Updating species diversity of *Colletotrichum*, with a phylogenomic overview

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Abstract: The genus *Colletotrichum* includes important plant pathogens, endophytes, saprobes and human pathogens. Even though the polyphasic approach has facilitated *Colletotrichum* species identification, knowledge of the overall species diversity and host distribution is largely incomplete. To address this, we examined 952 *Colletotrichum* strains isolated from plants representing 322 species from 248 genera, or air and soil samples, from 87 locations in China, as well as 56 strains from Saudi Arabia, Thailand, Turkey, and the UK. Based on morphological characteristics and multi-locus phylogenetic analyses, the strains were assigned to 107 species, including 30 new species described in this paper and 18 new records for China. The currently most comprehensive backbone tree of *Colletotrichum*, comprising 16 species complexes (including a newly introduced *C. bambusicola* species complex) and 15 singleton species, is provided. Based on these analyses, 280 species with available molecular data are accepted in this genus, of which 139 have been reported in China, accounting for 49.6 % of the species. *Colletotrichum siamense*, *C. karsti*, *C. fructicola*, *C. truncatum*, *C. fioriniae*, and *C. gloeosporioides* were the most commonly detected species in China, as well as the species with the broadest host range. By contrast, 76 species were currently found to be associated with a single plant species or genus in China. To date, 33 *Colletotrichum* species have been exclusively reported as endophytes. Furthermore, we generated and assembled whole-genome sequences of the 30 new and a further 18 known species. The most comprehensive genome tree comprising 94 *Colletotrichum* species based on 1 893 single-copy orthologous genes was hence generated, with all nodes, except four, supported by 100 % bootstrap values. Collectively, this study represents the most comprehensive investigation of *Colletotrichum* diversity and host occurrence to date, and greatly enhances our understanding of the diversity and phylogenetic relationships in this genus.

Key words: Backbone tree, Fungal systematics, Multi-locus phylogeny, New taxa, Phylogenomics, Plant pathogen, Taxonomy
Taxonomic novelties: New species: *Colletotrichum arecacearum* F. Liu, Z.Y. Ma & L. Cai, *Colletotrichum bicoloratum* F. Liu, W.P. Wu & L. Cai, *Colletotrichum bromeliacearum* F. Liu & L. Cai, *Colletotrichum buxi* F. Liu, W.P. Wu & L. Cai, *Colletotrichum chamaedoreae* F. Liu, W.P. Wu & L. Cai, *Colletotrichum crousii* F. Liu, Z.Y. Ma & L. Cai, *Colletotrichum danxiashanense* F. Liu, W.P. Wu & L. Cai, *Colletotrichum diversisporum* F. Liu, W.P. Wu & L. Cai, *Colletotrichum diversum* F. Liu & L. Cai, *Colletotrichum dolichoconidiophori* F. Liu, W.P. Wu & L. Cai, *Colletotrichum iris* F. Liu & L. Cai, *Colletotrichum monsterae* F. Liu, W.P. Wu & L. Cai, *Colletotrichum multiseptatum* F. Liu, W.P. Wu & L. Cai, *Colletotrichum nageiae* F. Liu, W.P. Wu & L. Cai, *Colletotrichum obovoides* F. Liu & L. Cai, *Colletotrichum parabambusicola* F. Liu, W.P. Wu & L. Cai, *Colletotrichum paraendophytum* F. Liu, W.P. Wu & L. Cai, *Colletotrichum reniforme* F. Liu, Z.Y. Ma & L. Cai, *Colletotrichum schimae* F. Liu, W.P. Wu & L. Cai, *Colletotrichum shivasii* F. Liu & L. Cai, *Colletotrichum sinuatum* F. Liu, W.P. Wu & L. Cai, *Colletotrichum subacidae* F. Liu, Z.Y. Ma & L. Cai, *Colletotrichum subsalicis* F. Liu & L. Cai, *Colletotrichum subvariabile* F. Liu, W.P. Wu & L. Cai, *Colletotrichum syngoniicola* F. Liu, Z.Y. Ma & L. Cai, *Colletotrichum telosmae* F. Liu, W.P. Wu & L. Cai, *Colletotrichum tibetense* F. Liu & L. Cai, *Colletotrichum variabile* F. Liu, W.P. Wu & L. Cai, *Colletotrichum zhaoqingense* F. Liu & L. Cai, *Colletotrichum zhejiangense* F. Liu, W.P. Wu & L. Cai.

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INTRODUCTION

Colletotrichum is the only genus of the *Glomerellaceae* (*Glomerellales*, *Sordariomycetes*, *Ascomycota*), and is regarded as one of the 10 most important genera of plant pathogenic fungi in the world (Dean *et al.* 2012). A few species are opportunistic human pathogens, including *C. dematium*, *C. gigasporum*, *C. gloeosporioides* and *C. truncatum* that can cause keratitis and subcutaneous infections (Guarro *et al.* 1998, Damm *et al.* 2009, Shiraishi *et al.* 2011, Shivaprakash *et al.* 2011, Liu *et al.* 2014, Buchta *et al.* 2019). In rare cases, *Colletotrichum* species have been reported to infect animals, *e.g. C. fioriniae* (as *C. acutatum* var. *fioriniae*), infecting a scale insect, and *C. acutatum* (*s. lat.*), infecting a sea turtle (Manire *et al.* 2002, Marcelino *et al.* 2008). *Colletotrichum* also includes plant endophytes, and saprobes from a wide range of substrates, such as the soil, water, and air (Liu *et al.* 2014).

Accurate species identification is important for understanding biodiversity, host-parasite interaction, and evolutionary history, and for monitoring and controlling plant pathogens, and developing quarantine measures. Previous host- and morphology-oriented systematics of *Colletotrichum* is, however, not regarded as natural, does not reflect the phylogenetic relationships, and has largely impeded meaningful investigation of species diversity in this genus. To establish a stable and natural classification system, the use of molecular data in combination with morphological, geographical, and ecological data has increasingly been employed (Cai *et al.* 2009, Cannon *et al.* 2012, Marin-Felix *et al.* 2017, Jayawardena *et al.* 2020).

In the genus *Colletotrichum*, a species complex (also called an 'aggregate') is defined as a group of species that form a monophyletic clade and exhibit shared characteristics (*e.g.* similar conidial morphology) (Cannon *et al.* 2012). The current classification system of *Colletotrichum* comprises 15 species complexes, *i.e.* the *C. acutatum*, *C. agaves*, *C. boninense*, *C. caudatum*, *C. dematium*, *C. destructivum*, *C. dracaenophilum*, *C. gigasporum*, *C. gloeosporioides*, *C. graminicola*, *C. magnum*, *C. orbiculare*, *C.*

orchidearum, *C. spaethianum*, and *C. truncatum* species complexes, as well as a number of singletons (Marin-Felix *et al.* 2017, Damm *et al.* 2019, Jayawardena *et al.* 2020, Bhunjun *et al.* 2021). The *C. caudatum* species complex forms an inner clade of the *C. graminicola* species complex, and was annotated as *C. caudatum* sub-aggregate in the phylogenetic tree, but referred to as a species complex by Crouch (2014). Subsequently, many researchers refer to this group as a *C. caudatum* species complex (*e.g.* Marin-Felix *et al.* 2017, Jayawardena *et al.* 2020). Recently, Bhunjun *et al.* (2021) recommended treating the two species complexes as one, *i.e.* the *C. graminicola-caudatum* species complex.

ITS is a useful DNA barcode for assigning *Colletotrichum* species to species complexes (Cannon *et al.* 2012), but different loci are being employed to resolve the different species complexes. For example, six loci (*act*, *chs-1*, *gapdh*, *his3*, ITS, and *tub2*) have been used for the *C. acutatum*, *C. dematium*, *C. destructivum*, *C. dracaenophilum*, *C. magnum*, *C. orchidearum*, *C. spaethianum* and *C. truncatum* species complexes (Damm *et al.* 2009, 2012a, 2014, 2019), with an additional locus each for the *C. boninense* (*cal*) and *C. orbiculare* (*gs*) species complexes (Damm *et al.* 2012b, 2013), and three additional loci (ApMat, *cal*, and *gs*) for the *C. gloeosporioides* species complex (Weir *et al.* 2012, Liu *et al.* 2015). Meanwhile, *act*, *chs-1*, *gapdh*, ITS, and *tub2* have been used for the *C. gigasporum* species complex (Liu *et al.* 2014), and *apn2*, ITS, Mat1/Apn2, and *sod2* have been used for the *C. caudatum* and *C. graminicola* species complexes (Crouch *et al.* 2009a, Crouch 2014). Furthermore, the combined use of ApMat and *gs* in phylogenetic analysis is very useful for species delimitation in the *C. gloeosporioides* species complex (Liu *et al.* 2015).

Based on phylogenetic analyses of multiple loci, the backbone tree of *Colletotrichum* has been constructed and is frequently updated by the addition of newly described species. The tree includes 119 species in Cannon *et al.* (2012); 189 species in Jayawardena *et al.* (2016) and Marin-Felix *et al.* (2017); 247 species in Jayawardena *et al.* (2020); and 248 species in Bhunjun *et al.* (2021). The continuous discovery of new species indicates very high species diversity in this genus. In China, most *Colletotrichum* taxa are reported in the form of single or few species, or species associated with a certain host (*e.g.* Tao *et al.* 2013, Liu *et al.* 2015, Zhang *et al.* 2020), and there is a lack of systematic and biodiversity investigation of these fungi.

In the current study, we aimed to: 1) resolve the systematic placement of 1 008 *Colletotrichum* strains collected, mostly in China, since 1993; 2) characterise newly discovered species based on all available data; 3) supplement missing sequences of the *act*, *chs-1*, *gapdh*, *his3*, and *tub2* genes of some known species, and build an integrated dataset for *Colletotrichum*; 4) construct a robust and reliable phylogeny of *Colletotrichum* including all species with type-derived sequences; and 5) improve knowledge on the diversity and host occurrence of *Colletotrichum* species in China. In addition, all *Colletotrichum* species with an available genome sequence were used for the construction of a whole-genome species tree to help resolve species boundaries and define species complexes.

MATERIALS AND METHODS

Isolates

In the current study, 1 008 *Colletotrichum* isolates, associated with at least 322 host plant species in 248 genera, from the LC Culture Collection (a personal culture collection of Lei Cai, housed in the Institute of Microbiology, Chinese Academy of Sciences) and the Novozymes Culture Collection were analysed. Of these, 952 were collected at 87 locations in China and 56 at 26 locations in Saudi Arabia, Thailand, Turkey, and the UK. Representative cultures of the new species described herein were deposited in the China General Microbiological Culture Collection (CGMCC). Type specimens were deposited in the Mycological Herbarium, Institute of Microbiology, Chinese Academy of Sciences, Beijing, China (HMAS).

Morphology

The isolates were cultivated on potato dextrose agar (PDA; Difco™, Becton, Dickinson and Company, Sparks, MD, USA) and synthetic nutrient-poor agar (SNA; Nirenberg 1976) supplemented with double-autoclaved pine needles placed on the agar surface. The cultures were incubated at room temperature (25 °C) under a 12 h day/night regime. After 7 d, fungal growth rates were measured and the colony characteristics were noted. Colony colours were rated using the colour charts of Rayner (1970). Morphological observations of reproductive structures were performed using a Nikon AZ100 dissecting microscope (DM) and a Nikon Eclipse 80i compound microscope with differential interference contrast (DIC) illumination, both equipped with a Nikon DS-Ri2 high-definition colour digital camera. Slides were prepared using lactic acid. Measurements and descriptions of microscopic structures were preferentially made from cultures grown on SNA. If sterile on SNA, structures produced on PDA, oatmeal agar (OA), malt extract agar (MEA) (Crous *et al.* 2019), or pine needles were described. Hyphal appressoria were induced using a slide culture technique (Cai *et al.* 2009) or observed directly on the reverse side of colonies grown on SNA. At least 30 measurements were made for each structure, and the mean value, standard deviation, and minimum–maximum values are given, with the extreme measurements in parentheses. Descriptions and illustrations of taxonomic novelties were deposited in MycoBank (www.MycoBank.org; Crous *et al.* 2004).

Molecular analyses using barcoding sequences

Total genomic DNA was extracted from fresh mycelia of each isolate using a modified CTAB protocol (Guo *et al.* 2000). All primers used in the current study are listed in Table 1. PCR amplification was performed as described by Crouch *et al.* (2009a) and Liu *et al.* (2016). PCR amplicons were purified and sequenced by the SinoGenoMax Company (Beijing, China). The forward and reverse reads were paired, and consensus sequences calculated in MEGA v. 7.0.21 (Kumar *et al.* 2016).

Primarily, ApMat, *gapdh*, *gs*, ITS, or *tub2*, which are good discriminative loci in different species complexes in *Colletotrichum* (Damm *et al.* 2012a, b, 2013, 2014, 2019, Liu *et al.* 2015, Jayawardena *et al.* 2016), were selected for PCR amplification and sequencing. All efforts were made to assign isolates to species complexes and to identify them to species level, by BLASTn searches of the NCBI GenBank or by phylogenetic analyses using single locus sequences.

For isolates of species that could not be determined based on the above analyses, an ITS tree was first used for inferring delimitation to the species complex level, and further multi-locus phylogenetic analyses and phenotypic characterisation were then performed for species delimitation. Regarding the multi-locus analyses, a concatenated sequence dataset of *act*, *chs-1*, *gapdh*, *his3*, ITS, and *tub2*, including all *Colletotrichum* species for which molecular data

Table 1. Primers used in this study, with originating loci, sequences and references.

Locus	Product name	Primer name	Direction	Sequence (5'–3')	Reference
act	Actin	ACT-512F	Forward	ATGTGCAAGGCCGGTTTCGC	Carbone & Kohn (1999)
		ACT-783R	Reverse	TACGAGTCCTTCTGGCCCAT	Carbone & Kohn (1999)
apn2	Mat1 and the adjacent DNA lyase gene	Apn1W1F	Forward	ATGGAGCACAAAAACGAACA	Crouch *et al.* (2009b)
		Apn1W1R	Reverse	GCGGAGCAGAGGATGTAGTC	Crouch *et al.* (2009b)
cal	Calmodulin	CL1C	Forward	GAATTCAAGGAGGCCTTCTC	Weir *et al.* (2012)
		CL2C	Reverse	CTTCTGCATCATGAGCTGGAC	Weir *et al.* (2012)
chs-1	Chitin synthase	CHS-79F	Forward	TGGGGCAAGGATGCTTGGAAGAAG	Carbone & Kohn (1999)
		CHS-345R	Reverse	TGGAAGAACCATCTGTGAGAGTTG	Carbone & Kohn (1999)
ApMat	Apn2-Mat1-2 intergenic spacer and partial mating type Mat1-2 gene	AMF1	Forward	CCAGAAATACACCGAACTTGC	Silva *et al.* (2012)
		AMR1	Reverse	TCATTCTACGTATGTGCCCG	Silva *et al.* (2012)
gapdh	Glyceraldehyde-3-phosphate dehydrogenase	GDF1	Forward	GCCGTCAACGACCCCTTCATTGA	Guerber *et al.* (2003)
		GDR1	Reverse	GGGTGGAGTCGTACTTGAGCATGT	Guerber *et al.* (2003)
gs	Glutamine synthetase	GSF1	Forward	ATGGCCGAGTACATCTGG	Guerber *et al.* (2003)
		GSR1	Reverse	GAACCGTCGAAGTTCCAC	Guerber *et al.* (2003)
		GSLF2	Forward	TACACGAGSAAAAGGATACGC	Liu *et al.* (2016)
		GSLR1	Reverse	AGRCGCACATTGTCAGTATCG	Liu *et al.* (2016)
his3	Histone3	CYLH3F	Forward	AGGTCCACTGGTGGCAAG	Crous *et al.* (2004)
		CYLH3R	Reverse	AGCTGGATGTCCTTGGACTG	Crous *et al.* (2004)
ITS	Internal transcribed spacer	ITS1	Forward	TCCGTAGGTGAACCTGCGG	White *et al.* (1990)
		ITS4	Reverse	TCCTCCGCTTATTGATATGC	White *et al.* (1990)
Mat1/Apn2	The 3' end of *apn2* and the 5' end of the mating type gene *Mat1-2*	Mat1M72F	Forward	ACGGCAAACGGCTCAGGGAGTG	Crouch *et al.* (2009b)
		Mat1M72R	Reverse	AATGCCGAGTCCCACGAGGTTCG	Crouch *et al.* (2009b)
sod2	Manganese-superoxide dismutase	SOD625F	Forward	GCCCACAGTACATATTGCCTAAGC	Crouch *et al.* (2006)
		SOD625R	Reverse	TCATCCCGGGAGCCAGAAAACCT	Crouch *et al.* (2006)
tub2	β-tubulin 2	T1	Forward	AACATGCGTGAGATTGTAAGT	O'Donnell & Cigelnik (1997)
		Bt2b	Reverse	ACCCTCAGTGTAGTGACCCTTGGC	Glass & Donaldson (1995)

are available, was used to construct the overview phylogeny for the genus (Cannon *et al.* 2012, Damm *et al.* 2012a, b, 2013, 2014, 2019, Weir *et al.* 2012, Liu *et al.* 2014, Jayawardena *et al.* 2016, Marin-Felix *et al.* 2017). Two additional sequence datasets were used for the *C. caudatum* species complex (*apn2*, ITS, Mat1/Apn2, and *sod2*) and *C. graminicola* species complex (*act*, *chs-1*, ITS, *sod2*, and *tub2*) (Crouch *et al.* 2009a, Cannon *et al.* 2012, Crouch 2014). All novel sequences obtained in the current study were submitted to the NCBI GenBank (www.ncbi.nlm.nih.gov; Tables S1–S3).

Sequence alignments of the individual loci were prepared using MAFFT v. 7 (http://mafft.cbrc.jp/alignment/server/index.html) and manually edited in MEGA v. 7.0.21. Maximum-likelihood (ML) and Bayesian analysis (BA) were used for phylogenetic inferences of the ITS alignment and concatenated alignments. MrModelTest v. 2.2 (Nylander 2004) was used to determine the optimal nucleotide substitution model for each locus. The individual gene trees were assessed for clade conflicts between the individual phylogenies.

Maximum-likelihood and BA were implemented using the CIPRES Science Gateway portal (https://www.phylo.org/; Miller *et al.* 2012) using RAxML-HPC BlackBox v. 8.2.10 (Stamatakis 2014) and MrBayes v. 3.2.6 (Huelsenbeck & Ronquist 2001, Ronquist & Huelsenbeck 2003), respectively. For ML analyses, GTR+GAMMA substitution model with 1 000 bootstrap iterations was set. Bayesian analyses were computed with four simultaneous Markov Chain Monte Carlo chains, 200 M generations, and a sampling frequency of 1 000 generations for the first dataset and 100 generations for the other two datasets, ending the run automatically when standard deviation of split frequencies fell below 0.01. The burn-in fraction was set to 0.25, after which the 50 % majority rule consensus trees and posterior probability (PP) values were calculated. The resulting trees were plotted using FigTree v. 1.4.2 (http://tree.bio.ed.ac.uk/software/figtree).

Whole-genome sequencing

Phylogenomic analysis was performed to better define the species complex boundaries for *Colletotrichum* and help to understand the fungal evolution in this genus. Whole-genome sequences were generated for ex-type strains of new species described in the current study and for 18 known species that were available. Reference genomes were retrieved from NCBI (Table S4). All isolates were purified using a single-spore isolation method (Zhang *et al.* 2013). Hypha of 4-d-old colonies growing on PDA were transferred to 50 mL of potato dextrose broth (PDB) and cultivated

for 3–6 d at 25 °C at 150 rpm. Fresh mycelia were filtered through four layers of sterile gauze and were then stored at -80 °C. DNA libraries were prepared using DNeasy Plant Mini kit (Qiagen). The libraries were sequenced as 150 bp pair-end reads using Illumina NovaSeq 6000 platform. Genome assemblies were deposited in the National Microbiology Data Center (NMDC) under BioProject NMDC10017886.

Genome assembly and gene annotation

Read quality was assessed by using FastQC v. 0.11.8 (Andrews & Babraham 2010). Clean reads were assembled with SPAdes v. 3.12.0 (Bankevich *et al.* 2012), using the 'careful' mode and various kmers (21, 33, 55, 77, 99). Scaffolds shorter than 200 bp were removed from subsequent analyses. Genome assembly quality was assessed using QUAST v. 5.0.2 (Alexey *et al.* 2013). Genome completeness was assessed using genome mode in BUSCOs v. 2.0.1 (Mathieu *et al.* 2019), with Sordaromyceta_odb9 gene set.

Gene prediction for the 48 newly sequenced and 46 previously published genomes of *Colletotrichum* (Table S4) were done using the Funannotate pipeline v. 1.7.0 (Palmer 2016). Repetitive elements were initially soft-masked using default parameters. Next, the prediction step of funannotate pipeline (funannotate predict) was implemented using --busco_db Sordariomycetes, --busco_seed_species Verticillium longporum1 and default parameters. Predicted proteins were firstly annotated using eggNOG-mapper v. 2 (Huerta-Cepas *et al.* 2017) and then compared via BlastP (e-value ≤ 1e-10) against Fungal Cytochrome P450 (Moktali *et al*. 2012) and Transporters Classification Database (Saier *et al.* 2016). Carbohydrate-active enzymes annotation was predicted using dbCAN v. 2.0.6 (Yin *et al.* 2012) with DIAMOND, Hotpep and HMMER as default settings, and the genes found by at least two tools were regarded as candidates. The SignalP v. 5.5 (Armenteros *et al.* 2019), TMHMM v. 2.0 (Krogh *et al.* 2001), TargetP v. 2.0 (Emanuelsson *et al.* 2000), EffectorP v. 1.0 (Sperschneider *et al.* 2016) were incorporated to predict effectors.

Phylogenomic tree construction

The phylogenetic relationships between *Colletotrichum* members were inferred based on orthologs of all (94) assembled genomes (Table S4), using *Verticillium dahliae* as the outgroup. Predicted proteins were clustered into orthologous groups by using Orthofinder v. 2.3.3 (Emms & Kelly 2019). Amino acid sequences of 1 893 single-copy orthologs were aligned using MAFFT v. 7.407 (Katoh & Standley 2013) with default settings. Conserved sites in the alignment were extracted using Gblocks v. 0.91b (Castresana 2000) and then concatenated. A JTT substitution model of the concatenated alignment resulting from analysis in ProtTest v. 3.4.2 (Darriba *et al.* 2011) was used for phylogenomic tree construction using RAxML v. 8.2.12 (Stamatakis 2014) with 1 000 bootstrap iterations.

RESULTS

Single-locus analysis

Based on BLASTn search and single-locus phylogenetic analyses using ApMat, *gapdh*, *gs*, or *tub2*, we attempted to assign the 1 008 strains analysed (Table S5) to species level. For the undetermined strains, a single ITS phylogenetic analysis was performed to allocate them into species complexes. The ITS alignment contained 618 characters, including alignment gaps. The ML search revealed a best tree with an lnL of -8314.217491. The BA was run for 20 025 000 generations, and a 50 % consensus tree and posterior probabilities were calculated from 30 040 trees from two analysis runs. The analysed strains were thus separated into 14 species complexes and six singleton clades. Four taxa (*C. bambusicola*, *C. hsienjenchang*, *C. metake*, and *C. parabambusicola sp. nov.*), characterised by straight conidia, formed a main clade, which was denoted as a new species complex (Fig. S1). The *C. graminicola* species complex was polyphyletic in the ITS tree. *Colletotrichum riograndense*, which had previously been considered as belonging to the *C. spaethianum* species complex, was however phylogenetically basal to the *C. bambusicola* and *C. spaethianum* species complexes. Furthermore, the topologies of the single ITS tree and multi-locus tree were compared to determine whether the grouping of species within species complexes was congruent.

Multi-locus phylogeny

Overview phylogeny of Colletotrichum *based on six loci*

The combined *act*, *chs-1*, *gapdh*, *his3*, ITS, and *tub2* sequence alignment that was used for overview phylogeny construction contained 250 currently accepted *Colletotrichum* species and *Monilochaetes infuscans* (CBS 869.96) as the outgroup. The final alignment contained 2 659 characters (*act*: 322; *chs-1*: 251; *gapdh*: 441; *his3*: 417; ITS: 606; *tub2*: 622) including the alignment gaps, and 1 944 characters were unique site patterns. The ML search revealed a best tree with an lnL of -74738.627777. MrModelTest recommended Dirichlet base frequencies for all data partitions of the BA. The GTR+I+G model was suggested for *act*, *gapdh*, and ITS, and the HKY+I+G model for *chs-1*, *his3*, and *tub2*. The BA was run for 39 980 000 generations, and a 50 % consensus tree and posterior probabilities were calculated from 59 972 trees from two runs.

The topologies of the six-locus phylogenetic trees generated by ML and BA were congruent and consistent with the species complex delimitation reported previously (Cannon *et al.* 2012, Marin-Felix *et al.* 2017, Bhunjun *et al.* 2021), but differed from the ITS tree constructed in the current study in the grouping of *C. guangxiense* and *C. riograndense* on species complex level. In the six-locus tree, *C. guangxiense* and four additional taxa (*C. bambusicola*, *C. hsienjenchang*, *C. metake*, and *C. parabambusicola sp. nov.*) formed a new species complex (Fig. 1). By contrast, *C. guangxiense* was basal to the *C. caudatum*, *C. destructivum* and *C. graminicola* species complexes in the ITS tree (Fig. S1). *Colletotrichum riograndense*, belonging to the *C. spaethianum* species complex in the six-locus phylogeny (Fig. 1), was in the ITS tree basal to a clade formed by the *C. bambusicola*, *C. caudatum*, *C. destructivum*, *C. graminicola*, and *C. spaethianum* species complexes (Fig. S1).

The *C. caudatum* species complex formed a subclade of the *C. graminicola* complex and some taxa in the two species complexes were indistinguishable in the six-locus tree (Fig. 1), *e.g. C. caudatum* and *C. somersetense*, *C. ochraceae* and *C. zoysiae*, *C. axonopodi* and *C. hanaui*.

The phylogenies of the C. caudatum *and* C. graminicola *species complexes*

As two different sets of loci were previously used for the phylogenetic analyses of *C. caudatum* and *C. graminicola* species complexes, separate analyses were performed herein.

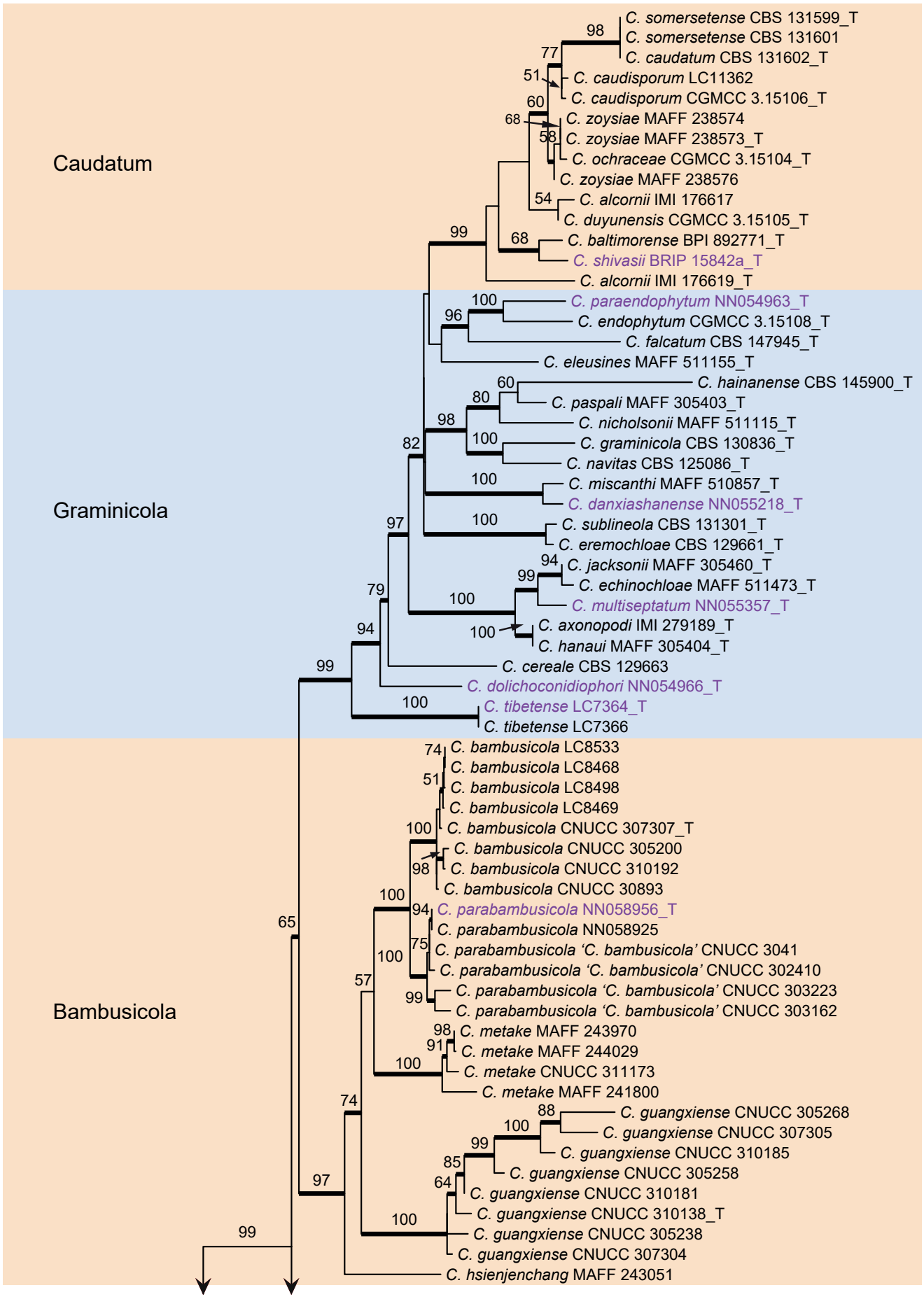


Fig. 1. Phylogenetic tree of *Colletotrichum* calculated with a maximum likelihood analysis of the combined *act*, *chs-1*, *gapdh*, *his3*, ITS, and *tub2* sequence alignment. Bayesian posterior probabilities (PP > 0.90) are emphasised by thickened branches, maximum likelihood bootstrap support values (> 50 %) are shown at the nodes. Species complexes are indicated with coloured boxes, with their names listed at the left. Ex-type strains are indicated with "T" in the end of the taxa labels. Latin names and ex-type strain numbers of the new species described in the current study are shown in purple font.

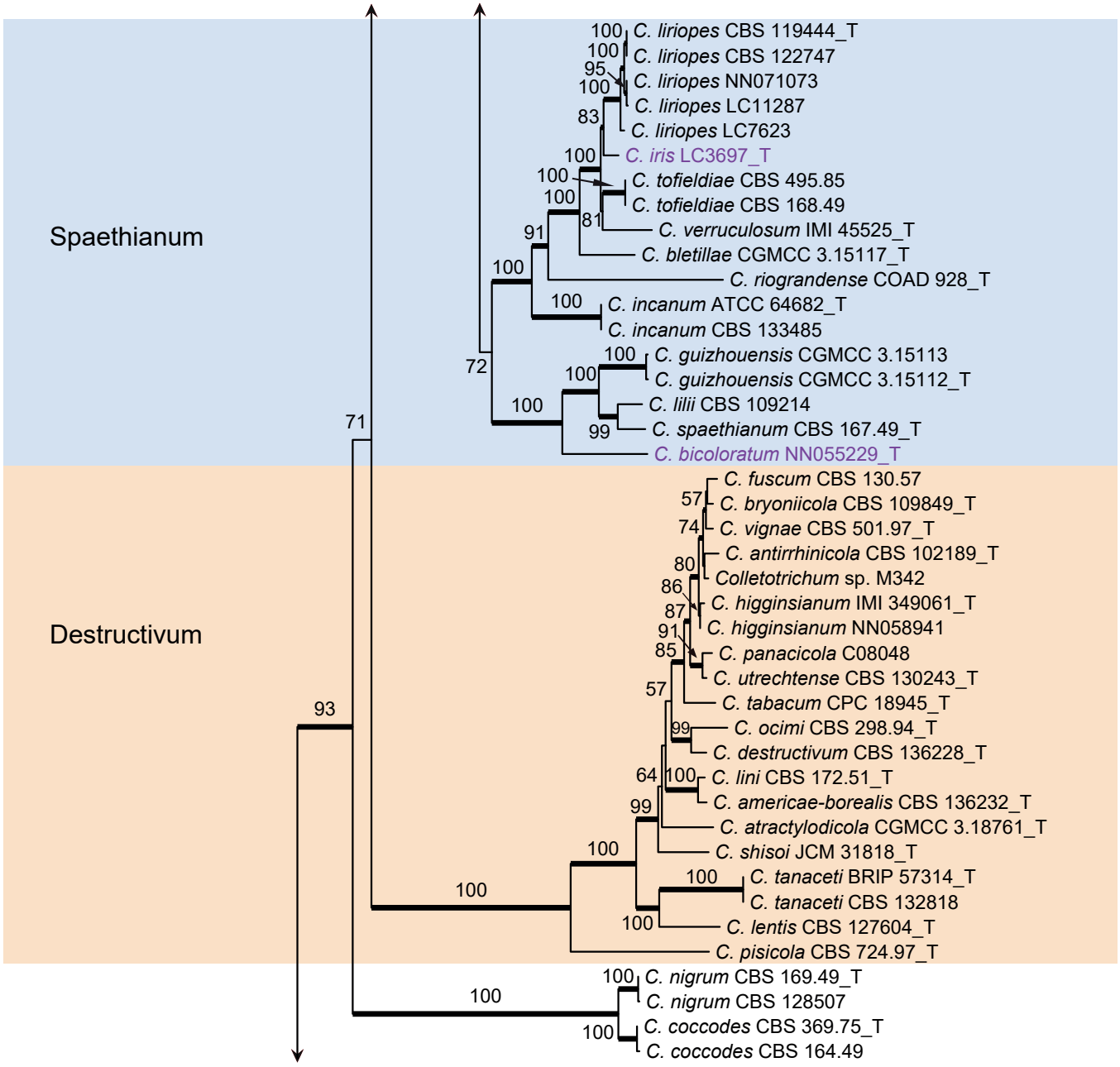


Fig. 1. (Continued).

Colletotrichum caudatum species complex (Fig. 2): The dataset consisted of 14 strains, with *C. gloeosporioides* (IMI 356878) as the outgroup. The final sequence alignment contained 2 949 characters (*apn2*: 805; ITS: 439; Mat1/Apn2: 1253; *sod2*: 452) including alignment gaps, and 301 characters were unique site patterns. The ML search revealed a best tree with an lnL of -6 746.046698. The BA was run for 260 000 generations, and a 50 % consensus tree and posterior probabilities were calculated from 5 202 trees from two runs. The topologies of phylogenetic trees generated by ML and BA were congruent. In the four-locus phylogenetic tree of *C. caudatum* species complex (Fig. 2), strain BRIP 15842a formed a sister clade to the ex-type of *C. baltimorense* on a long branch, distinct from the other clades, representing a novel species. The two strains of *C. alcornii* (IMI 176617 and IMI 176619) were separated into two distant clades, sharing 97 % (419/431) ITS sequence similarity, and may represent different species.

Colletotrichum graminicola species complex (Fig. 3): The dataset consisted of 22 strains, with *C. gloeosporioides* (IMI 356878) as the outgroup. The final alignment contained 2 117 characters (*act*: 255; *chs-1*: 278; ITS: 507; *sod2*: 564; *tub2*: 513) including alignment gaps, and 725 characters were unique site patterns. The ML search revealed a best tree with an lnL of -10629.345037. The BA was run for 1 000 generations, and a 50 % consensus tree and posterior probabilities were calculated from 202 trees from two runs. The topologies of the phylogenetic trees generated by ML and BA were congruent. In the five-locus phylogenetic tree of the *C. graminicola* species complex (Fig. 3), the analysed strains formed five distinct clades on long branches.

Whole-genome data and phylogenomic assessment

The *Colletotrichum* genomes varied from 35.03 Mbp to 109.66 Mbp in size and encoded from 8 424 to 14 841 protein-coding genes (Fig. 4, Table S4), and neither correlated with the phylogenetic position (Fig. 4) nor lifestyle of the species (Table S4), except for the genome sizes of the *C. orbiculare* species complex (> 82 Mbp)

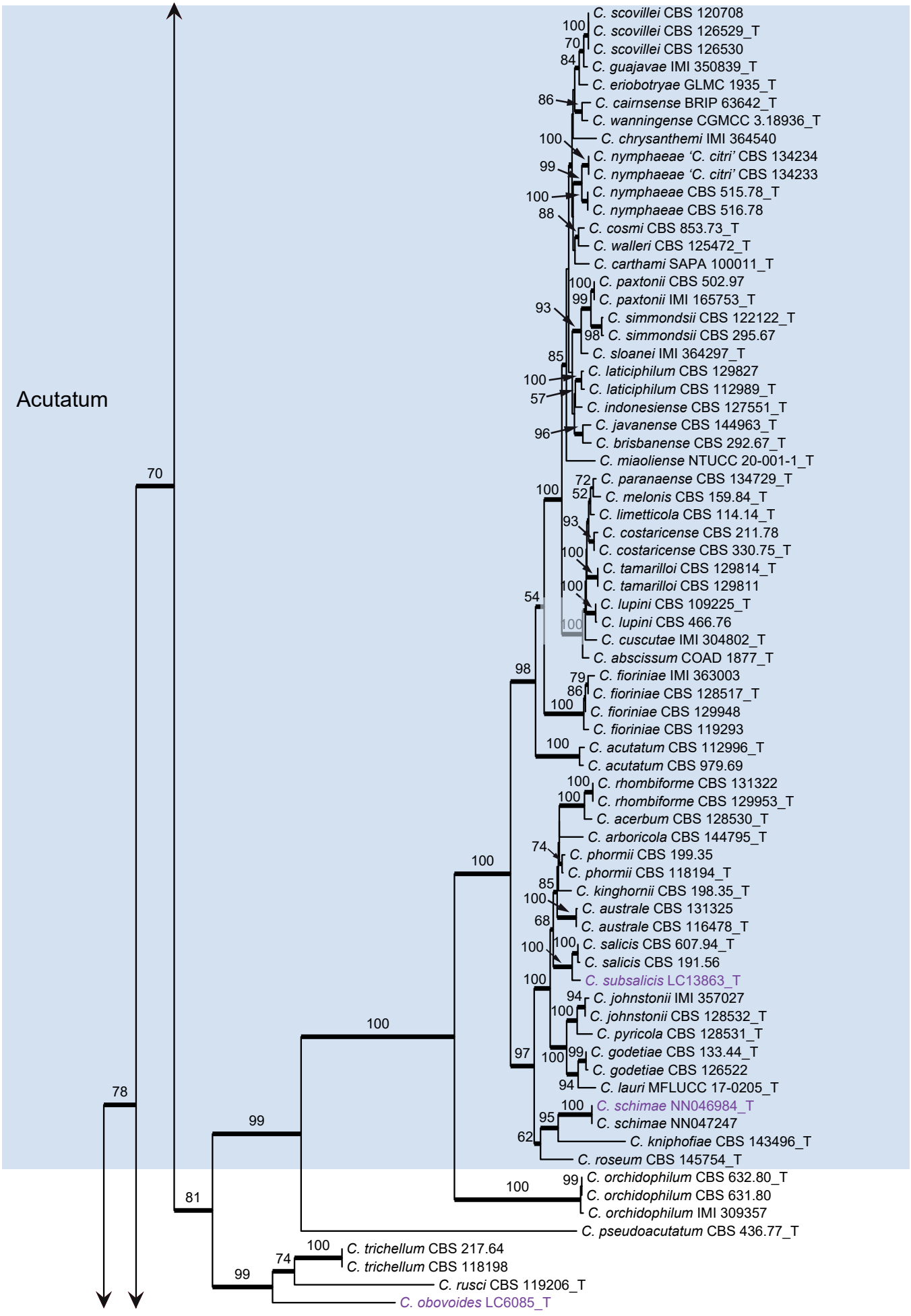


Fig. 1. (Continued).

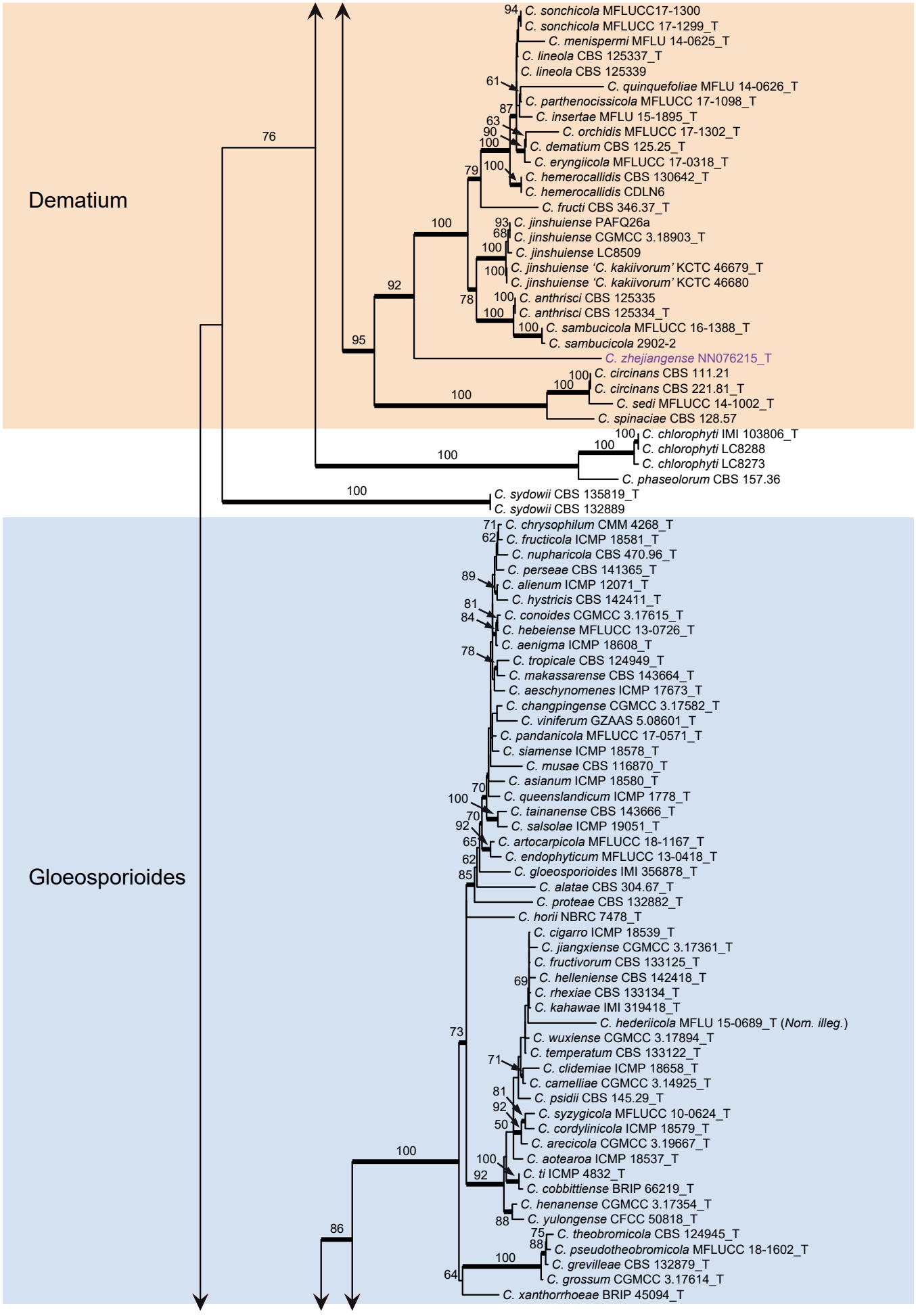


Fig. 1. (Continued).

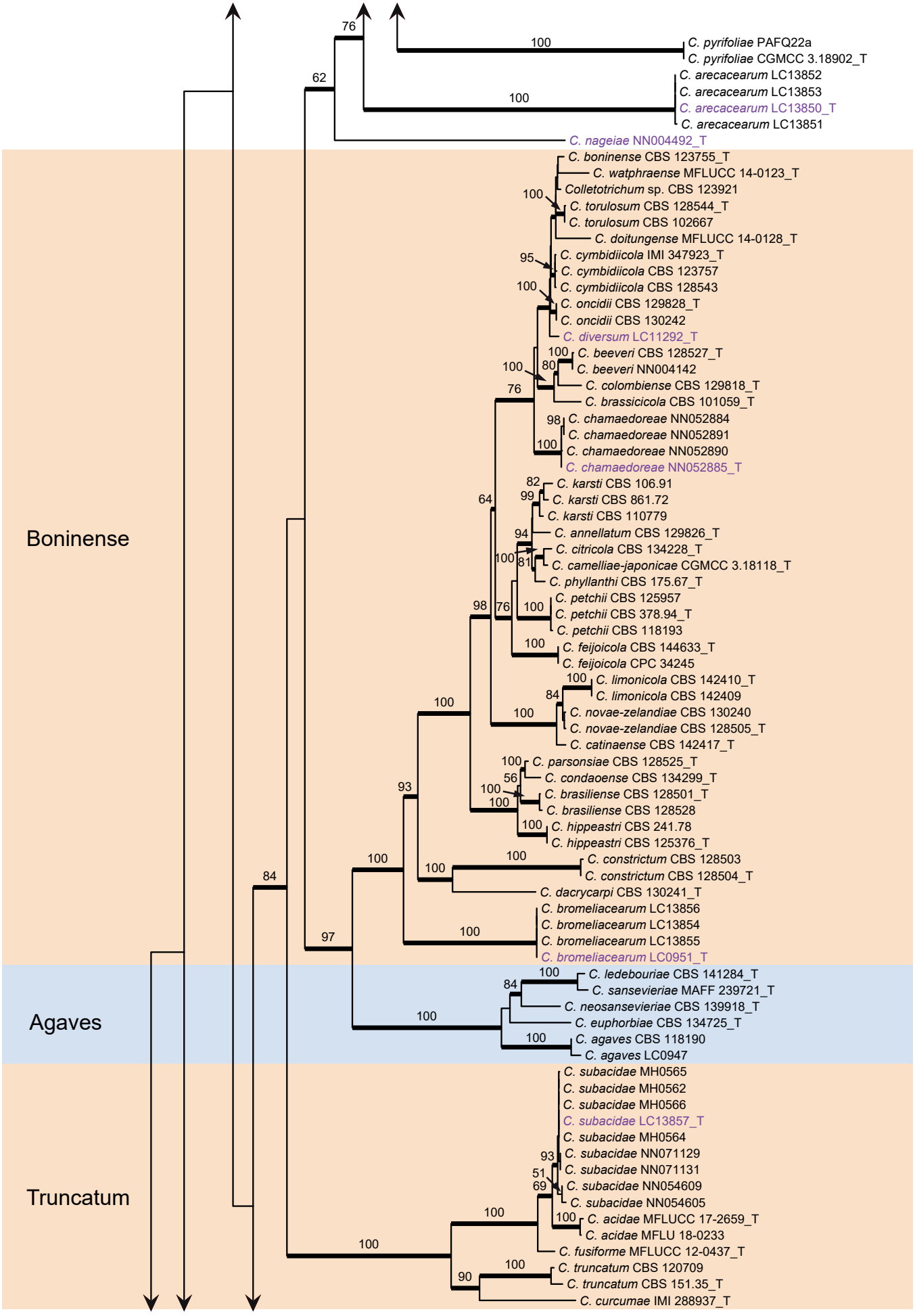


Fig. 1. (Continued).

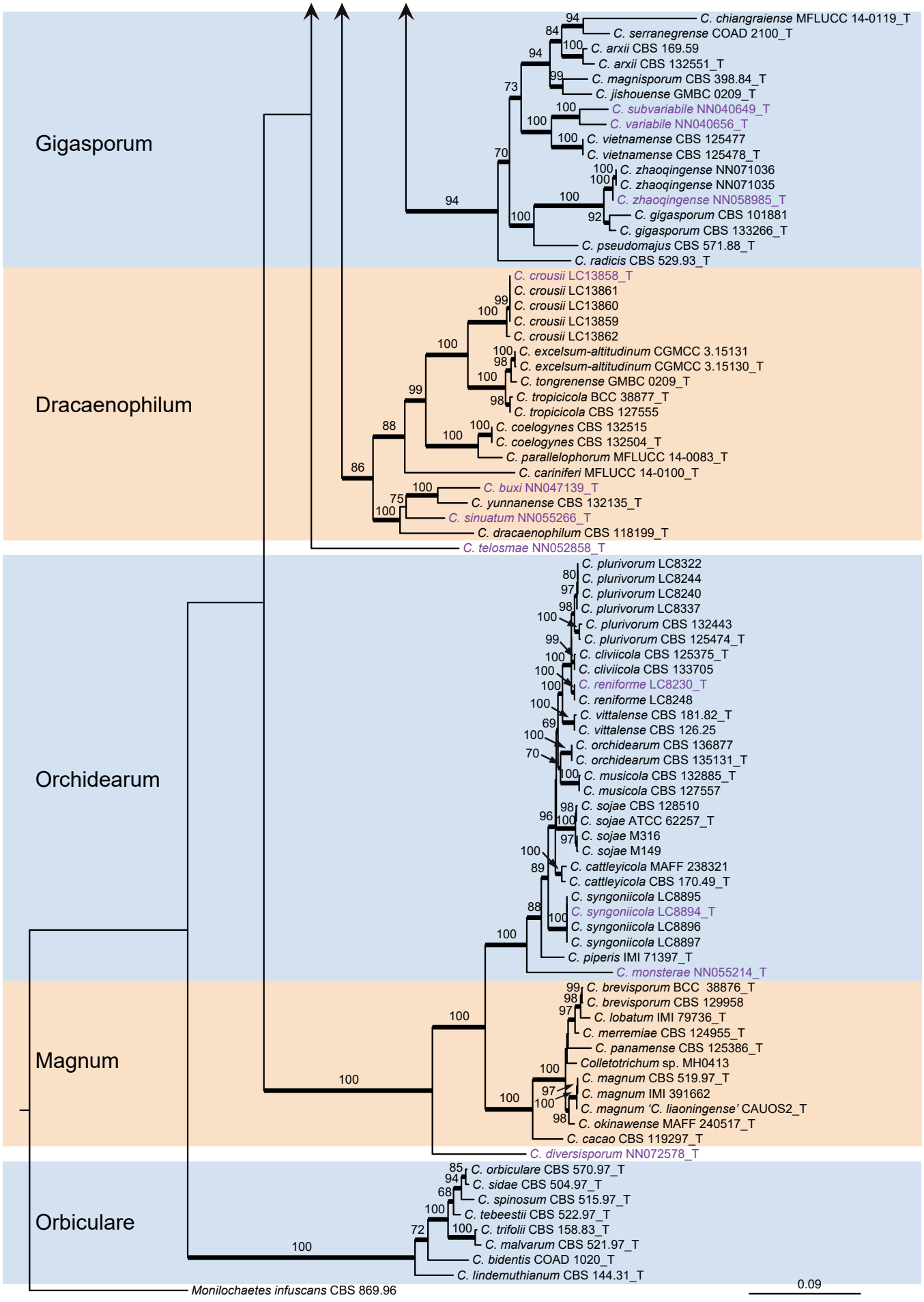


Fig. 1. (Continued).

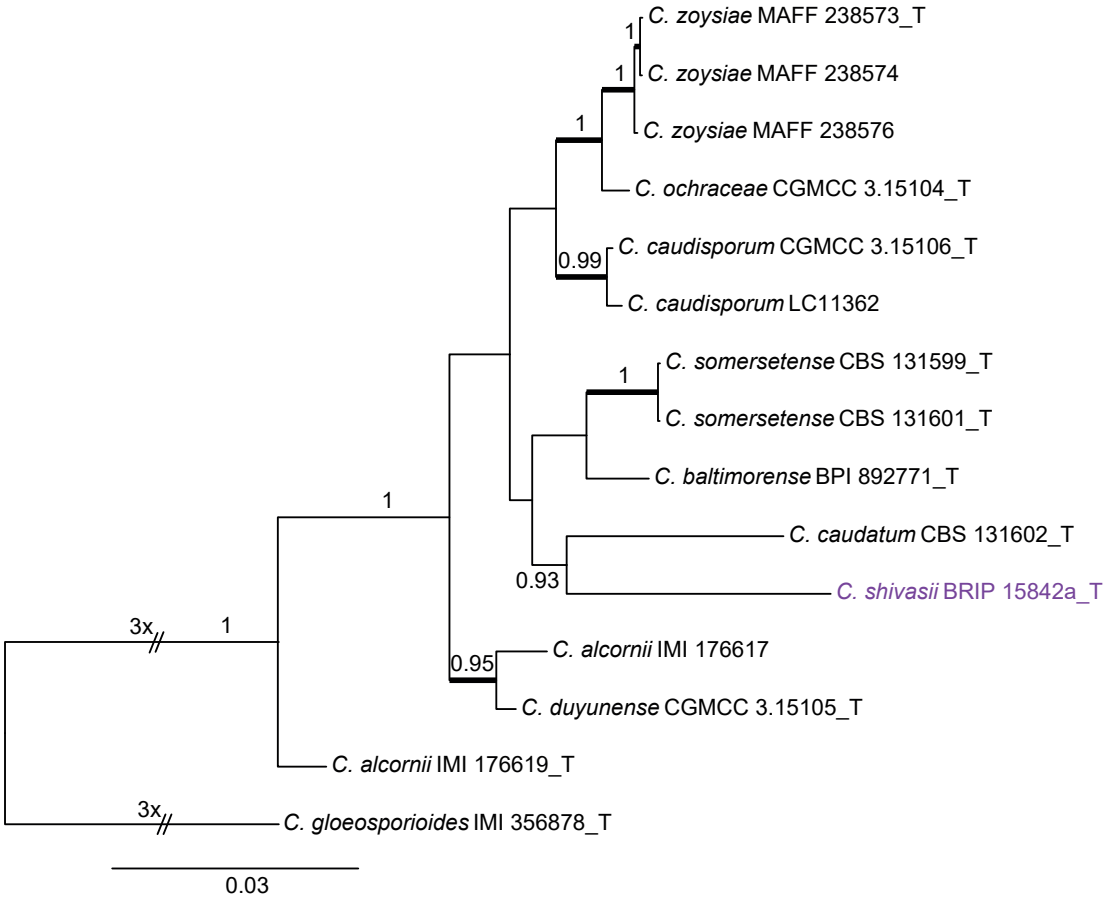


Fig. 2. Phylogenetic tree of the *C. caudatum* species complex resulting from a Bayesian analysis of the combined *apn2*, ITS, Mat1/Apn2, and *sod2* sequence alignment. Maximum likelihood bootstrap support values (> 70 %) are emphasised by thickened branches, bayesian posterior probabilities (PP > 0.90) are shown at the nodes. The scale bar represents the expected number of changes per site. Ex-type strains are indicated with "T" in the end of the taxa labels. Latin names and ex-type strain numbers of the new species described in the current study are shown in purple font.

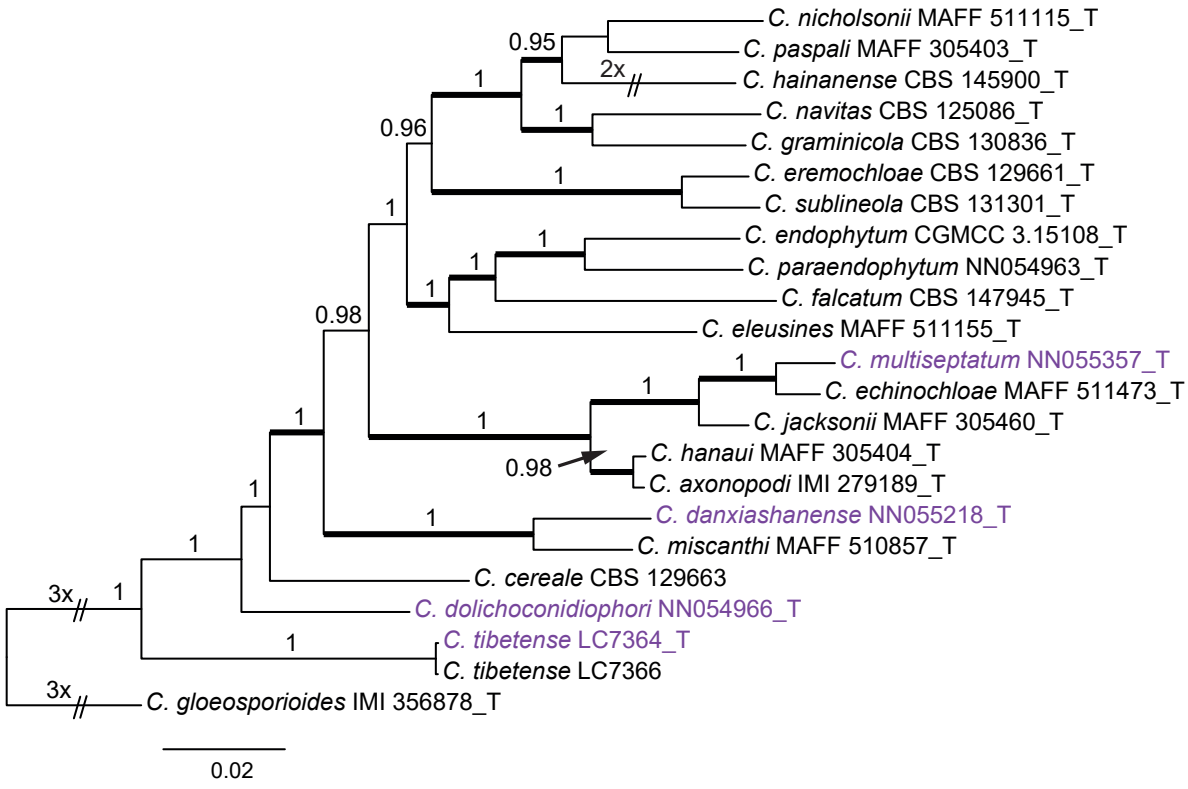


Fig. 3. Phylogenetic tree of the *C. graminicola* species complex resulting from a Bayesian analysis of the combined *act*, *chs-1*, ITS, *sod2*, and *tub2* sequence alignment. Maximum likelihood bootstrap support values (> 70 %) are emphasised by thickened branches, bayesian posterior probabilities (PP > 0.90) are shown at the nodes. The scale bar represents the expected number of changes per site. Ex-type strains are indicated with "T" in the end of the taxa labels. Latin names and ex-type strain numbers of the new species described in the current study are shown in purple font.

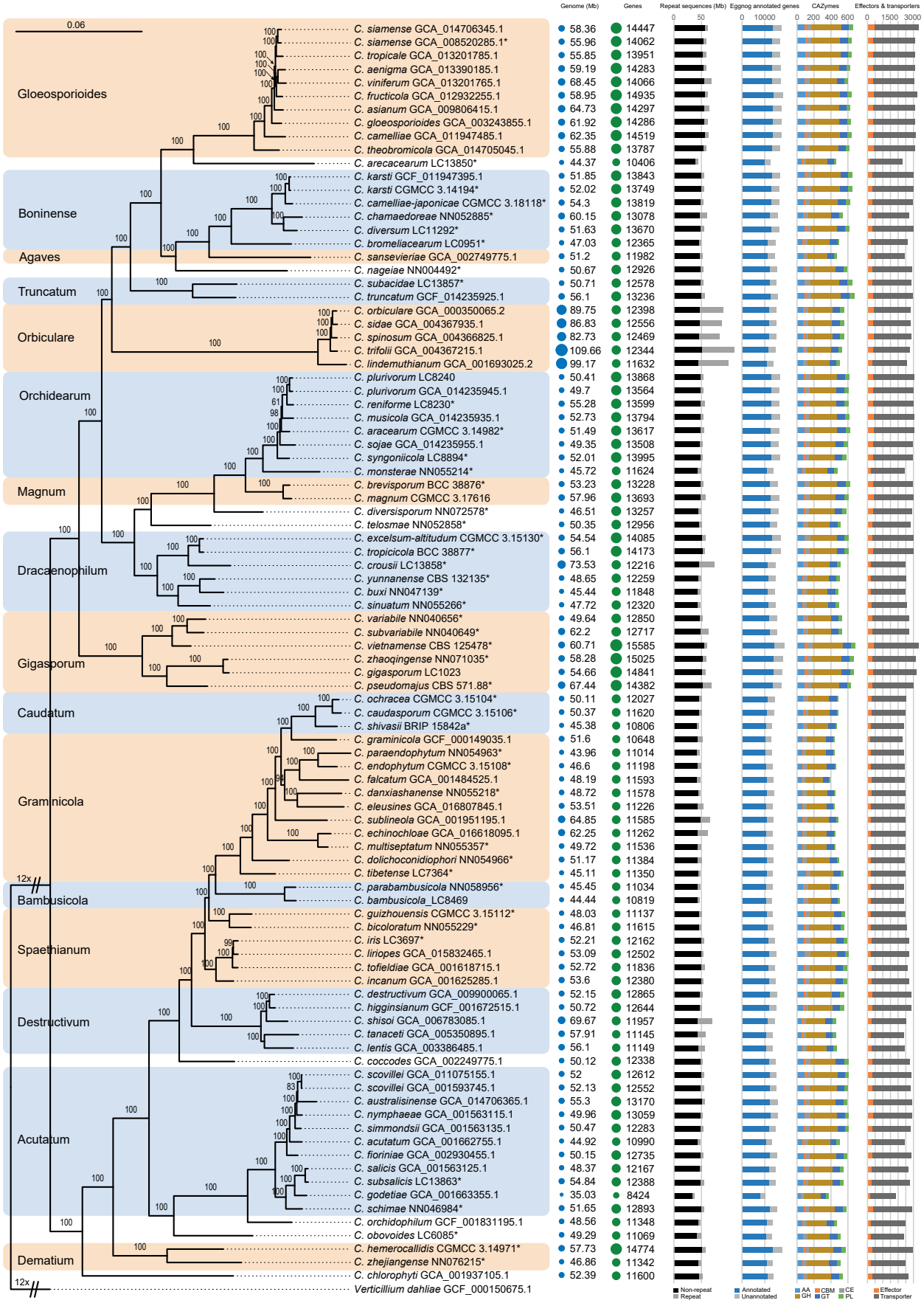


Fig. 4. Maximum likelihood phylogenomic tree generated from a concatenated alignment of sets of orthologous protein sequences. A total of 1 893 single-copy orthologs were retained. The tree was estimated based on the JTT substitution model. Ex-type strains are indicated with "*" in the end of the taxa labels. Genome and assembly features are shown at the right side of the phylogenetic tree. From left to right: Genomes (Mb): genome size in Mb; Genes: number of predicted genes; Repeat sequences (Mb): genome sizes showing proportion of repeat elements in these genomes; Eggnog annotated genes: number of predicted protein coding genes with and without functional annotation based on eggnog database; CAZymes: gene number with the distribution of CAZyme classes, auxiliary activities (AA), carbohydrate binding molecules (CBM), carbohydrate esterases (CE), glycoside hydrolases (GH), glycosyl transferases (GT), polysaccharide lyases (PL); Effectors & transporters: number of predicted effectors and transporters.

that were generally larger than those of other species (Fig. 4). However, disproportionate to the large genome, the *C. orbiculare* species complex encodes relatively smaller number of genes, CAZymes and transporters than a few other species complexes, *e.g. C. gigasporum*, *C. gloeosporioides*, and *C. orchidearum* species complexes. On the contrary, *C. orbiculare* species complex possesses the highest proportion of repeat content than other species in this genus (Fig. 4), which may contribute to its large genome (Haridas *et al.* 2020). Moreover, compared to other members in *Colletotrichum*, species associated with gramineous plants in the *C. bambusicola*, *C. caudatum*, and *C. graminicola* species complexes are characterised by small genome size and small number of genes, CAZymes and transporters.

Using 94 *Colletotrichum* species covering 16 species complexes and one outgroup, a high confidence whole-genome-based phylogenetic tree was generated (Fig. 4). The Gblocks filtered alignment of 1 893 single-copy orthologs consisted of 655 956 characters, including alignment gaps. All nodes, except for four (two in the *C. orchidearum* species complex, and the other two in the *C. graminicola* and *C. spaethianum* species complexes respectively), received 100 % bootstrap support (Fig. 4). The species tree supported the taxonomic status of all species newly described in the current study (Fig. 4). The strain with the assembly accession GCA_001593745.1 was labeled as *C. acutatum* at the time the genome was published; it was however revealed to be *C. scovillei* in the species tree (Fig. 4).

Taxonomy

Five taxa (*C. bambusicola*, *C. guangxiense*, *C. hsienjenchang*, *C. metake*, and *C. parabambusicola sp. nov.*) characterised by straight conidia formed a well-supported clade in the six-locus tree (Fig. 1), representing a new species complex, herein called the *C. bambusicola* species complex. Based on the molecular analyses, morphological examination, and habitat and geographical comparisons, 30 new species are introduced herein.

Colletotrichum arecacearum F. Liu, Z.Y. Ma & L. Cai, ***sp. nov.*** MycoBank MB 841370. Fig. 5.

Etymology: Named after its host plant family, *Arecaceae.*

Description: *Colonies* on PDA 19–22 mm diam in 7 d, flat with entire edge, saffron in the centre, white at the margin, aerial mycelium sparse, reverse creamy white. *Vegetative hyphae* hyaline, smooth-walled, septate, branched. Sporulating on OA, *conidiomata* scattered or confluent, immersed, olivaceous. *Conidiophores* usually reduced to conidiogenous cells. *Conidiogenous cells* hyaline, smooth-walled, ampulliform, rarely subcylindrical, straight or curved, collarette distinct, periclinal thickening sometimes visible, 8.5–15 × 4.5–7.5 µm. *Conidia* hyaline, aseptate, smooth-walled, guttulate, cylindrical, occasionally slightly curved, with one end round and one end subacute, 12.5–18.5 × 4–5.5 µm (av. ± SD = 15.5 ± 1.3 × 4.7 ± 0.3 µm), L/W ratio = 3.3. *Appressoria* and *setae* not observed.

Typus: **China**, Guangxi, Guangxi Botanical Garden of Medicinal Plants, on leaves of an unidentified species in *Arecaceae*, Jun. 2017, Z.Y. Ma & L.W. Hou (**holotype** HMAS 350634, ex-type culture CGMCC 3.20509 = LC13850 = MH0003).

Additional materials examined: **China**, Guangxi, Guangxi Botanical Garden of Medicinal Plants, on leaves of an unidentified species in *Arecaceae*, Jun. 2017, Z.Y. Ma & L.W. Hou, living cultures LC13851 (= MH0003-1), LC13852 (= MH0003-2), LC13853 (= MH0003-3).

Notes: *Colletotrichum arecacearum*, *C. pyrifoliae*, and *C. nageiae sp. nov.* clustered basal to the broadly known *C. gloeosporioides* species complex (Fig. 1). These three species produce cylindrical conidia, similar to those produced by the *C. gloeosporioides* complex (Weir *et al.* 2012), but are temporarily considered as singleton species because the ingroup taxa of the *C. gloeosporioides* complex are much more tightly related to each other than to them. *Colletotrichum arecacearum* is distinct from other species in this genus at each locus sequenced in the current study, and morphologically differs from the most closely related species *C. pyrifoliae* in producing shorter and wider conidiogenous cells (8.5–15 × 4.5–7.5 µm *vs.* 15–32 × 3–5 µm), and slightly shorter and thinner conidia (12.5–18.5 × 4–5.5 µm *vs.* 14–23 × 5.5–7 µm), and differs from *C. nageiae sp. nov.* in producing wider conidiogenous cells (8.5–15 × 4.5–7.5 µm *vs.* 10–20 × 2.5–4.5 µm) and longer conidia (12.5–18.5 × 4–5.5 µm *vs.* 9–13.5 × 4.5–6 µm).

Colletotrichum bambusicola C.L. Hou & Q.T. Wang, Mycologia 113: 452. 2021. Fig. 6.

Description: *Colonies* on PDA 52–56 mm diam in 7 d, flat with undulate edge, white to pale grey, aerial mycelium dense, reverse pale grey with mouse grey to black halo, white at the edge. Sexual morph developed on SNA. *Ascomata* ovoid to obpyriform, medium to dark brown, 180–195 × 95–110 µm, glabrous, ostiolate, neck pale brown, outer layer composed of angular cells, medium brown, 8–18.5 µm diam. *Asci* cylindrical to obclavate, hyaline, 58–72 × 7–10 µm, 8-spored. *Ascospores* uni- to bi-seriate, hyaline, smooth-walled, aseptate, allantoid with rounded ends, rarely straight or very slightly curved, 14–19 × 4–6 µm (av. ± SD = 16 ± 1.1 × 5 ± 0.5 µm), L/W ratio=3.2.

On SNA, *conidiomata* acervular, scattered, semi-immersed, conidiophores and setae formed on a cushion of roundish, hyaline to pale brown cells. *Setae* pale to dark brown, smooth-walled, straight or flexuous, 3–4-septate, 60–74 µm long, basal cell cylindrical, 4–4.5 µm diam, tip more or less acute. *Conidiophores* hyaline to pale brown, smooth-walled, septate, branched. *Conidiogenous cells* hyaline, smooth-walled, cylindrical, occasionally ampulliform, 21–33 × 2.5–3 µm. *Conidia* hyaline, aseptate, smooth-walled, cylindrical, straight, occasionally slightly curved, both ends rounded, or one end rounded and one end ± acute, 12–15.5 × 3.5–6 µm (av. ± SD = 14.0 ± 1.0 × 4.3 ± 0.7 µm), L/W ratio = 3.2. *Appressoria* single or gregarious, olivaceous, irregular outline with crenate or lobed margin, or clavate, 8.5–17.5 × 5–12 µm (av. ± SD = 12.3 ± 2.3 × 8.2 ± 1.7 µm).

Typus: **China**, Guangxi Zhuang Autonomous region, on seeds of *Phyllostachys edulis*, Sep. 2016, C.L. Hou & Q.T. Wang (**holotype** CAF80001, ex-type culture CFCC 54250 = ACCC 39709 = CNUCC 307307).

Additional materials examined: **China**, Fujian, Fuzhou, Wuyi Mountain, on *Petasites hybridus*, Aug. 2016, Z.Y. Ma, WYS14, living culture LC8469 (= M0288); *ibid*. living cultures LC8468 (= M0287); Fujian, Fuzhou, Wuyi Mountain, on *P. hybridus*, Aug. 2016, Z.Y. Ma, WYS40, living culture LC8498 (= M0322); Fujian, Fuzhou, Wuyi Mountain, on *Patrinia villosa*, Aug. 2016, Z.Y. Ma, WYS66, living culture LC8533 (= M0362).

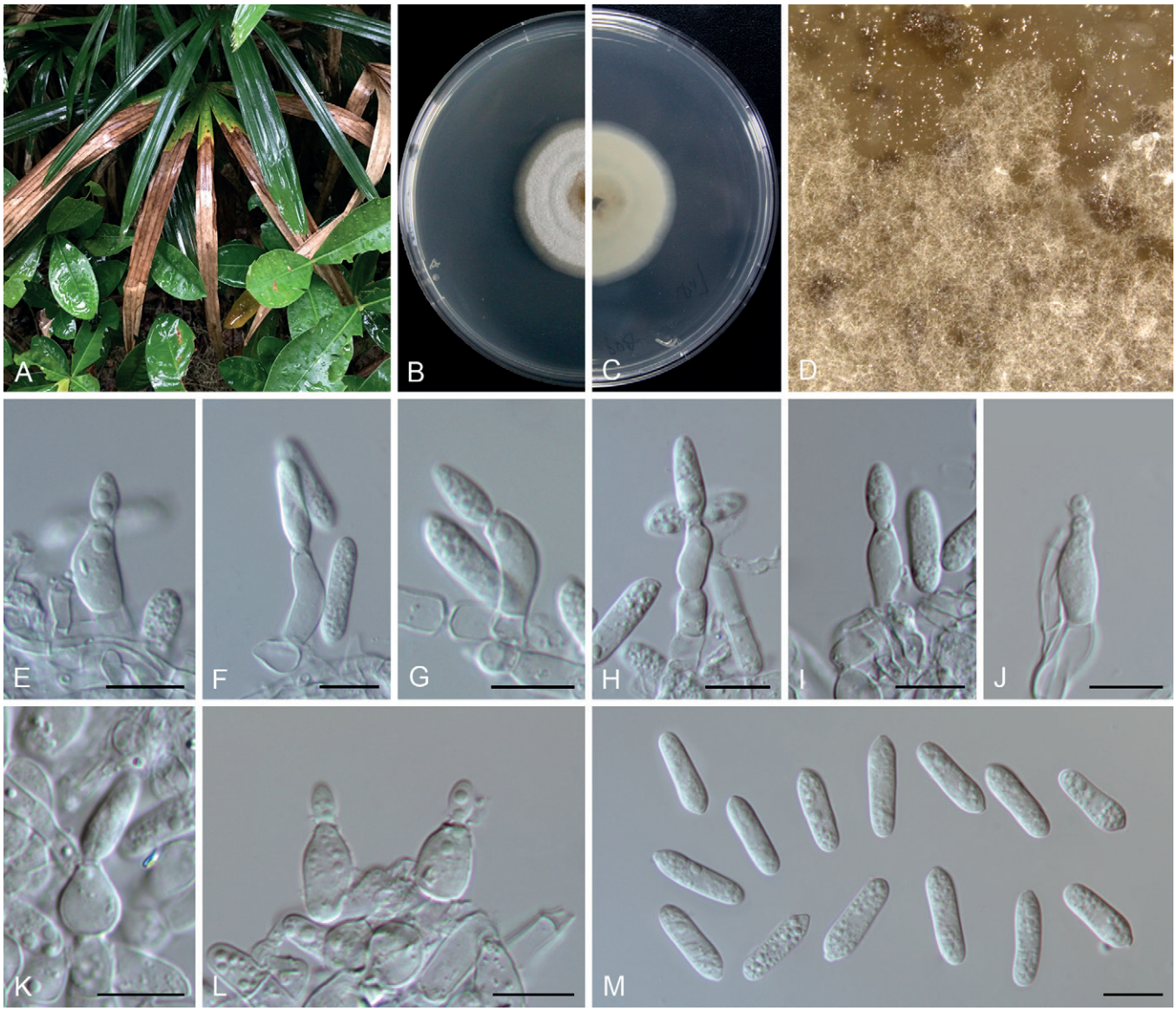


Fig. 5. *Colletotrichum arecacearum* (ex-type culture LC13850). **A.** Disease symptom on the host plant. **B, C.** Front and reverse colony on PDA (7 d). **D.** Colony surface on OA (7 d), with immersed, olivaceous conidiomata. **E–L.** Conidiogenous cells and conidia. **M.** Conidia. Scale bars = 10 µm.

Notes: Here, we describe the sexual morph of *C. bambusicola*, which was lacking in the original description based on collections from bamboo in Wang *et al.* (2021). This fungus was treated in a broader sense although two subclades were recognised. However, after broader sampling for the phylogenetic analysis and detailed morphological comparisons, we concluded that a new species should be proposed to distinguish the two clades (Fig. 1). *Colletotrichum bambusicola* differs in 3 bp in *act*, 2 bp in *gapdh*, 24 in *his3*, 1 bp in ITS, 11 bp in *tub2* from *C. parabambusicola sp. nov*. Morphologically, *C. bambusicola* differs from *C. parabambusicola sp. nov.* in that it produces longer asci (58–72 × 7–10 µm *vs.* 47–55 × 6.5–7.5 µm) and ascospores (14–19 × 4–6 µm *vs.* 10–14.5 × 3–5.5 µm), and a larger conidium L/W ratio (3.2 *vs.* 2.6).

Colletotrichum bicoloratum F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841371. Fig. 7.

Etymology: Named to reflect the bicoloured conidiogenous cells.
Description: *Colonies* on PDA 52 mm diam in 7 d, flat with entire edge, white, aerial mycelium dense, reverse greyish sepia to fuscous black. On MEA, *setae* rarely observed, dark brown, smooth-walled, straight, 3–4-septate, up to 51 µm long, basal cell cylindrical, 3.5 µm diam, tip acute. *Conidiophores* formed directly on hyphae, usually reduced into conidiogenous cells. *Conidiogenous cells* hyaline or dark brown, smooth-walled, ampulliform, 6–10.5 × 4–6 µm (av. ± SD = 8.8 ± 1.4 × 4.8 ± 0.6 µm). *Conidia* hyaline, aseptate, smooth-walled, curved, tapering towards apex and base, base usually obtuse and broader than the apex, 12–16 × 3–4 µm (av. ± SD = 14 ± 0.9 × 3.6 ± 0.3 µm), L/W ratio = 3.9. *Appressoria* single, medium to dark brown, usually ellipsoidal to subcircular, or irregularly shaped, rarely 2-celled, 5–9 × 4–6.5 µm.

Typus: **China**, Guangdong Province, Guangzhou, Yuexiu Park, on dead leaves of *Ophiopogon japonicus*, 29 Dec. 2012, W.P. Wu (**holotype** HMAS 350648, ex-type culture CGMCC 3.20510 = LC13882 = NN055229).

Notes: *Colletotrichum bicoloratum* is phylogenetically closely related to *C. guizhouensis*, *C. lilii* and *C. spaethianum* in the *C. spaethianum* species complex, but differs from *C. guizhouensis* and *C. lilii* in producing shorter and wider conidiogenous cells (6–10.5 × 4–6 µm *vs.* 12–25 × 2–2.5 µm in *C. guizhouensis*, 7–20 × 2–3.5 µm in *C. lilii*) and smaller appressoria (5–9× 4–6.5 µm *vs.* 6–14.5 × 5–11 µm in *C. guizhouensis*, 7.5–28.5 × 4.5–14 µm in *C. lilii*), and differs from *C. spaethianum* in producing wider conidiogenous cells (6–10.5 × 4–6 µm *vs.* 6–16 × 3–4 µm) and shorter conidia

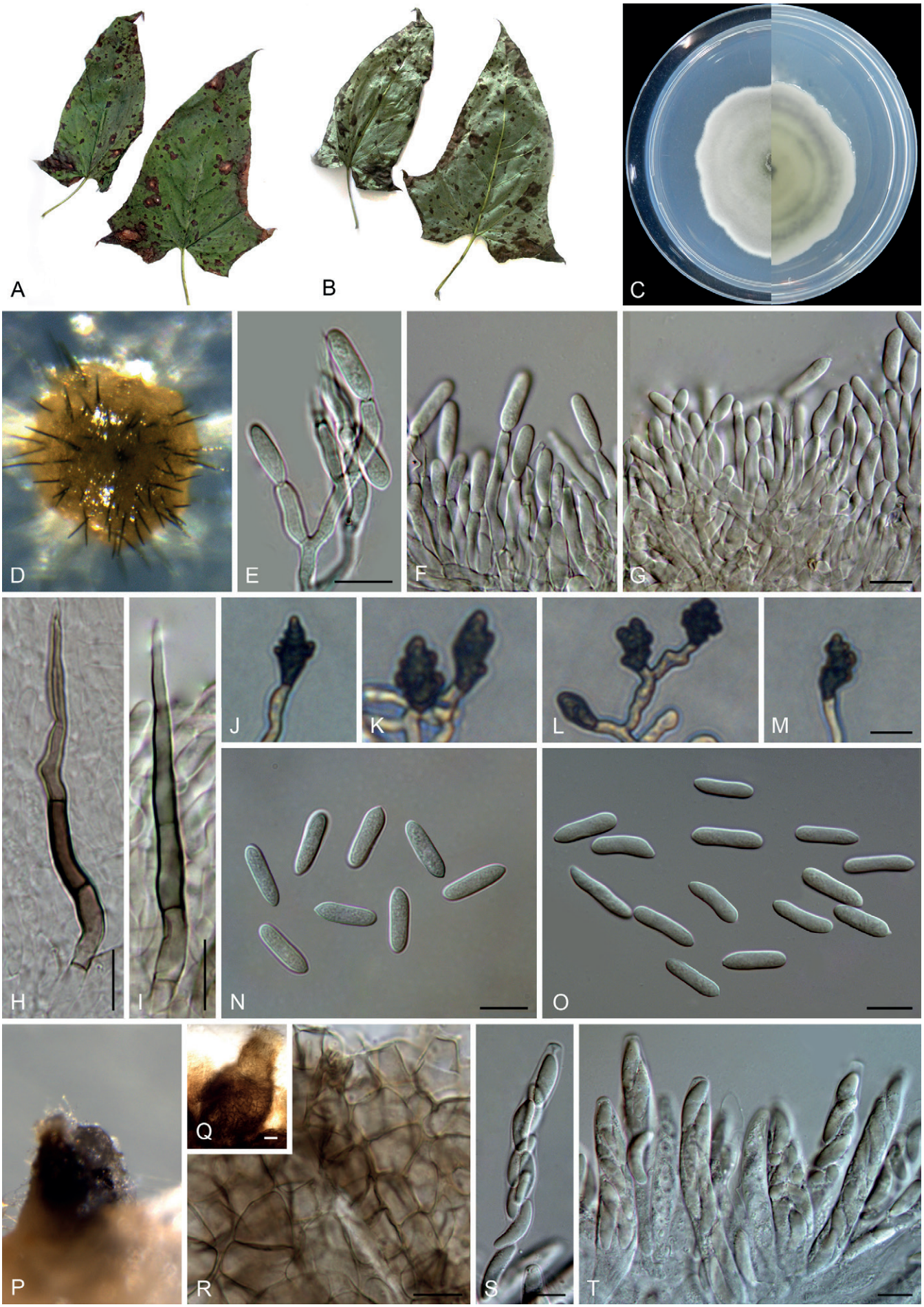


Fig. 6. *Colletotrichum bambusicola* (C–E, H, J–N from LC8469, F–G, I, O from LC8468, P–T from LC8533). **A, B.** Disease symptoms on the host plants. **C.** Front and reverse colony on PDA (7 d). **D.** Acervulus. **E–G**. Conidiophores, conidiogenous cells and conidia. **H, I.** Setae. **J–M.** Appressoria. **N, O.** Conidia. **P, Q.** Ascomata. **R.** Ascomata wall. **S, T.** Asci and ascospores. Scale bars =10 µm. Scale bar of M applies to J–M.

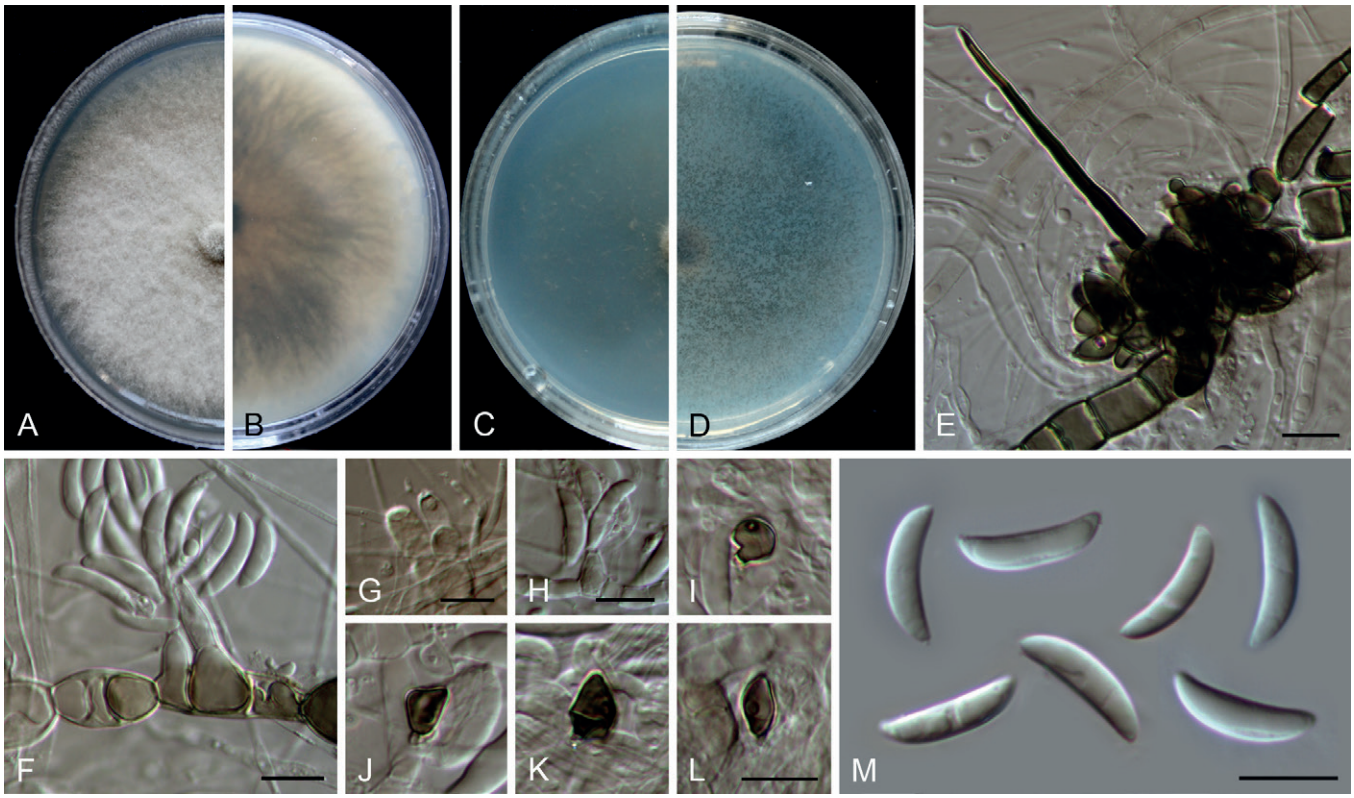


Fig. 7. *Colletotrichum bicoloratum* (ex-type culture NN055229). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Front and reverse colony on SNA (7 d). **E.** Seta and conidiophores. **F–H.** Conidiogenous cells and conidia. **I–L.** Appressoria. **M.** Conidia. Scale bars = 10 µm.

(12–16 × 3–4 µm *vs.* 13.5–29 × 3–4.5 µm) (Damm *et al.* 2009). *Colletotrichum bicoloratum* can be identified to species level by analysing any of the locus used in the current study.

Like most species in the *C. spaethianum* species complex, the associated host of *C. bicoloratum*, *Ophiopogon japonicus*, is also a petaloid monocotyledon plant. To the best of our knowledge, this is the first report of a *Colletotrichum* species associated with this plant host in China (Farr & Rossman 2021).

Colletotrichum bromeliacearum F. Liu & L. Cai, ***sp. nov.*** MycoBank MB 841372. Fig. 8.

Etymology: Named after the host plant family, *Bromeliaceae*.

Description: *Colonies* on PDA 40–47 mm diam in 7 d, flat with undulate edge, cinnamon in the centre, white towards the margin, aerial mycelia sparse, reverse brown vinaceous, dark brick, white towards margin. On PDA, *conidiomata* acervular, gregarious, pale luteous. *Setae* olivaceous grey to olivaceous black, smooth-walled, 2–3-septate, 21–73 µm long, basal cell cylindrical or cylindric-conical, 3–5 µm diam, tip more or less acute. *Conidiophores* formed from a cushion of roundish and pale brown cells, solitary or branched, septate, hyaline to pale brown. *Conidiogenous cells* hyaline or pale brown, smooth-walled, cylindrical, ovoid, 9–20 × 3.5–7 µm. *Conidia* hyaline, aseptate, smooth-walled, cylindrical with both ends round, 8.5–16 × 5–7.5 µm (av. ± SD = 12 ± 1.8 × 6.2 ± 0.7 µm), L/W ratio =1.9. *Appressoria* single, mostly globose to subglobose, rarely subcylindrical or irregular outline, with undulate edge, 5–8(–15) × 4.5–8 µm (av. ± SD = 6.7 ± 0.9 × 6 ± 0.9 µm).

Typus: **China**, Yunnan, on a bromeliad plant (*Bromeliaceae*), 2010, F. Liu (**holotype** HMAS 350626, ex-type culture CGMCC 3.20527 = LC0951).

Additional materials examined: **China**, Yunnan, on a bromeliad plant (*Bromeliaceae*), 2010, F. Liu, living cultures LC13854, LC13855, LC13856.

Notes: Four strains of *C. bromeliacearum* formed a distinct clade in the *C. boninense* species complex (Fig. 1). This species is distinct from other species in this genus at each locus sequenced in the current study. Hitherto, five *Colletotrichum* species were known from *Bromeliaceae*, *i.e. C. ananas*, *C. brevisporum*, *C. truncatum*, *C. gloeosporioides*, and *C. setosum* (Farr & Rossman 2021). *Colletotrichum bromeliacearum* is easily distinguished from *C. brevisporum*, *C. truncatum*, and *C. gloeosporioides* based on molecular and morphological characters (different species complexes), and from *C. ananas* [*Nom. inval.*, Art. 39.1 (Shenzhen)] and *C. setosum* in producing different shapes of conidia (cylindrical and straight *vs.* curved) (Garud 1968), as well as shorter and wider conidia (8.5–16 × 5–7.5 µm *vs.* 15–17 × 4–5 µm) (Patterson 1900), respectively.

Colletotrichum buxi F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841373. Fig. 9.

Etymology: Named after the host plant genus, *Buxus*.

Description: *Colonies* on PDA growing very slowly, reaching 8–11 mm diam after 7 d, flat with undulate edge, saffron to orange, conidial masses abundant, orange, aerial mycelium sparse, reverse salmon. *Conidiomata* not developed, abundant conidial masses (Fig. 9 E) formed on the surface of PDA, covered by aerial mycelium, orange, confluent. *Conidiophores* formed directly on hyphae, hyaline, septate, branched, 32–74 µm in length. *Conidiogenous cells* hyaline, smooth-walled, cylindrical to subcylindrical, variable in size, 9.5–26 × 2–4.5 µm (av. ± SD =18.6 ± 4.1 × 3.4 ± 0.7 µm). *Conidia* hyaline, mostly aseptate, sometimes

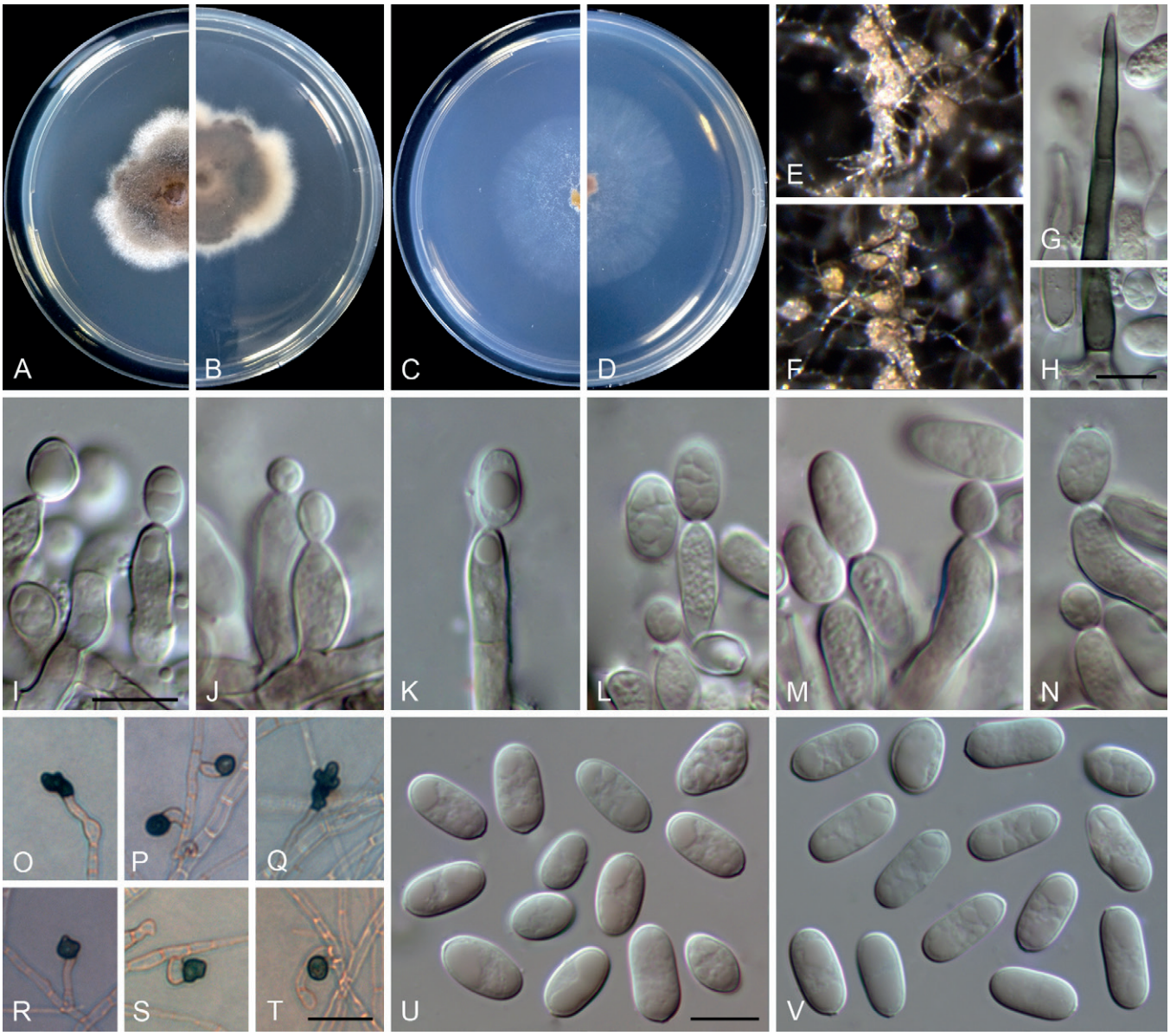


Fig. 8. *Colletotrichum bromeliacearum* (ex-type culture LC0951). **A, B.** Front and reverse colony on PDA (9 d). **C, D.** Front and reverse colony on SNA (9 d). **E, F.** Conidiomata on PDA. **G.** Tip of a seta. **H.** Base of a seta. **I–N.** Conidiogenous cells and conidia. **O–T.** Appressoria. **U, V.** Conidia. Scale bars: H, I, U = 10 µm; T = 20 µm. Scale bar of I applies to I–N; T applies to O–T; U applies to U, V.

1-septate and germinating with thin and flexuous germ tubes developing from the middle or apex of the conidia (Fig. 9 F, J), smooth-walled, cylindrical, both ends round, or one end obtuse and another end round, 9.5–14.5 × 4–6 µm (av. ± SD =12.2 ± 1.2 × 5.1 ± 0.4 µm), L/W ratio =2.4. *Appressoria* mostly clavate, sometimes subcylindrical or with an irregular outline and with a crenate or lobed margin, 5–12 × 3.5–6 µm (av. ± SD = 7.5 ± 1.8 × 4.4 ± 0.7 µm). *Setae* not observed.

Typus: **China**, Yunnan Province, Kunming, Kunming Botanical Garden, on healthy leaves of *Buxus* sp., 10 May 2002, W.P. Wu (**holotype** HMAS 350642, ex-type culture CGMCC 3.20511 = LC13873 = NN047139).

Additional material examined: **China**, Yunnan Province, Kunming, Kunming Botanical Garden, on *Buxus sinica* var. *parvifolia*, 20 Dec. 1993, W.P. Wu, living culture LC14551 (= NN004149).

Notes: *Colletotrichum buxi* resides within the *C. dracaenophilum* species complex in the multi-locus phylogenetic tree (Fig. 1). It shares low sequence similarity with the phylogenetically related species *C. yunnanense* at *act* (93.8 %), *chs-1* (98.8 %), *gapdh* (89.5 %), *his3* (94.9 %), *tub2* (97.3 %), and ITS (97.4 %), and differs in producing longer conidiophores (32–74 µm *vs.* 10–30 µm) and conidiogenous cells (9.5–26 µm *vs.* 6–12 µm), and shorter conidia (9.5–14.5 µm *vs.* 14–21 µm) (Liu *et al.* 2007).

Colletotrichum chamaedoreae F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841374. Fig. 10.

Etymology: Named after the host plant genus, *Chamaedorea*.

Description: *Colonies* on PDA 42–48 mm diam in 7 d, orange in the centre due to the formation of abundant conidial masses, white at the margin, reverse orange in the centre and white towards the margin. *Vegetative hyphae* hyaline, smooth-walled, septate, branched, 2.5–4.5 µm diam. On PDA, *ascomata* globose, subglobose or with an irregular shape, solitary or gregarious, brown to black, sub-immersed or immersed, ostiolate, outer wall composed of pale brown to dark brown angular cells, 6.5–19.5 × 3.5–12 µm diam (av. ± SD = 12.8 ± 3.1 × 7.3 ± 2.2 µm). *Interascal tissue* composed of hyaline, thin-walled, septate paraphyses, 2.5–5.5 µm diam. *Asci* obclavate

or clavate, hyaline, 41–65 × 12–16 µm, 8-spored. *Ascospores* uniseriately or irregularly arranged, hyaline, smooth-walled, aseptate, fusoid or subcylindrical with gently tapering rounded ends, straight or slightly curved, 14.5–21.5 × 4.5–6.5 µm (av. ± SD = 17.7 ± 1.8 × 5.3 ± 0.5 µm), L/W ratio = 3.3.

Conidial masses amber to buff, protruded from the dark brown to black conidiomata. *Setae* medium brown to dark brown, smooth-walled, 1–7-septate, 36–95 µm long, basal cells cylindrical, sometimes inflated in the middle, 4–8 µm diam, the tip acute or rounded. *Conidiophores* 0–1-septate, usually reduced to conidiogenous cells. *Conidiogenous cells* hyaline, cylindrical to subcylindrical, smooth-walled, straight or slight curved, sometimes extending to form new conidiogenous loci, 11–27 × 3.5–9.5 µm. *Conidia* hyaline, aseptate, smooth-walled, guttulate, often with two big and a number of small guttules, cylindrical, the apex round, the base with a prominent truncate scar, straight, 13.5–19 × 4.5–6.5 µm (av. ± SD = 15.7 ± 1.4 × 5.6 ± 0.3 µm), L/W ratio = 2.8. *Appressoria* not observed.

Typus: **China**, Yunnan Province, Jinghong, Xishuangbanna Botanical Garden, on healthy leaves of *Chamaedorea erumpens*, 19 Mar. 2010, W.P. Wu (**holotype** HMAS 350639, ex-type culture CGMCC 3.20512 = LC13868 = NN052885).

Additional materials examined: **China**, Yunnan Province, Jinghong, Xishuangbanna Botanical Garden, on healthy leaves of *Chamaedorea erumpens*, 19 Mar. 2010, W.P. Wu, living cultures LC13867 (= NN052884), LC13869 (= NN052890), LC13870 (= NN052891).

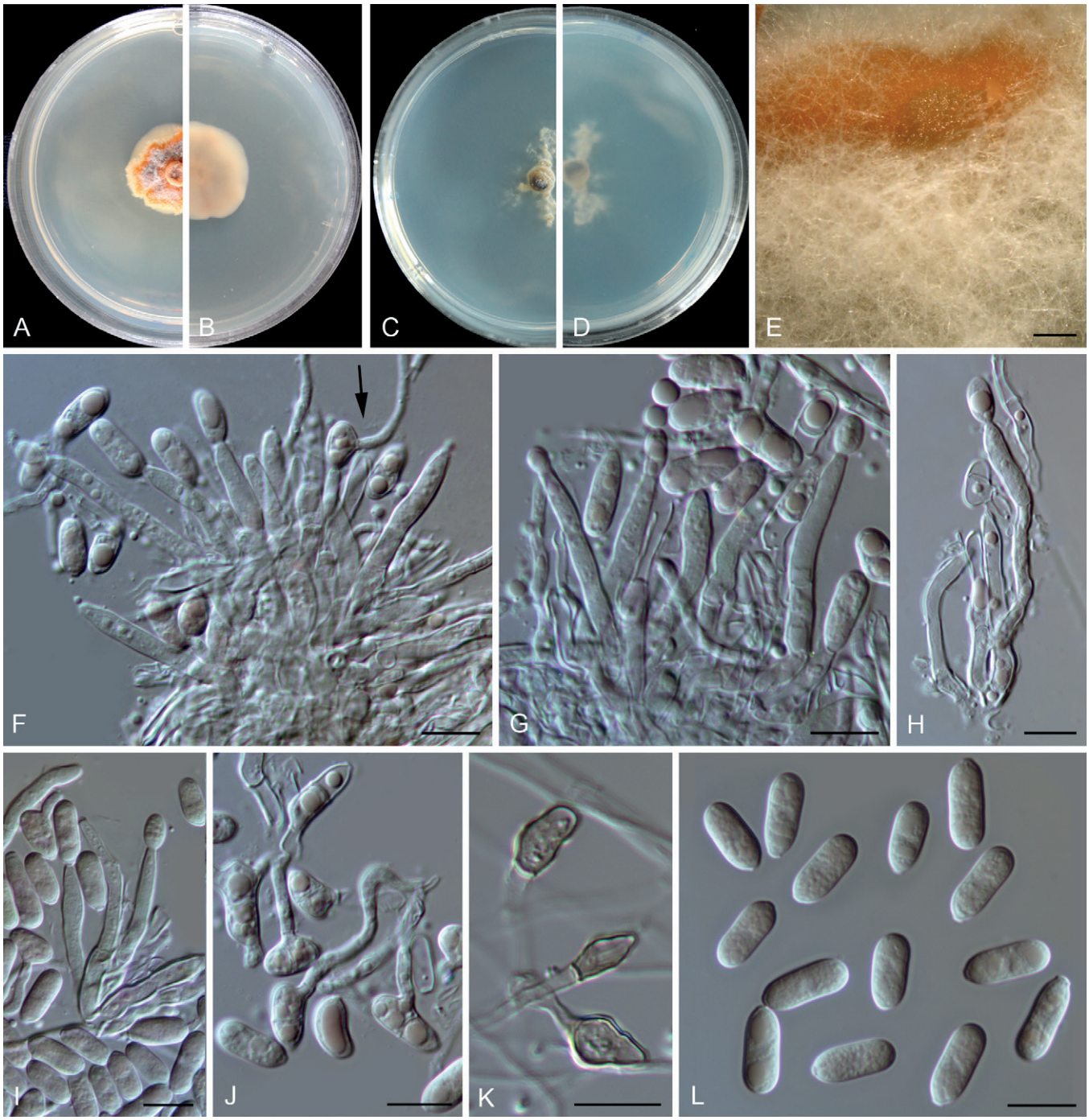


Fig. 9. *Colletotrichum buxi* (ex-type culture NN047139). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Front and reverse colony on SNA (7 d). **E.** Conidial masses on PDA. **F–I.** Conidiophores, conidiogenous cells and conidia (arrow in F points to a germinating conidium). **J.** Germinating conidia. **K.** Appressoria. **L.** Conidia. Scale bars: E = 300 µm; F–L = 10 µm.

Notes: *Colletotrichum chamaedoreae* belongs to the *C. boninense* species complex (Fig. 1). Conidiogenous cells that extend to form new conidiogenous loci have previously been observed in species of the *C. boninense* species complex, *e.g.* in *C. annellatum*, *C. constrictum*, *C. cymbidiicola*, *C. novae-zelandiae*, and *C. oncidii*. However, their conidia are shorter and the conidium L/W ratio

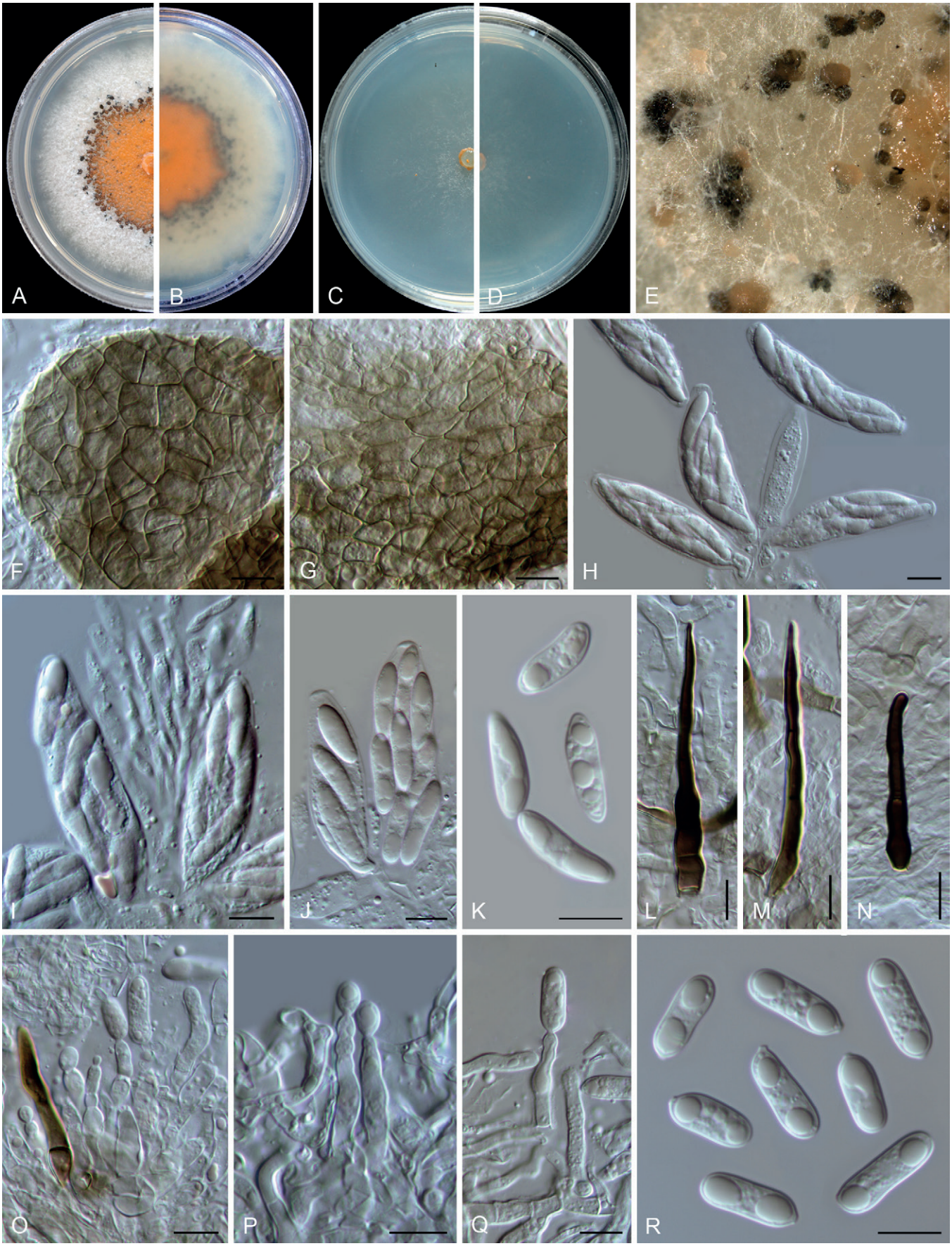


Fig. 10. *Colletotrichum chamaedoreae* (ex-type culture NN052885). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Front and reverse colony on SNA (7 d). **E.** Conidiomata and ascomata on SNA. **F, G.** Ascomata wall. **H–J.** Asci, ascospores and paraphyses. **K.** Ascospores. **L–N.** Seta. **O–Q.** Conidiophores, conidiogenous cells and conidia. **R.** Conidia. Scale bars = 10 µm.

is lower than those of *C. chamaedoreae* (Damm *et al.* 2012b). In addition, *C. chamaedoreae* is distinct from other species in this genus at each locus sequenced in the current study, and morphologically differs from the most closely related species *C. brassicicola* in that it produces shorter asci (41–65 × 12–16 µm *vs.* 65–105 × 12–13.5 µm), and longer and wider conidiogenous cells (11–27 × 3.5–9.5 µm *vs.* 7–14 × 4–5.5 µm) (Damm *et al.* 2012b).

Colletotrichum chiangraiense X.Y. Ma *et al.*, MycoKeys 43: 34. 2018.

Notes: *Colletotrichum chiangraiense* was shown to be a member of the *C. boninense* species complex in the original description (Ma *et al.* 2018), but resided within the *C. gigasporum* species complex in our multi-locus tree, forming an unusually long branch (Fig. 1). BLASTn search of the NCBI GenBank using ITS and *act* sequences of *C. chiangraiense* (ex-type MFLUCC 14-0119) yielded closest matches with species in the *C. gigasporum* species complex, while using *tub2* yielded closest matches with species in the *C. boninense* species complex. Therefore, it is very likely that the sequences provided in Ma *et al.* (2018) were misplaced or with sequencing errors. The taxonomic status of *C. chiangraiense* requires confirmation by re-examination and re-sequencing of the type.

Colletotrichum crousii F. Liu, Z.Y. Ma & L. Cai, ***sp. nov.*** MycoBank MB 841375. Fig. 11.

Etymology: Named in honour of the mycologist Pedro Crous, one of the major contributors to recent improvements in *Colletotrichum* systematics.

Description: *Colonies* on PDA 44–46 mm diam in 7 d, flat with undulate edge, rosy buff, covered by cottony and white aerial mycelium, reverse dark vinaceous buff, white towards margin. On PDA, *conidiomata* not observed, conidiophores formed directly from hyphae, conidial masses pale vinaceous buff, confluent. *Conidiophores* hyaline, solitary, sometimes branched at the base, up to 35 µm, usually reduced to conidiogenous cells. *Conidiogenous cells* hyaline, aseptate, smooth-walled, cylindrical to ampulliform, 9–22 × 4.5–6 µm. *Conidia* hyaline, aseptate, smooth-walled, cylindrical, both ends obtuse, or apex obtuse and bottom gradually narrowed with an prominent truncate scar, 12.5–18.5 × 6.5–8 µm (av. ± SD =16 ± 1.6 × 7 ± 1.6 µm), L/W ratio =2.2. *Appressoria* and *setae* not observed.

Typus: **China**, Guangxi, Chongzuo, Guangxi Nonggang National Nature Reserve, on leaf of *Rhaphidophora* sp., Jun. 2017, Z.Y. Ma & L.W. Hou, NG56 (**holotype** HMAS 350636, ex-type culture CGMCC 3.20513 = LC13858 = MH0588).

Additional materials examined: **China**, Guangxi, Chongzuo, Guangxi Nonggang National Nature Reserve, on leaf of *Rhaphidophora* sp., Jun. 2017, Z.Y. Ma & L.W. Hou, NG56 (Fig. 11A, B), living cultures LC13859 (= MH0589), LC13860 (= MH0592), LC13861 (= MH0727); on leaf of *Rhaphidophora* sp., Jun. 2017, Z.Y. Ma & L.W. Hou, NG58 (Fig. 11C, D), living culture LC13862 (= MH0759).

Notes: *Colletotrichum crousii* is phylogenetically related to *C. excelsum-altitudinum*, *C. tongrenense*, and *C. tropicicola* in the *C. dracaenophilum* species complex, but differs in that it produces wider conidia (6.5–8 µm *vs.* 5–7 µm in *C. excelsum-altitudinum* and *C. tongrenense*, 4.5–5.5 µm in *C. tropicicola*) with a lower L/W ratio (2.2 *vs.* generally 2.4–3.3) (Tao *et al.* 2013, Damm *et al.* 2019, Zhou *et al.* 2019), and larger conidiogenous cells (9–22 × 4.5–6 µm *vs.* 2–11 × 1–2 µm in *C. tongrenense*) (Zhou *et al.* 2019). Moreover, *C. crousii* is distinct from other species in this genus at each locus sequenced in the current study.

Colletotrichum danxiashanense F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841376. Fig. 12.

Etymology: Named after the location where the fungus was collected, Danxia Mountain.

Description: *Colonies* on PDA 52 mm diam in 7 d, flat with rhizoids edge, surface covered by floccose white, aerial mycelium, reverse pale luteous to brown. *Vegetative hyphae* hyaline or pale brown, smooth-walled, septate, branched. On SNA, *conidiomata* not developed, conidiophores formed directly on hyphae, terminally or laterally. *Setae* not observed. *Conidiophores* reduced to conidiogenous cells. *Conidiogenous cells* hyaline, rarely pale brown, smooth-walled, ampulliform to cylindrical, 6–12 × 2.5–5.5 µm, periclinal thickening not observed. *Conidia* hyaline, aseptate, smooth-walled, guttulate, falcate with ± acute or obtuse ends, 18.5–29.5 × 3–4.5 (av. ± SD ± 24.4 ± 3.1 × 3.8 ± 0.4), L/W ratio = 6.4. *Appressoria* single, medium brown to dark brown, subcircular, subcylindrical, or irregularly shaped, 6–10 × 6–7 µm (av. ± SD = 8.3 ± 1.4 × 6.4 ± 0.4 µm).

Typus: **China**, Guangdong Province, Shaoguan, Danxia Mountain, on dead leaves of probable *Miscanthus* sp., 25 Dec. 2012, W.P. Wu (**holotype** HMAS 350650, ex-type culture CGMCC 3.20514 = LC13885 = NN055218).

Notes: *Colletotrichum danxiashanense* belongs to the *C. graminicola* species complex and forms a sister clade to *C. miscanthi* (Fig. 3). Both species are morphologically similar and associated with the same host genus, *Miscanthus*, but with clearly different *act* (98.3 % identity, with 4 bp differences), *chs-1* (99.6 % identity, with 1 bp difference), ITS (98.9 % identity, with 5 bp differences), *sod2* (90.5 % identity, with 35 bp differences), and *tub2* (97.9 % identity, with 10 bp differences) sequences.

Colletotrichum diversisporum F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841377. Fig. 13.

Etymology: Refers to the diverse shapes of conidia.

Description: *Colonies* on PDA 49 mm diam in 7 d, flat with entire edge, smoke to mouse grey in the centre, white towards the margin, aerial mycelium more or less sparse, reverse smoke grey. *Vegetative hyphae* hyaline, smooth-walled, septate, branched. On PDA, *conidiomata* not developed, conidiophores formed directly on hyphae. *Conidiophores* hyaline or very pale brown, septate, branched. *Conidiogenous cells* hyaline, smooth-walled, cylindrical, 14–33 × 2.5–3.5 µm. *Conidia* hyaline, aseptate, smooth-walled, guttulate, variable in shape and size, cylindrical, ellipsoidal or ovoid, sometimes constricted in the centre or near the base, 9.5–16.5 × 3.5–8 µm (av. ± SD ± 11.5 ± 1.5 × 5.2 ± 1.1 µm), L/W ratio = 2.2. Sometimes conidia becoming 1-septate and germinating after 10 d, germ tubes flexuous and thinner than hyphae (Fig. 13 G). *Appressoria* and *setae* not observed.

Typus: **China**, Guangdong Province, Guangzhou, South China Botanical Garden, on dead leaves of *Dracaena angustifolia*, 28 Feb. 2016, W.P. Wu (**holotype** HMAS 350655, ex-type culture CGMCC 3.20515 = LC13890 = NN072578).

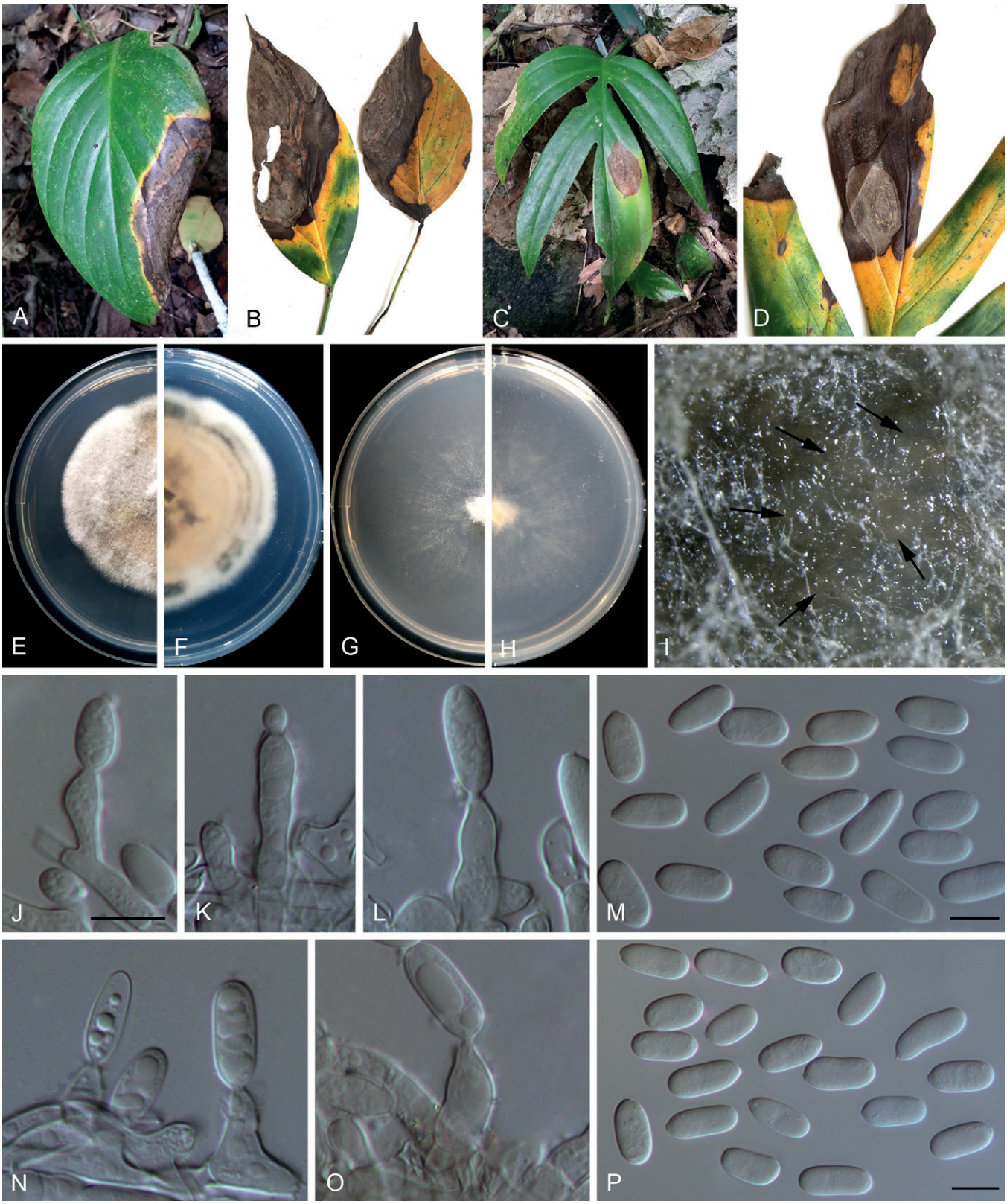


Fig. 11. *Colletotrichum crousii* (ex-type culture LC13858). **A–D.** Disease symptoms on *Rhaphidophora* spp. **E, F.** Front and reverse colony on PDA (7 d). **G, H.** Front and reverse colony on SNA (7 d). **I.** Conidioma on SNA. **J–L, N, O.** Conidiophores, conidiogenous cells and conidia. **M, P.** Conidia. Scale bars = 10 µm. Scale bar of J applies to J–L, N, O.

Notes: *Colletotrichum diversisporum* is basal to the *C. magnum* and *C. orchidearum* species complexes (Fig. 1). It is characterised by a production of conidia of variable shapes and sizes, and can be easily differentiated from other species by analysing any of the loci sequenced in the current study.

Colletotrichum diversum F. Liu & L. Cai, ***sp. nov.*** MycoBank MB 841378. Fig. 14.

Etymology: Named to reflect the formation of two different types of conidiophores.

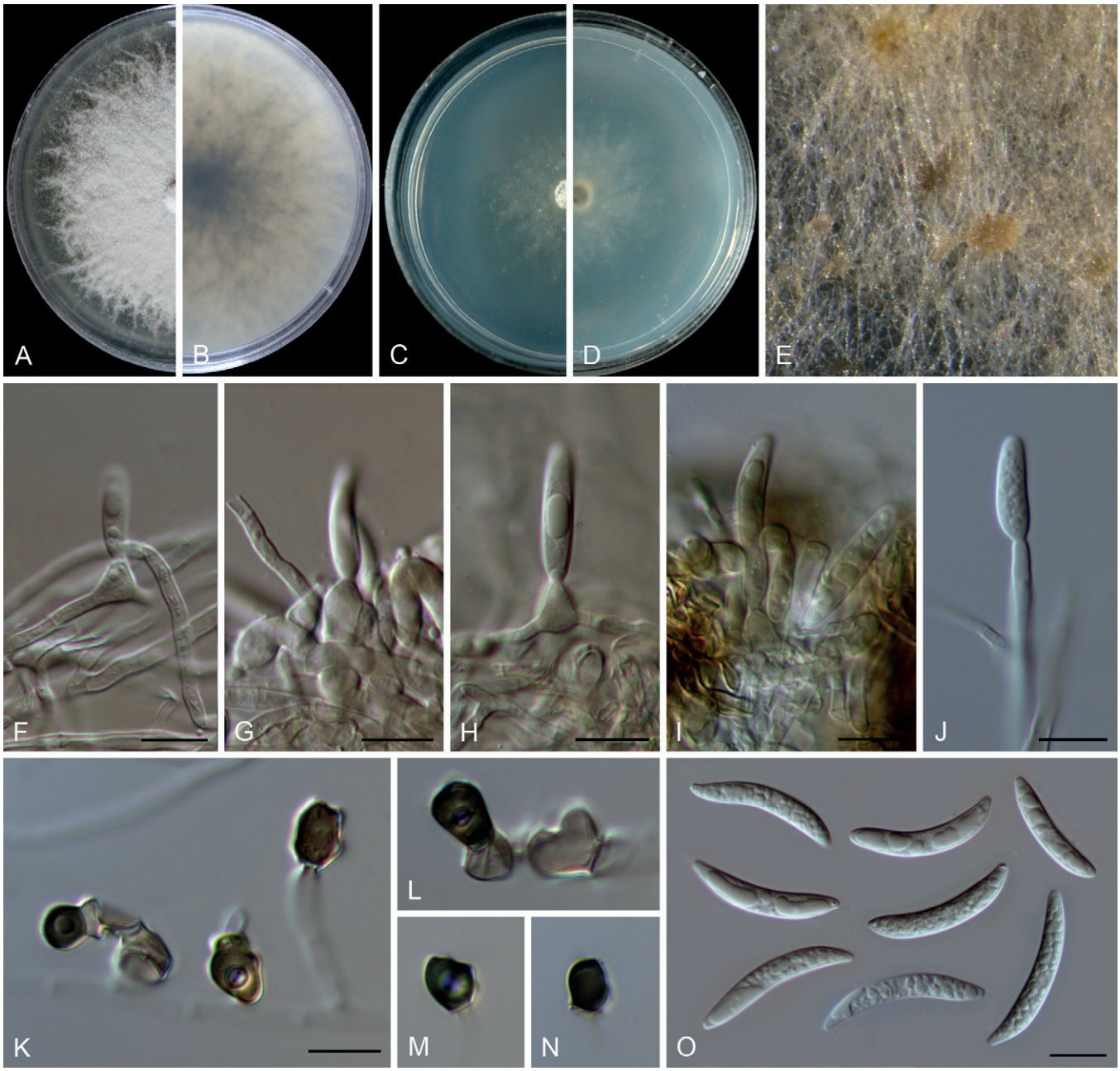


Fig. 12. *Colletotrichum danxiashanense* (ex-type culture NN055218). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Front and reverse colony on SNA (7 d). **E.** Conidial masses on PDA. **F–J.** Conidiogenous cells and conidia. **K–N.** Appressoria. **O.** Conidia. Scale bars = 10 µm. Scale bar of K applies to K–N.

Description: *Colonies* on PDA 36–39 mm diam in 7 d, flat with undulate edge, pale glaucous grey, aerial mycelium sparse, surface partly covered with orange conidial masses, reverse white. *Vegetative hyphae* hyaline, smooth-walled, septate, branched. On SNA, *conidiomata* acervular, scattered or gregarious, conidiophores formed on a cushion of subglobose pale brown cells (type I, Fig. 14 D–F) or directly from vegetative hyphae (type II, Fig. 14 H–L). The first type of *conidiophores* hyaline, branched, up to 45 µm, sometimes reduced to conidiogenous cells; *conidiogenous cells* hyaline, ampulliform to obclavate, sometimes cylindrical, often extending to form new conidiogenous loci, 11.5–17.5(–22.5) × 3–5.5 µm (av. ± SD = 14.6 ± 2.4 × 4.3 ± 0.6 µm), periclinal thickening distinct. The second type of *conidiophores* hyaline, septate, branched, up to 80 µm; *conidiogenous cells* hyaline, smooth-walled, cylindrical or subcylindrical, sometimes irregularly inflated, variable in length, (7–)12–32 × 3–4.5 µm (av. ± SD = 20.9 ± 6.2 × 3.7 ± 0.6 µm), usually extending to form new conidiogenous loci, periclinal thickening distinct. *Conidia* hyaline, aseptate, smooth-walled, guttulate, straight, cylindrical with one end round and one end slightly acute, 12–15.5 × 4.5–5.5 µm (av. ± SD = 14.1 ± 0.8 × 5.2 ± 0.3), L/W ratio = 2.7. *Appressoria* and *setae* not observed.

Typus: **China**, Yunnan Province, Honghe Hani and Yi Autonomous Prefecture, Mengzi county, Nanhu park, on *Philodendron selloum*, 12 May 2016, Q. Chen (**holotype** HMAS 350633, ex-type culture CGMCC 3.20516 = LC11292 = CQ775).

Notes: *Colletotrichum diversum* is basal to the phylogenetic clade that comprises *C. boninense*, *C. cymbidiicola*, *C. doitungense C. oncidii*, *C. torulosum* and *C. watphraense* in the *C. boninense* species complex (Fig. 1), and shares low sequence similarity with the most closely related species *C. oncidii* at *act* (97.9 %) and *gapdh* (96.9 %) and 99 % similarities at *his3*, ITS and *tub2*. Morphologically, the two species differ with respect to the formation of conidiophores and conidiogenous cells. On SNA, *C. diversum* forms conidiophores either on a cushion of subglobose pale

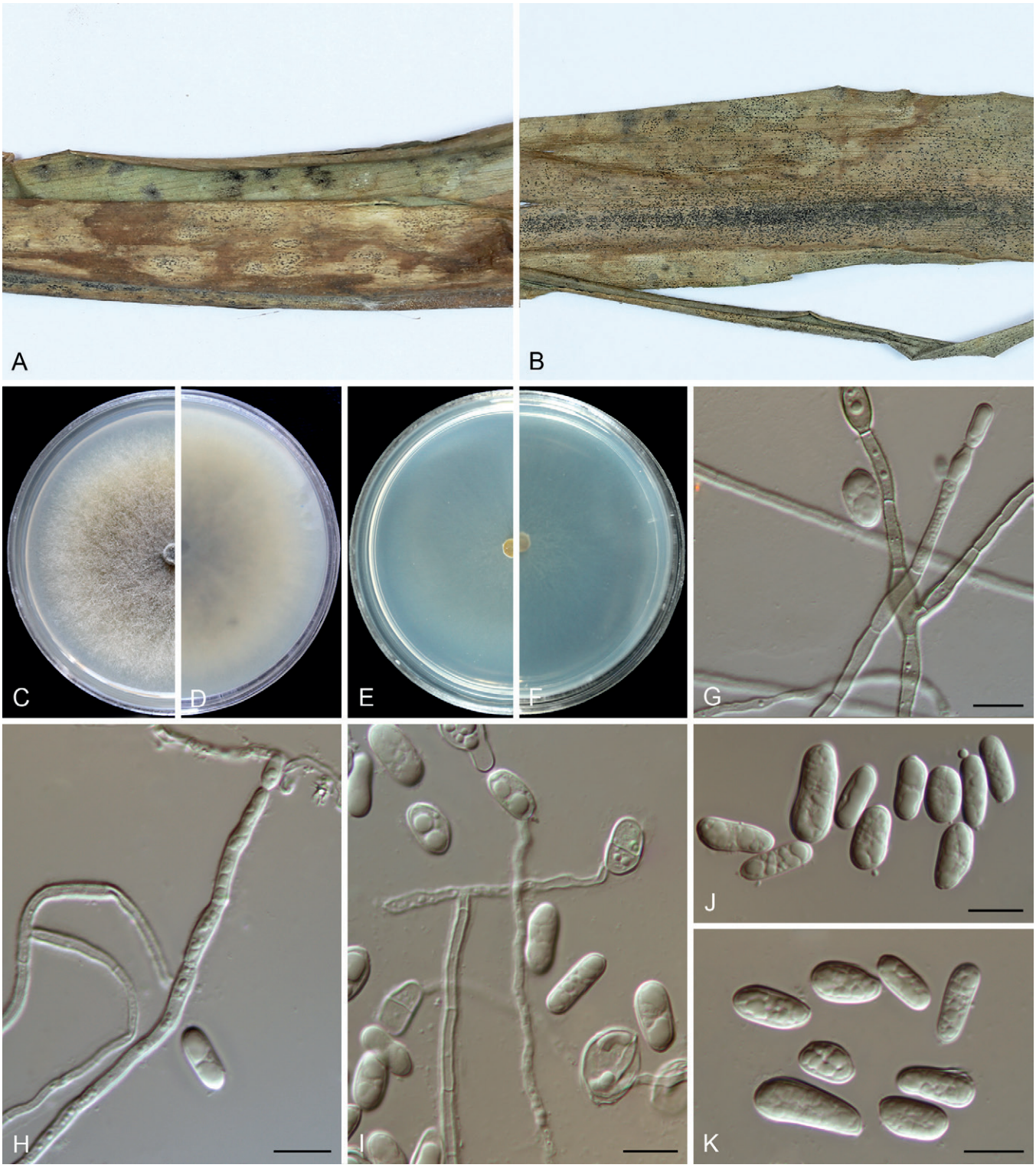


Fig. 13. *Colletotrichum diversisporum* (ex-type culture NN072578). **A, B.** Disease symptoms on host plant. **C, D.** Front and reverse colony on PDA (7 d). **E, F.** Front and reverse colony on SNA (7 d). **G, H.** Conidiophores, conidiogenous cells and conidia. **I.** Germinating conidia. **J, K.** Conidia. Scale bars = 10 µm.

brown cells or directly from vegetative hyphae, while *C. oncidii* only forms conidiophores directly from hyphae. In addition, *C. diversum* produces ampulliform to obclavate or (sub-)cylindrical conidiogenous cells, while only cylindrical cells have been observed for *C. oncidii* (Damm *et al.* 2012b).

To date, *Colletotrichum* species known to be associated with *Philodendron selloum* are *C. orchidearum* (Hou *et al.* 2016, Damm *et al.* 2019), and *C. philodendri* which lacks type-derived sequence data (Alfieri *et al.* 1984). Furthermore, *C. diversum* morphologically differs from *C. philodendri* with respect to the shape (cylindrical with obtuse ends *vs.* round at one end and acute at the other end) and width (4.5–5.5 µm *vs.* 3.5–4 µm) of the conidia. Geographically, *C. philodendri* was reported in the Americas (Brazil and the US) (Hennings 1905, Alfieri *et al.* 1984), while, to date, *C. diversum* is only known in China.

Colletotrichum dolichoconidiophori F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841379. Fig. 15.

Etymology: Named to reflect the formation of long conidiophores.
Description: *Colonies* on PDA 40–41 mm diam in 7 d, flat with fimbriate edge, pale grey in the centre, white toward the margin, aerial mycelium floccose, reverse fuscous black, white at margin.

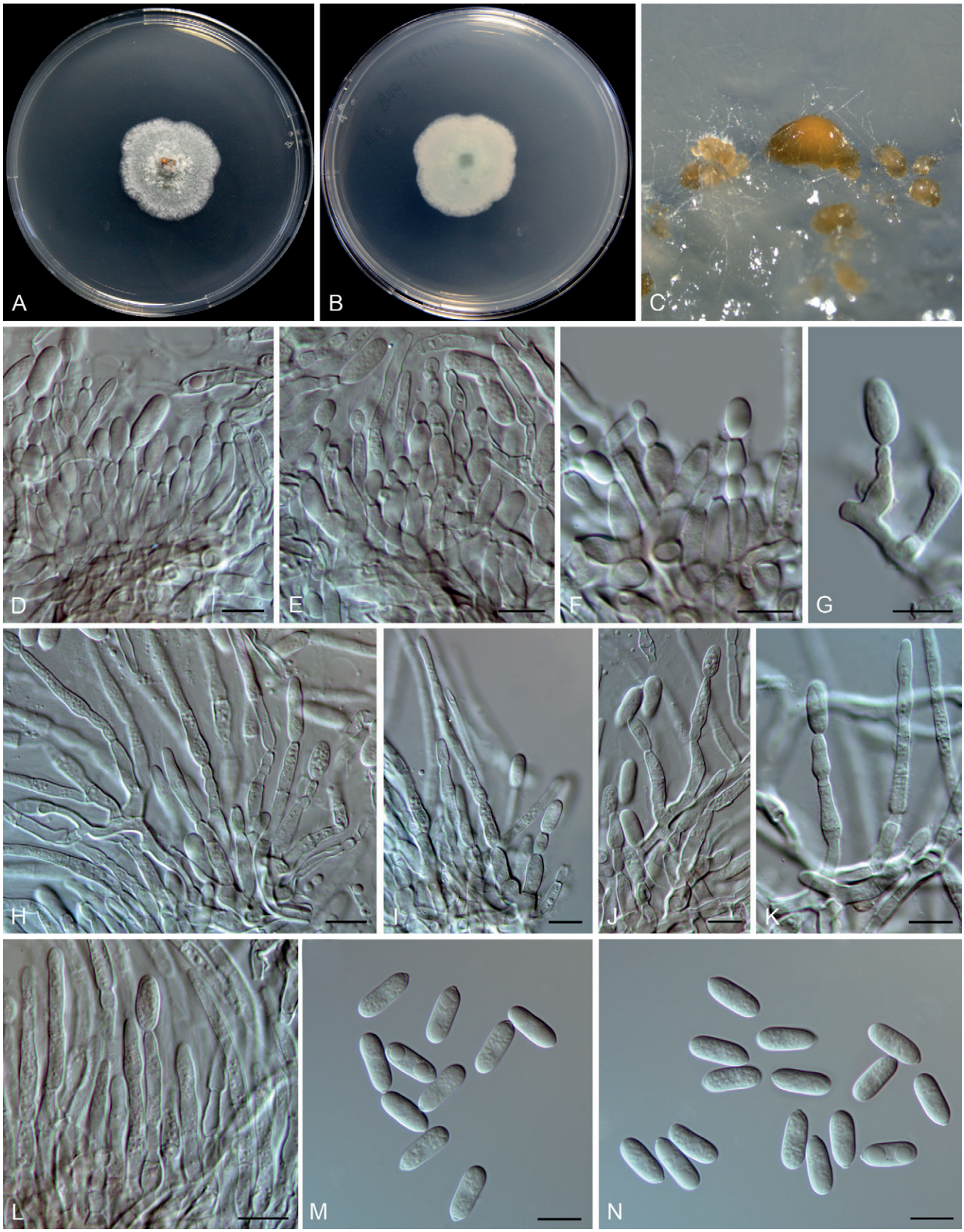


Fig. 14. *Colletotrichum diversum* (ex-type culture LC11292). **A, B.** Front and reverse colony on PDA (6 d). **C.** Conidiomata and conidial masses. **D–G.** Type I of conidiophores and conidia. **H–L.** Type II of conidiophores and conidia. **M, N.** Conidia. Scale bars = 10 µm.

Vegetative hyphae hyaline to pale brown, smooth-walled, septate, branched. *Conidiomata* not developed. On PDA, *conidiophores* formed directly on hyphae, hyaline to very pale brown, smooth-walled, cylindrical, up to 250 µm. *Conidiogenous cells* cylindrical to subcylindrical, rarely ampulliform, hyaline, 6–23 × 2–4 µm. *Setae* abundant, brown, smooth- and thick-walled, 0–3-septate, 41–110 µm long, basal cell cylindrical, inflated, flask shaped or globose, 3.5–8 µm diam, tip ± acute. *Conidia* hyaline, aseptate, smooth-

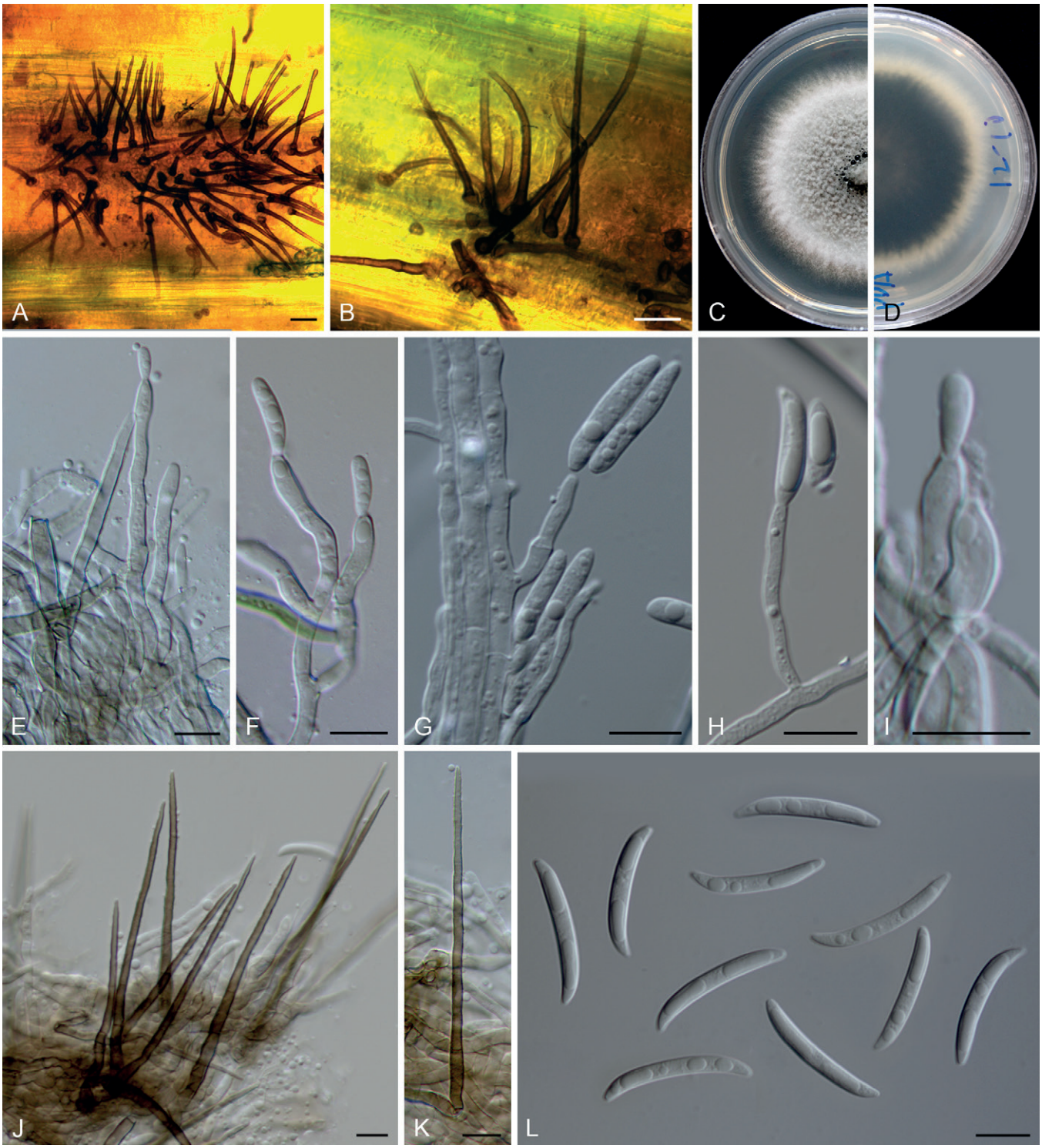


Fig. 15. *Colletotrichum dolichoconidiophori* (ex-type culture NN054966). **A, B.** Conidiomata with setae on the host plant. **C, D.** Front and reverse colony on PDA (7 d). **E–I.** Conidiophores, conidiogenous cells and conidia. **J, K.** Setae. **L.** Conidia. Scale bars: A, B = 20 µm; E–L = 10 µm.

walled, falcate, central part of the conidium almost straight with parallel walls, gradually tapering towards a slightly rounded to ± acute apex and a truncate base, with a similar radian, 19–27.5 × 2.5–3.5 µm (av. ± SD ± 24.9 ± 1.92 × 3.1 ± 0.29 µm), L/W ratio = 8. *Appressoria* not observed.

Typus: **China**, Beijing, Huairou, Beigoucun, on an unidentified grass, 10 Sep. 2012, W.P. Wu (**holotype** HMAS 350654, ex-type culture CGMCC 3.20517 = LC13889 = NN054966).

Notes: *Colletotrichum dolichoconidiophori* belongs to the *C. graminicola* species complex (Fig. 1). It shares very low sequence similarity with all currently accepted species in the genus, even with the most closely related species *C. cereale* CBS 129663 (Figs 1, 3, *act*: 90.7 %; *chs-1*: 96 %; ITS: 96.7 %; *sod2*: 91.8 %; *tub2*: 92.2 %). Morphologically, *C. dolichoconidiophori* differs from *C. cereale* in that it produces longer conidiogenous cells (6–23 × 2–4 µm *vs.* 2–6 × 1–2 µm).

Colletotrichum guangxiense C.L. Hou & Q.T. Wang, Mycologia 113: 454. 2021.

Notes: Intraspecific branches in the *C. guangxiense* clade suggest a high degree of genetic variation in this species, mainly within the *act* and *tub2* sequences examined in the current study.

Colletotrichum iris F. Liu & L. Cai, ***sp. nov.*** MycoBank MB 841383. Fig. 16.

Etymology: Named after the host plant genus, *Iris*.

Description: *Colonies* on PDA 33–34 mm diam in 7 d, flat, aerial mycelium dense, white, reverse pale luteous, centre part fuscous black, and with a fuscous black halo towards margin. On PDA, *conidiomata* scattered or confluent, dark brown to black, immersed. *Setae* not observed. *Conidiophores* hyaline to pale brown, branched, septate, up to 65 µm. *Conidiogenous cells* hyaline or pale brown, smooth-walled, cylindrical, occasionally ampulliform, straight or flexuous, 12.5–22.5 × 3–4.5 µm. *Conidia* hyaline, aseptate, smooth-walled, curved, apex ± acute, base usually broader and truncate, 18–28 × 2–4 µm (av. ± SD = 22 ± 2.6 × 3.4 ± 0.5 µm), L/W ratio = 6.5. *Appressoria* single or in small groups, medium brown, mostly irregular shaped, occasionally ellipsoidal to subcircular, 5–16 × 3–10 µm (av. ± SD = 9.6 ± 2.6 × 6.7 ± 1.8 µm).

Typus: **China**, Jiangxi, Lushan Botanical Garden, on *Iris japonica*, 4 Sep. 2013, N. Zhou (**holotype** HMAS 350628, ex-type culture CGMCC 3.20518 = LC3697).

Notes: *Colletotrichum iris* is closely related to *C. liriopes* in the *C. spaethianum* species complex (Fig. 1), but differs genetically in 2 bp of the *act* nucleotide sequence, 1 bp of *chs-1*, 13 bp of *gapdh*, 12 bp of *his3*, 1 bp of ITS and 3 bp of *tub2*. Morphologically, *C. iris* differs from *C. liriopes* in that it produces thick-walled, pale brown conidiogenous cells and a higher conidium L/W ratio (6.5 *vs*.5.0) (Damm *et al.* 2009). Like most other species in the *C. spaethianum* complex (Damm *et al.* 2009), *C. iris* was isolated from the petaloid monocotyledon plant, *Iris japonica*. Six other *Iris*-associated species in the genus are *C. circinans*, *C.*

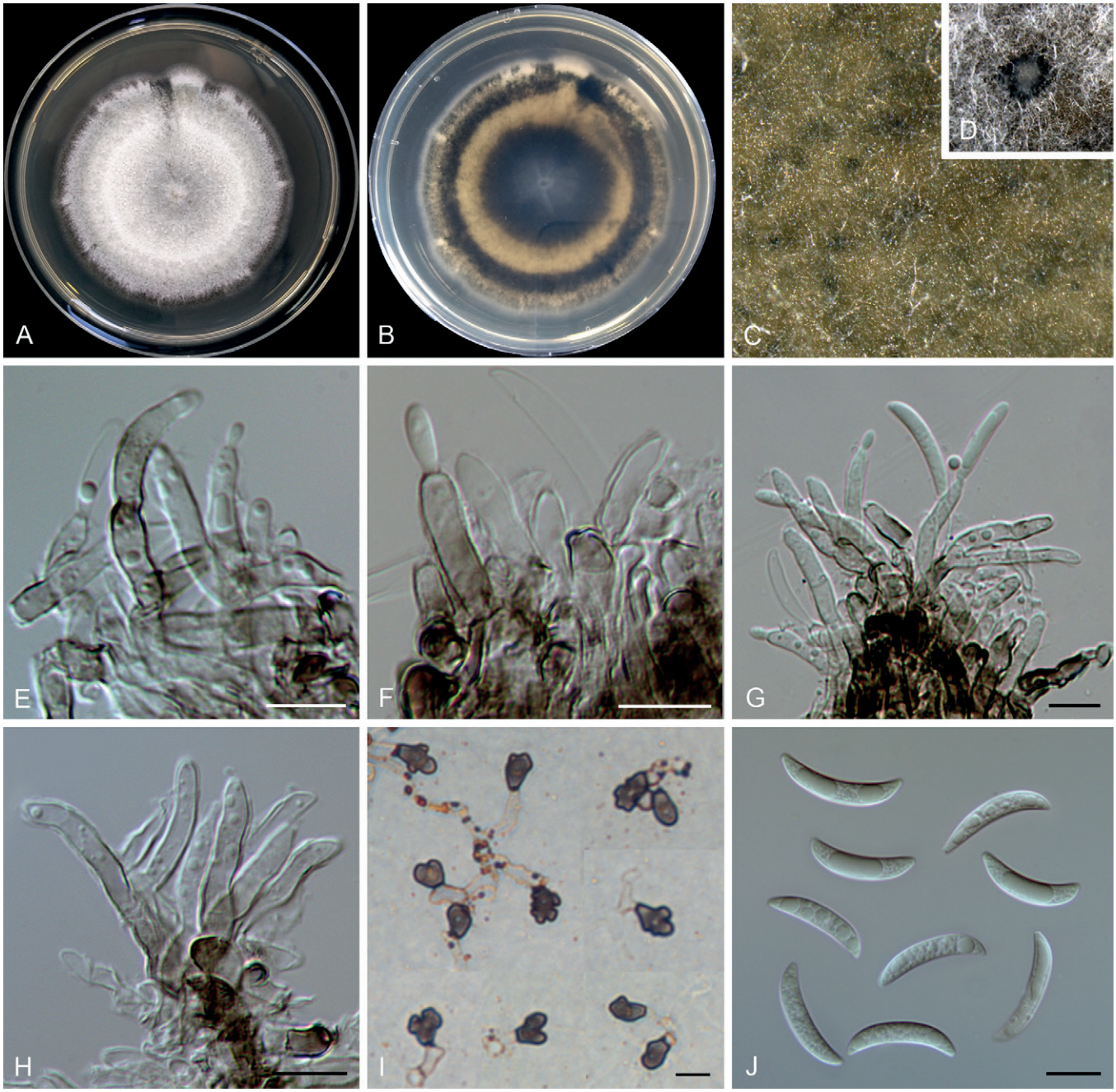


Fig. 16. *Colletotrichum iris* (ex-type culture LC3697). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Immersed conidiomata. **E–H.** Conidiophores, conidiogenous cells and conidia. **I.** Appressoria. **J.** Conidia. Scale bars = 10 µm.

coccodes, *C. dematium*, *C. gloeosporioides*, *C. siamense*, and *C. tofieldiae* (Farr & Rossman 2021), which are phylogenetically distinct from *C. iris*. Moreover, *C. iris* morphologically differs from another *Iris*-associated species *C. liliacearum* (DNA sequences are unavailable) in producing longer conidia (18–28 × 2–4 µm µm *vs.*12–17 × 2.5–3.5) (Ferraris 1902).

Colletotrichum jasminigenum Wikee *et al.*, Fungal Diversity 46: 174. 2011.

Notes: *Colletotrichum jasminigenum* was shown to be a member of the *C. truncatum* species complex (Hyde *et al.* 2014). However, BLASTn search of the NCBI GenBank using *gapdh* and *act* sequences of *C. jasminigenum* (ex-holotype MFLUCC 10-0273) yielded the closest matches with species of the *C. gloeosporioides* species complex, while using ITS and *tub2* sequences indicated that it belongs to the *C. truncatum* species complex. Therefore, it is likely that the sequences of MFLUCC 10-0273 provided in Wikee *et al.* (2011) were mixed up with those of other species or contained major sequencing errors. To clarify the taxonomic status of *C. jasminigenum*, type specimen and culture inquiries were submitted to the culture collections (CGMCC and MFLUCC) mentioned in the original publication (Wikee *et al.* 2011). Unfortunately, the ex-type could not be located in CGMCC. We suspected that it might not have been preserved in the culture collection, as the strain number was not mentioned in Wikee *et al.* (2011). Furthermore, specimen delivery from MFLUCC was not allowed because of the current quarantine measures for international mail. Therefore, the taxonomic status of *C. jasminigenum* requires further examination and re-sequencing of the type.

Colletotrichum jinshuiense M. Fu & G.P. Wang, Persoonia 42: 21. 2018.
Synonym: *Colletotrichum kakiivorum* H.Y. Jung & S.Y. Lee [as *'kakivorum'*], Mycol. Prog. 17: 1118. 2018.

Typus: **China**, Hubei Province, Wuhan, on leaves of *Pyrus pyrifolia* cv. Jinshui, 1 Aug. 2016, M. Fu (**holotype** HMAS 247824, ex-type culture CGMCC 3.18903).

Additional material examined: **China**, Fujian Province, Fuzhou, Wuyi Mountain, on *Dioscorea zingiberensis*, Aug. 2016, L. Cai & Z.Y. Ma, living culture LC8509 (= M0333).

Notes: The ex-type strains of *C. jinshuiense* (Fu *et al.* 2019, published online 24 Jul. 2018) and *C. kakiivorum* (Lee & Jung 2018, published online: 30 Jul. 2018) cluster together in a well-supported clade within the *C. dematium* species complex (Fig. 1), and their *act*, *chs-1*, *gapdh*, *his3*, ITS, and *tub2* sequences share high similarity (99.8 %), with only two base-pair differences. Morphologically, *C. jinshuiense* and *C. kakiivorum* produce conidiogenous cells, conidia, and appressoria with essentially similar shapes and dimensions. Hence, *C. kakiivorum* is synonymised with the previously published *C. jinshuiense*.

Colletotrichum liriopes Damm *et al.*, Fungal Diversity 39: 71. 2009. Fig. 17.

Typus: **Mexico**, APHIS interception Houston 057263, on *Liriope muscari*, 29 Nov. 2000, M.J. Segall (**holotype** CBS H-20364, ex-type culture CBS 119444).

Additional materials examined: **China**, Shan'xi, Xi An, Huaqing Hot Spring, on dead leaves of *Osmanthus fragrans*, 1 Jul. 2015, W.P. Wu, living culture NN071073; Tibet, Bomi county, Suotong village, on *Poaceae*, 13 Jun. 2015, F. Liu, living culture LC7623; Yunnan Province, Honghe Hani and Yi Autonomous Prefecture, Mengzi county, DaTun Sea, on *Liriope spicata*, 12 May 2016, Q. Chen, living culture LC11287.

Notes: *Colletotrichum liriopes* is phylogenetically related to *C. iris* in the *C. spaethianum* species complex. This species is pathogenic to *Eria coronaria* (Yang *et al.* 2011), *Liriope muscari* (Damm *et al.* 2009), *L. spicata* (this study), and *Rohdea japonica* (Kwon & Kim 2013), endophytic in *Bletilla ochracea* and *Peione bulbocodioides* (Yang *et al.* 2011), and saprophytic on dead stalk of *Hemerocallis fulva* (Yang *et al.* 2011) and dead leaves of *Osmanthus fragrans* (this study).

Colletotrichum magnum (Jenkins & Winstead) Rossman & W.C. Allen, IMA Fungus 7: 4. 2016.
Basionym: *Glomerella magna* Jenkins & Winstead, Phytopathology 54: 453. 1964.
Synonym: *Colletotrichum liaoningense* Y.Z. Diao, *et al.*, Persoonia 38: 34. 2017.

Typus: **USA**, on *Citrullus lanatus*, unknown collection date, R. Rodriguez, ex-epitype culture CBS 519.97.

Additional material examined: **China**, Liaoning Province, Xingcheng city, on chili fruits (*Capsicum annuum* var. *conoides*), Oct. 2012, Y.Z. Diao, ex-type culture of *C. liaoningense* CGMCC 3.17616 (= CAUOS2 = LC6228).

Notes: Since the sequence data and phylogenetic assessment of *C. liaoningense* are questionable (Damm *et al.* 2019), we re-sequenced six loci of its ex-type culture CAUOS2, twice, in the present study. Comparison with sequences deposited in the NCBI GenBank by Diao *et al.* (2017) revealed that the sequences of four loci were consistent except for 1–3 base-pair differences [99 % sequence similarity shared at *cal* (433/435), *chs-1* (294/297), *gapdh* (257/258), and *tub2* (679/680)]; however, the sequences of ITS and *act* differed at many positions [96 % similarity on ITS (478/500) and *act* (252/263)]. Therefore, the original sequences of CAUOS2 are incorrect, and the sequences newly generated in the current study have been deposited in GenBank (Table S1) and used for six-locus phylogenetic analyses (Fig. 1).

Colletotrichum liaoningense is phylogenetically indistinguishable from *C. magnum* (Fig. 1), and their *act*, *chs-1*, *his3*, ITS, and *tub2* sequences are 100 % identical, while the *gapdh* sequences are 96 % (250/260) identical. Consequently, *C. liaoningense* is synonymised with the older name *C. magnum*.

Colletotrichum metake Sacc., Annls Mycol. 6: 557. 1908.

Notes: *Colletotrichum metake* was originally described on a dead culm of bamboo (*Arundinaria japoniea*) in Italy (Costa, Vittorio, Treviso) and characterised by oblong conidia (22 × 5.5–6 µm) (Saccardo 1908), but without type designation. In the current study, four bamboo-associated strains of *C. metake* (Sato *et al.* 2012, Wang *et al.* 2021) clustered in a well-supported clade (Fig. 1). Three of these strains were from *Pleioblastus simonii* in Japan and one from *Chimonobambusa quadrangularis* in China. However, none of these strains is suitable for type designation because of the inconsistency with the original collection site and host of the species (Hyde & Zhang 2008).

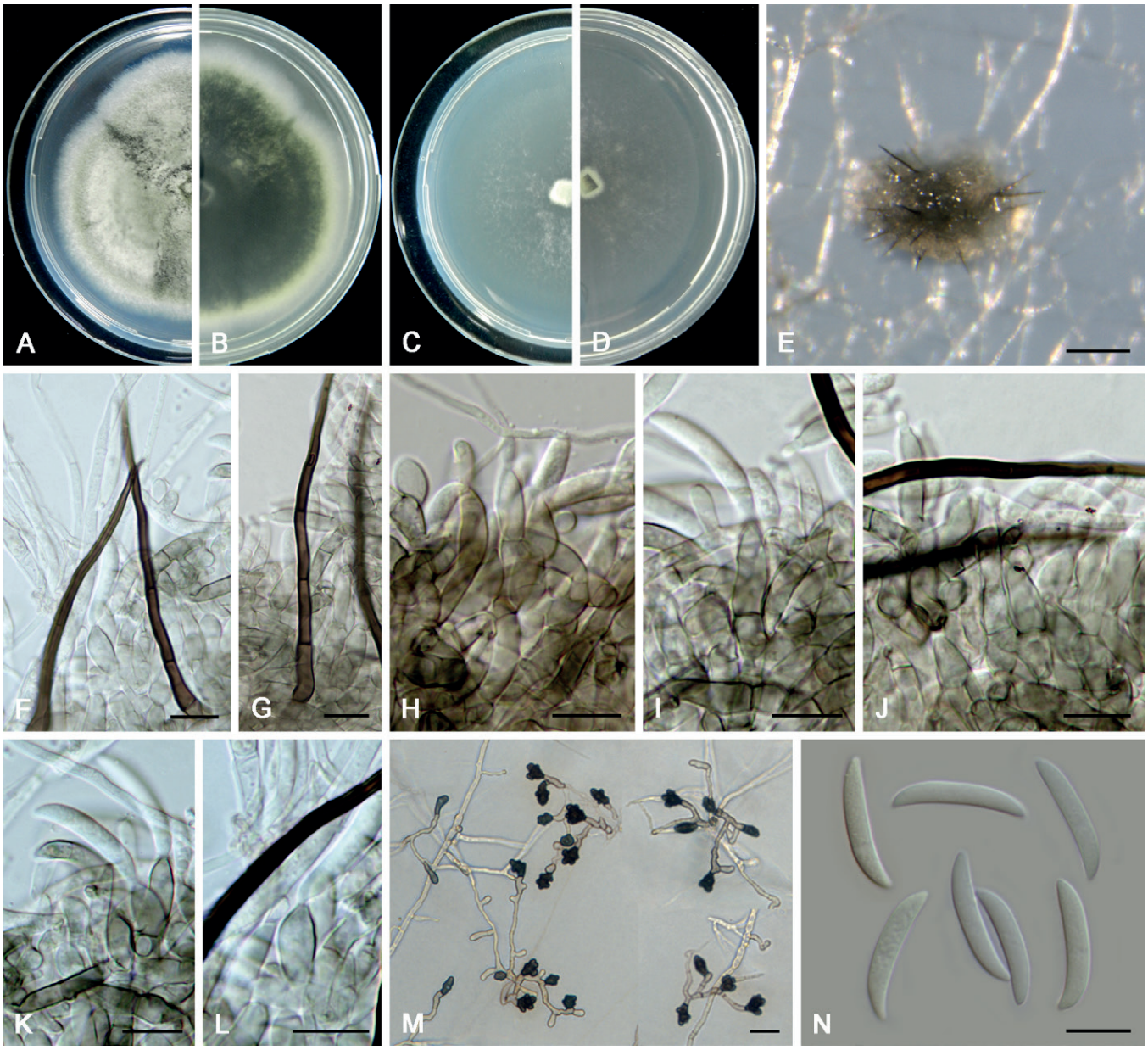


Fig. 17. *Colletotrichum liriopes* (LC11287). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Front and reverse colony on SNA (7 d). **E.** Conidioma. **F, G.** Setae. **H–L.** Conidiophores, conidiogenous cells and conidia. **M.** Appressoria. **N.** Conidia. Scale bars: E = 80 µm; F–N = 10 µm.

Colletotrichum monsterae F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841384. Fig. 18.

Etymology: Named after the host plant genus, *Monstera.*

Description: *Colonies* on PDA 52 mm diam in 7 d, flat with entire edge, aerial mycelium white and floccose, reverse saffron. *Vegetative hyphae* hyaline to pale brown, smooth-walled, septate, branched. *Conidiomata* black, submerged, conidial masses buff, abundantly formed on the surface of the agar medium or directly on hyphyae. *Setae* not observed. *Conidiophores* brown, base dark brown, mostly gradually becoming paler towards the tip, 1–3-septate, solitary or branched at the bottom, 46–102 µm long. *Conidiogenous cells* pale to medium brown, smooth-walled, cylindrical, 15–51.5 × 3.5–6 µm (av. ± SD ± 33 ± 11.1 × 4.7 ± 0.8). *Conidia* hyaline, aseptate, smooth-walled, guttulate, cylindrical to subcylindrical, rarely obvoid, straight, sometimes slightly curved, with obtuse ends or gradually tapering towards the base, on SNA 13–22.5 × 4.5–6 µm (av. ± SD ± 18.2 ± 2.1 × 5 ± 0.4), L/W ratio = 3.6, on PDA 16.5–24.5 × 3.5–5 (av. ± SD ± 20.6 ± 1.9 × 4.4 ± 0.3), L/W ratio = 4.7. *Appressoria* single, medium to dark brown, mostly irregularly shaped, rarely cylindrical, with undulate to lobate margins, 8.5–19 × 4.5–11.5 µm.

Typus: **China**, Guangdong Province, Guangzhou, Zhaoqing, Seven Star Cave (Qixingyan), on diseased leaf of *Monstera deliciosa*, 24 Dec. 2012, W.P. Wu (**holotype** HMAS 350640, ex-type culture CGMCC 3.20519 = LC13871 = NN055214).

Notes: Although represented by a single strain, *C. monsterae* is phylogenetically distinct from all currently accepted species of *Colletotrichum* at each locus sequenced in the current study and is basal to other species in the *C. orchidearum* species complex (Fig. 1). Morphologically it is different from most species in the genus, including the closest related species, *C. piperis*, and the two other *Monstera deliciosa*-associated species, *C. gloeosporioides* (French 1989) and *C. orchidearum* (Damm *et al.* 2019), by producing long brown conidiophores reminiscent of setae.

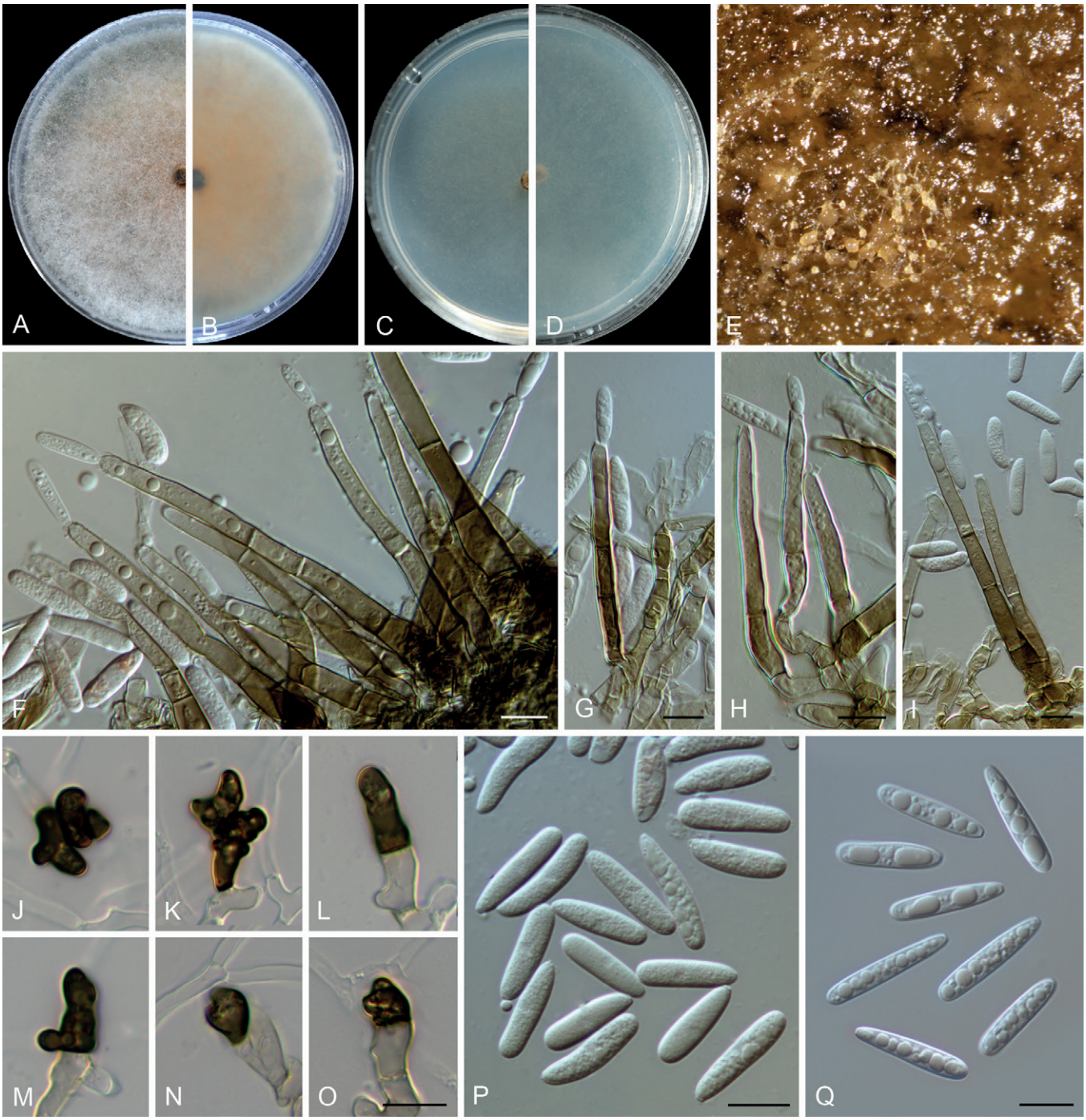


Fig. 18. *Colletotrichum monsterae* (ex-type culture NN055214). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Front and reverse colony on SNA (7 d). **E.** Conidiomata (black, submerged) and conidial masses (buff, superficial). **F–I.** Conidiophores bearing conidia. **J–O.** Appressoria. **P.** Conidia formed on SNA. **Q.** Conidia formed on PDA. Scale bars = 10 µm.

Colletotrichum multiseptatum F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841385. Fig. 19.

Etymology: Named to reflect the multiple septa of its seta.

Description: *Colonies* on PDA 49 mm diam in 7 d, flat with entire edge, saffron to peach, aerial mycelium unconsolidated, reverse peach to umber. *Vegetative hyphae* hyaline to pale brown, smooth-walled, septate, branched. *Conidiomata* not developed, abundant conidial masses formed on the surface of medium, salmon, brown to black, solitary or gregarious. *Setae* medium brown to dark brown, smooth-walled, 50–62 µm long, 2–4-septate, base cylindrical, sometimes slightly inflated, 4.5–6 µm diam, tip ± acute or rounded. *Conidiophores* formed directly from hyphae, hyaline to pale brown, 1–3-septate, usually branched at the bottom and reduced to conidiogenous cells. *Conidiogenous cells* hyaline or pale brown, smooth-walled, ampulliform, bullet-shaped, or subcylindrical, variable in length, 8.5–21.5 × 3–5.5 µm (av. ± SD = 13.1 ± 3 × 4 ± 0.5 µm), collarette observed. *Conidia* hyaline, aseptate, smooth-walled, guttulate, curved, or slightly curved, gradually tapering towards the round apex and truncate base, sometimes less curved towards the base, on PDA 16.5–26 × 3–4.5 µm (av. ± SD = 19.8 ± 2.3 × 3.7 ± 0.3 µm), L/W ratio = 5.4, on SNA 20–25.5 × 3.5–4.5 µm (av. ± SD = 21.8 ± 1.5 × 3.9 ± 0.2 µm), L/W ratio = 5.6. Only one *appressorium* observed, irregular shaped, dark brown, 10 × 5.5 µm.

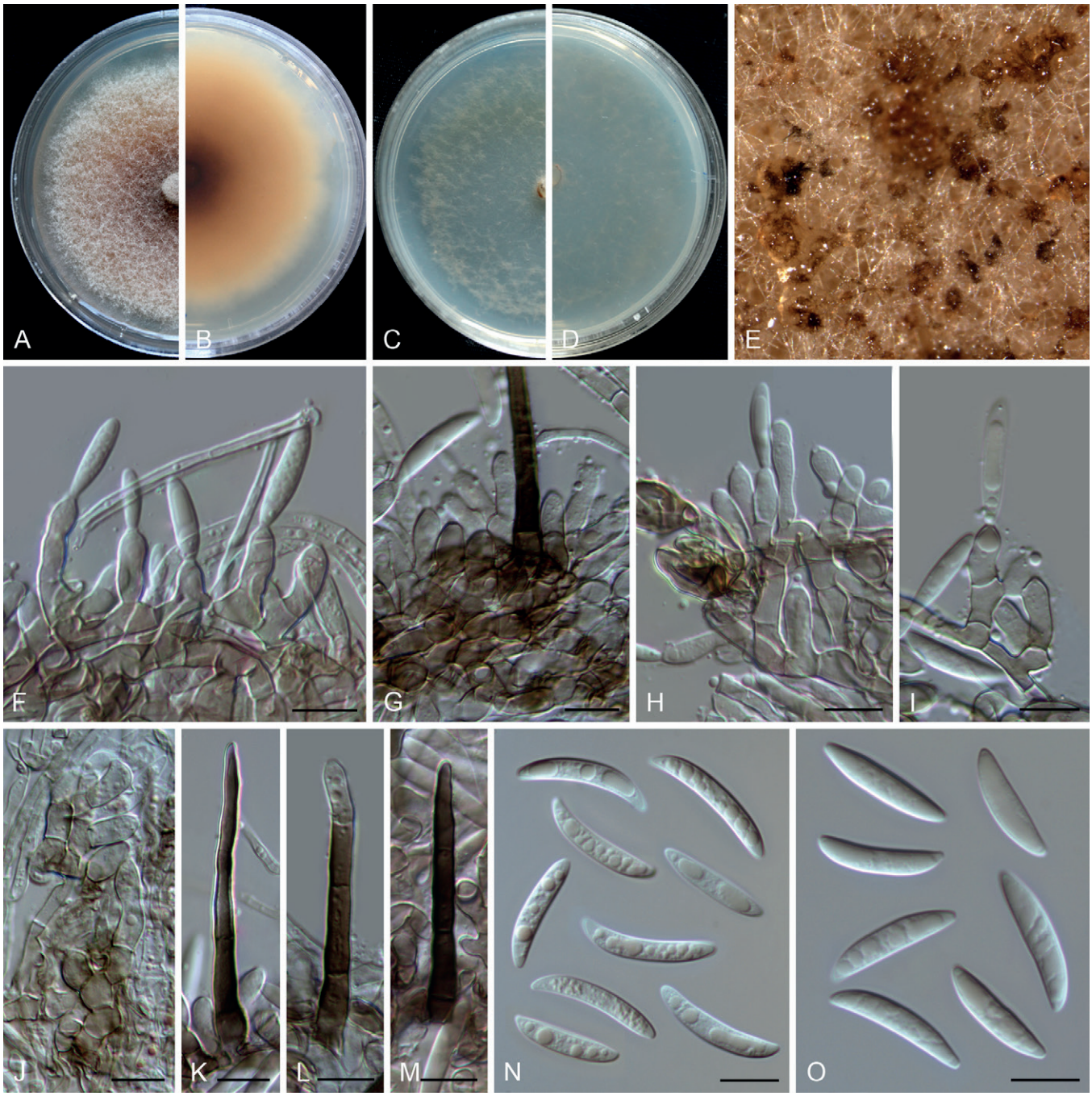


Fig. 19. *Colletotrichum multiseptatum* (ex-type culture NN055357). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Front and reverse colony on SNA (7 d). **E.** Conidial masses on PDA. **F–I.** Conidiophores, conidiogenous cells and conidia on PDA. **J.** Conidiogenous cells on SNA. **K–M.** Setae on PDA. **N.** Conidia on SNA. **O.** Conidia on PDA. Scale bars = 10 µm.

Typus: **China**, Guangdong Province, Shaoguan, Danxia Mountain, on dead culm of an unidentified grass, 25 Dec. 2012, W.P. Wu (**holotype** HMAS 350651, ex-type culture CGMCC 3.20520 = LC13886 = NN055357).

Notes: *Colletotrichum multiseptatum*, belonging to the *C. graminicola* species complex, is phylogenetically related to *C. echinochloae* (Fig. 3), but shares low sequence similarity at *sod2* (97 %) and even lower whole-genome sequence similarity (95 %) with that species. Morphologically, *C. multiseptatum* differs from *C. echinochloae* in that it produces shorter setae [50–62 µm *vs.*79.8–145.5(–186.3) µm] and exhibits a higher L/W ratio of the conidia (5.4–5.6 *vs.*3.5–5) (Moriwaki & Tsukiboshi 2009). Furthermore, the conidia of *C. echinochloae* are more curved and both ends are more acute than those of *C. multiseptatum.*

Colletotrichum nageiae F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841386. Fig. 20.

Etymology: Named after the host plant genus, *Nageia*.

Description: *Colonies* on PDA growing slowly, reaching 32 mm diam after 7 d, flat with entire edge, white, aerial mycelium sparse, reverse pale buff. On SNA, *vegetative hyphae* hyaline to brown, smooth-walled, septate, branched, 1.5–2 µm diam. *Conidiomata* dark brown to black, beneath the media. *Setae* pale brown to brown, straight to flexuous, smooth-walled, 2–3-septate, 57–62 µm long, basal cells cylindrical, 3.5–4.5 µm diam, the tip rounded. *Conidiophores* septate, branched, *conidiogenous cells* hyaline to pale brown, cylindrical, smooth-walled, straight, 10–20 × 2.5–4.5 µm. *Conidia* hyaline, aseptate, smooth-walled, cylindrical, straight,

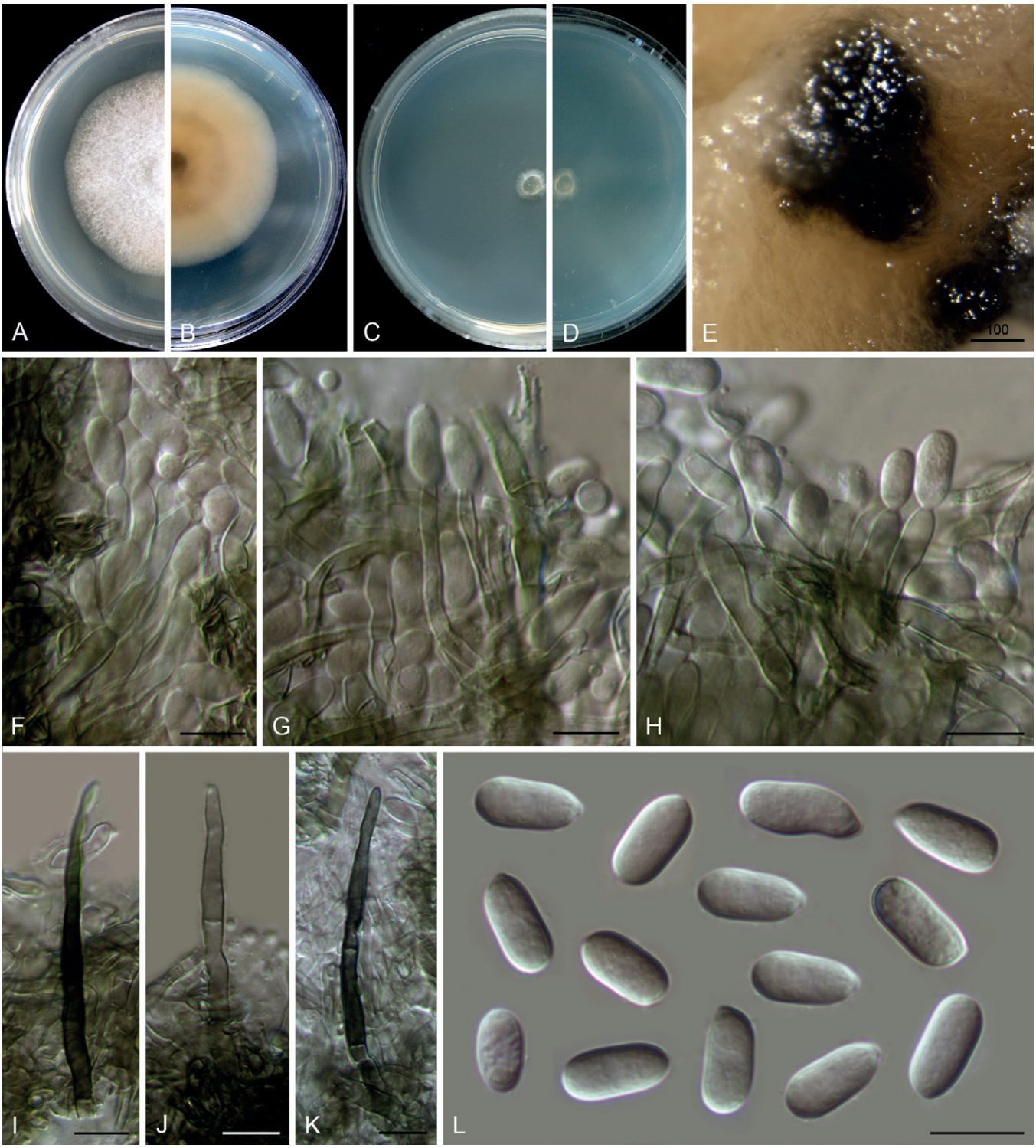


Fig. 20. *Colletotrichum nageiae* (ex-type culture NN004492). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Front and reverse colony on SNA (7 d). **E.** Conidioma. **F–H.** Conidiogenous cells and conidia. **I–K.** Setae. **L.** Conidia. Scale bars: E = 100 µm; F–L = 10 µm.

9–13.5 × 4.5–6 µm (av. ± SD = 11.5 ± 0.9 × 5.3 ± 0.4 µm), L/W ratio = 2.2, the apex obtuse, the bottom gradually narrowed with a prominent truncate scar. *Appressoria* not observed.

Typus: **China**, Yunnan Province, Kunming, Kunming Botanical Garden, on healthy leaves of *Nageia nagi*, 20 Dec. 1993, W.P. Wu (**holotype** HMAS 350638, ex-type culture CGMCC 3.20521 = LC13866 = NN004492).

Notes: Although the conidial morphology of *C. nageiae* resembles that of species in the *C. boninense* species complex, it is a singleton species that clusters basal to *C. gloeosporioides* species complex and is phylogenetically distinct from all currently accepted *Colletotrichum* species (Fig. 1). Furthermore, BLASTn search revealed very low sequence similarity with the sequences of other species deposited in the NCBI GenBank, based on the comparisons of *act* (up to 86 % identity shared with species in the *C. gloeosporioides* and *C. gigasporum* species complexes), *cal* (up to 80 % identity shared with species in the *C. gloeosporioides* and *C. gigasporum* species complexes), *chs-1* (up to 93 % identity shared with species in the *C. boninense* species complex), *gapdh* (up to 87 % identity shared with species in the *C. boninense* species complex), *gs* (up to 78 % identity shared with species in the *C. boninense* species complex), *his3* (up

to 91 % identity shared with species in the *C. gloeosporioides* and *C. gigasporum* species complexes), and *tub2* (up to 83 % identity shared with species in the *C. boninense* species complex).

Colletotrichum obovoides F. Liu & L. Cai, ***sp. nov.*** MycoBank MB 841387. Fig. 21.

Etymology: Named to reflect the obovoid shape of conidia.

Description: *Colonies* on PDA 28–33 mm diam in 7 d, flat with fimbriate edge, white, abundant pale luteous and confluent conidial masses formed on the surface of medium, reverse white, or buff because of the production of conidial masses. *Vegetative hyphae* hyaline, smooth-walled, septate, branched. On SNA, *conidiomata* acervular, superficial or semi-immersed, black, protruding with white or buff conidial masses. *Setae* not observed. *Conidiophores* hyaline, septate, branched, formed directly from hyphae or on a cushion of pale brown cells, up to 70 µm. *Conidiogenous cells* hyaline, smooth-walled, cylindrical, rarely ampulliform, 5–24 × 2.5–4 µm. *Conidia* hyaline, aseptate, smooth-walled, obovoid, sometimes clavate, 10.5–15.5 × 5.5–7.5 µm (av. ± SD ± 12.7 ± 1.1 × 6.5 ± 0.4), L/W ratio = 1.9. *Appressoria* solitary, brown to dark brown, aseptate, smooth-walled, subglobose, bullet-shaped, clavate, or navicular, 7.5–13 × 4.5–9.5 µm (av. ± SD = 10.2 ± 1.7 × 6.2 ± 1.2 µm).

Typus: **China**, Tibet, Bomi county, Suotong village, on leaf of an unidentified plant, 13 Jun. 2015, Q. Chen, ST10 (**holotype** HMAS 350629, ex-type culture CGMCC 3.20522 = LC6085 = JJR053).

Notes: *Colletotrichum obovoides* is a singleton species, not belonging to any species complex (Fig. 1), and differs genetically from the most closely related species *C. rusci* in 24 bp of the *act* nucleotide sequence, 18 bp of *chs-1*, 41 bp of *his3*, 40 bp of ITS, and 53 bp of *tub2*. Morphologically, *C. obovoides* distinctly differs from the two phylogenetically related species, *C. trichellum* (conidia fusoid, straight or slightly curved, 15–28 × 3–5 µm, Duke 1928) and *C. rusci* (conidia subfusoid or cymbiform, curved, 16–23 × 4–5 µm, Damm *et al.* 2009), in that it produces obovoid or clavate, and smaller conidia (10.5–15.5 × 5.5–7.5 µm).

Colletotrichum orchidis Jayaward. *et al.*, Mycosphere 11: 595. 2020.

Notes: Phylogenetically, *C. orchidis* belongs to the *C. dematium* species complex (Fig. 1). However, BLASTn search of the NCBI GenBank using sequences of different loci of *C. orchidis* yielded controversial results. The closest matches identified by BLASTn search using *gapdh*, *chs-1*, *act*, and *tub2* sequences of the ex-type MFLUCC 17-1302 (Jayawardena *et al.* 2020) are species that belong to the *C. dematium* species complex. However, based on the ITS sequence similarity, the closest matches are *C. panacicola*, *C. destructivum*, and *C. utrechtense*, which belong to the *C. destructivum* species complex, and *C. trifolii*, which belongs to the *C. orbiculare* species complex. This inconsistence might explain the unusually long branch of *C. orchidis* in the six-locus tree (Fig. 1), and requires re-examination of the ex-type.

Colletotrichum parabambusicola F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841388. Fig. 22.

Etymology: Named after its close phylogenetic relationship with *C. bambusicola*.

Description: *Colonies* on PDA 48–52 mm diam in 7 d, flat with crenate edge, pale grey to mouse grey, aerial mycelium dense and floccose, reverse saffron. Sexual morph formed on PDA. *Ascomata* medium to dark brown, outer wall composed of dark brown angular or rarely subglobose cells. *Interascal tissue* composed of paraphyses, thin-walled, hyaline, septate, 1–3 µm diam. *Asci* cylindrical, hyaline, 47–55 × 6.5–7.5 µm, 8-spored. *Ascospores* arranged uniseriately or irregularly, hyaline, smooth-walled, aseptate, allantoid or cylindrical to ellipsoidal, 10–14.5 × 3–5.5 µm, (av. ± SD = 12 ± 1.1 × 4 ± 0.6 µm), L/W ratio=3. *Conidiomata* subimmersed, globose, black, solitary or gregarious, conidial masses buff. *Setae* not observed. *Conidiophores* formed directly on hyphae, hyaline, septate, branched, 21–48 µm long. *Conidiogenous cells* hyaline, smooth-walled, ampulliform, subcylindrical, 8–21.5 × 3–5 µm (av. ± SD = 12.9 ± 3.5 × 3.8 ± 0.5 µm). *Conidia* hyaline, aseptate, smooth-walled, guttulate, variable in shape, ellipsoidal, cylindrical, ovoid, ossiform, obclavate, with obtuse ends, 9.5–20.5 × 4–8 (av. ± SD ± 13.9 ± 2.7 × 5.3 ± 1), L/W ratio = 2.6. *Appressoria* single, brown, subcircular, globose to subglobose, clavate, pyriform, 6.5–15 × 4.5–6.5 µm.

Typus: **China**, Shanghai Botanical Garden, on dead culm of bamboo, 22 May 2015, W.P. Wu (**holotype** HMAS 350649, ex-type culture CGMCC 3.20523 = NN058956 = LC13884).

Additional material examined: **China**, Shanghai Botanical Garden, on dead culm of bamboo, 22 May 2015, W.P. Wu, living culture LC13883 (= NN058925).

Notes: *Colletotrichum parabambusicola* shares low sequence similarity with the phylogenetically related species *C. bambusicola* at *act* (97.7 %), *gapdh* (92.1 %), *his3* (94.2 %), ITS (99.8 %), and *tub2* (97.3 %). Morphologically, it differs from *C. bambusicola* in producing smaller asci (47–55 × 6.5–7.5 µm *vs.*58–72 × 7–10 µm) and ascospores (10–14.5 × 3–5.5 µm *vs.*14–19 × 4–6 µm) and exhibiting a lower conidium L/W ratio (2.6 *vs.*3.2).

Colletotrichum paraendophytum F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841389. Fig. 23.

Etymology: Named to reflect its close phylogenetic relationship with *C. endophytum.*

Description: *Colonies* on PDA 52 mm diam in 7 d, flat with entire edge, mouse grey, aerial mycelium fluffy, reverse fuscous black with a white margin. *Vegetative hyphae* hyaline to pale brown, smooth-walled, septate, branched. On SNA, *conidiomata* scattered, semi-immersed. *Setae* dark brown, smooth-walled, 1–2-septate, 38–160 µm long, basal cell cylindrical, sometimes paler than the other cells, 3–6 µm diam, tip acute or round. *Conidiophores* either septate, branched, formed from a cushion of roundish brown cells, or reduced to conidiogenous cells. *Conidiogenous cells* hyaline to pale brown, smooth-walled, cylindrical to ampulliform, straight, 9.5–15 × 3–5 µm, periclinal thickening distinct, sometimes extending to form a new conidiogenous locus. *Conidia* hyaline, aseptate, guttulate, smooth-walled, slightly curved, gradually tapering towards a rounded apex and a usually truncate base, with a similar radian, 18.5–23 × 3–4.5 (av. ± SD = 21 ± 0.9 × 3.8 ± 0.3 µm), L/W ratio = 5.5. *Appressoria* not observed.

Typus: **China**, Beijing, Huairou, Beigoucun, on an unidentified grass, 10 Sep. 2012, W.P. Wu (**holotype** HMAS 350653, ex-type culture CGMCC 3.20524 = LC13888 = NN054963).

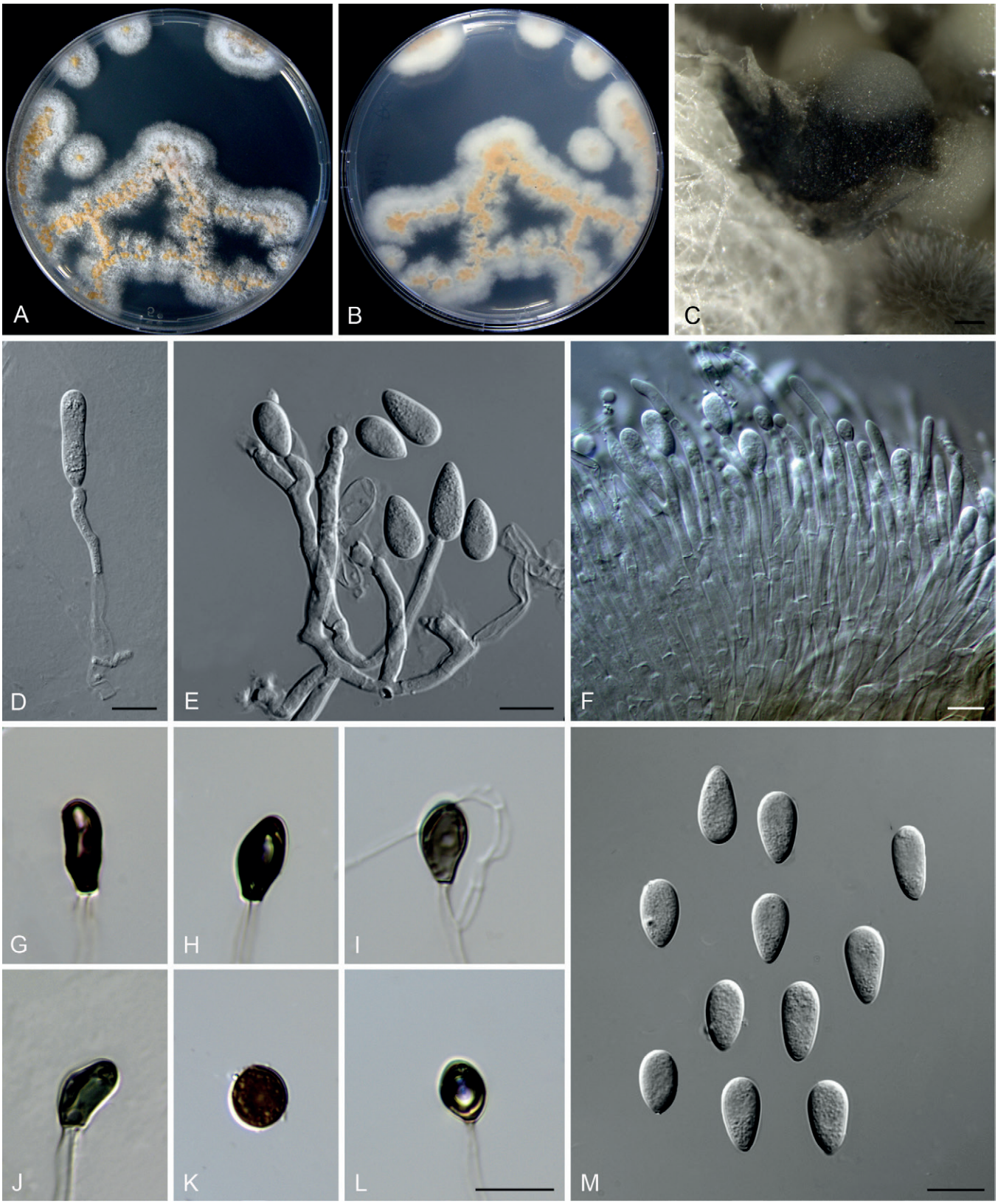


Fig. 21. *Colletotrichum obovoides* (ex-type culture LC6085). **A, B.** Front and reverse colony on PDA (6 d). **C.** Conidioma. **D–F.** Conidiophores, conidiogenous cells and conidia. **G–L.** Appressoria. **M.** Conidia. Scale bars: C = 100 µm; D, E, L, M = 10 µm; F = 20 µm. Scale bar of L applies to G–L.

Notes: *Colletotrichum paraendophytum* is phylogenetically closely related to *C. endophytum* in the *C. graminicola* species complex (Figs 1, 3), but differs in that it produces differently shaped conidia (slightly curved *vs.*pronouncedly curved) and with a different conidium L/W ratio (5.5 *vs.*4.8). In addition, *C. paraendophytum* produces semi-immersed brown conidiomata, which are absent in *C. endophytum* (Tao *et al.* 2013). Furthermore, the two species share low sequence similarity at *act* (95.2 %), *chs-1* (98.2 %), ITS (97.9 %), *sod2* (92.8 %), and *tub2* (92.1 %).

Colletotrichum plurivorum Damm *et al.*, Stud. Mycol. 92: 31. 2018. Fig. 24.

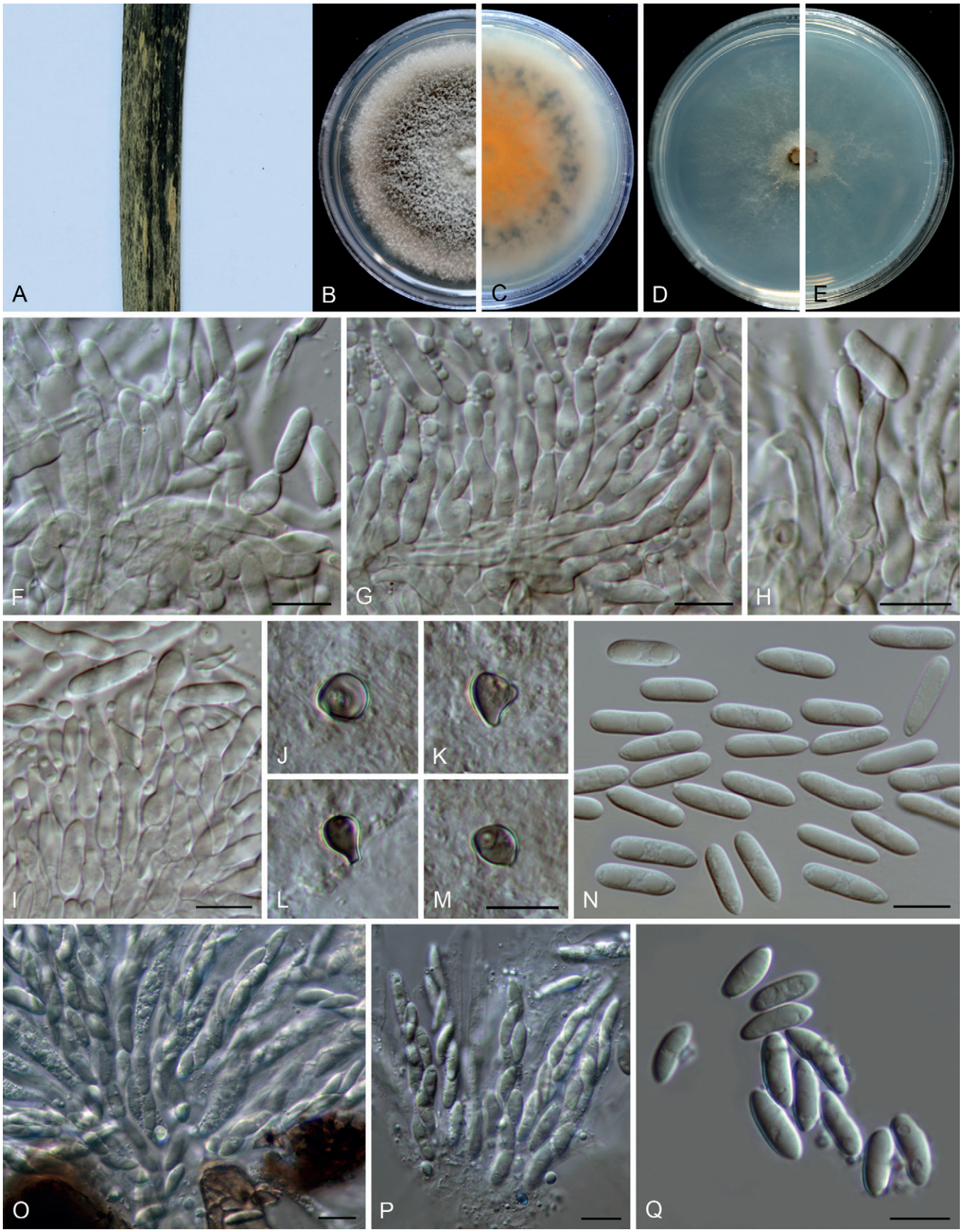


Fig. 22. *Colletotrichum parabambusicola* (ex-type culture NN058956). **A.** Disease symptom on host plant. **B, C.** Front and reverse colony on PDA (7 d). **D, E.** Front and reverse colony on SNA (7 d). **F–I.** Conidiophores, conidiogenous cells and conidia. **J–M.** Appressoria. **N.** Conidia. **O, P.** Asci. **Q.** Ascospores. Scale bars: F–I, M–Q = 10 µm. Scale bar of M applies to J–M.

Description: *Colonies* on PDA 35–51 mm diam in 7 d, flat with undulate edge. *Vegetative hyphae* hyaline to medium brown, smooth-walled, septate, branched. On PDA, *ascomata* globose, subglobose or with an irregular shape, solitary or gregarious, black, 130–300 µm diam, formed on the surface of the medium and usually covered by aerial mycelium, ostiolate, outer wall composed of greenish grey angular cells, 2–6 µm diam. *Interascal tissue* composed of thin-walled, hyaline, septate paraphyses. *Asci* cylindrical, obclavate to clavate,

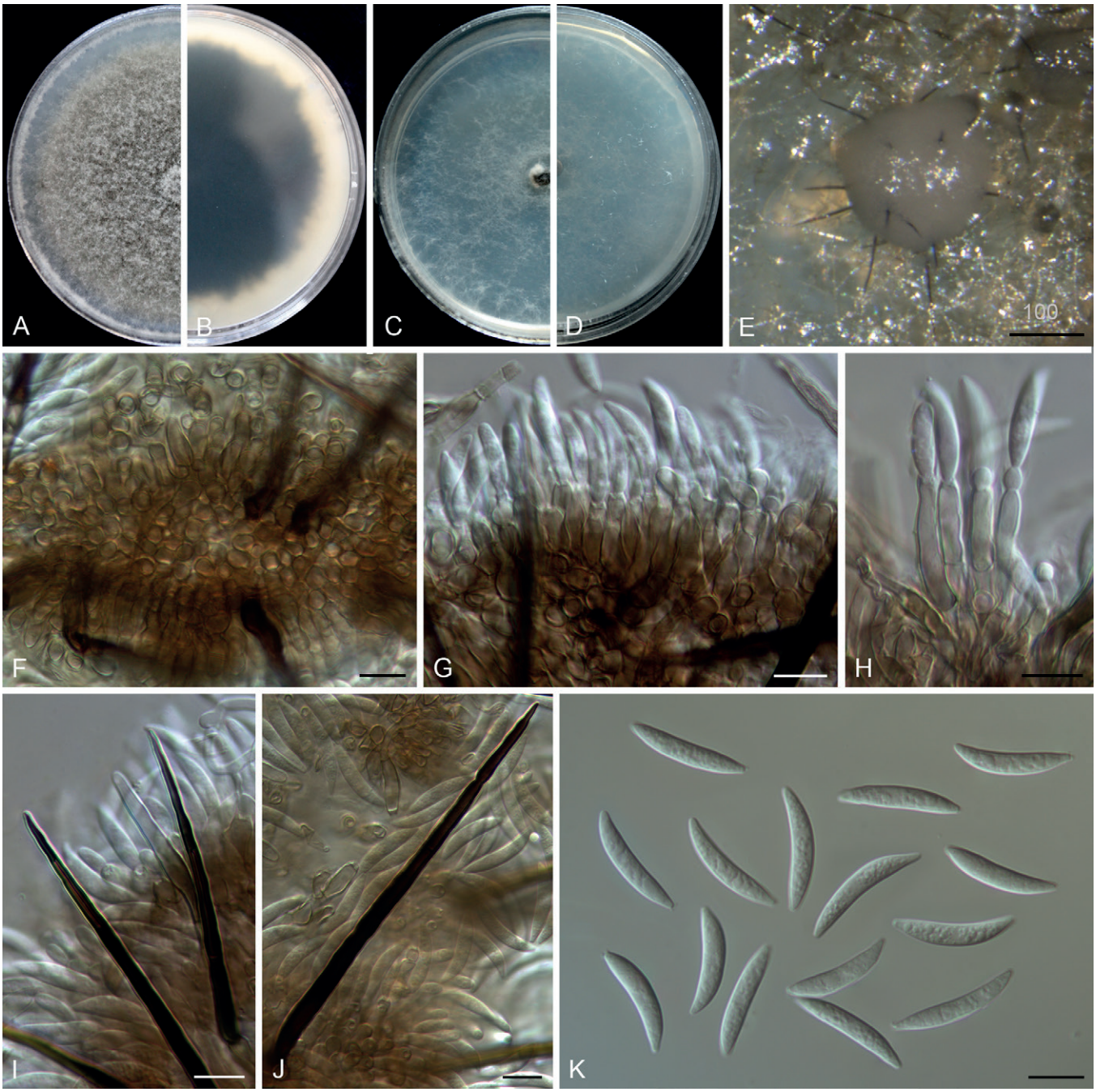


Fig. 23. *Colletotrichum paraendophytum* (ex-type culture NN054963). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Front and reverse colony on SNA (7 d). **E.** Conidial mass with setae. **F–H.** Conidiophores, conidiogenous cells and conidia. **I, J.** Setae. **K.** Conidia. Scale bars: F–K = 10 µm.

33–54.5 × 7.5–13 µm, 8-spored. *Ascospores* hyaline, smooth-walled, aseptate, fusoid, clavate, with rounded ends, straight or slightly curved, 15–22.5(–25.5) × 4.5–6 µm, (av. ± SD = 18.5 ± 2.7 × 5.3 ± 0.5 µm), L/W ratio = 3.5. *Conidiomata* acervular, solitary or confluent, superficial or semi-immersed, protruding pale luteous conidial masses. *Setae* pale brown to dark brown, usually smooth-walled at the base and verruculose at the top, 1–3-septate, 54–82 µm long, basal cells cylindrical, 3.5–6 µm diam, the tip ± acute. *Conidiophores* solitary or branched, septate, usually reduced to conidiogenous cells. *Conidiogenous cells* hyaline, cylindrical, ovoid to obclavate, smooth-walled, 11–31 × 2.5–5 µm. *Conidia* hyaline, aseptate, smooth-walled, guttulate, cylindrical with obtuse ends, straight, 9–13.5 × 4.5–5.5 µm (av. ± SD = 11.3 ± 1.1 × 5 ± 0.3 µm), L/W ratio = 2.3. *Appressoria* not observed.

Typus: **Vietnam**, Da Lat-Lam Dong, from anthracnose on leaf of *Coffea* sp., collection date unknown, P. Nguyen & E. Liljeroth (**holotype** CBS H-21496, ex-type culture CBS 125474).

Additional materials examined: **China**, Fujian, Fuzhou, Wuyi Mountain, on *Paederia foetida*, Aug. 2016, Z.Y. Ma & L. Cai, WYS8, living cultures LC8240 = (M51), LC8244 (= M55), LC8322 (= M136); on *Vigna unguiculata*, Aug. 2016, Z.Y. Ma & L. Cai, FJWYS01, living culture LC8337 (= M151).

Notes: *Colletotrichum plurivorum* exhibits a large host range and high degree of genetic variation (Damm *et al.* 2019). This is the first report of *C. plurivorum* on *Paederia foetida* and *Vigna unguiculata.*

Colletotrichum quinquefoliae Jayaward. *et al*., Fungal Diversity 78: 83. 2016.

Notes: *Colletotrichum quinquefoliae* was described as a distinct species in the *C. dematium* species complex (Li *et al.* 2016) and

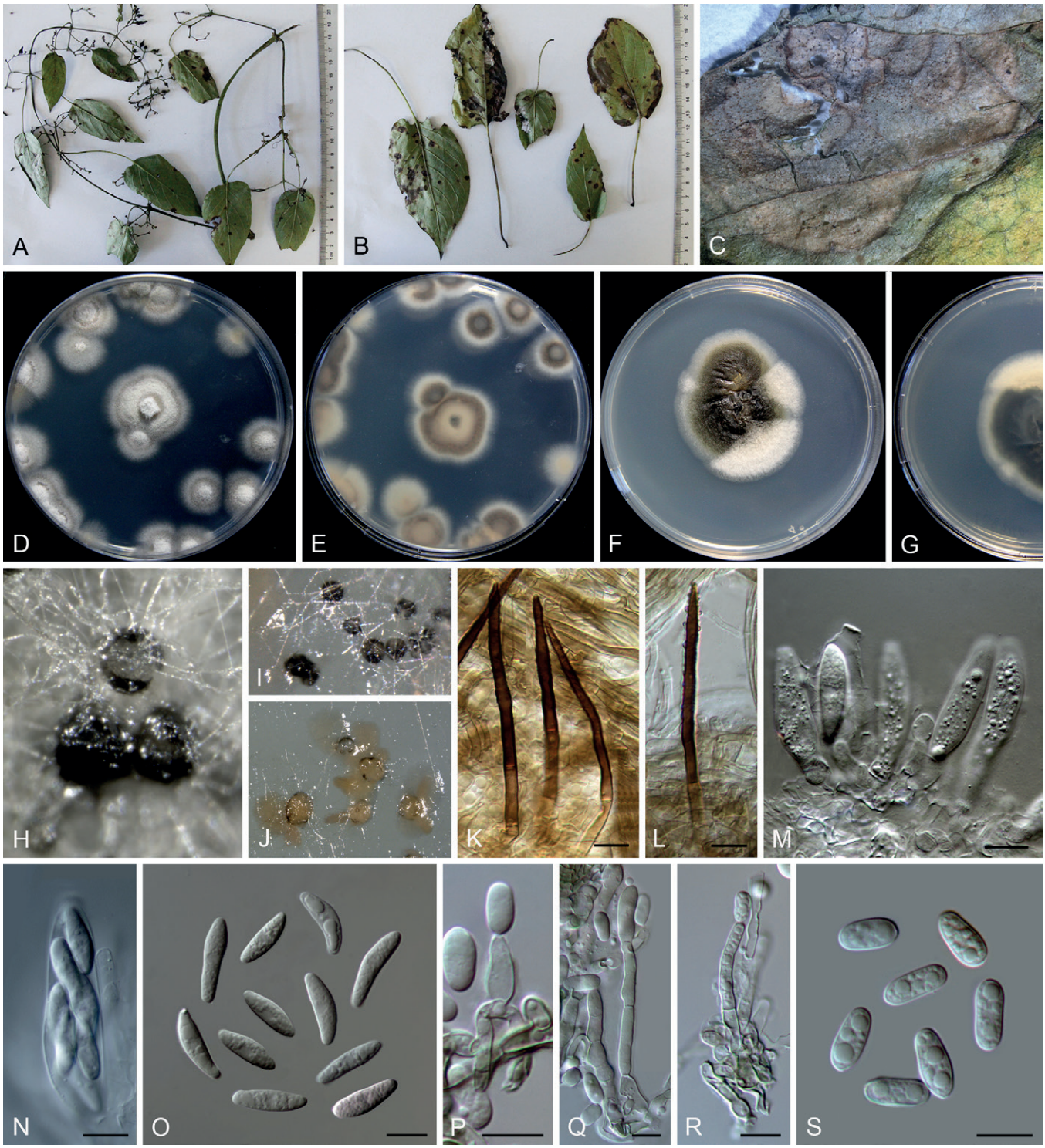


Fig. 24. *Colletotrichum plurivorum* (D–E, H–J. LC8337; F–G, K–S. LC8240). **A, B.** Disease symptoms on *Paederia foetida*. **C.** Disease symptom on *Vigna unguiculata*. **D–G.** Front and reverse colonies on PDA (6 d). **H, I.** Ascomata. **J.** Conidiomata and conidial mass. **K, L.** Setae. **M, N.** Asci. **O.** Ascospores. **P–R.** Conidiophores, conidiogenous cells and conidia. **S.** Conidia. Scale bar = 10 µm.

forms an unusually long branch in the multi-locus phylogenetic tree (Fig. 1). Based on the BLASTn searches, ITS, *gapdh*, and *tub2* sequences of its type MFLU 14-0626 (Li *et al.* 2016) share high similarity with those of species in the *C. dematium* species complex. However, the closest matches using the *act* sequence (KU236389.1) is *C. siamense* (> 99 % identity), belonging to the *C. gloeosporioides* species complex, which very likely reflects a confusion with another specimen and may explain the strangely long branch of *C. quinquefoliae*. The type of *C. quinquefoliae* and its derived sequences are thus in need of reexamination.

Colletotrichum reniforme F. Liu, Z.Y. Ma & L. Cai, ***sp. nov.*** MycoBank MB 841390. Fig. 25.

Etymology: Named to reflect the reniform shape of ascospores.

Description: *Colonies* on PDA 60–64 mm diam in 7 d, flat with entire edge, pale grey with white edge, floccose aerial mycelium, reverse olivaceous grey to iron grey with off-white edge. *Vegetative hyphae* hyaline, smooth-walled, septate, branched. Sexual morph formed on SNA. *Ascomata* solitary or gregarious, superficial to semi-immersed, globose or irregular, black, outer wall composed of angular cells,

Fig. 25. *Colletotrichum reniforme* (ex-type culture LC8230). **A.** Disease symptom on *Smilax cocculoides*. **B.** Front and reverse colony on PDA (6 d). **C, D.** Conidiomata and conidial masses on pine needle and SNA, respectively. **E–H.** Appressoria. **I.** Conidiophores. **J.** Conidia. **K–O.** Setae. **P, Q.** Ascomata on SNA and pine needle, respectively. **R, S.** Asci. **T.** Ascospores. Scale bars: P, Q = 200 µm; R = 20 µm; H–K, M, O, S, T = 10 µm. Scale bar of H applied to E–H.

medium brown. *Interascal tissue* composed of paraphyses, thin-walled, hyaline, septate. *Asci* cymbiform to subcylindrical, hyaline, 33.5–49.5 × 6.5–11.5 µm, 8-spored. *Ascospores* uniseriately arranged, hyaline, smooth-walled, aseptate, allantoid to reniform with rounded ends, 13.5–16 × 4–5 µm (av. ± SD = 14.8 ± 0.7 × 4.5 ± 0.3 µm), L/W ratio = 3.2. On SNA amended with pine needle, *conidiomata* acervular, scattered or gregarious, semi-immersed. *Setae* straight or flexuous, smooth-walled, sometimes verrucous

in the upper half, basal cell medium brown, gradually becoming dark brown towards the tip, 1–2-septate, 65–89 µm long, basal cell cylindrical, 3.5–4.5 µm diam, the tip ± acute. *Conidiophores* hyaline to pale brown, septate, branched, 25–35 µm, usually reduced to conidiogenous cells. *Conidiogenous cells* hyaline, smooth-walled, cylindrical, subcylindrical to ampulliform, 5.5–11.5(–14) × 2.5–5 µm. *Conidia* hyaline, aseptate, smooth-walled, guttulate, straight, cylindrical, both ends obtuse, 11.5–16 × 4–5.5 µm (av. ± SD = 13.6 ± 0.9 × 4.7 ± 0.3), L/W ratio = 2.9. *Appressoria* single, medium to dark brown, various in shape, subcircular, ovoid, navicular, ellipsoidal or irregular in outline, 9–14.5 × 4.5–7.5 µm (av. ± SD = 11.6 ± 1.4 × 5.5 ± 0.7 µm).

Typus: **China**, Fujian, Fuzhou, Wuyi Mountain, on *Smilax cocculoides*, Aug. 2016, Z.Y. Ma & L. Cai, WYS3 (**holotype** HMAS 350631, ex-type culture CGMCC 3.20525 = LC8230 = M41).

Additional material examined: **China**, Fujian, Fuzhou, Wuyi Mountain, on *Paederia foetida*, Aug. 2016, Z.Y. Ma & L. Cai, WYS8, living culture LC8248 (= M59).

Notes: *Colletotrichum reniforme* is closely related to *C. cliviicola* in the *C. orchidearum* species complex (Fig. 1), but these two species are easily differentiated on the basis of morphological characteristics. The conidiophores of *C. reniforme* are inconspicuous on SNA and pine needles, and difficult to distinguish from the pale brown acervulus cells, while those of *C. cliviicola* are easily recognised and usually elongating up to 70 or 80 µm in 3 wk (Damm *et al.* 2019). The conidiogenous cells of *C. reniforme* are shorter and thinner than those of *C. cliviicola* [5.5–11.5(–14) × 2.5–5 µm *vs.*7.5–23 × 4.5–7.5 µm]. Furthermore, microcyclic conidiation is observed in *C. cliviicola*, but not in *C. reniforme*. According to Damm *et al.* (2019) and Yang *et al.* (2009), the appressoria of *C. cliviicola* usually have undulate to lobate margins, while those of *C. reniforme* are flat.

Colletotrichum schimae F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841391. Fig. 26.

Etymology: Named after the host plant genus, *Schima.*

Description: *Colonies* on PDA 33–38 mm diam in 7 d, flat with entire or undulate edge, white, aerial mycelium dense, reverse umber in the centre, pale luteous towards the margin. *Conidiomata* and *setae* not observed. On SNA, *conidiophores* formed directly from aerial mycelium, hyaline, aseptate or septate. *Conidiogenous cells* hyaline, cylindrical, formed terminally or laterally on hyphae, variable in size, up to 45 µm long. *Conidia* hyaline, smooth-walled, guttulate, cylindrical to fusoid, with ± acute ends, 8.5–14 × 2.5–4 µm (av. ± SD = 11.6 ± 1.1 × 3.5 ± 0.3 µm), L/W ratio = 3.3. *Appressoria* pale brown, solitary, ellipsoidal, subglobose, bullet or irregular shape, 5–12.5 × 3.5–7 µm.

Typus: **China**, Hunan Province, Chenzhou, Yizhang County, Mangshan, on healthy leaves of *Schima* sp., 12 Apr. 2002, W.P. Wu (**holotype** HMAS 350647, ex-type culture CGMCC 3.20526 = LC13880 = NN046984).

Additional material examined: **China**, Hunan Province, Chenzhou, Yizhang County, Mangshan, on healthy leaves of *Schima* sp., 12 Apr. 2002, W.P. Wu, living culture LC13881 (= NN047247).

Notes: *Colletotrichum schimae* is phylogenetically related to *C. kniphofiae* in the *C. acutatum* species complex, and shares low sequence similarity at *act* (92 %), *chs-1* (96.2 %), *gapdh* (89.8 %), ITS (98.4 %), and *tub2* (94.9 %). Moreover, *C. schimae* is distinct from all other species in this genus at each locus sequenced in the current study. Morphologically, *C. schimae* differs from *C. kniphofiae* in that it produces smaller-sized conidia (8.5–14 × 2.5–4 µm *vs.*17–37 × 5–7 µm) (Crous *et al.* 2018).

Colletotrichum shivasii F. Liu & L. Cai, ***sp. nov.*** MycoBank MB 841392. Fig. 27.

Etymology: Named in honour of the mycologist Roger Shivas, who provided the ex-type culture of this species for the study.

Description: *Colonies* on PDA 75–80 mm diam in 7 d, flat with fimbriate edge, aerial mycelium white, reverse white at first, becoming orange to black at the centre with time. On PDA, *conidiomata* not observed. *Conidiophores* formed directly from aerial mycelium, hyaline to very pale grey, septate, up to 37 µm. *Setae* not observed. *Conidiogenous cells* cylindrical, smooth-walled, 12–16 µm in length. *Conidia* hyaline, smooth-walled, apex reduced into a filiform appendage (10–)12.5–23 µm, conidia body slightly curved or straight, 27.5–47.5 µm long (including appendages), 2.5–4 µm wide (av ± SD = 39.4 ± 5.2 × 3.6 ± 0.5 µm), L/W ratio = 10.9. *Appressoria* pale to medium brown, pyriform to subcircular, 6–11.5 × 4.5–7.5 µm (av. ± SD = 7.8 ± 1.5 × 6 ± 1.1 µm).

Typus: **Australia**, Queensland, Tablelands, Wongabel Road, Atherton, on leaf of *Themeda triandra*, Feb. 2004, probably J.L. Alcorn (**holotype** HMAS 350627, ex-type culture LC1400 = BRIP 15842a).

Notes: *Colletotrichum shivasii* belongs to the *C. caudatum* species complex. Species in this complex comprise widespread fungal pathogens of warm-season grasses, and are easily differentiated from other species in the genus by producing caudate conidia (Crouch 2014). *Colletotrichum shivasii*, associated with the perennial tussock-forming grass *Themeda triandra* in Australia, is morphologically similar to the closely related species *C. caudatum*, but harbours nucleotide polymorphisms at ITS (96.9 % similarity), *sod2* (92.9 % similarity), and Mat/Apn2 (82.1 % similarity).

Colletotrichum sinuatum F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841393. Fig. 28.

Etymology: Named to reflect the sinuate setae and conidiophores.

Description: *Colonies* on PDA 42 mm diam in 7 d, flat with entire edge, white to pale saffron, aerial mycelium sparse, reverse pale saffron with a black centre. *Conidiomata* not formed, conidial masses and setae abundantly formed on the surface of medium. *Setae* medium to dark brown, smooth-walled or verruculose, mostly sinuate, 2–5-septate, 67–175 µm long, basal cells cylindrical, sometimes inflated, 4–9.5 µm diam, the tip acute or rounded. *Conidiophores* formed directly from hyphae, hyaline to brown, branched, 1–4-septate, 32–122 µm in length. *Conidiogenous cells* hyaline to pale brown, smooth-walled, cylindrical, rarely subulate, variable in length, on SNA 11.5–34 × 2.5–5 µm (av. ± SD = 21.9 ± 5.4 × 3.8 ± 0.6 µm), on PDA 15–37 × 3–5 µm (av. ± SD = 24.8 ± 6.5 × 4 ± 0.5 µm). *Conidia* hyaline, aseptate, smooth-walled, cylindrical, apex obtuse, tapering at base to a truncate hilum, mostly straight, rarely slightly curved, on SNA 14.5–19 × 3.5–5 µm (av. ± SD = 16.9 ± 1.2 × 4.4 ± 0.4 µm), L/W ratio = 3.8, on PDA 14.5–21 × 4.5–5.5 µm (av. ± SD = 17.8 ± 1.5 × 4.8 ± 0.3 µm), L/W ratio = 3.7. *Appressoria* not observed.

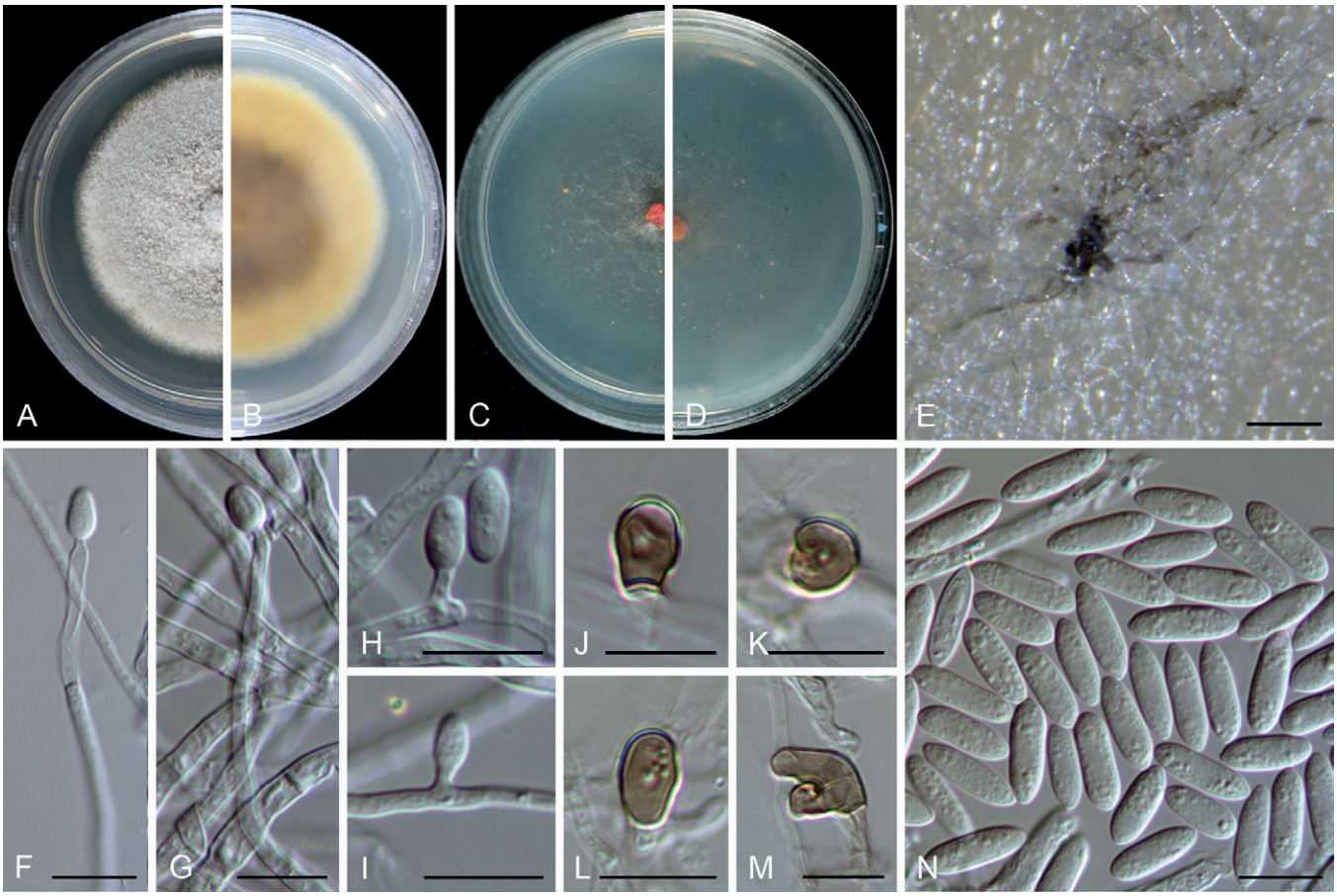


Fig. 26. *Colletotrichum schimae* (ex-type culture NN046984). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Front and reverse colony on SNA (7 d). **E.** Conidial mass on SNA. **F–I.** Conidiophores, conidiogenous cells and conidia. **J–M.** Appressoria. **N.** Conidia. Scale bars = 10 µm.

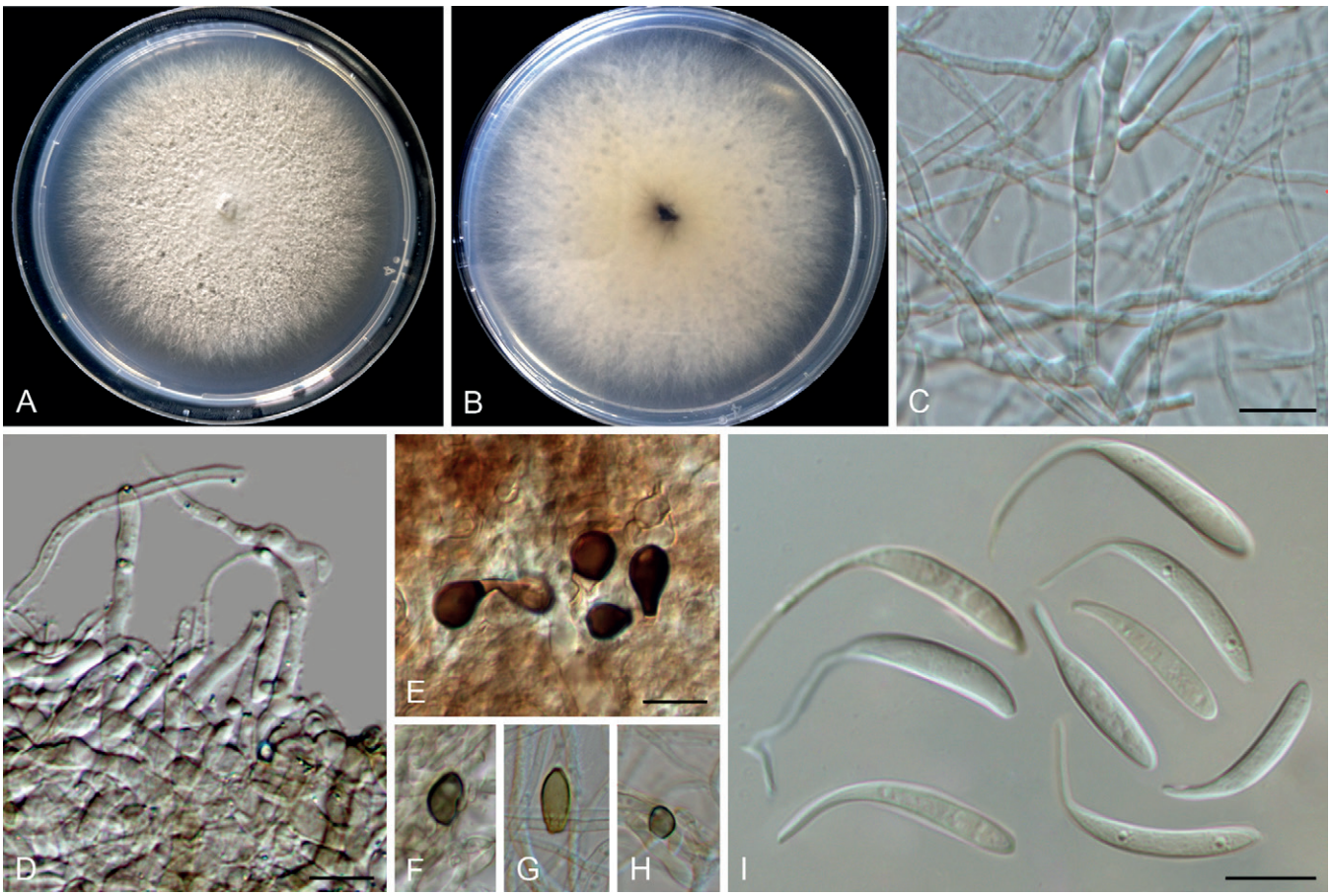


Fig. 27. *Colletotrichum shivasii* (ex-type culture BRIP 15842a). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Conidiophores and conidiogenous cells. **E–H.** Appressoria. **I.** Conidia. Scale bars = 10 µm.

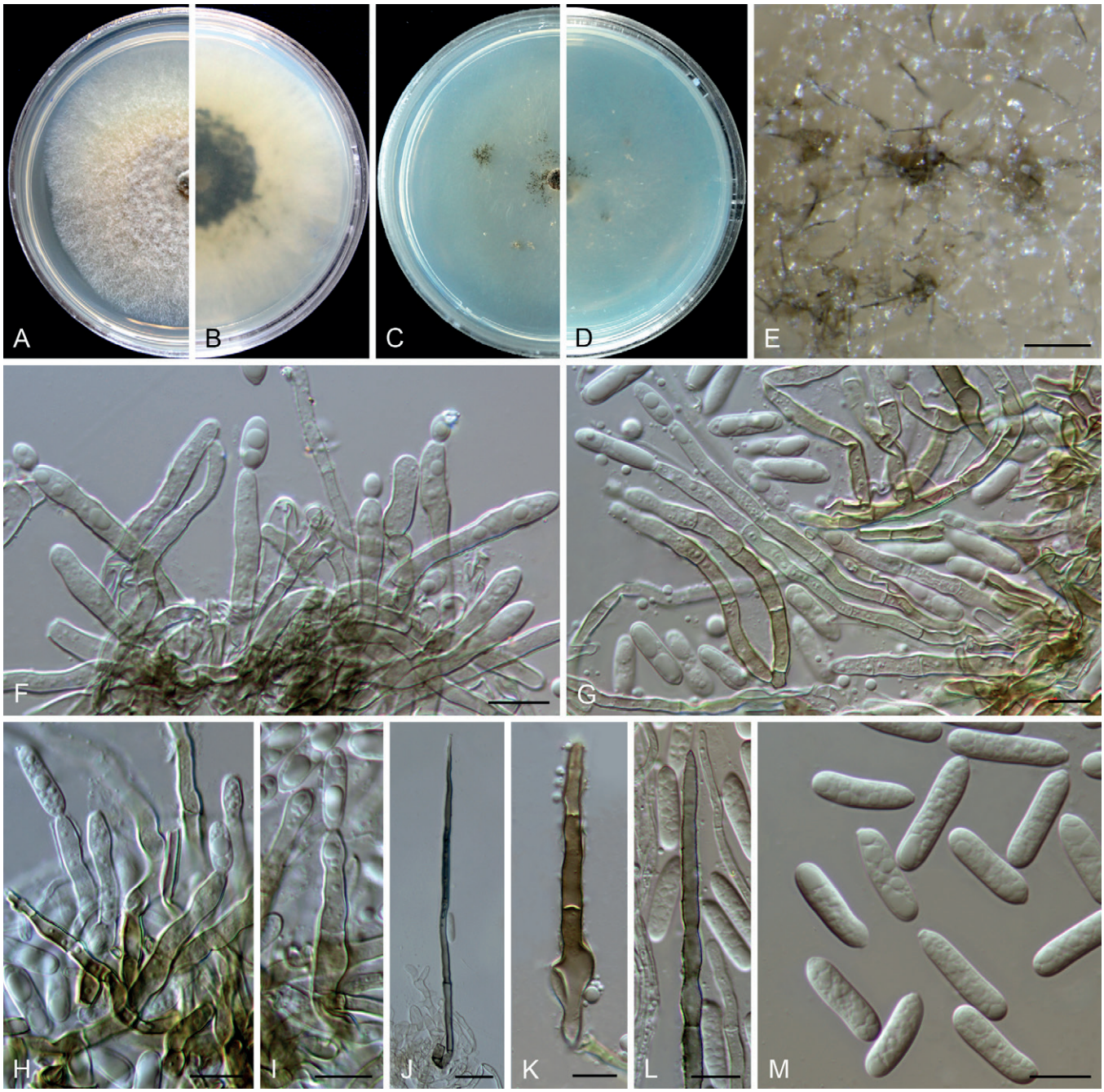


Fig. 28. *Colletotrichum sinuatum* (ex-type culture NN055266). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Front and reverse colony on SNA (7 d). **E.** Conidial masses and setae on SNA. **F–I.** Conidiophores, conidiogenous cells and conidia. **J–L.** Setae. **M.** Conidia. Scale bars: E = 100 µm; J = 20 µm; F–I, K–M = 10 µm.

Typus: **China**, Guangdong Province, Guangzhou, Yuexiu Park, on dead leaves of *Ophiopogon japonicus*, 29 Dec. 2012, W.P. Wu (**holotype** HMAS 350643, ex-type culture CGMCC 3.20528 = LC13874 = NN055266).

Notes: *Colletotrichum sinuatum* belongs to the *C. dracaenophilum* species complex. It shares low sequence similarity with the most closely related species *C. yunnanense* at *act* (91.6 %), *chs-1* (97.6 %), *gapdh* (87.4 %), *his3* (92.4 %), ITS (96.5 %), and *tub2* (96.3 %). Moreover, *C. schimae* is distinct from all other species in this genus at each locus sequenced in the current study. This species morphologically differs from the phylogenetically related species *C. buxi sp. nov.*, *C. dracaenophilum*, and *C. yunnanense* in that it produces distinctly longer conidiophores and conidiogenous cells. Two other *O. japonicus*-associated species, *C. truncatum* and *C. falcatum* (Raabe *et al.* 1981, Miller 1992), are easily distinguished from *C. sinuatum* in that they produce curved conidia.

Colletotrichum subacidae F. Liu, Z.Y. Ma & L. Cai, ***sp. nov.*** MycoBank MB 841394. Fig. 29.

Etymology: Named to reflect its close phylogenetic relationship with *C. acidae*.

Description: *Colonies* on PDA 43–51 mm diam in 7 d, flat with undulate edge, glaucous grey to smoke grey in the centre, white at the margin, aerial mycelium sparse, reverse greenish grey in the centre, white at the margin. On PDA, *conidiomata* acervular, gregarious, semi-immersed. *Setae* dark brown, 1–3-septate, 80–165 µm long, base cylindrical, smooth-walled, 5–9 µm diam, tip acute to obtuse. *Conidiophores* hyaline to pale brown, smooth-walled, septate, solitary or branched, formed from a cushion of roundish brown cells. *Conidiogenous cells* hyaline, smooth-walled, cylindrical, 9–20 × 2–4.5 µm. *Conidia* hyaline, aseptate, smooth-

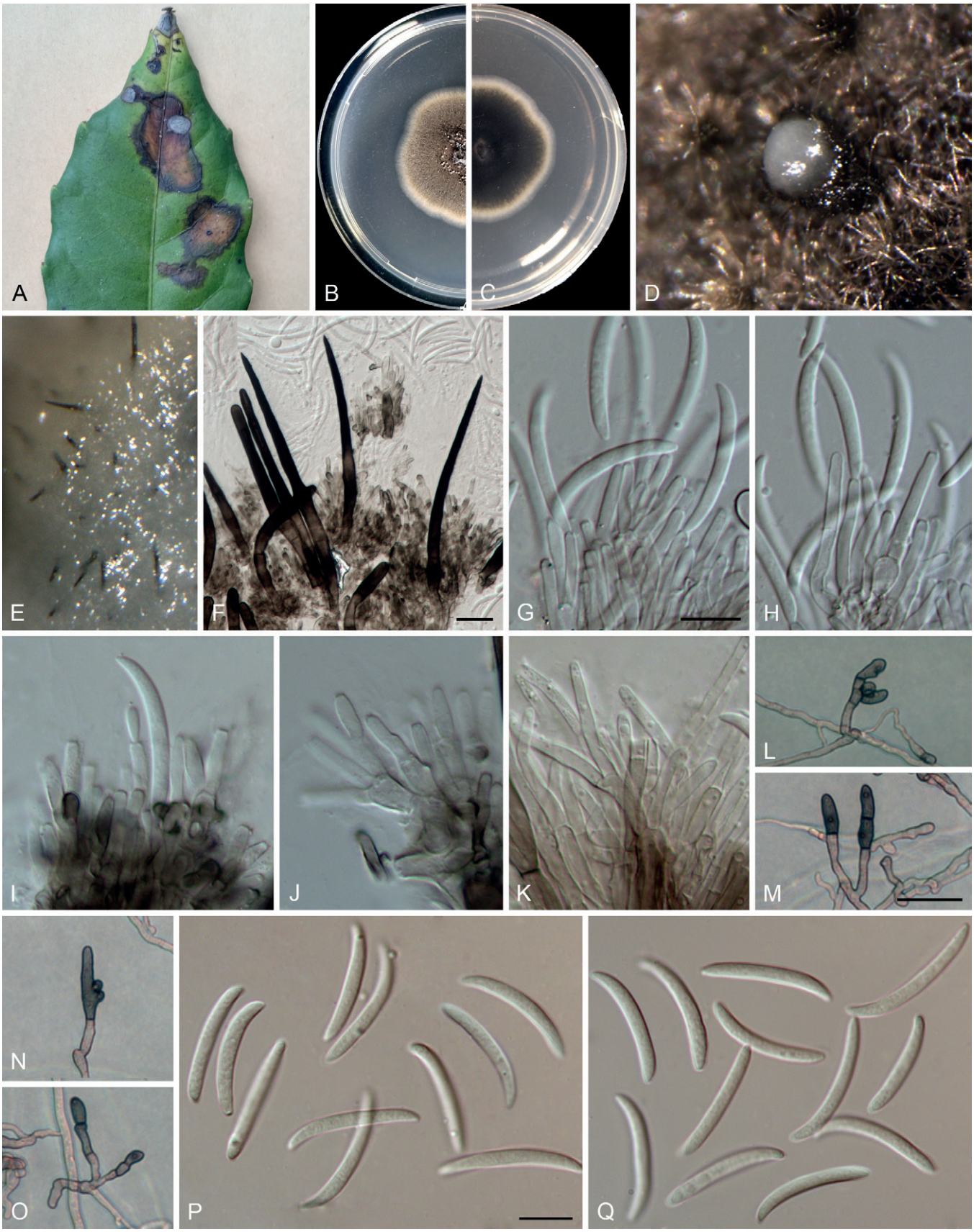


Fig. 29. *Colletotrichum subacidae* (ex-type culture LC13857). **A.** Disease symptom on host plant. **B, C.** Front and reverse colony on PDA (6 d). **D.** Conidioma on PDA. **E, F.** Setae. **G–K.** Conidiophores, conidiogenous cells and conidia. **L–O.** Appressoria. **P, Q.** Conidia. Scale bars: F, M = 20 µm; G, P = 10 µm. Scale bar of G applies to G–K; M applies to L–O; P applies to P–Q.

walled, slightly curved, central part of conidium almost straight with parallel walls, apex more or less acute, base usually truncate, 21–30 × 2.5–4 µm (av. ± SD = 26 ± 2.3 × 3 ± 0.3 µm), L/W ratio = 8.5. *Appressoria* brown, usually in groups, mostly oblong to subcylindrical, rarely irregular in outline, 8–25 × 5–8 µm (av. ± SD = 15.5 ± 4.4 × 6.5 ± 1.0 µm), L/W ratio = 2.3.

Typus: **China**, Guangxi, Chongzuo, Guangxi Nonggang National Nature Reserve, on *Tetrastigma obovatum*, Jun. 2017, Z.Y. Ma & L.W. Hou (**holotype** HMAS 350635, ex-type culture CGMCC 3.20529 = LC13857 = LH01).

Additional materials examined: **China**, Beijing, Xibeiwang, Beijing Medical Botanical Garden, on a diseased stem of *Asparagus officinalis*, 9 Sep. 2012, W.P. Wu, living culture NN054605; on a diseased leaf of *Hosta* sp., 9 Sep. 2012, W.P. Wu, living culture NN054609; Guangxi, Chongzuo, Guangxi Nonggang National Nature Reserve, on *Tetrastigma obovatum*, Jun. 2017, Z.Y. Ma & L.W. Hou, living cultures LC15821, LC15822, LC15823; Hubei Province, Wuhan Botanical Garden, on a dead leaf petiole of *Ailanthus altissima*, 2 Aug. 2015, W.P. Wu, living cultures NN071129, NN071131.

Notes: *Colletotrichum subacidae* is phylogenetically allied with *C. acidae* (Fig. 1), but these two species share low sequence similarity at *gapdh* (93.8 %), *act* (94.3 %), and *tub2* (97.6 %). Morphologically, *C. subacidae* differs from *C. acidae* with respect to the shape and size of appressoria (oblong to subcylindrical, 8–25 × 5–8 µm *vs.*round, oval or irregular, 11–23 × 9–18 µm) and the size of conidiogenous cells (9–20 × 2–4.5 µm *vs.*1–2 × 2–3.5 µm) (Samarakoon *et al.* 2018). Moreover, the conidia of *C. acidae* are more strongly curved than those of *C. subacidae*.

Colletotrichum subsalicis F. Liu & L. Cai, ***sp. nov.*** MycoBank MB 841395. Fig. 30.

Etymology: Named to reflect its close phylogenetic relationship with *C. salicis.*

Description: *Colonies* on PDA 39–40 mm diam in 7 d, flat with entire edge, pale mouse grey in the centre, white at the margin, aerial mycelium sparse, reverse brown vinaceous, mouse grey and white towards the margin. On PDA, *conidiomata* acervular, scattered, semi-immersed, protruding saffron conidial masses. *Setae* not observed. *Conidiophores* formed from a cushion of pale brown angular cells, septate, branched, 17–41 µm. *Conidiogenous cells* hyaline to pale brown, smooth-walled, mostly cylindrical to ampulliform, rarely ovoid, 11–20 × 2–5 µm, periclinal thickening visible. *Conidia* hyaline, aseptate, smooth-walled, fusoid, 13–16 × 3.5–5 µm (av. ± SD = 14 ± 0.9 × 4.5 ± 0.9 µm), L/W ratio = 3.2. *Appressoria* single, olivaceous, smooth-walled, mostly clavate with a truncate base, sometimes irregular, 6–13 × 2–6 µm (av. ± SD = 8.5 ± 1.7 × 4 ± 1.7 µm), L/W ration = 2.1.

Typus: **China**, Beijing, Baihuashan National Nature Reserve Forest Station, *Populus alba*, 19 Sep. 2018, Q. Chen (**holotype** HMAS 350637, ex-type culture CGMCC 3.20530 = LC13863 = CQ1168).

Notes: *Colletotrichum subsalicis* forms a sister clade to *C. salicis* in the *C. acutatum* species complex (Fig. 1), but morphologically differs from the latter in conidium shape (fusoid *vs.*cylindrical to clavate) and appressorium size (6–13 × 2–6 µm, av. ± SD = 8.5 × 4 µm, L/W ratio = 2.1 *vs.* 6–19.5 × 5–9.5 µm, av. ± SD = 11.5 × 7.6 µm, L/W ratio = 1.5) (Damm *et al.* 2012a). Furthermore, the sexual morph of *C. salicis* is more commonly observed in culture than the asexual morph (Damm *et al.* 2012a), but is absent in *C. subsalicis*. *Colletotrichum subsalicis* and *C. salicis* share 98.8 % genomic similarity.

Colletotrichum subvariabile F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841396. Fig. 31.

Etymology: Named to reflect its close phylogenetic relationship with *C. variabile.*

Description: *Colonies* on PDA 48–49 mm diam in 7 d, flat with entire edge, pale salmon, covered by white and pale greenish grey aerial mycelium, reverse pale salmon, variegated with pale greenish grey spots. On PDA, *conidiomata* subimmersed, globose, black, solitary or gregarious, in which conidiophores hardly observed. *Conidiophores*, formed directly on hyphae, usually reduced to conidiogenous cells, terminally or laterally. *Conidiogenous cells* rarely observed, hyaline to pale brown, cylindrical, or ampulliform, 2–12 µm in length. *Conidia* hyaline with salmon guttules, smooth-walled, cylindrical with obtuse apex and truncate base, 18–27 × 5.5–8 µm, av. ± SD = 22.1 ± 2.5 × 6.7 ± 0.8 µm, L/W ratio = 3.3. *Setae* and *appressoria* not observed.

Typus: **China**, Yunnan Province, Kunming, Kunming Botanical Garden, on healthy leaves of an unknown plant (endophyte), 20 Dec. 1993, W.P. Wu (**holotype** HMAS 350645, ex-type culture CGMCC 3.20531 = LC13876 = NN040649).

Notes: *Colletotrichum subvariabile*, belonging to the *C. gigasporum* species complex (Fig. 1), shares low sequence similarity with the phylogenetically related species *C. variabile sp. nov.* at *act* (95.2 %), *chs-1* (97.2 %), *gapdh* (94.2 %), *his3* (95 %), *tub2* (97.9 %), and ITS (97.8 %). Morphologically, *C. subvariabile* differs from *C. variabile* in that it produces shorter conidiogenous cells (2–12 µm *vs.*9–34 µm) and has a lower conidium L/W ratio (3.3 *vs.*3.8).

Colletotrichum syngoniicola F. Liu, Z.Y. Ma & L. Cai, ***sp. nov.*** MycoBank MB 841397. Fig. 32.

Etymology: Named after the host plant genus, *Syngonium.*

Description: Colonies on PDA 56–58 mm diam in 7 d, flat with entire edge, smoke grey to greenish grey with white edge, aerial mycelium sparse and short, reverse greenish grey to olivaceous black, off-white at the margin. On SNA, *vegetative hyphae* hyaline or brown, smooth-walled, septate, branched. *Conidiomata* not developed. *Conidiophores* formed directly from hyphae, conidial masses buff to honey. *Setae* not observed. *Conidiophores* hyaline to brown, septate, branched, up to 130 µm long, basal cells more or less thick-walled. *Conidiogenous cells* hyaline, rarely pale brown, smooth-walled, cylindrical or slightly tapering towards the apex, 8–19(–24) × 3.5–5.5 µm. *Conidia* hyaline, aseptate, smooth-walled, guttulate, cylindrical with obtuse ends, sometimes the base tapering to a truncate hilum, (9–)11–18.5(–23.5) × 3.5–5.5 (av. ± SD = 14.9 ± 1.2 × 4.1 ± 0.4), L/W ratio = 3.6. *Appressoria* single or gregarious, medium to dark brown, terminally at the tip of the hyphae, mostly irregularly shaped, with undulate to lobate margins, sometimes elliptical with an entire margin, 7.5–18 × 3.5–9 µm (av. ± SD = 10.1 ± 2.7 ×5.8 ± 1.7 µm).

Typus: **China**, Guangdong, Shenzhen, from a leaf spot of *Syngonium* sp., Nov. 2016, Y.Z. Diao, SZ36 (**holotype** HMAS 350632, ex-type culture CGMCC 3.20532 = LC8894 = M0745).

Additional materials examined: **China**, Guangdong, Shenzhen, from leaf spots of *Syngonium* sp., Nov. 2016, Y.Z. Diao, SZ36, living cultures LC8895 (= M0746), LC8896 (= M0747), LC8897 (= M0748).

Notes: *Colletotrichum syngoniicola* belongs to the *C. orchidearum* species complex (Fig. 1), and shares low sequence similarity with

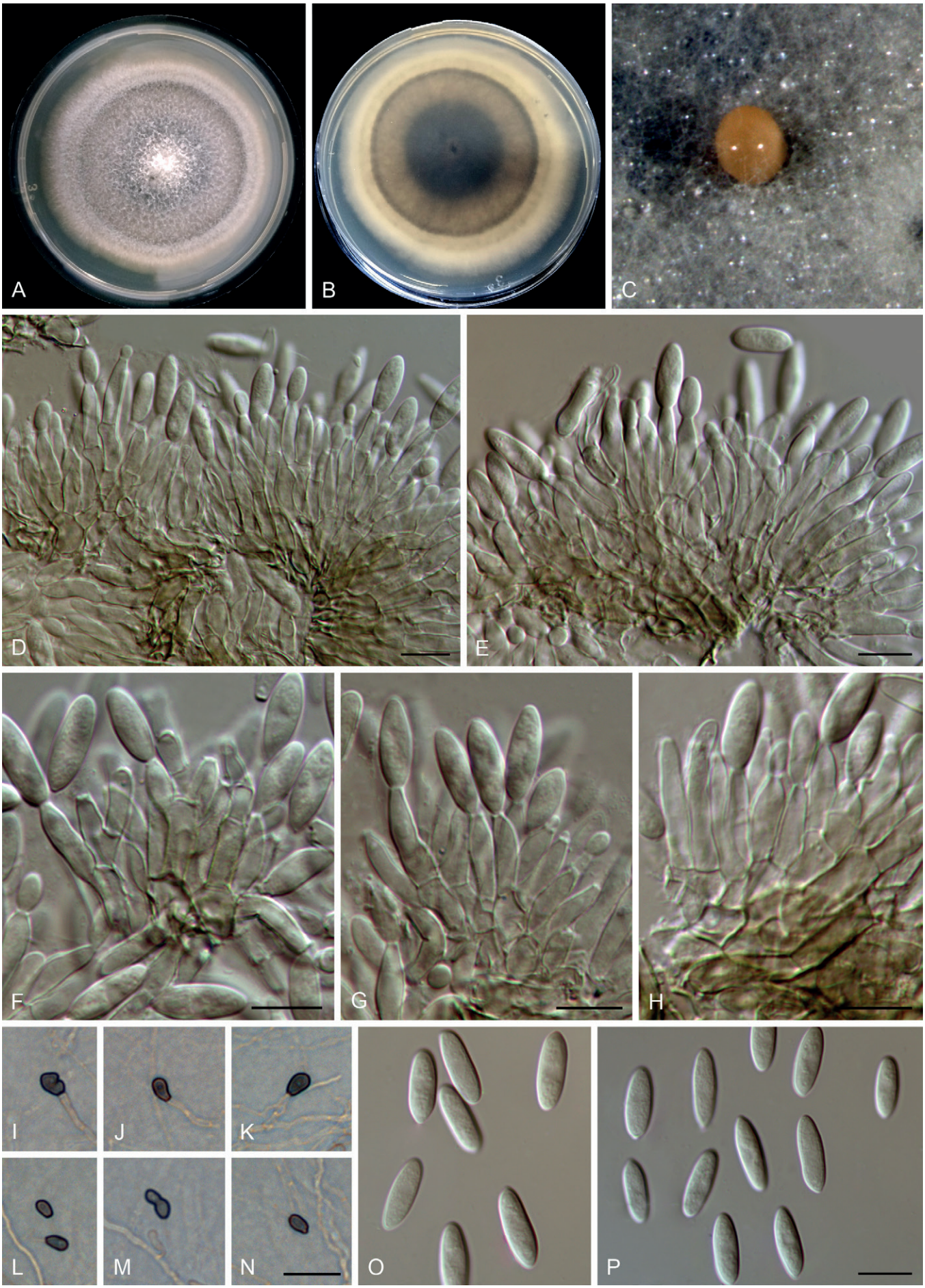


Fig. 30. *Colletotrichum subsalicis* (ex-type culture LC13863). **A, B.** Front and reverse colony on PDA (13 d). **C.** Conidioma on PDA. **D–H.** Conidiophores, conidiogenous cells and conidia. **I–N.** Appressoria. **O, P.** Conidia. Scale bars: D–H, P = 10 µm; N = 20 µm. Scale bar of N applies to I–N; P applies to O, P.

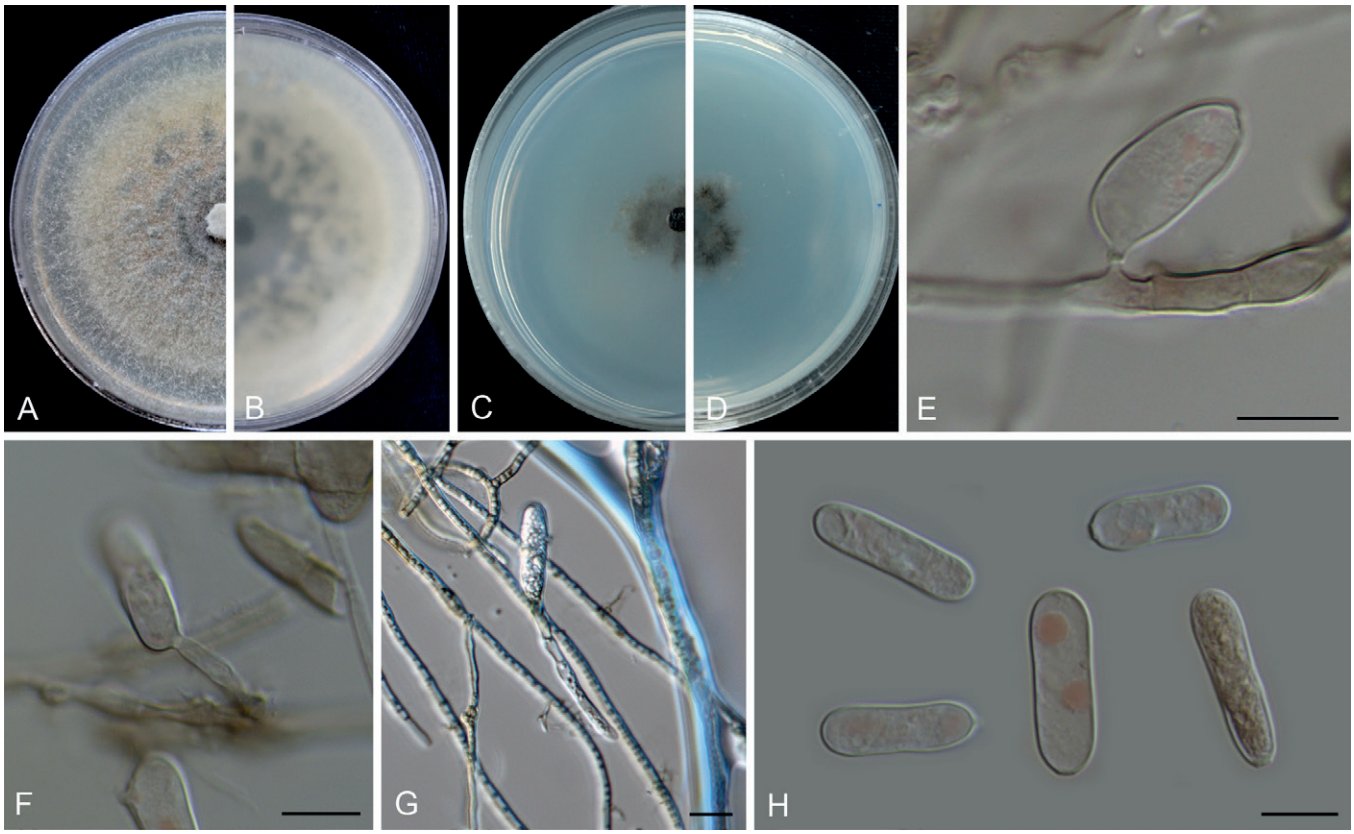


Fig. 31. *Colletotrichum subvariabile* (ex-type culture NN040649). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Front and reverse colony on SNA (7 d). **E–G.** Conidiophores, conidiogenous cells and conidia. **H.** Conidia. Scale bars = 10 µm.

the phylogenetically related species *C. piperis* at *act* (95.3 %), *chs-1* (98.4 %), *gapdh* (93.2 %), *his3* (96.5 %), *tub2* (97.5 %), and ITS (99 %). Morphologically, *C. syngoniicola* differs from *C. piperis* in that it produces relatively darker conidiophores (Damm *et al.* 2019). Moreover, although *C. syngoniicola* is characterised by the unusual conidiophores that are long-branched and brown, resembling those of *C. monsterae sp. nov.*, the two species share low sequence similarity at *act* (89.3 %), *chs-1* (92.8 %), *gapdh* (87.7 %), *his3* (91.9 %), ITS (97.6 %), and *tub2* (93.5 %).

Colletotrichum telosmae F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841398. Fig. 33.

Etymology: Named after the host plant genus, *Telosma.*

Description: *Colonies* on PDA growing slowly, 28–29 mm diam in 7 d, raised with concave edge, grey, reverse iron grey with pale amber margin, a pale amber ring more towards the centre of the colony corresponds to the production of conidial masses on the surface. *Vegetative hyphae* hyaline to pale brown, smooth-walled, septate, branched. On SNA, *conidiomata* not developed, conidiophores formed directly on hyphae, conidial masses buff to brown. *Setae* not observed. *Conidiophores* hyaline to pale brown, 1–4-septate, branched, up to 80 µm long. *Conidiogenous cells* hyaline, smooth-walled, cylindrical, 8–24 × 2–4 µm (av. ± SD ± 18.3 ± 3.5 × 3 ± 0.3 µm), collarette visible. *Conidia* hyaline, aseptate, smooth-walled, guttulate, cylindrical with obtuse ends, 10.5–11.5 × 3.5–5 µm (av. ± SD ± 11 ± 0.4 × 4 ± 0.2 µm), L/W ratio = 2.8. *Appressoria* ellipsoidal, subcircular, medium brown to dark brown, 5.5–11.5 × 3.5–7 µm (av. ± SD ± 7.2 ± 1.6 × 5 ± 1 µm), with conidia-like cells formed from the appressoria, 6.5–7.5 × 5–5.5 µm.

Typus: **China**, on healthy leaves of *Telosma cordarum*, 24 Mar. 2010, W.P. Wu (**holotype** HMAS 350641, ex-type culture CGMCC 3.20533 = LC13872 = NN052858).

Notes: The endophytic *C. telosmae*, phylogenetically related to the *C. dracaenophilum* species complex (Fig. 1), is a singleton species and can be distinguished from all currently accepted species of *Colletotrichum* at each locus sequenced in the current study. Its cylindrical conidia resemble species in many complexes, especially the *C. gloeosporioides* and *C. dracaenophilum* complexes. However, the conidia-like cells that form on the *C. telosmae* appressoria (Fig. 33L–M) have not been previously observed in this genus. This is the first report of a *Colletotrichum* species on *Telosma cordarum.*

Colletotrichum tibetense F. Liu & L. Cai, ***sp. nov.*** MycoBank MB 841399. Fig. 34.

Etymology: Named after the location where the fungus was collected, Tibet.

Description: *Colonies* on PDA growing slowly, 21–24 mm diam in 7 d, flat with fimbriate edge, straw, aerial mycelium sparse, reverse straw. *Vegetative hyphae* hyaline, smooth-walled, septate, branched. Sporulating on SNA and pine needle, *conidiomata* not developed, *conidiophores* formed directly from hyphae and hardly observed, conidial masses abundant, pale luteous to buff, scattered or confluent. *Setae* not observed. *Conidiophores* hyaline, aseptate, unbranched, reduced to conidiogenous cells. *Conidiogenous cells* hyaline, smooth-walled, cylindrical, straight or flexuous, 19.5–32.5 × 2 µm. *Conidia* hyaline, aseptate, guttulate, smooth-walled, curved, central part of conidium almost straight with parallel walls, gradually

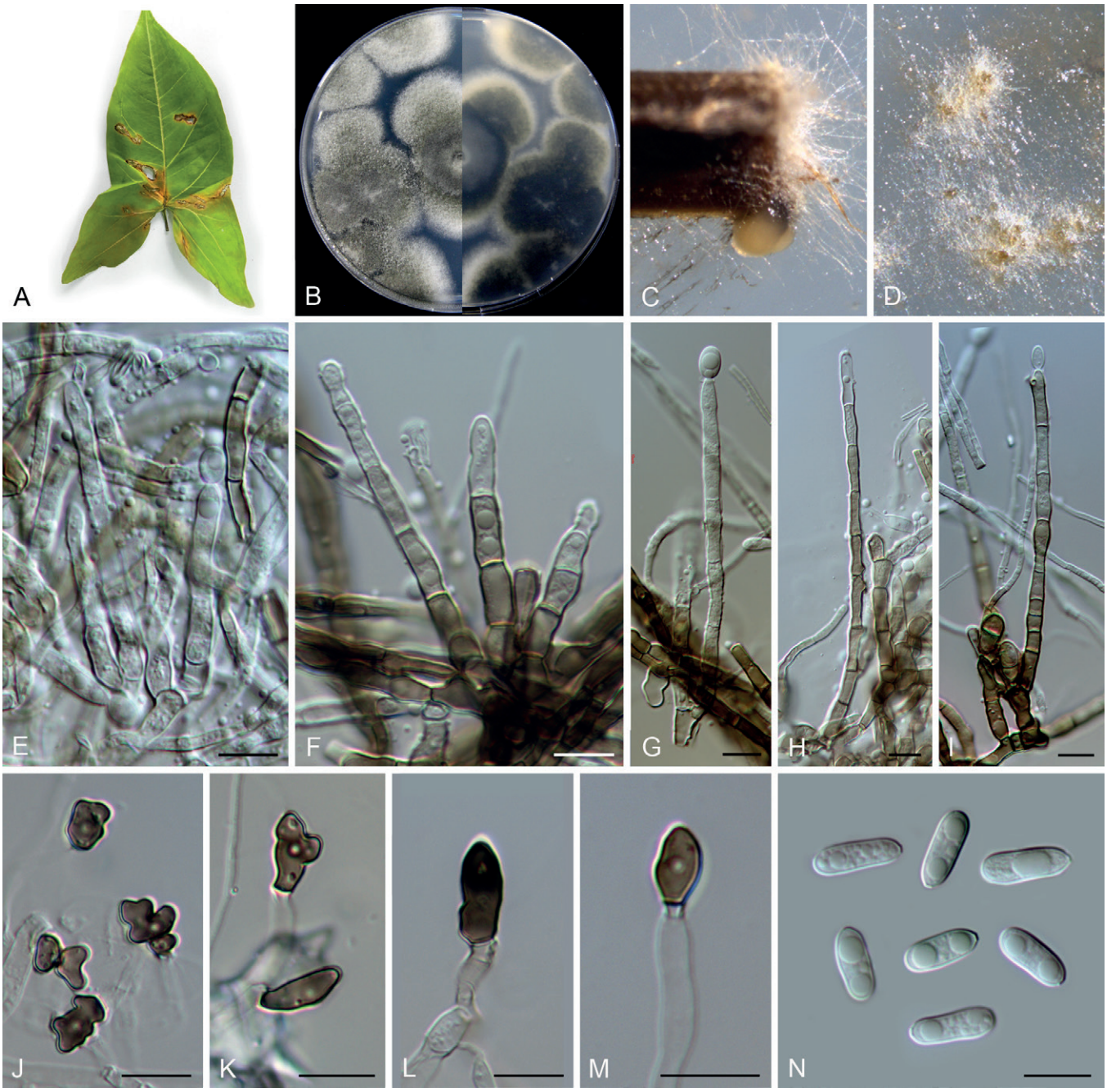


Fig. 32. *Colletotrichum syngoniicola* (ex-type culture LC8894). **A.** Disease symptom on *Syngonium* sp. **B.** Front and reverse colony on PDA (6 d). **C, D.** Conidiomata and conidial masses on pine needle and SNA, respectively. **E–I.** Conidiophores, conidiogenous cells and conidia. **J–M.** Appressoria. **N.** Conidia. Scale bars = 10 µm.

tapering towards a ± acute or slightly rounded apex and a usually truncate base, with a similar radian, 11.5–18.5 × 2.5–4 µm (av. ± SD = 16.4 ± 1.7 × 3.1 ± 0.3 µm), L/W ratio = 5.3. *Appressoria* discrete or gregarious, brown, smooth-walled, subglobose, obovoid, clavate with truncate base, or sometimes irregularly shaped, lobed, 6–9.5 × 3.5–7 µm (av. ± SD = 8.1 ± 0.9 × 5.3 ± 0.8 µm).

Typus: **China**, Tibet, Bomi county, Suotong village, on an unidentified species of *Poaceae*, 13 Jun. 2015, F. Liu, BM12 (**holotype** HMAS 350630, ex-type culture CGMCC 3.20534 = LC7364 = LJM48).

Additional material examined: **China**, Tibet, Bomi county, Suotong village, on *Poaceae*, 13 Jun. 2015, F. Liu, BM12, living culture LC7366.

Notes: *Colletotrichum tibetense* belongs to the *C. graminicola* species complex (Fig. 1) and is characterised by slow growth rate on PDA (21–24 mm diam in 7 d) and abundant sporulation. It morphologically differs from the closely related species *C. dolichoconidiophori* (Figs 1, 3) in producing longer conidiogenous cells (19.5–32.5 × 2 µm *vs.*6–23 × 2–4 µm), shorter conidia (11.5–18.5 × 2.5–4 µm *vs.*19–27.5 × 2.5–3.5 µm), and with a lower conidium L/W ratio (5.3 *vs.*8). The closest matches revealed by BLASTn search using the *act*, *chs-1*, *sod2*, *tub2*, and ITS sequences of the ex-type strain LC7364 were *C. cereale* (92.7 %), *C. hanaui* (95 %), *C. sublineola* (86.3 %), *C. navitas* (89.3 %), and *C. tofieldiae* (99.8 %), respectively.

Colletotrichum variabile F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841400. Fig. 35.

Etymology: Named to reflect the variable length of conidiogenous cells.

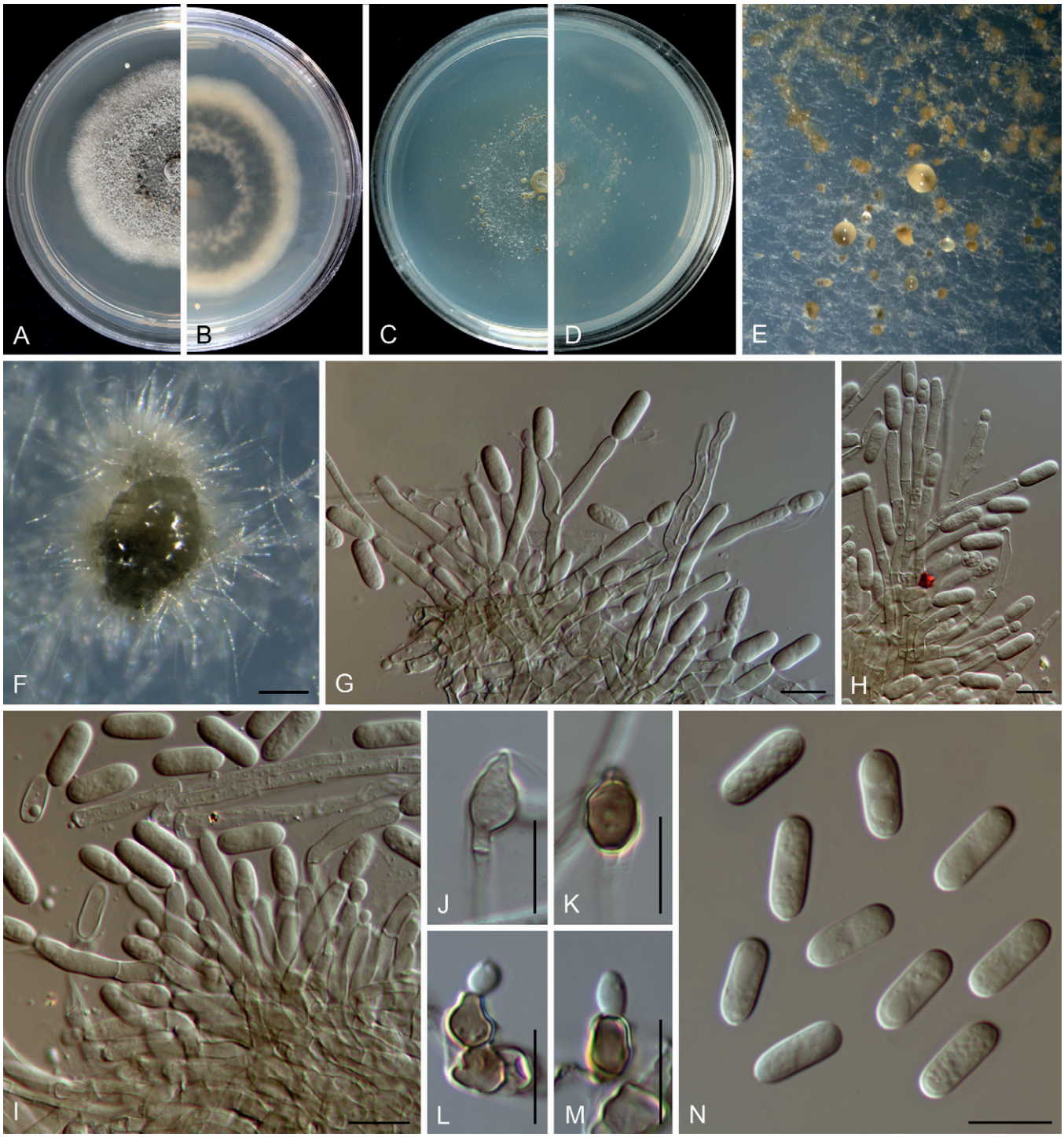


Fig. 33. *Colletotrichum telosmae* (ex-type culture NN052858). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Front and reverse colony on SNA (7 d). **E, F.** Conidial masses on SNA. **G–I.** Conidiophores, conidiogenous cells and conidia. **J–M.** Appressoria. **N.** Conidia. Scale bars: F = 100 µm; G–N = 10 µm.

Description: *Colonies* on PDA 42 mm diam in 7 d, flat with entire edge, white to pale saffron, aerial mycelium sparse, reverse pale saffron with a black region in the centre. On PDA, *conidiomata* and setae not observed. *Conidial masses* salmon, formed among the aerial mycelium. *Conidiophores* formed directly from the aerial mycelium, hyaline, branched, 1–5-septate. *Conidiogenous cells* cylindrical to subcylindrical, rarely ovoid, hyaline, 9–34 × 4–5.5 µm. *Conidia* hyaline, smooth-walled, guttulate, cylindrical with obtuse ends, sometimes slightly narrowed at the centre, becoming 1–3-septate with age, (16–)19–27.5 × 4.5–7 µm, av. ± SD = 22.5 ± 2.2 × 6.0 ± 0.6 µm, L/W ratio = 3.8. *Appressoria* irregular outline with crenate or lobed margin, clavate, brown, 7.5–9 × 4.5–5.5 µm.

Typus: **China**, Yunnan Province, Kunming, Kunming Botanical Garden, from healthy leaves of an unknown plant, 20 Dec. 1993, W.P. Wu (**holotype** HMAS 350644, ex-type culture CGMCC 3.20535 = LC13875 = NN040656).

Notes: *Colletotrichum variabile* belongs to the *C. gigasporum* species complex. It shares low sequence similarity with the phylogenetically related species *C. subvariabile sp. nov.* at *act* (95.2 %), *chs-1* (97.2 %), *gapdh* (94.2 %), *his3* (95 %), *tub2* (97.9 %), and ITS (97.8 %), and differs from that species in that it produces longer conidiogenous cells (9–34 µm *vs.*2–12 µm). In addition, *C. variabile* differs from other species in the *C. gigasporum* species complex in the mode of conidiophore and conidium formation (directly on the aerial mycelia *vs.*on a cushion of cells).

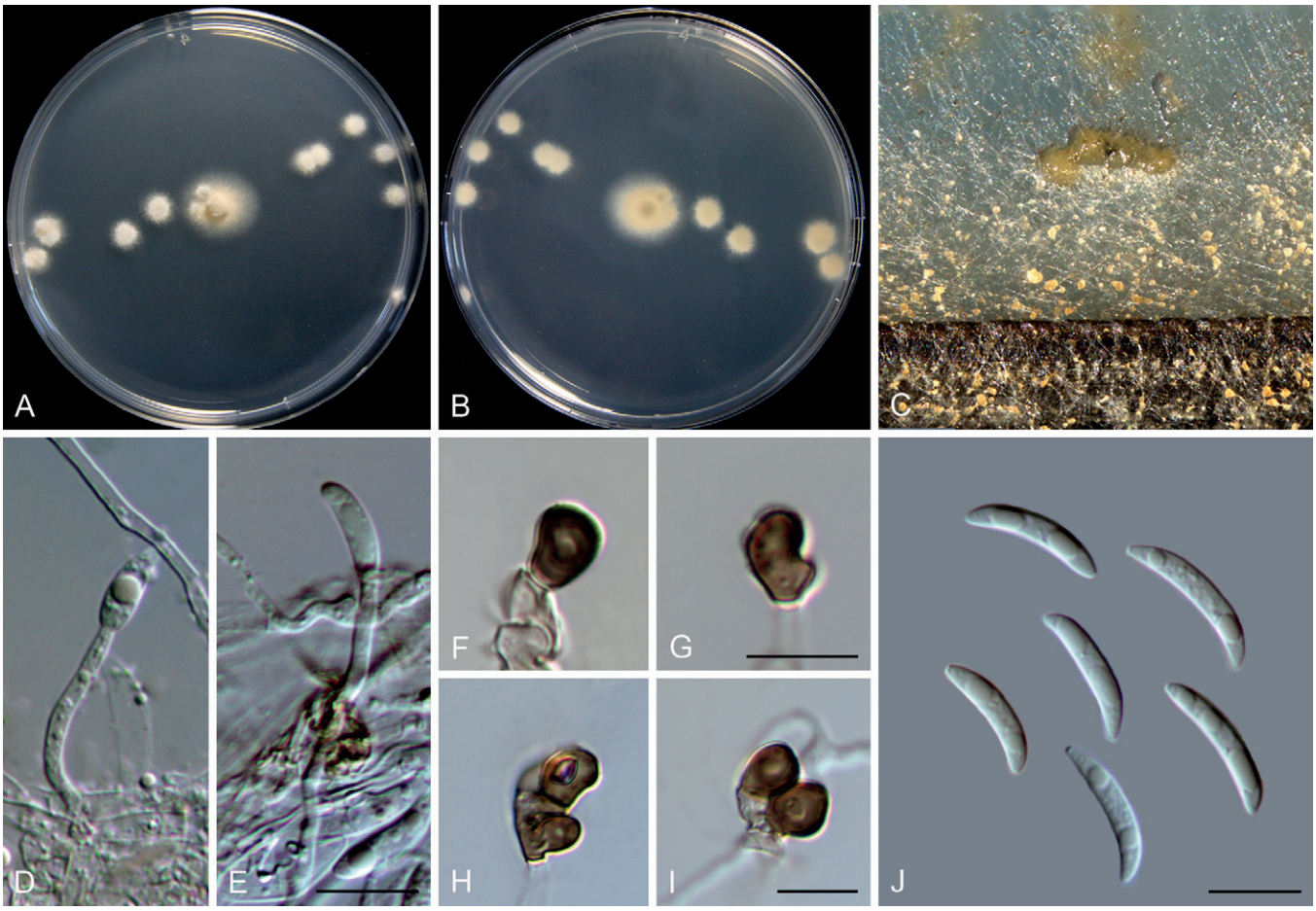


Fig. 34. *Colletotrichum tibetense* (ex-type culture LC7364). **A, B.** Front and reverse colony on PDA (6 d). **C.** Conidial masses on pine needle and SNA. **D, E.** Conidiogenous cells and conidia. **F–I.** Appressoria. **J.** Conidia. Scale bars = 10 µm. Scale bar of E applies to D, E; G applies to F, G; I applies to H, I.

Colletotrichum zhaoqingense F. Liu & L. Cai, ***sp. nov.*** MycoBank MB 841401. Fig. 36.

Etymology: Named after the location at which the fungus was collected, Zhaoqing.

Description: *Colonies* on PDA 52 mm diam in 7 d, flat with entire edge, medium to dark mouse grey, aerial mycelium floccose, reverse dark mouse grey. On SNA, *conidiomata* acervular, scattered, semi-immersed to immersed, protruding hyaline or salmon conidial masses, surrounded by dark brown setae. *Setae* 1–4-septate, 66–112 µm long, basal cells cylindrical, sometimes conical, smooth-walled, 5–6.5 µm diam, tip acute. *Conidiophores* formed from a cushion of roundish to angular pale brown cells, or formed directly on aerial mycelium, solitary or branched, septate, hyaline to pale brown, 0–4-septate. *Conidiogenous cells* cylindrical, rarely ovoid, hyaline to pale brown, 10–22 × 4.5–8 µm. *Conidia* hyaline, smooth-walled, guttulate, cylindrical with obtuse ends, 20–24 × 5.5–7 µm, av. ± SD = 21.3 ± 0.9 × 6.3 ± 0.6 µm, L/W ratio = 3.4. *Appressoria* variable in shape, globose, subglobose, ovoid, or irregular outline with a crenate or lobed margin, pale brown, 5.5–18 × 3.5–6.5 µm.

Typus: **China**, Zhejiang Province, Hangzhou Botanical Garden, on dead petiole of an unidentified palm (*Arecaceae*), 12 Jun. 2015, W.P. Wu (**holotype** HMAS 350646, ex-type culture CGMCC 3.20536 = LC13878 = NN071035).

Additional materials examined: **China**, Guangdong Province, Zhaoqing, Seven Star Cave (Qixingyan), on *Musa* sp., 24 Dec. 2012, W.P. Wu, living culture NN055284; Guangzhou, on *Carica papaya*, 10 Dec. 2013, W.P. Wu, living culture NN057644; Zhejiang Province, Hangzhou Botanical Garden, on dead petiole of palm (*Arecaceae*), 12 Jun. 2015, W.P. Wu, living cultures LC13877 (= NN058985), LC13879 (= NN071036).

Notes: *Colletotrichum zhaoqingense* forms a sister clade to *C. gigasporum* (Fig. 1), but differs morphologically from the latter in producing smaller conidia (20–24 × 5.5–7 µm *vs.*22–32 × 6–9 µm) (Liu *et al.* 2014). Furthermore, on the molecular level, these two species share low sequence similarity at *chs-1* (98 %), *gapdh* (97.3 %), and ITS (93.2 %).

Colletotrichum zhejiangense F. Liu, W.P. Wu & L. Cai, ***sp. nov.*** MycoBank MB 841402. Fig. 37.

Etymology: Named after the location at which the fungus was collected, Zhejiang Province.

Description: *Colonies* on PDA 34–35 mm diam in 7 d, flat with crenate edge, grey to purple slate, aerial mycelium dense, reverse violet slate with grey margin. *Conidiomata* black, columnar, straight, conidial masses hyaline. *Conidiophores* formed from a cushion of elliptical or angular and medium brown cells, branched, septate, hyaline to pale brown. *Setae* brown to olivaceous black, smooth-walled, 1–3-septate, 45–139 µm long, basal cells cylindrical to slightly conical, 4–8 µm diam, tip acute or round. *Conidiogenous cells* smooth-walled, cylindrical, 5.5–11.5 × 2.5–4.5 µm (av. ± SD = 8.8 ± 1.9 × 3.5 ± 0.5 µm). *Conidia* hyaline, aseptate, smooth-walled, curved, central part almost straight with parallel walls, gradually tapering towards the ends with a similar radian, 20.5–

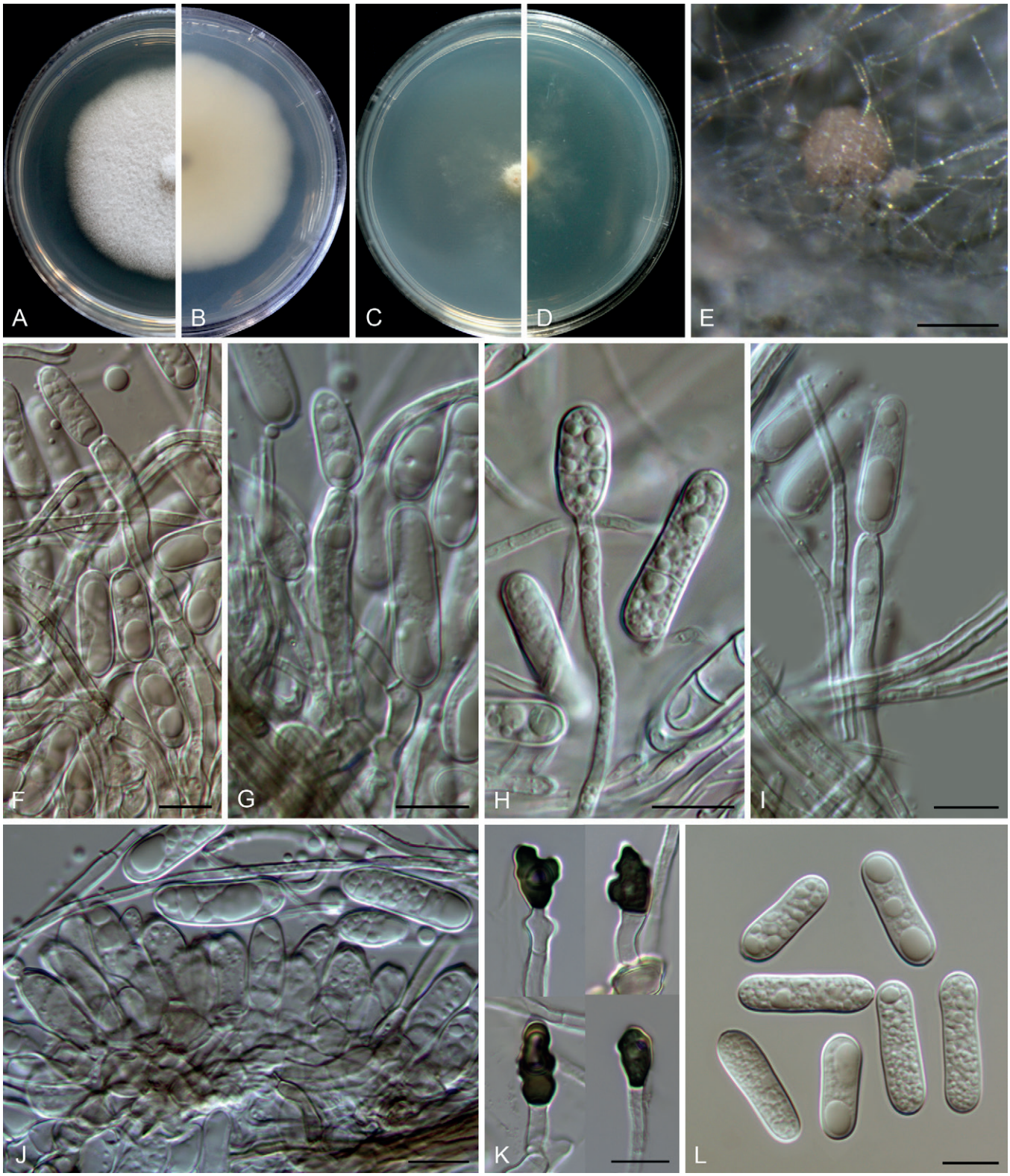


Fig. 35. *Colletotrichum variabile* (ex-type culture NN040656). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Front and reverse colony on SNA (7 d). **E.** Conidial mass. **F–J.** Conidiophores, conidiogenous cells and conidia. **K.** Appressoria. **L.** Conidia. Scale bars = 10 µm.

24.5 × 3–4 µm (av. ± SD = 22 ± 0.9 × 3.3 ± 0.2 µm), L/W ratio = 6.7. *Appressoria* not observed.

Typus: **China**, Zhejiang Province, Chun'an County, Qiandao Lake, on dead leaves of an unidentified tree, 18 Oct. 2018, W.P. Wu (**holotype** HMAS 350652, ex-type culture CGMCC 3.20537 = LC13887 = NN076215).

Notes: *Colletotrichum zhejiangense* belongs to the *C. dematium* species complex (Figs 1, S1), and is characterised by typical curved conidia with parallel walls in the middle, as is also observed for other species in this group. BLASTn search of *C. zhejiangense* sequences in the NCBI GenBank revealed very low sequence similarity with other species; the closest matches of the *act*, *chs-1*, *gapdh*, ITS and *tub2* sequences were *C. fructi* (89.1 % identity), *C. insertae* (94.4 %), *C. lineola* (68.9 %), *C. fructi* (98.6 %) and *C. dematium* (89.2 %), respectively.

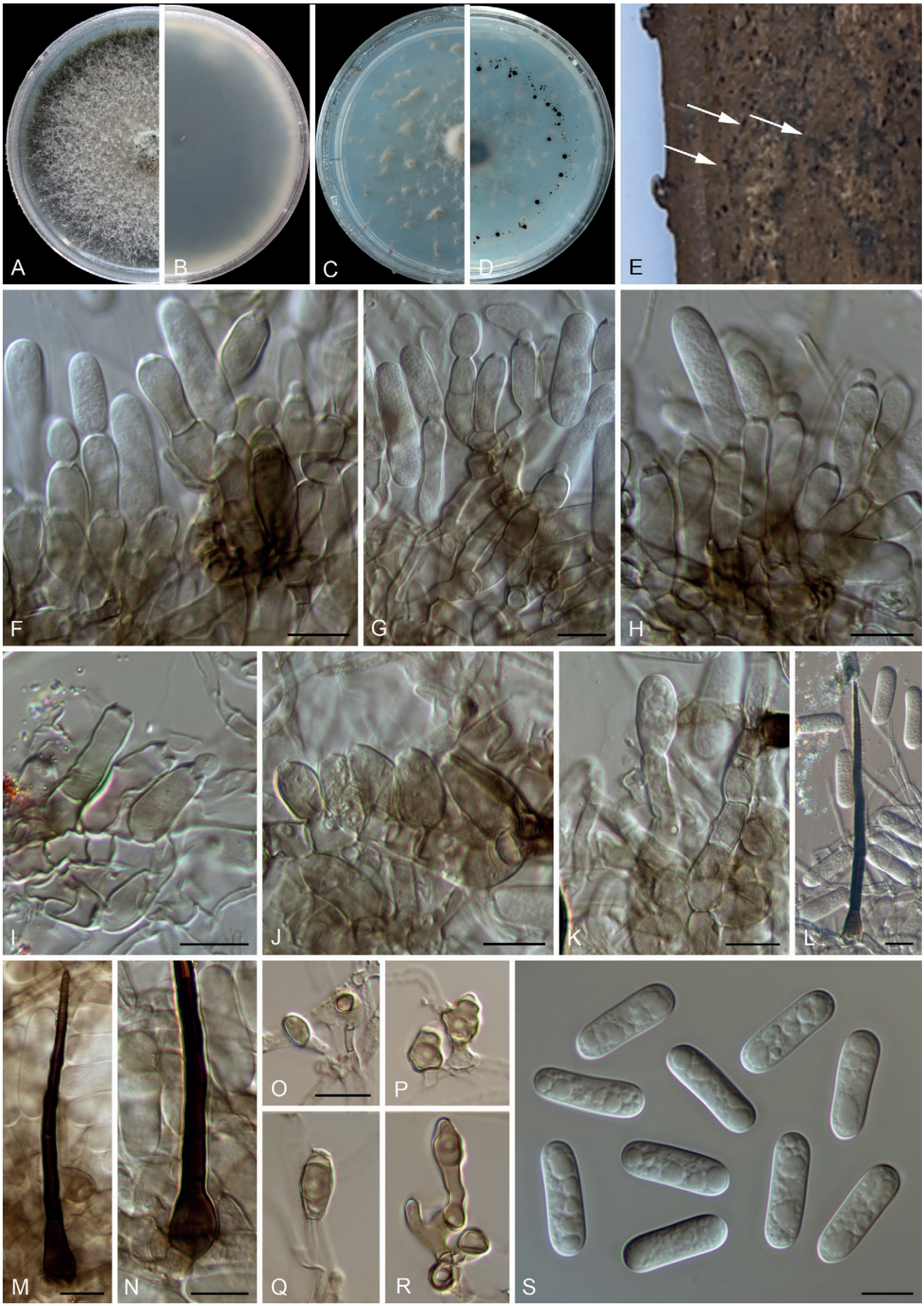


Fig. 36. *Colletotrichum zhaoqingense* (A–D, I–L, N–S: ex-type culture NN058985, E–H, M: NN071035). **A, B.** Front and reverse colony on PDA (7 d). **C, D.** Front and reverse colony on SNA (7 d). **E.** Conidiomata (black) on dead petiole of palm. **F–K.** Conidiophores, conidiogenous cells and conidia. **L–N.** Setae. **O–R.** Appressoria. **S.** Conidia. Scale bars: F–O, S = 10 µm. Scale bar of O applies to O–R.

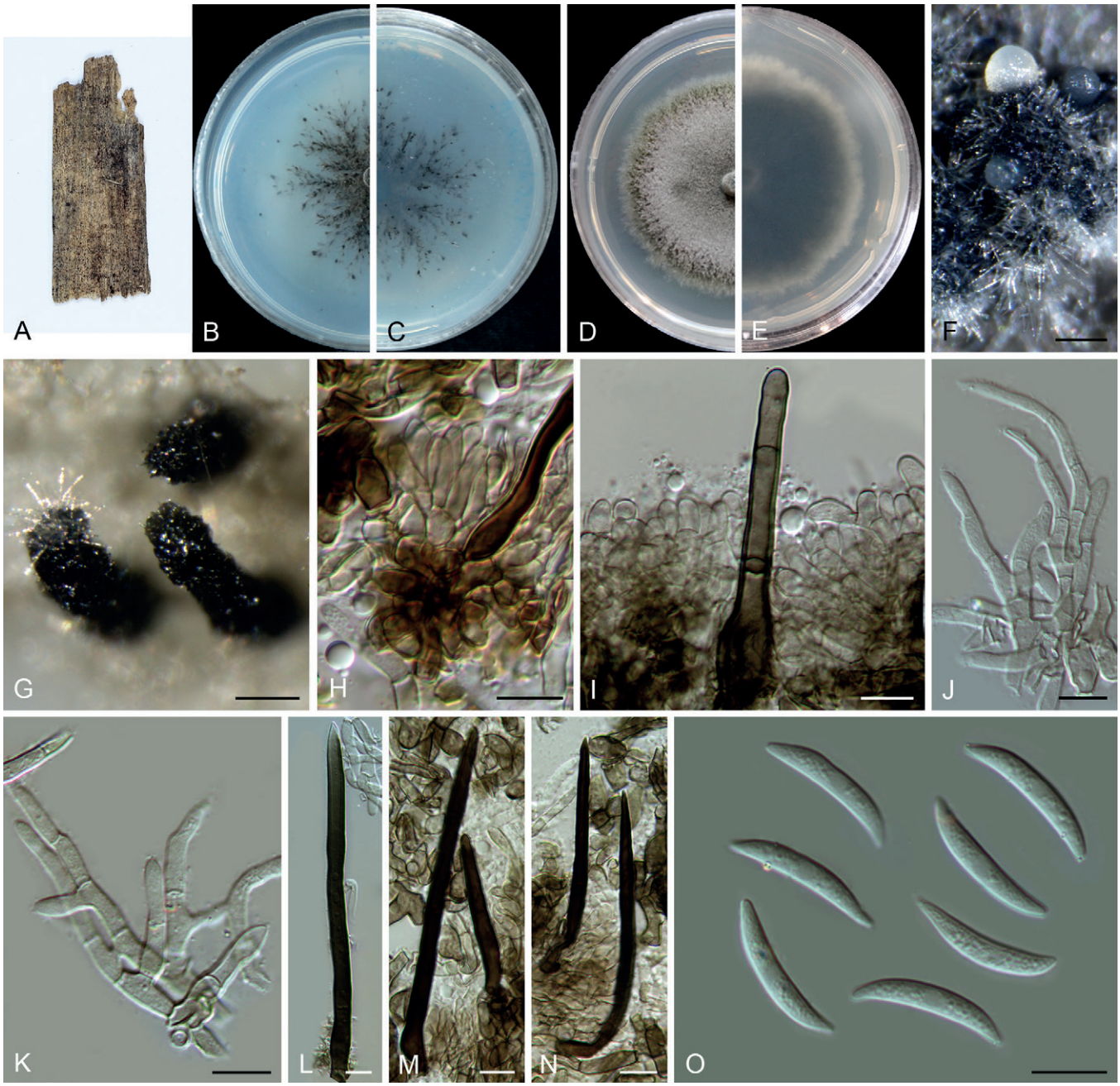


Fig. 37. *Colletotrichum zhejiangense* (ex-type culture NN076215). **A.** Symptom on the dead leaf of an unidentified tree. **B, C.** Front and reverse colony on SNA (7 d). **D, E.** Front and reverse colony on PDA (7 d). **F, G.** Conidiomata. **H, I.** Conidiophores, conidiogenous cells and setae. **J, K.** Conidiophore-like hyphae. **L–N.** Setae. **O.** Conidia. Scale bars: F, G = 100 µm; H–O = 10 µm.

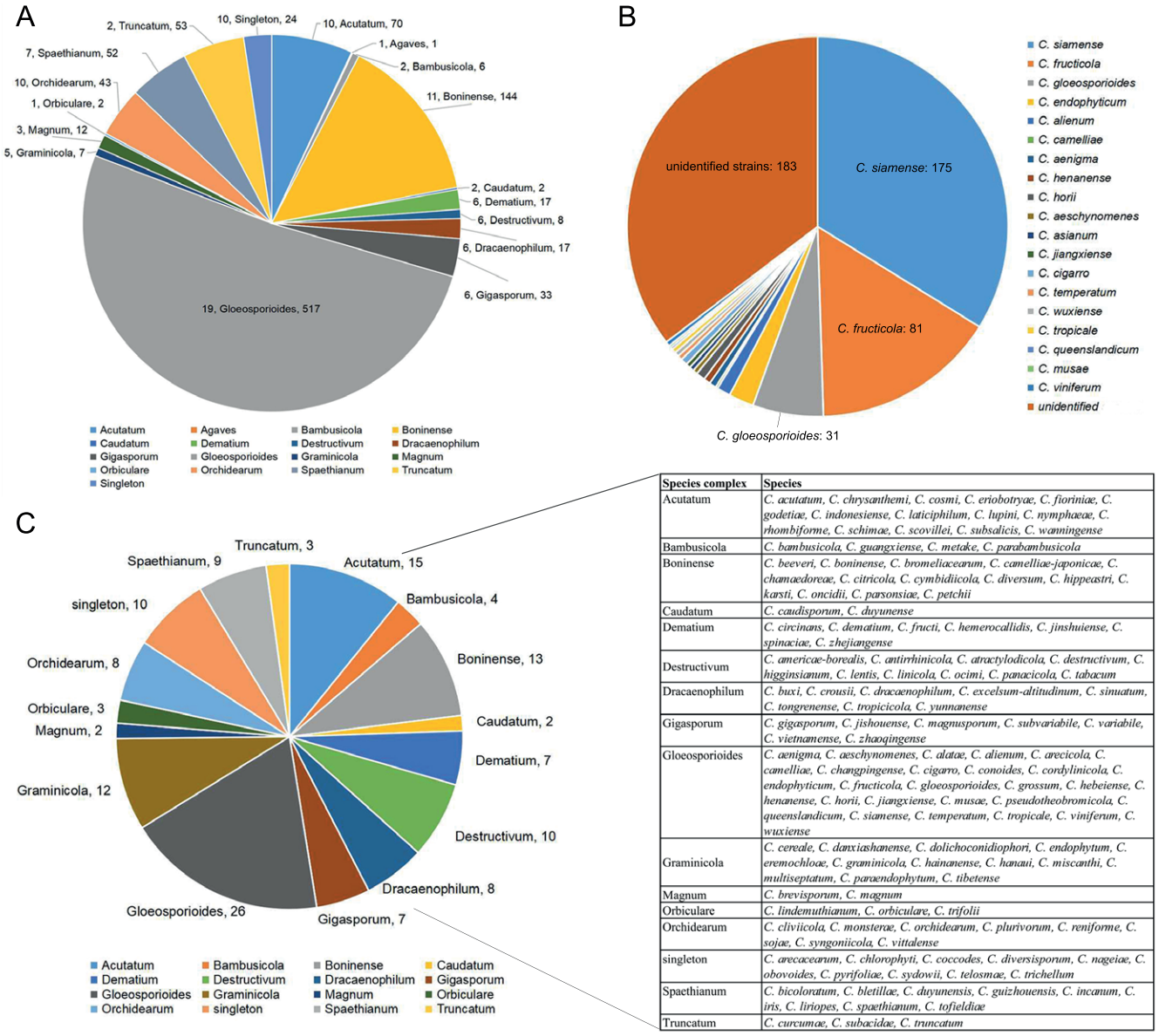
Species diversity of *Colletotrichum* in China

In the current study, based on BLASTn searches and phylogenetic analyses of single-, multi-locus and whole-genome sequences, 1 008 strains were assigned to 107 species, belonging to 16 species complexes and 10 singletons (Fig. 38), of which 97 were isolated in China (Tables S5, S6). The majority of analysed strains belong to the *C. gloeosporioides* species complex (Fig. 38). However, because of the unavailability of ApMat and *gs* sequences for some taxa in the *C. gloeosporioides* species complex, species identification in this group was difficult or unfeasible. Hence, only tentative identification was provided for 183 strains in the current study. Among all the identified species, *C. siamense* was the most common taxon, followed by *C. karsti*, *C. fructicola*, *C. truncatum*, *C. fioriniae*, and *C. gloeosporioides* (Fig. 39).

Furthermore, we summarised the host-association data for *Colletotrichum* species from China, that were retrieved from 224 peer-reviewed papers published in 2009 or later (Table S6), and in which the species had been identified employing a modern classification approach. As of 1 Apr. 2021, 139 species belonging to 15 species complexes and 10 singleton species have been reported in China, including the 30 new species and 18 new records reported in the current study (Table S6, Fig. 38). The top six most common species listed in the preceding paragraph are also the species with the widest host range in China (Fig. 39). On the other hand, 76 species have to date been reported from a single plant species or genus (Table S6).

DISCUSSION

In the current study, we generated 67 type-derived sequences for known *Colletotrichum* species that were omitted or have been erroneously sequenced in various previous publications. This helped



Species complex	Species
Acutatum	*C. acutatum, C. chrysanthemi, C. cosmi, C. eriobotryae, C. fioriniae, C. godetiae, C. indonesiense, C. laticiphilum, C. lupini, C. nymphaeae, C. rhombiforme, C. schimae, C. scovillei, C. subsalicis, C. wanningense*
Bambusicola	*C. bambusicola, C. guangxiense, C. metake, C. parabambusicola*
Boninense	*C. beeveri, C. boninense, C. bromeliacearum, C. camelliae-japonicae, C. chamaedoreae, C. citricola, C. cymbidiicola, C. diversum, C. hippeastri, C. karsti, C. oncidii, C. parsonsiae, C. petchii*
Caudatum	*C. caudisporum, C. duyunense*
Dematium	*C. circinans, C. dematium, C. fructi, C. hemerocallidis, C. jinshuiense, C. spinaciae, C. zhejiangense*
Destructivum	*C. americae-borealis, C. antirrhinicola, C. atractylodicola, C. destructivum, C. higginsianum, C. lentis, C. linicola, C. ocimi, C. panacicola, C. tabacum*
Dracaenophilum	*C. buxi, C. crousii, C. dracaenophilum, C. excelsum-altitudinum, C. sinuatum, C. tongrenense, C. tropicicola, C. yunnanense*
Gigasporum	*C. gigasporum, C. jishouense, C. magnusporum, C. subvariabile, C. variabile, C. vietnamense, C. zhaoqingense*
Gloeosporioides	*C. aenigma, C. aeschynomenes, C. alatae, C. alienum, C. arecicola, C. camelliae, C. changpingense, C. cigarro, C. conoides, C. cordylinicola, C. endophyticum, C. fructicola, C. gloeosporioides, C. grossum, C. hebeiense, C. henanense, C. horii, C. jiangxiense, C. musae, C. pseudotheobromicola, C. queenslandicum, C. siamense, C. temperatum, C. tropicale, C. viniferum, C. wuxiense*
Graminicola	*C. cereale, C. danxiashanense, C. dolichoconidiophori, C. endophytum, C. eremochloae, C. graminicola, C. hainanense, C. hanaui, C. miscanthi, C. multiseptatum, C. paraendophytum, C. tibetense*
Magnum	*C. brevisporum, C. magnum*
Orbiculare	*C. lindemuthianum, C. orbiculare, C. trifolii*
Orchidearum	*C. cliviicola, C. monsterae, C. orchidearum, C. plurivorum, C. reniforme, C. sojae, C. syngoniicola, C. vittalense*
singleton	*C. arecacearum, C. chlorophyti, C. coccodes, C. diversisporum, C. nageiae, C. obovoides, C. pyrifoliae, C. sydowii, C. telosmae, C. trichellum*
Spaethianum	*C. bicoloratum, C. bletillae, C. duyunensis, C. guizhouensis, C. incanum, C. iris, C. liriopes, C. spaethianum, C. tofieldiae*
Truncatum	*C. curcumae, C. subaciadae, C. truncatum*

Fig. 38. Statistics of *Colletotrichum* strains and species in this study. **A.** Proportion of all 1 008 strains analysed in this study (left: number of species, right: number of strains). **B.** Proportion of the 517 strains (right: number of strains) of species in the *C. gloeosporioides* species complex analysed in this study. **C.** Proportion and summary of species within each species complex distributed in China based on this and previous studies (right: number of species).

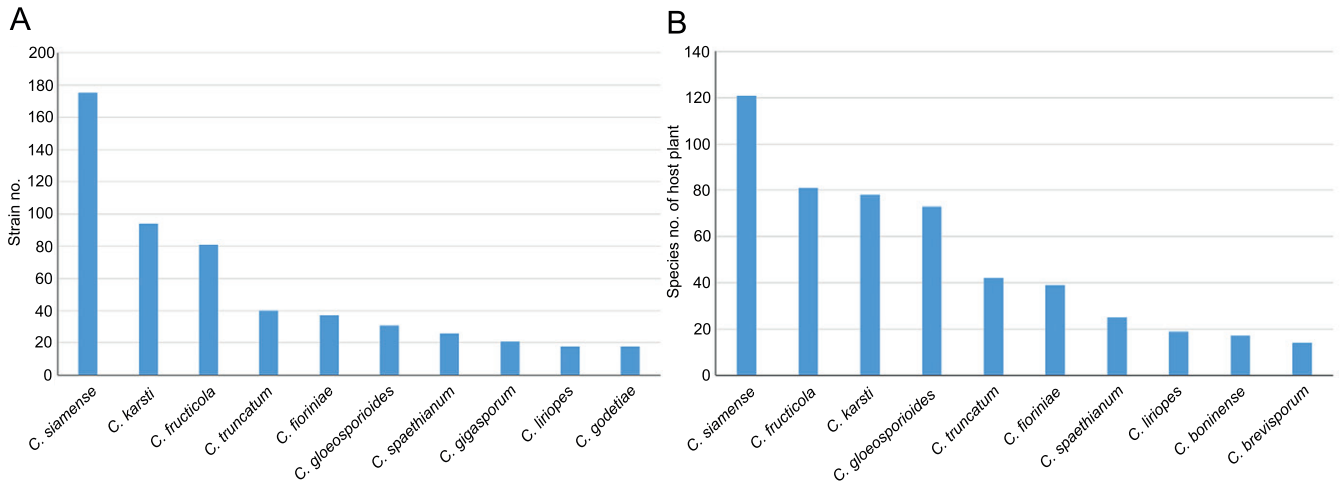


Fig. 39. Statistics of *Colletotrichum* species in this study. **A.** The most common ten species identified in this study. **B.** The ten species with the widest host range in China based on this study.

to clarify the existing taxonomic confusion (*e.g. C. liaoningense* and *C. ochraceae*), and also greatly contributed to the reconstruction of a robust backbone tree for *Colletotrichum*. Nevertheless, the identity of a few ambiguous species is still pending clarification, as we were unable to obtain their type or type-derived DNA, *e.g.* in the case of *C. chiangraiense*, *C. jasminigenum*, and *C. quinquefoliae.* Several strains that had been isolated from different bamboo hosts form a distinct clade in the multi-locus phylogeny (Fig. 1), which we refer to as the *C. bambusicola* species complex. The strains previously identified as *C. metake* and *C. hsienjenchang* (Sato *et al.* 2012) do not include type material, and hence their identity has not yet been clarified. Furthermore, the *C. metake* strains neither originate from the type location (Italy) nor from the host that *C. metake* was originally described on (*Arundinaria japonica*, Saccardo 1908), and might even represent more than one species. The two species will be examined in detail in a subsequent study (U. Damm, unpub. data). Overall, together with the 30 species newly described in the current study, 265 of the 280 *Colletotrichum* species were herein assigned to 16 species complexes, with the remaining 15 species regarded as singletons (Fig. 1, Tables S1–S3).

Among the 16 species complexes, the *C. acutatum*, *C. boninense*, and *C. gloeosporioides* species complexes contain more species than the other species complexes. Coincidentally, most strains analysed in the current study belong to these three species complexes (Fig. 38), with more than half (518/1 008) belonging to the *C. gloeosporioides* species complex. Although the combined use of ApMat and *gs* is very effective in resolving species in the *C. gloeosporioides* species complex (Liu *et al.* 2015), we did not employ the two loci in the multi-locus analyses herein, as they had been only rarely sequenced from species in other species complexes. To date, 51 species for which DNA sequence data are available have been accepted in the *C. gloeosporioides* species complex (Fig. 1); however, the species boundaries are still not well defined for several species. For example, the sequences of the six loci analysed and even whole-genome sequences of *C. kahawae s. str.* and its closest relatives (*C. cigarro*, *C. fructivorum*, *C. hedericola*, *C. helleniense*, *C. kahawae*, *C. rhexiae* and *C. jiangxiense*), *C. conoides* and *C. hebeiense*, *C. wuxiense* and *C. temperatum*, and *C. cobbitiiense* and *C. ti* exhibit very few nucleotide differences (Liu *et al.*, unpub. data). Hence, resolution of the taxonomy of the *C. gloeosporioides* species complex requires a further in-depth study, preferably involving whole-genome data.

Based on the findings of the current study, data retrieved from the USDA fungal database (Farr & Rossman 2021), and data from previous studies (Table S6), we observed that *Colletotrichum* species vary widely with respect to host specificity and host range, although determination of the host range is somewhat biased as pathogenic fungi have received much more attention to date than endophytes and saprobes. Species with both broad and narrow host range are found in most species complexes (Crouch *et al.* 2014, Table S6), especially in the *C. acutatum*, *C. boninense* and *C. gloeosporioides* species complexes. In contrast, species in the *C. caudatum* and *C. graminicola* species complexes are exclusively associated with monocots, and mostly restricted to single species or members of the *Poaceae* (Crouch *et al.* 2009a, 2014). Comparative genomic analyses indicate that host specificity may be related to gene family contractions (Baroncelli *et al.* 2016), loss of functional genes (Gan *et al.* 2016, Stajich 2017), and maintenance of a targeted arsenal of virulence factors (O'Connell *et al.* 2012). In-depth comparative genomic and transcriptomic analyses, as well as verification experiments of functional genes, are required to elucidate the molecular mechanisms of host specialisation and expansion.

Many *Colletotrichum* species have been isolated from healthy plant tissue and are referred to as endophytes, of which some are also known to be plant pathogenic. However, this does not necessarily imply that all endophytes can switch to a necrotrophic lifestyle (Cannon *et al.* 2012), and distinguishing between the two life strategies is difficult. According to Bhunjun *et al.* (2021), 16 out of the 40 endophytic *Colletotrichum* species can cause disease symptoms in host plants. Our large-scale survey revealed only three additional necrotrophs among the previously known endophytic species (*C. caudisporum*, *C. duyunensis*, and *C. metake*) (Table S7). By contrast, six newly described species (*C. buxi*, *C. chamaedoreae*, *C. nageiae*, *C. schimae*, *C. telosmae*, and *C. variabile*) have been isolated exclusively as endophytes to date. This largely implies that some of the 33 *Colletotrichum* species that are currently reported as endophytes only (Table S7) might live as beneficial organisms in the host plant and may not cause plant disease.

Although morphological characters are insufficient to distinguish *Colletotrichum* species, they are considered as important taxonomic characters for the identification of species to species complexes (Cannon *et al.* 2012). For example, conidia of most species in the *C. acutatum* species complex have acute ends or at least one acute end (Damm *et al.* 2012a); conidia of most species in the *C. gigasporum* species complex are notably larger than those formed by other species complexes (Liu *et al.* 2014); and typical conidia of *C. boninense* species complex are cylindrical with a prominent basal scar (Damm *et al.* 2012b). However, many species in various species complexes (*e.g.* the *C. dracaenophilum*, *C. magnum*, and *C. orchidearum* species complexes), as well as singleton species, form cylindrical conidia with round ends, which is regarded as a typical feature of the *C. gloeosporioides* complex (Damm *et al.* 2019). A schematic overview of the typical conidium and ascospore features of each *Colletotrichum* species complex is provided in Fig. 40. In general, species of the *C. acutatum*, *C. bambusicola*, *C. boninense*, *C. dracaenophilum*, *C. gigasporum*, *C. gloeosporioides*, *C. magnum*, *C. orbiculare*, and *C. orchidearum* species complexes produce straight conidia, while species in the *C. caudatum*, *C. dematium*, *C. graminicola*, *C. spaethianum*, and *C. truncatum* species complexes produce curved conidia (Damm *et al.* 2012a, b, 2013, 2014, 2019, 2020, Weir *et al.* 2012, Yang *et al.* 2012, Crouch 2014, Liu *et al.* 2014, 2015, Jayawardena *et al.* 2016, Liu 2016, Fu *et al.* 2019, Zhang *et al.* 2020). Of note, species complexes with curved conidia are scattered throughout the phylogenetic tree, which indicates that curved spores may have evolved more than once within the genus.

The ITS and multi-locus trees constructed in the current study are consistent with previous reports that the species complexes in *Colletotrichum* are monophyletic except for the *C. graminicola* species complex (Cannon *et al.* 2012, Marin-Felix *et al.* 2017, Bhunjun *et al.* 2021). In the multi-locus phylogenetic tree of the current study (Fig. 1), the *C. graminicola* species complex is inclusive of the *C. caudatum* species complex residing at the top of the clade. However, morphologically, the *C. caudatum* species complex is easily differentiated from the *C. graminicola* species complex by the formation of a filiform appendage at the apex of the curved conidia (Crouch 2014, Fig. 40). Initially, we suspected that this incongruence might be a consequence of the largely incomplete sequence dataset for this group. Specifically, the *his3*/*gapdh* sequences of most species in the *C. graminicola* species complex, and those of *gapdh*/*chs-1*/*his3*/*act*/*tub2* of most species in the *C. caudatum* species complex are unavailable, and treated as missing data in the alignments (*e.g.* Marin-Felix *et al.* 2017, Bhunjun *et al.* 2021, and the current study). However, the subsequent species tree based on 1 893 single-copy orthologous

Fig. 40. An illustration of the diversity of conidia and ascospores in different species complexes of *Colletotrichum*. **A, B.** Acutatum (**A.** Conidia of *C. schimae*, NN046984; **B.** Ascospores of *C. salicis*, CBS 607.94). **C.** Agaves (Conidia of *C. agaves*, CBS 118190). **D, E.** Bambusicola (**D.** Conidia of *C. bambusicola*, LC8468; **E.** Ascus and ascospores of *C. bambusicola*, LC8533). **F, G.** Boninense (**F.** Conidia of *C. chamaedoreae*, NN052885; **G.** Ascus and ascospores of *C. chamaedoreae*, NN052885). **H.** Caudatum (Conidia of *C. shivasii*, BRIP 15842a). **I.** Dematium (Conidia of *C. zhejiangense*, NN076215). **J.** Destructivum (Conidia of *Colletotrichum* sp., LC8517). **K.** Dracaenophilum (Conidia of *C. buxi*, NN047139). **L, M.** Gigasporum (**L.** Conidia of *C. magnisporum*, CBS 398.84; **M.** Ascospores of *C. pseudomajus*, CBS 571.88). **N, O.** Gloeosporioides (**N.** Conidia of *C. gloeosporioides*, CGMCC 3.17360; **O.** Ascospores of *C. alienum*, CBS 115183). **P.** Graminicola (Conidia of *C. multiseptatum*, NN055357). **Q.** Magnum (Conidia of *C. magnum*, CGMCC 3.17616). **R.** Orbiculare (Conidia of *C. orbiculare*, CBS 570.97). **S,T.** Orchidearum (**S.** Conidia of *C. orchidearum*, CBS 135131; **T.** Ascospores of *C. reniforme*, LC8230). **U.** Spaethianum (Conidia of *C. iris*, LC3697). **V.** Truncatum (Conidia of *C. subacidae*, LC13857). Scale bars = 10 µm.

genes (Fig. 4) revealed the same topology of this group as that in the multi-locus tree (Fig. 1). It is therefore most likely that species in the *C. caudatum* species complex are descendants of a common ancestor of the *C. graminicola* species complex, from which evolved a filiform appendage at the conidial apex. The two species complexes probably should be regarded as one species complex (the *C. graminicola-caudatum* species complex) as proposed by Bhunjun *et al.* (2021), or as *C. caudatum* sub-aggregate in the *C. graminicola* species complex, as proposed by Crouch (2014).

Although ITS is generally useful for assigning *Colletotrichum* species to species complexes, the allocation of a few individual species within the *C. bambusicola*, *C. caudatum*, *C. destructivum*, *C. graminicola*, and *C. spaethianum* species complexes somewhat contradicts that achieved by using multiple loci. For example, *C. riograndense*, a member of the *C. spaethianum* species complex according to the six-locus phylogeny (Fig. 1), is basal to the *C. bambusicola* and *C. spaethianum* species complexes in the ITS tree (Fig. S1). By contrast, the affiliation of species to species complexes is much more congruent between the six-locus tree and the whole-genome tree (Fig. 4), except for the *C. spaethianum* species complex, which is divided into two subclades in the genome tree. These contradictions among the single- and six-locus gene trees, and the genome tree might result from incomplete lineage sorting, horizontal gene transfer, and hybridisation or recombination through speciation events (Degnan & Rosenberg 2009).

By 3 June 2021, 207 whole genomes of 69 *Colletotrichum* species (Table S4) have been deposited in the NCBI and JGI databases, representing 24.6 % of the currently accepted *Colletotrichum* species. Whole-genome sequences of additional 48 species, including 30 new and 18 known species, were generated and assembled in the current study, increasing the number of genome-sequenced species to 116 (41.4 % of the species, Table S4). To better define the species complex boundaries and reveal the evolutionary relationship of *Colletotrichum*, we generated a whole-genome-based phylogenetic tree in this study. In accordance with the six-locus tree (Fig. 1), most species complexes formed well-supported clades in the species tree, except for the *C. spaethianum* species complex, which did not form a monophyletic clade. As expected, the *C. boninense* and *C. gloeosporioides* species complexes with a large number of species and a wide range of hosts had generally larger number of genes and CAZymes (Fig. 4). This is consistent with the conclusion of Baroncelli *et al.* (2016) that host range is associated with gene family expansion and contraction in *Colletotrichum*. However, the numbers of genes and CAZymes greatly varied among species in the *C. acutatum* species complex, another species rich group with broad host range. For example, *C. godetiae*, associated with at least 18 genera of host plants (Farr & Rossman 2021), possesses the smallest genome size and number of genes, CAZymes and transporters of this genus (Fig. 4). Considering the importance of the genus *Colletotrichum*, we recommend genome sequencing of all species, especially those plant and human pathogens. This effort will not only pave the way toward a fully resolved *Colletotrichum* tree of life, but also provide essential data revealing their evolution and adaptation mechanisms, and improve the understanding of the genetic basis of various biological features and metabolic potential of these fungi.

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DECLARATION ON CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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Fig. S1. Phylogenetic tree of *Colletotrichum* resulting from the RAxML analysis of the ITS sequence alignment. Bootstrap support values (1 000 replicates, GTR-GAMMA model) > 50 % are shown at the nodes. The scale bar represents the expected number of changes per site. Species complexes are indicated with coloured boxes, their names are listed at the left. Ex-type strains are indicated with "T" in the end of the taxa labels.

Table S1. DNA barcodes of all accepted *Colletotrichum* spp. except for the ones in the *C. graminicola* and *C. caudatum* species complexes.

Table S2. DNA barcodes of the accepted *Colletotrichum* spp. in the *C. caudatum* species complex.

Table S3. DNA barcodes of the accepted *Colletotrichum* spp. in the *C. graminicola* species complex.

Table S4. *Colletotrichum* species for which whole-genome sequences are available, retrieved from NCBI and JGI, or generated in the current study.

Table S5. All strains identified in the current study.

Table S6. The substrate/host information for *Colletotrichum* species analysed in the current study, and host information of species reported in China retrieved from literature.

Table S7. *Colletotrichum* species reported as endophytes in previous publications and in the current study.

FIG. S1

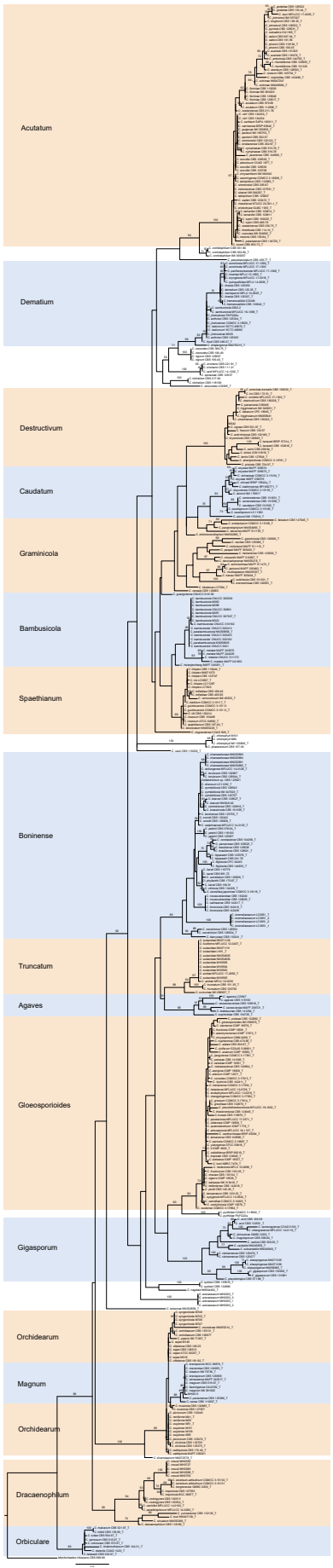

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Table S1. DNA barcodes of all accepted *Colletotrichum* spp. except for the ones in the *C. graminicola* and *C. caudatum* species complexes.

Species[a]	Culture[b]	Type	Group	Host	Country	GenBank numbers[c]					
						ITS	*gapdh*	*chs-1*	*his3*	*act*	*tub2*
C. abscissum	COAD 1877*	Holotype	Acutatum	*Citrus sinensis* cv. Pera	Brazil	KP843126	KP843129	KP843132	KP843138	KP843141	KP843135
C. acerbum	CBS 128530, ICMP 12921, PRJ 1199.3*	Holotype	Acutatum	*Malus domestica* , bitter rot of fruit	New Zealand	JQ948459	JQ948790	JQ949120	JQ949450	JQ949780	JQ950110
C. acidae	MFLUCC 17-2659*	Holotype	Truncatum	*Phyllanthus acidus*	Thailand	MG996505	MH003691	MH003694	—	MH003697	MH003700
C. acidae	MFLU 18-0233		Truncatum	*Phyllanthus acidus*	Thailand	MG996506	MH003692	MH003695	—	MH003698	MH003701
C. acutatum	CBS 112996, ATCC 56816, STE-U 5292*	Holotype	Acutatum	*Carica papaya*	Australia	JQ005776	JQ948677	JQ005797	JQ005818	JQ005839	JQ005860
C. acutatum	CBS 979.69		Acutatum	*Coffea arabica*	Kenya	JQ948400	JQ948731	JQ949061	JQ949391	JQ949721	JQ950051
C. aenigma	ICMP 18608*	Holotype	Gloeosporioides	*Persea americana*	Israel	JX010244	JX010044	JX009774	—	JX009443	JX010389
C. aeschynomenes	ICMP 17673*, ATCC 201874	Holotype	Gloeosporioides	*Aeschynomene virginica*	USA	JX010176	JX009930	JX009799	—	JX009483	JX010392
C. agaves	CBS 118190		Agaves	*Agave striate*	Mexico	DQ286221	—	—	—	—	—
C. agaves	LC0947, BTL11(B02)		Agaves	*Agave* sp.	Thailand	**MZ595831**	**MZ664053**	**MZ799266**	**MZ673842**	**MZ664129**	**MZ673955**
C. alatae	CBS 304.67*, ICMP 17919	Holotype	Gloeosporioides	*Dioscorea alata*	India	JX010190	JX009990	JX009837	—	JX009471	JX010383
C. alienum	ICMP 12071*	Holotype	Gloeosporioides	*Malus domestica*	New Zealand	JX010251	JX010028	JX009882	—	JX009572	JX010411
C. americae-borealis	CBS 136232*	Holotype	Destructivum	*Medicago sativa*	USA	KM105224	KM105579	KM105294	KM105364	KM105434	KM105504
C. annellatum	CBS 129826, CH1*	Holotype	Boninense	*Hevea indica* , leaf	Colombia	JQ005222	JQ005309	JQ005396	JQ005483	JQ005570	JQ005656
C. anthrisci	CBS 125334*	Holotype	Dematium	*Anthriscus sylvestris*	Netherlands	GU227845	GU228237	GU228335	GU228041	GU227943	GU228139
C. anthrisci	CBS 125335		Dematium	*Anthriscus sylvestris*	Netherlands	GU227846	GU228238	GU228336	GU228042	GU227944	GU228140
C. antirrhinicola	CBS 102189*	Holotype	Destructivum	*Antirrhinum majus*	New Zealand	KM105180	KM105531	KM105250	KM105320	KM105390	KM105460
C. aotearoa	ICMP 18537*	Holotype	Gloeosporioides	*Coprosma* sp.	New Zealand	JX010205	JX010005	JX009853	—	JX009564	JX010420
C. arboricola	CBS 144795*, SAG 53350-12	Holotype	Acutatum	*Fuchsia magellanica*	Chile	MH817944	MH817950	—	—	MH817956	MH817962
C. arecacearum sp. nov.	LC13850, MH0003*	Holotype	singleton	*Arecaceae*	China	**MZ595867**	**MZ664049**	**MZ799262**	**MZ673887**	**MZ664165**	**MZ673986**
C. arecacearum sp. nov.	LC13851, MH0003-1		singleton	*Arecaceae*	China	**MZ595868**	**MZ664050**	**MZ799263**	**MZ673888**	**MZ664166**	**MZ673987**
C. arecacearum sp. nov.	LC13852, MH0003-2		singleton	*Arecaceae*	China	**MZ595869**	**MZ664051**	**MZ799264**	**MZ673889**	**MZ664167**	**MZ673988**
C. arecacearum sp. nov.	LC13853, MH0003-3		singleton	*Arecaceae*	China	**MZ595870**	**MZ664052**	**MZ799265**	**MZ673890**	**MZ664168**	**MZ673989**
C. arecicola	CGMCC 3.19667*	Holotype	Gloeosporioides	*Areca catechu*	China	MK914635	MK935455	MK935541	—	MK935374	MK935498
C. artocarpicola	MFLUCC 18-1167*	Holotype	Gloeosporioides	*Artocarpus heterophyllus*	Thailand	MN415991	MN435568	MN435569	—	MN435570	MN435567
C. arxii	CBS 169.59, IMI 304050, IMI 309371		Gigasporum	*Oncidium excavatum*	Netherlands	KF687717	KF687824	KF687781	KF687846	KF687784	KF687868
C. arxii	CBS 132551, Paphi 2-1*	Holotype	Gigasporum	*Paphiopedilum* sp.	Germany	KF687716	KF687843	KF687780	KF687858	KF687802	KF687881
C. asianum	ICMP 18580*, CBS 130418	Holotype	Gloeosporioides	*Coffea arabica*	Thailand	FJ972612	JX010053	JX009867	—	JX009584	JX010406
C. atractylodicola	CGMCC3.18761, SAUCC 1307*	Holotype	Destructivum	*Atractylodes chinensis*	China	KR149280	KR259334	KR259333	—	KR132243	KU058178
C. australe	CBS 116478, HKUCC 2616*	Holotype	Acutatum	*Trachycarpus fortunei*	South Africa	JQ948455	JQ948786	JQ949116	JQ949446	JQ949776	JQ950106
C. australe	CBS 131325, CPC 19820		Acutatum	*Hakea* sp.	Australia	JQ948456	JQ948787	JQ949117	JQ949447	JQ949777	JQ950107
C. australianum	VPRI 43075*	Holotype	Gloeosporioides	*Citrus sinensis*	Australia	MG572138	MG572127	MW091987	—	MN442109	MG572149
C. bambusicola	CNUCC 307307*	Holotype	Bambusicola	*Phyllostachys edulis*	China	MT199632	MT192844	MT192871	—	MT188638	MT192817
C. bambusicola	CNUCC 310192		Bambusicola	*Phyllostachys edulis*	China	MT199624	MT192840	MT192867	—	MT188634	MT192813
C. bambusicola	CNUCC 305200		Bambusicola	*Phyllostachys edulis*	China	MT199619	MT192846	MT192873	—	MT188640	MT192819
C. bambusicola	CNUCC 30893		Bambusicola	*Phyllostachys edulis*	China	MT199621	MT192843	MT192870	—	MT188637	MT192816
C. bambusicola	LC8469, M288		Bambusicola	*Petasites hybridus*	China	**MZ595857**	**MZ772869**	**MZ799334**	**MZ673877**	**MZ664155**	**MZ673978**
C. bambusicola	LC8498, M322		Bambusicola	*Petasites hybridus*	China	**MZ595859**	**MZ664097**	**MZ799335**	**MZ673879**	**MZ664157**	**MZ673980**
C. bambusicola	LC8468, M287		Bambusicola	*Petasites hybridus*	China	**MZ595856**	**MZ664095**	**MZ799333**	**MZ673876**	**MZ664154**	**MZ673977**
C. bambusicola	LC8533, M362		Bambusicola	*Patrinia villosa*	China	**MZ595862**	**MZ664096**	**MZ799336**	**MZ673882**	**MZ664160**	—
C. beeveri	CBS 128527, ICMP 18594*	Holotype	Boninense	*Brachyglottis repanda*	New Zealand	JQ005171	JQ005258	JQ005345	JQ005432	JQ005519	JQ005605
C. beeveri	NN004142		Boninense	*Yucca* sp.	China	**MZ595881**	**MZ664082**	**MZ799277**	**MZ673901**	**MZ664179**	—
C. bicoloratum sp. nov.	LC13882, NN055229*	Holotype	Spaethianum	*Ophiopogon japonicus*	China	**MZ595899**	**MZ664100**	**MZ799332**	**MZ673919**	**MZ664197**	**MZ674017**
C. bidentis	COAD 1020*, CPC 21930	Holotype	Orbiculare	*Bidens subalternans*	Brazil	KF178481	KF178506	KF178530	KF178554	KF178578	KF178602
C. bletillae	CGMCC 3.15117*, LC2340	Holotype	Spaethianum	*Bletilla ochracea*	China	JX625178	KC843506	**MZ799322**	**MZ673854**	KC843542	JX625207
C. boninense	CBS 123755, MAFF 305972*	Holotype	Boninense	*Crinum asiaticum* var. *sinicum*	Japan	JQ005153	JQ005240	JQ005327	JQ005414	JQ005501	JQ005588
C. brasiliense	CBS 128501, ICMP 18607, PAS12*	Holotype	Boninense	*Passiflora edulis* , fruit anthracnose	Brazil	JQ005235	JQ005322	JQ005409	JQ005496	JQ005583	JQ005669
C. brasiliense	CBS 128528, ICMP 18606, PAS10		Boninense	*Passiflora edulis* , fruit	Brazil	JQ005234	JQ005321	JQ005408	JQ005495	JQ005582	JQ005668
C. brassicicola	CBS 101059, LYN 16331*	Holotype	Boninense	*Brassica oleracea* var. *gemmifera* , leaf spot	New Zealand	JQ005172	JQ005259	JQ005346	JQ005433	JQ005520	JQ005606
C. brevisporum	BCC 38876*, LC0600	Holotype	Magnum	*Neoregalia* sp., leaf	Thailand	JN050238	JN050227	**MZ799287**	**MZ673841**	JN050216	JN050244
C. brevisporum	CBS 129958		Magnum	*Anthurium* sp.	Thailand	MG600763	MG600823	MG600870	MG600909	MG600967	MG601030
C. brisbanense	CBS 292.67, DPI 11711*	Holotype	Acutatum	*Capsicum annuum*	Australia	JQ948291	JQ948952	JQ949282	JQ949612	JQ949942	JQ949612
C. bromeliacearum sp. nov.	LC0951*	Holotype	Boninense	*Bromeliad*	China	**MZ595832**	**MZ664077**	**MZ799267**	**MZ673843**	**MZ664130**	**MZ673956**
C. bromeliacearum sp. nov.	LC13854, LC0951-1		Boninense	*Bromeliad*	China	**MZ595833**	**MZ664078**	**MZ799268**	**MZ673844**	**MZ664131**	**OK360930**
C. bromeliacearum sp. nov.	LC13855, LC0951-2		Boninense	*Bromeliad*	China	**MZ595834**	**MZ664079**	**MZ799269**	**MZ673845**	**MZ664132**	**OK360931**
C. bromeliacearum sp. nov.	LC13856, LC0951-3		Boninense	*Bromeliad*	China	**MZ595835**	**MZ664080**	**MZ799270**	**MZ673846**	**MZ664133**	**OK360932**
C. bryoniicola	CBS 109849*	Holotype	Destructivum	*Bryonia dioica*	Netherlands	KM105181	KM105532	KM105251	KM105321	KM105391	KM105461
C. buxi sp. nov.	LC13873, NN047139*	Holotype	Dracaenophilum	*Buxus* sp.	China	**MZ595886**	**MZ664056**	**MZ799285**	**MZ673906**	**MZ664184**	**MZ674004**
C. cacao	CBS 119297*	Holotype	singleton	*Theobroma cacao*	Costa Rica	MG600772	MG600832	MG600878	MG600916	MG600976	MG601039
C. cairnsense	BRIP 63642*	Holotype	Acutatum	*Capsicum annuum*	Australia	KU923672	KU923704	KU923710	KU923722	KU923716	KU923688
C. camelliae	CGMCC 3.14925, LC1364*	Epitype	Gloeosporioides	*Camellia sinensis*	China	KJ955081	KJ954782	**MZ799255**	**MZ673847**	KJ954363	KJ955230
C. camelliae-japonicae	CGMCC 3.18118*, LC6416	Holotype	Boninense	*Camellia japonica*	China	KX853165	KX893584	**MZ799271**	**MZ673859**	KX893576	KX893580
C. cariniferi	MFLUCC 14-0100*	Holotype	Dracaenophilum	*Dendrobium carinifierum*	Thailand	MF448521	—	—	—	—	MH351274
C. carthami	SAPA 100011*	Epitype	Acutatum	*Carthamus tinctorium*	Japan	AB696998	—	—	—	—	AB696992
C. catinaense	CBS 142417*, CPC 27978	Holotype	Boninense	*Citrus reticulata*	Italy	KY856400	KY856224	KY856136	KY856307	KY855971	KY856482
C. cattleyicola	CBS 170.49*	Holotype	Orchidearum	*Cattleya* sp.	Belgium	MG600758	MG600819	MG600866	MG600905	MG600963	MG601025
C. cattleyicola	MAFF 238321		Orchidearum	*Cattleya* sp.	Japan	MG600759	—	—	—	—	MG601026
C. chamaedoreae sp. nov.	LC13867, NN052884		Boninense	*Chamaedorea erumpens*	China	**MZ595889**	**MZ664083**	**MZ799273**	**MZ673909**	**MZ664187**	**MZ674007**
C. chamaedoreae sp. nov.	LC13868, NN052885*	Holotype	Boninense	*Chamaedorea erumpens*	China	**MZ595890**	**MZ664084**	**MZ799274**	**MZ673910**	**MZ664188**	**MZ674008**
C. chamaedoreae sp. nov.	LC13869, NN052890		Boninense	*Chamaedorea erumpens*	China	**MZ595891**	**MZ664086**	**MZ799275**	**MZ673911**	**MZ664189**	**MZ674009**
C. chamaedoreae sp. nov.	LC13870, NN052891		Boninense	*Chamaedorea erumpens*	China	**MZ595892**	**MZ664085**	**MZ799276**	**MZ673912**	**MZ664190**	**MZ674010**
C. changpingense	CGMCC 3.17582*, SA0016, MFLUCC 15-0022	Holotype	Gloeosporioides	Rhizome of *Fragaria* × *ananass*	China	KP683152	**MZ664048**	KP852449	—	KP683093	**MZ673952**
C. chiangmaiense	MFLUCC 18-0945*	Holotype	Gloeosporioides	*Magnolia garrettii*	Thailand	MW346499	MW548592	MW623653	—	MW655578	—
C. chiangraiense	MFLUCC 14-0119*	Holotype	Gigasporum	*Dendrobium* sp.	Thailand	MF448522	—	—	—	MH376383	MH351275
C. chlorophyti	IMI 103806*	Holotype	singleton	*Chlorophytum* sp.	India	GU227894	GU228286	GU228384	GU228090	GU227992	GU228188
C. chlorophyti	LC8288, M101		singleton	*Ipomoea batatas*	China	**MZ595852**	**MZ664108**	**MZ799353**	**MZ673872**	**MZ664150**	**MZ673973**
C. chlorophyti	LC8273, M84		singleton	*Arachis hypogaea*	China	**MZ595851**	**MZ664107**	**MZ799352**	**MZ673871**	**MZ664149**	**MZ673972**
C. chrysanthemi	IMI 364540, CPC 18930		Acutatum	*Chrysanthemum coronarium* , leaf spot	China	JQ948273	JQ948603	JQ948934	JQ949264	JQ949594	JQ949924
C. chrysophilum	URM 7368, CMM 4268*	Holotype	Gloeosporioides	*Musa* sp.	Brazil	KX094252	KX094183	KX094083	—	KX093982	KX094285
C. cigarro	ICMP 18539*	Holotype	Gloeosporioides	*Olea europaea*	Australia	JX010230	JX009966	JX009800	**MZ673837**	JX009523	JX010434
C. circinans	CBS 221.81*	Epitype	Dematium	*Allium cepa*	Serbia	GU227855	GU228247	GU228345	GU228051	GU227953	GU228149
C. circinans	CBS 111.21		Dematium	*Allium cepa*	USA	GU227854	GU228246	GU228344	GU228050	GU227952	GU228148
C. citricola	ZJUC34, CBS 134228, CGMCC 3.15227*	Holotype	Boninense	*Citrus unshiu*	China	KC293576	KC293736	—	—	—	KC293656
C. citrus-medicae	HGUP 1554*	holotype	singleton	*Citrus medica*	China	MN599910	MT006331	MT006328	MT006334	MT006325	—
C. chongqingense	CS0612*	holotype	Boninense	*Camellia sinensis*	China	MG602060	MG602022	MT976117	—	MT976107	MG602044
C. cliviicola	ICMP 18658*	Holotype	Gloeosporioides	*Clivia hirta*	USA, Hawaii	JX010265	JX009989	JX009877	—	JX009537	JX010438
C. cliviicola	CBS 133705		Orchidearum	*Clivia* sp.	South Africa	MG600732	MG600794	MG600849	MG600891	MG600938	MG600999
C. cliviicola	CBS 125375*	Holotype	Orchidearum	*Clivia miniata*	China	MG600733	MG600795	MG600850	MG600892	MG600939	MG601000
C. cobbittiense	BRIP 66219*	Holotype	Gloeosporioides	*Cordyline stricta* × *C. australis*	Australia	MH087016	MH094133	MH094135	MH094136	MH094134	MH094137
C. coccodes	CBS 369.75*	Neotype	singleton	*Solanum tuberosum*	Netherlands	HM171679	HM171673	JX546781	JX546779	HM171667	JX546873
C. coccodes	CBS 164.49		singleton	*Solanum tuberosum*	Netherlands	JQ005775	HM171672	JQ005796	JQ005817	JQ005838	JQ005859
C. coelogynes	CBS 132504*	Holotype	Dracaenophilum	*Coelogyne* sp.	Germany	MG600713	MG600776	MG600836	MG600882	MG600920	MG600980
C. coelogynes	CBS 132515		Dracaenophilum	*Coelogyne* sp.	Germany	MG600714	MG600777	MG600837	MG600883	MG600921	MG600981
C. colombiense	CBS 129818*	Holotype	Boninense	*Passiflora edulis* , leaf	Colombia	JQ005174	JQ005261	JQ005348	JQ005435	JQ005522	JQ005608
C. condaoense	CBS 134299*	Holotype	Boninense	*Ipomoea pes-caprae*	Vietnam	MH229914	MH229920	MH229926	MH229927	—	MH229923
C. conoides	CGMCC 3.17615, CAUG17, LC6226*	Holotype	Gloeosporioides	Chili pepper	China	KP890168	KP890162	KP890156	—	KP890144	KP890174
C. constrictum	CBS 128504, ICMP 12941*	Holotype	Boninense	*Citrus limon* , fruit rot	New Zealand	JQ005238	JQ005325	JQ005412	JQ005499	JQ005586	JQ005672
C. constrictum	CBS 128503, ICMP 12936		Boninense	*Solanum betaceum* , fruit rot	New Zealand	JQ005237	JQ005324	JQ005411	JQ005498	JQ005585	JQ005671
C. cordylinicola	MFLUCC 090551*, ICMP 18579	Holotype	Gloeosporioides	*Cordyline fruticosa*	Thailand	JX010226	JX009975	JX009864	—	HM470235	JX010440
C. cosmi	CBS 853.73, PD 73/856*	Holotype	Acutatum	*Cosmos* sp., seed	Netherlands	JQ948274	JQ948604	JQ948935	JQ949265	JQ949595	JQ949925
C. costaricense	CBS 330.75*	Holotype	Acutatum	*Coffea arabica* cv. Typica, berry	Costa Rica	JQ948180	JQ948510	JQ948841	JQ949171	JQ949501	JQ949831
C. costaricense	CBS 211.78, IMI 309622		Acutatum	*Coffea* sp., twig	Costa Rica	JQ948181	JQ948511	JQ948842	JQ949172	JQ949502	JQ949832
C. crousii sp. nov.	LC13858, MH0588*	Holotype	Dracaenophilum	*Rhaphidophora* sp.	China	**MZ595876**	**MZ664059**	**MZ799281**	**MZ673896**	**MZ664174**	**MZ673995**
C. crousii sp. nov.	LC13859, MH0589		Dracaenophilum	*Rhaphidophora* sp.	China	**MZ595877**	**MZ664060**	—	**MZ673897**	**MZ664175**	**MZ673996**
C. crousii sp. nov.	LC13860, MH0592		Dracaenophilum	*Rhaphidophora* sp.	China	**MZ595878**	**MZ664061**	**MZ799282**	**MZ673898**	**MZ664176**	**MZ673997**
C. crousii sp. nov.	LC13861, MH0727		Dracaenophilum	*Rhaphidophora* sp.	China	**MZ595879**	**MZ664062**	**MZ799283**	**MZ673899**	**MZ664177**	**MZ673998**
C. crousii sp. nov.	LC13862, MH0759		Dracaenophilum	*Rhaphidophora* sp.	China	**MZ595880**	**MZ664063**	**MZ799284**	**MZ673900**	**MZ664178**	**MZ673999**
C. curcumae	IMI 288937*	Epitype	Truncatum	*Curcuma longa*	India	GU227893	GU228285	GU228383	GU228089	GU227991	GU228187
C. cuscutae	IMI 304802, CPC 18873*	Holotype	Acutatum	*Cuscuta* sp.	Dominica	JQ948195	JQ948525	JQ948856	JQ949186	JQ949516	JQ949846
C. cycadis	BRIP 71326a*	Holotype	Gigasporum	*Cycas revoluta*	China	MT439915	MT439919	MT439917	—	—	MT439921
C. cymbidicola	IMI 347923*	Holotype	Boninense	*Cymbidium* sp., leaf lesion	Australia	JQ005166	JQ005253	JQ005340	JQ005427	JQ005514	JQ005600
C. cymbidicola	CBS 128543, ICMP 18584		Boninense	*Cymbidium* sp., leaf spot	New Zealand	JQ005167	JQ005254	JQ005341	JQ005428	JQ005515	JQ005601
C. cymbidicola	CBS 123757, MAFF 306100		Boninense	*Cymbidium* sp.	Japan	JQ005168	JQ005255	JQ005342	JQ005429	JQ005516	JQ005602
C. dacrycarpi	CBS 130241, ICMP 19107*	Holotype	Boninense	*Dacrycarpus dacrydioides* , leaf endophyte	New Zealand	JQ005236	JQ005323	JQ005410	JQ005497	JQ005584	JQ005670
C. dematium	CBS 125.25*	Epitype	Dematium	*Eryngium campestre*	France	GU227819	GU228211	GU228309	GU228015	GU227917	GU228113
C. destructivum	CBS 136228*	Epitype	Destructivum	*Trifolium hybridum*	USA	KM105207	KM105561	KM105277	KM105347	KM105417	KM105487
C. diversisporum sp. nov.	LC13890, NN072578*	Holotype	singleton	*Dracaena angustifolia* , dead leaves	China	**MZ595911**	**MZ664122**	**MZ799302**	**MZ673931**	**MZ664209**	**MZ674029**
C. diversum sp. nov.	LC11292, CQ775*	Holotype	Boninense	*Philodendron selloum*	China	**MZ595844**	**MZ664081**	**MZ799272**	**MZ673864**	**MZ664142**	**MZ673965**
C. doitungense	MFLUCC 14-0128*	Holotype	Boninense	*Dendrobium* sp.	Thailand	MF448524	MH049480	—	—	MH376385	MH351277
C. dracaenigenum	MFLUCC 19-0430*	Holotype	Gloeosporioides	*Dracaena* sp.	Thailand	MN921250	MT215577	MT215575	—	MT313686	—
C. dracaenophilum	CBS 118199*	Holotype	Dracaenophilum	*Dracaena sanderana*	China	JX519222	JX546707	JX519230	JX546756	JX519238	JX519247
C. endophyticum	MFLUCC 13-0418, LC0324*	Holotype	Gloeosporioides	*Pennisetum purpureum*	Thailand	KC633854	KC832854	**MZ799261**	**MZ673839**	KF306258	**MZ673954**
C. eriobotryae	GLMC 1935*	Holotype	Acutatum	*Eriobotrya japonica*	Taiwan	MF772487	MF795423	MN191653	MN191658	MN191648	MF795428
C. eryngiicola	MFLUCC 17-0318*	Holotype	Dematium	*Eryngium*	Russia	KY792726	KY792723	KY792720	—	KY792717	KY792729
C. euphorbiae	CBS 134725*	Holotype	Agaves	*Euphorbia* sp.	South Africa	KF777146	KF777131	KF777128	KF777134	KF777125	KF777247
C. excelsum-altitudinum	CGMCC 3.15130*, LC2344	Holotype	Dracaenophilum	*Bletilla ochracea*	China	HM751815	KC843502	**MZ799280**	**MZ673855**	KC843548	JX625211
C. excelsum-altitudinum	CGMCC 3.15131, LC2345		Dracaenophilum	*Bletilla ochracea*	China	JX625182	KC843503	—	—	KC843549	JX625212
C. feijoicola	CBS 144633*	Holotype	Boninense	*Acca sellowiana*	Portugal	MK876413	MK876475	—	—	MK876466	MK876507
C. feijoicola	CPC 34245		Boninense	*Acca sellowiana*	Portugal	MK876414	MK876474	MK876471	MK876477	MK876465	MK876506
C. fioriniae	IMI 363003, CPC 18928		Acutatum	*Camellia reticulata*	China	JQ948339	JQ948669	JQ949000	JQ949330	JQ949660	JQ949990
C. fioriniae	CBS 128517, ARSEF 10222, ERL 1257, EHS 58*	Holotype	Acutatum	*Fiorinia externa* (elongate hemlock scale, insect)	USA	JQ948292	JQ948622	JQ948953	JQ949283	JQ949613	JQ949943
C. fioriniae	CBS 129948, RB128		Acutatum	*Tulipa* sp.	UK	JQ948344	JQ948674	JQ949005	JQ949335	JQ949665	JQ949995
C. fioriniae	CBS 119293, MEP 1322		Acutatum	*Vaccinium corymbosum* (blueberry), fruit	New Zealand	JQ948314	JQ948644	JQ948975	JQ949305	JQ949635	JQ949965
C. fructi	CBS 346.37*	Epitype	Dematium	*Malus sylvestris*	USA	GU227844	GU228236	GU228334	GU228040	GU227942	GU228138
C. fructicola	ICMP 18581*, CBS 130416	Holotype	Gloeosporioides	*Coffea arabica*	Thailand	JX010165	JX010033	JX009866	—	FJ907426	JX010405
C. fructivorum	Coll1414, BPI 884103, CBS 133125*	Holotype	Gloeosporioides	*Vaccinium macrocarpon*	Burlington	JX145145	**MZ664047**	**MZ799259**	—	**MZ664126**	JX145196
C. fuscum	CBS 130.57		Destructivum	*Digitalis lanata*	unknown	JQ005762	KM105530	JQ005783	JQ005804	JQ005825	JQ005846
C. fuscum	CBS 133701*	Epitype	Destructivum	*Digitalis lanata*	Germany	KM105174	KM105524	KM105244	KM105314	KM105384	KM105454
C. fusiforme	MFLUCC 12-0437*	Holotype	Truncatum	Dead leaves	Thailand	KT290266	KT290255	KT290253	—	KT290251	KT290256

Table S1. DNA barcodes of all accepted *Colletotrichum* spp. except for the ones in the *C. graminicola* and *C. caudatum* species complexes.

Species[a]	Culture[b]	Type	Group	Host	Country	GenBank numbers[c]					
						ITS	*gapdh*	*chs-1*	*his3*	*act*	*tub2*
C. gigasporum	CBS 101881		Gigasporum	*Solanum betaceum*	New Zealand	KF687736	KF687841	KF687777	KF687861	KF687797	KF687886
C. gigasporum	CBS 133266, MUCL 44947*	Holotype	Gigasporum	*Centella asiatica*	Madagascar	KF687715	KF687822	KF687761	KF687844	—	KF687866
C. gloeosporioides	IMI 356878*, ICMP 17821, CBS 112999	Epitype	Gloeosporioides	*Citrus sinensis*	Italy	JX010152	JX010056	JX009818	JQ005413	JX009531	JX010445
C. godetiae	CBS 133.44*	Holotype	Acutatum	*Clarkia hybrida* , cv. Kelvon Glory, seed	Denmark	JQ948402	JQ948733	JQ949063	JQ949393	JQ949723	JQ950053
C. godetiae	CBS 126522, PD 88/472, BBA 70345		Acutatum	*Prunus cerasus* , fruit, die-back	Netherlands	JQ948411	JQ948742	JQ949072	JQ949402	JQ949732	JQ950062
C. grevilleae	CBS 132879, CPC 15481*	Holotype	Gloeosporioides	*Grevillea* sp.	Italy	KC297078	KC297010	KC296987	KC297056	KC296941	KC297102
C. grossum	CGMCC3.17614, CAUG7, LC6227*	Holotype	Gloeosporioides	Chili pepper	China	KP890165	KP890159	KP890153	—	KP890141	KP890171
C. guajavae	IMI 350839, CPC 18893*	Holotype	Acutatum	*Psidium guajava* , fruit	India	JQ948270	JQ948600	JQ948931	JQ949261	JQ949591	JQ949921
C. guangxiense	CNUCC 310138*	Holotype	Bambusicola	*Phyllostachys edulis*	China	MT199633	MT192834	MT192861	—	MT188628	MT192805
C. guangxiense	CNUCC 307305		Bambusicola	*Phyllostachys edulis*	China	MT199625	MT192839	MT192866	—	MT188633	MT192807
C. guangxiense	CNUCC 305268		Bambusicola	*Phyllostachys edulis*	China	MT199626	MT192838	MT192865	—	MT188632	MT192808
C. guangxiense	CNUCC 310185		Bambusicola	*Phyllostachys edulis*	China	MT199627	MT192837	MT192864	—	MT188631	MT192809
C. guangxiense	CNUCC 305258		Bambusicola	*Phyllostachys edulis*	China	MT199628	MT192836	MT192863	—	MT188630	MT192810
C. guangxiense	CNUCC 310181		Bambusicola	*Phyllostachys edulis*	China	MT199629	MT192835	MT192862	—	MT188629	MT192806
C. guangxiense	CNUCC 305238		Bambusicola	*Phyllostachys edulis*	China	MT199630	MT192833	MT192860	—	MT188627	MT192811
C. guangxiense	CNUCC 307304		Bambusicola	*Phyllostachys edulis*	China	MT199631	MT192832	MT192859	—	MT188626	MT192812
C. guizhouensis	CGMCC 3.15112*, LC2305	Holotype	Spaethianum	*Bletilla ochracea*	China	JX625158	KC843507	**MZ799321**	**MZ673850**	KC843536	JX625185
C. guizhouensis	CGMCC 3.15113, LC2313		Spaethianum	*Bletilla ochracea*	China	JX625164	KC843508	—	—	KC843537	JX625192
C. hebeiense	MFLUCC13–0726*	Holotype	Gloeosporioides	*Vitis vinifera*	China	KF156863	KF377495	KF289008	—	KF377532	KF288975
C. hederiicola	MFLU 15-0689*	Holotype	Gloeosporioides	*Hedera helix*	Italy	MN631384	—	MN635794	—	MN635795	—
C. helleniense	CBS 142418, CPC 26844*	Holotype	Gloeosporioides	*Poncirus trifoliata*	Greece, Arta	KY856446	KY856270	KY856186	KY856361	KY856019	KY856528
C. hemerocallidis	CBS 130642, CDLG5, CGMCC 3.14971*	Holotype	Dematium	*Hemerocallis fulva* var. *kwanso*	China	JQ400005	JQ400012	JQ399998	—	JQ399991	JQ400019
C. hemerocallidis	CDLN6		Dematium	*Hemerocallis fulva* var. *kwanso*	China	JQ400006	JQ400013	JQ399999	—	JQ399992	JQ400020
C. henanense	LC3030, CGMCC 3.17354, LF238 *	Holotype	Gloeosporioides	*Camellia sinensis*	China	KJ955109	KJ954810	**MZ799256**	**MZ673835**	KM023257	KJ955257
C. higginsianum	IMI 349061, CPC 19379*	Epitype	Destructivum	*Brassica chinensis*	Trinidad and	KM105184	KM105535	KM105254	KM105324	KM105394	KM105464
C. higginsianum	NN058941		Spaethianum	On dead stem of unidentified monocotyledon plant	China	**MZ595903**	**MZ664103**	**MZ799350**	**MZ673923**	**MZ664201**	**MZ674021**
C. hippeastri	CBS 125376, CSSG1*	Holotype	Boninense	*Hippeastrum vittatum* , leaf	China	JQ005231	JQ005318	JQ005405	JQ005492	JQ005579	JQ005665
C. hippeastri	CBS 241.78, IMI 304052		Boninense	*Hippeastrum* sp.	Netherlands	JQ005232	JQ005319	JQ005406	JQ005493	JQ005580	JQ005666
C. horii	NBRC 7478*, ICMP 10492, MTCC 10841	Neotype	Gloeosporioides	*Diospyros kaki*	Japan	GQ329690	GQ329681	JX009752	—	JX009438	JX010450
C. hsienjenchang	MAFF 243051	Approved str	Bambusicola	*Phyllostachys bambusoides*	Japan	AB738855	—	AB738846	AB738847	AB738845	—
C. hystricis	CBS 142411, CPC 28153*	Holotype	Gloeosporioides	*Citrus hystrix*	Italy, Catania	KY856450	KY856274	KY856190	KY856365	KY856023	KY856532
C. incanum	IL6A, NRRL 62592, CBS 133485		Spaethianum	*Glycine max*	USA	KC110787	KC110805	—	KC110796	KC110823	KC110814
C. incanum	ATCC 64682*	Holotype	Spaethianum	*Phaseolus vulgaris*	Canada	KC110789	KC110807	—	KC110798	KC110825	KC110816
C. indonesiense	CBS 127551, CPC 14986*	Holotype	Acutatum	*Eucalyptus* sp.	Indonesia	JQ948288	JQ948618	JQ948949	JQ949279	JQ949609	JQ949939
C. insertae	MFLU 15-1895*	Holotype	Dematium	*Parthenocissus inserta*	Russia	KX618686	KX618684	KX618683	—	KX618682	KX618685
C. iris sp. nov.	LC3697, ZN169*	Holotype	Spaethianum	*Iris japonica*	China	**MZ595837**	**MZ664090**	**MZ799323**	**MZ673856**	**MZ664135**	**MZ673958**
C. jasminigenum	CGMCC LLTX–01, MFLU 10–0273*	Holotype	Truncatum	*Jasminum sambac*	Vietnam	HM131513	HM131499	—	—	HM131508	HM153770
C. javanense	CBS 144963*	Holotype	Acutatum	*Capsicum annuum*	Indonesia	MH846576	MH846572	MH846573	MH846571	MH846575	MH846574
C. jiangxiense	CGMCC 3.17361*, LC3266, LF488	Holotype	Gloeosporioides	*Camellia sinensis*	China	KJ955149	KJ954850	**MZ799257**	—	KJ954427	**OK236389**
C. jinshuiense	CGMCC 3.18903, PAFQ26*	Holotype	Dematium	*Pyrus pyrifolia* cv. Jinshui	China	MG748077	MG747995	MG747913	—	MG747767	MG748157
C. jinshuiense	PAFQ26a		Dematium	*Pyrus pyrifolia* cv. Jinshui	China	MG874830	MG874822	MG874814	—	MG874807	MG874838
C. jinshuiense	LC8509, M333		Dematium	*Dioscorea zingiberensis*	China	**MZ595860**	**MZ664123**	**MZ799341**	**MZ673880**	**MZ664158**	**MZ673981**
C. jishouense	GMBC 0209*	Holotype	Gigasporum	*Nothapodytes pittosporoides*	China	MH482929	MH681658	—	—	MH708135	MH727473
C. johnstonii	CBS 128532, ICMP 12926, PRJ 1139.3*	Holotype	Acutatum	*Solanum lycopersicum* , fruit rot	New Zealand	JQ948444	JQ948774	JQ949105	JQ949435	JQ949765	JQ950095
C. johnstonii	IMI 357027, CPC 18924, PRJ 1125.005		Acutatum	*Citrus* sp.	New Zealand	JQ948443	JQ948773	JQ949104	JQ949434	JQ949764	JQ950094
C. kahawae	IMI 319418*, ICMP 17816	Holotype	Gloeosporioides	*Coffea arabica*	Kenya	JX010231	JX010012	JX009813	**MZ673838**	JX009452	JX010444
C. kakiivorum	KCTC 46679*	Holotype	Dematium	*Diospyros kaki*	Korea	LC324781	LC324787	LC324783	LC324789	LC324785	LC324791
C. kakiivorum	KCTC 46680		Dematium	*Diospyros kaki*	Korea	LC324782	LC324788	LC324784	LC324790	LC324786	LC324792
C. karsti	CBS 861.72		Boninense	*Bombax aquaticum*	Brazil	JQ005184	JQ005271	JQ005358	JQ005445	JQ005532	JQ005618
C. karsti	CBS 106.91		Boninense	*Carica papaya* , fruit spots	Brazil	JQ005220	JQ005307	JQ005394	JQ005481	JQ005568	JQ005654
C. karsti	CBS 110779		Boninense	*Eucalyptus grandis*	South Africa	JQ005198	JQ005285	JQ005372	JQ005459	JQ005546	JQ005632
C. kinghornii	CBS 198.35*	Holotype	Acutatum	*Phormium* sp.	UK	JQ948454	JQ948784	JQ949115	JQ949445	JQ949775	JQ950105
C. kniphofiae	CBS 143496*	Holotype	Acutatum	*Kniphofia uvaria*	UK	MH107884	MH107998	MH107990	—	MH107975	MH108037
C. laticiphilum	CBS 112989, IMI 383015, STE-U 5303*	Holotype	Acutatum	*Hevea brasiliensis*	India	JQ948289	JQ948619	JQ948950	JQ949280	JQ949610	JQ949940
C. laticiphilum	CBS 129827, CH2		Acutatum	*Hevea brasiliensis*	Colombia	JQ948290	JQ948620	JQ948951	JQ949281	JQ949611	JQ949941
C. lauri	MFLUCC:17-0205*, IT2505_1a	Holotype	Acutatum	*Laurus nobilis*	Italy	KY514347	KY514344	KY514341	—	KY514338	KY514350
C. ledebouriae	CBS 141284*	Holotype	Agaves	*Ledebouria floridunda*	South Africa	KX228254	—	—	KX228365	KX228357	—
C. lentis	CBS 127604, DAOM 235316, CT21*	Holotype	Destructivum	*Lens culinaris*	Canada	JQ005766	KM105597	JQ005787	JQ005808	JQ005829	JQ005850
C. lilii	CBS 109214		Spaethianum	*Lilium* sp.	Japan	GU227810	GU228202	GU228300	GU228006	GU227908	GU228104
C. limetticola	CBS 114.14*	Epitype	Acutatum	*Citrus aurantifolia* , young twig	USA, Florida	JQ948193	JQ948523	JQ948854	JQ949184	JQ949514	JQ949844
C. limonicola	CBS 142409, CPC 27861		Boninense	*Citrus limon*	Malta, Gozo	KY856471	KY856295	KY856212	KY856387	KY856044	KY856553
C. limonicola	CBS 142410*, CPC 31141	Holotype	Boninense	*Citrus limon*	Malta, Gozo	KY856472	KY856296	KY856213	KY856388	KY856045	KY856554
C. lindemuthianum	CBS 144.31*	Epitype	Orbiculare	*Phaseolus vulgaris*	Germany	JQ005779	JX546712	JQ005800	JQ005821	JQ005842	JQ005863
C. lineola	CBS 125337*	Epitype	Dematium	*Apiaceae* sp.	Czech Republic	GU227829	GU228221	GU228319	GU228025	GU227927	GU228123
C. lineola	CBS 125339		Dematium	*Apiaceae* sp.	Czech Republic	GU227830	GU228222	GU228320	GU228026	GU227928	GU228124
C. lini	CBS 172.51*	Epitype	Destructivum	*Linum usitatissimum*	Netherlands	JQ005765	KM105581	JQ005786	JQ005807	JQ005828	JQ005849
C. liriopes	CBS 119444*	Holotype	Spaethianum	*Liriope muscari*	Mexico	GU227804	GU228196	GU228294	GU228000	GU227902	GU228098
C. liriopes	CBS 122747		Spaethianum	*Liriope muscari*	Mexico	GU227805	GU228197	GU228295	GU228001	GU227903	GU228099
C. liriopes	LC11287, MZ06		Spaethianum	*Liriope spicata*	China	**MZ595843**	**MZ664092**	**MZ799325**	**MZ673863**	**MZ664141**	**MZ673964**
C. liriopes	LC7623, LJM109		Spaethianum	*Poaceae*	China	**MZ595842**	**MZ664091**	**MZ799324**	**MZ673862**	**MZ664140**	**MZ673963**
C. liriopes	NN017073		Spaethianum	*Osmanthus fragrans* , dead leaves	China	**MZ595908**	**MZ664093**	**MZ799326**	**MZ673928**	**MZ664206**	**MZ674026**
C. lohatum	IMI 79736*	Holotype	Magnum	*Piper catalpaefolium*	Trinidad and Tob	MG600768	MG600828	MG600874	MG600912	MG600972	MG601035
C. lupini	CBS 109225, BBA 70884*	Neotype	Acutatum	*Lupinus albus*	Ukraine	JQ948155	JQ948485	JQ948816	JQ949146	JQ949476	JQ949806
C. lupini	CBS 466.76		Acutatum	*Manihot utilissima* , leaf	Rwanda	JQ948160	JQ948490	JQ948821	JQ949151	JQ949481	JQ949811
C. magnisporum	CBS 398.84*	Holotype	Gigasporum	Unknown	unknown	KF687718	KF687842	KF687782	KF687865	KF687803	KF687882
C. magnum	CBS 519.97*	Epitype	Magnum	*Citrullus lanatus*	USA	MG600769	MG600829	MG600875	MG600913	MG600973	MG601036
C. magnum	IMI 391662		Magnum	*Citrullus lanatus*	USA	MG600771	MG600831	MG600877	MG600915	MG600975	MG601038
C. magnum	CAUOS2*, LC6228	Holotype of C	Magnum	Chili pepper	China	**MZ595839**	**MZ848400**	**OK236385**	**MZ673858**	**OK236387**	**MZ673960**
C. makassarense	CBS 143664*	Holotype	Gloeosporioides	*Capsicum annuum*	Indonesia	MH728812	MH728820	MH805850	—	MH781480	MH846563
C. malvarum	CBS 521.97*, LARS 720, Lav-4	Holotype	Orbiculare	*Lavatera trimestris*	UK	KF178480	KF178504	KF178529	KF178553	KF178577	KF178601
C. melonis	CBS 159.84*	Holotype	Acutatum	*Cucumis melo* , peel of fruit	Brazil	JQ948194	JQ948524	JQ948855	JQ949185	JQ949515	JQ949845
C. menispermi	MFLU 14-0625*	Holotype	Dematium	*Menispermum dauricum* (*Menispermaceae*), dead twigs	Russia	KU242357	KU242356	KU242355	—	KU242353	KU242354
C. merremiae	CBS 124955*	Holotype	Magnum	*Merremia umbellata*	Panama	MG600765	MG600825	MG600872	MG600910	MG600969	MG601032
C. metake	MAFF 244029		Bambusicola	*Pleioblastus simonii*	Japan	**OK090429**	—	—	—	—	**OK236390**
C. metake	MAFF 243970		Bambusicola	*Pleioblastus simonii*	Japan	**OK090430**	—	—	—	—	**OK236391**
C. metake	MAFF 241800		Bambusicola	*Pleioblastus simonii*	Japan	**OK090431**	—	**OK236386**	—	**OK236388**	**OK236392**
C. metake	CNUCC 311173		Bambusicola	*Chimonobambusa quadrangularis*	China	MT192601	MT192858	MT188625	—	MT188652	MT192831
C. miaoliense	NTUCC 20-001-1*	Holotype	Acutatum	*Fragaria* × *ananassa*	Taiwan	MK908419	MK908470	MK908522	—	MK908573	MK908624
C. monsteraе sp. nov.	LC13871, NN055214*	Holotype	Orchidearum	*Monstera deliciosa*	China	**MZ595897**	**MZ664121**	**MZ799351**	**MZ673917**	**MZ664195**	**MZ674015**
C. musae	CBS 116870*, ICMP 19119, MTCC 11349	Epitype	Gloeosporioides	*Musa* sp.	USA	JX010146	JX010050	JX009896	—	JX009433	HQ596280
C. musicola	CBS 132885*	Holotype	Orchidearum	*Musa* sp.	Mexico	MG600736	MG600798	MG600853	MG600895	MG600942	MG601003
C. musicola	CBS 127557		Orchidearum	*Musa* sp.	Mexico	MG600737	MG600799	MG600854	MG600896	MG600943	MG601004
C. nageiae sp. nov.	LC13866, NN004492*	Holotype	singleton	*Nageia nagi*	China	**MZ595882**	**MZ664087**	**MZ799278**	**MZ673902**	**MZ664180**	**MZ674000**
C. neorubicola	CCR144*	Holotype	Destructivum	*Rubus idaeus*	China	MK529906	MK547520	MK547526	—	MK547523	MN186400
C. neosansevieriae	CBS 139918*	Holotype	Agaves	*Sansevieria trifasciata*	South Africa	KR476747	KR476791	—	KR476792	KR476790	KR476797
C. nigrum	CBS 169.49*	Epitype	singleton	*Capsicum* sp.	Argentina	JX546838	JX546742	JX546693	JX546791	JX546646	JX546885
C. nigrum	CBS 128507, ICMP 12927, C1147-2		singleton	*Capsicum annuum*	New Zealand	JX546843	JX546747	JX546698	JX546796	JX546651	JX546890
C. novae-zelandiae	CBS 128505, ICMP 12944*	Holotype	Boninense	*Capsicum annuum* , fruit rot	New Zealand	JQ005228	JQ005315	JQ005402	JQ005489	JQ005576	JQ005662
C. novae-zelandiae	CBS 130240, ICMP 12064		Boninense	*Citrus* sp. (grapefruit)	New Zealand	JQ005229	JQ005316	JQ005403	JQ005490	JQ005577	JQ005663
C. nupharicola	CBS 470.96*, ICMP 18187	Holotype	Gloeosporioides	*Nuphar lutea* subsp. *polysepala*	USA	JX010187	JX009972	JX009835	—	JX009437	JX010398
C. nymphaeae	ZJUC42, CBS 134234		Acutatum	*Citrus aurantifolia*	China	KC293582	KC293742	KY856139	KY856310	KY855974	KC293662
C. nymphaeae	CBS 515.78*	Epitype	Acutatum	*Nymphaea alba* , leaf spot	Netherlands	JQ948197	JQ948527	JQ948858	JQ949188	JQ949518	JQ949848
C. nymphaeae	CBS 516.78, IAM 14670		Acutatum	*Nuphar luteum* , leaf spot	Netherlands	JQ948198	JQ948528	JQ948859	JQ949189	JQ949519	JQ949849
C. nymphaeae, as 'citri'	ZJUC41, CBS 134233, CGMCC 3.15228*	Holotype	Acutatum	*Citrus aurantifolia*	China	KC293581	KC293741	KY856138	KY856309	KY855973	KC293661
C. obovoides sp. nov.	LC6085, JJR053*	Holotype	singleton	Unknown	China	**MZ595838**	—	**MZ799345**	**MZ673857**	**MZ664136**	**MZ673959**
C. ocimi	CBS 298.94*	Holotype	Destructivum	*Ocimum basilicum*	Italy	KM105222	KM105577	KM105292	KM105362	KM105432	KM105502
C. okinawense	MAFF 240517*	Holotype	Magnum	*Carica papaya*	Japan	MG600767	MG600827	—	—	MG600971	MG601034
C. oncidii	CBS 129828*	Holotype	Boninense	*Oncidium* sp., leaf	Germany	JQ005169	JQ005256	JQ005343	JQ005430	JQ005517	JQ005603
C. oncidii	CBS 130242		Boninense	*Oncidium* sp., leaf	Germany	JQ005170	JQ005257	JQ005344	JQ005431	JQ005518	JQ005604
C. orbiculare	CBS 570.97*, LARS 73	Holotype	Orbiculare	*Cucumis sativus*	Europe, probably	KF178466	KF178490	KF178515	KF178539	KF178563	KF178587
C. orchidearum	CBS 135131*	Holotype	Orchidearum	*Dendrobium nobile*	Netherlands	MG600738	MG600800	MG600855	MG600897	MG600944	MG601005
C. orchidearum	CBS 136877		Orchidearum	*Dendrobium nobile*	Netherlands	MG600739	MG600801	MG600856	MG600898	MG600945	MG601006
C. orchidis	MFLUCC 17-1302*	Holotype	Dematium	*Orchis* sp.	Italy	MK502144	MK496857	MK496855	—	MK496853	MK496859
C. orchidophilum	CBS 632.80*	Holotype	singleton	*Dendrobium* sp.	USA	JQ948151	JQ948481	JQ948812	JQ949142	JQ949472	JQ949802
C. orchidophilum	CBS 631.80		singleton	*Ascocenda* sp.	USA	JQ948152	JQ948482	JQ948813	JQ949143	JQ949473	JQ949803
C. orchidophilum	IMI 309357, CPC 16815		singleton	*Phalaenopsis* sp.	UK	JQ948153	JQ948483	JQ948814	JQ949144	JQ949474	JQ949804
C. panacicola	C08048		Destructivum	*Panax ginseng*	Korea	GU935867	GU935847	—	—	GU944757	—
C. panamense	CBS 125386*	Holotype	Magnum	*Merremia umbellata*	Panama	MG600766	MG600826	MG600873	MG600911	MG600970	MG601033
C. pandanicola	MFLUCC 17-0571*	Holotype	Gloeosporioides	*Pandanaceae*	Thailand	MG646967	MG646934	MG646931	—	MG646938	MG646926
C. parabambusicola sp. nov.	LC13883, NN058925		Bambusicola	On dead culm of bamboo	China	**MZ595902**	—	**MZ799337**	**MZ673922**	**MZ664200**	**MZ674020**
C. parabambusicola sp. nov.	LC13884, NN058956	Holotype	Bambusicola	On dead culm of bamboo	China	**MZ595904**	**MZ664098**	**MZ799338**	**MZ673924**	**MZ664202**	**MZ674022**
C. parabambusicola sp. nov.	CNUCC 3041		Spaethianum	*Brachystachyum densiflorum*	China	MT199616	MT192849	MT192876	—	MT188643	MT192822
C. parabambusicola sp. nov.	CNUCC 302410		Spaethianum	*Phyllostachys sulphurea* var. *viridis*	China	MT199609	MT192856	MT188623	—	MT188650	MT192829
C. parabambusicola sp. nov.	CNUCC 303223		Spaethianum	*Phyllostachys aureosulcata* cv. Spectabilis	China	MT199613	MT192852	MT188619	—	MT188646	MT192825
C. parabambusicola sp. nov.	CNUCC 303162		Spaethianum	*Phyllostachys aureosulcata* cv. Spectabilis	China	MT199614	MT192851	MT192878	—	MT188645	MT192824
C. parallelophorum	MFLUCC 14-0083*	Holotype	Dracaenophilum	*Dendrobium* sp.	Thailand	MF448525	MK165695	—	—	—	MH351280
C. paranaense	CBS 134729*	Holotype	Acutatum	*Malus domestica*	Paraná	KC204992	KC205026	KC205043	KC205004	KC205077	KC205060
C. parsonsiae	CBS 128525, ICMP 18590*	Holotype	Boninense	*Parsonsia capsularis* , leaf endophyte	New Zealand	JQ005233	JQ005320	JQ005407	JQ005494	JQ005581	JQ005667
C. parthenocissicola	MFLUCC 17-1098*	Holotype	Dematium	*Parthenocissus quinquefolia*	Russia	MK629452	MK639362	MK639356	—	MK639358	MK639360
C. paxtonii	IMI 165753, CPC 18868*	Holotype	Acutatum	*Musa* sp.	Saint Lucia	JQ948285	JQ948615	JQ948946	JQ949276	JQ949606	JQ949936
C. paxtonii	CBS 502.97, LARS 58		Acutatum	*Musa nana*	West Indies	JQ948286	JQ948616	JQ948947	JQ949277	JQ949607	JQ949937
C. perseae	CBS 141365*, GA100	Holotype	Gloeosporioides	Avocado	Israel	KX620308	KX620242	**MZ799260**	—	KX620145	KX620341
C. petchii	CBS 378.94*	Holotype	Boninense	*Dracaena marginata* , spotted leaves	Italy	JQ005223	JQ005310	JQ005397	JQ005484	JQ005571	JQ005657
C. petchii	CBS 118193, AR 3658		Boninense	*Dracaena sanderana* , living leaves	China	JQ005227	JQ005314	JQ005401	JQ005488	JQ005575	JQ005661
C. petchii	CBS 125957, NB 145		Boninense	*Dracaena* , leaf spots	Netherlands	JQ005226	JQ005313	JQ005400	JQ005487	JQ005574	JQ005660
C. phaseolorum	CBS 157.36		Dematium	*Phaseolus radiatus* var. *aureus*	Japan	GU227896	GU228288	GU228386	GU228092	GU227994	GU228190
C. phormii	CBS 118194, AR 3546*	Epitype	Acutatum	*Phormium* sp.	Germany	JQ948446	JQ948777	JQ949107	JQ949437	JQ949767	JQ950097
C. phormii	CBS 199.35, DSM 1168		Acutatum	*Phormium* sp.	UK	JQ948447	JQ948778	JQ949108	JQ949438	JQ949768	JQ950098
C. phyllanthi	CBS 175.67, MACS 271*	Holotype	Boninense	*Phyllanthus acidus*	India	JQ005221	JQ005308	JQ005395	JQ005482	JQ005569	JQ005655

Table S1. DNA barcodes of all accepted *Colletotrichum* spp. except for the ones in the *C. graminicola* and *C. caudatum* species complexes.

Species[a]	Culture[b]	Type	Group	Host	Country	GenBank numbers[c]					
						ITS	*gapdh*	*chs-1*	*his3*	*act*	*tub2*
C. piperis	IMI 71397, CPC 21195*	epitype	Orchidearum	*Piper nigrum*	Malaysia	MG600760	MG600820	MG600867	MG600906	MG600964	MG601027
C. pisicola	CBS 724.97, LARS 60*	Holotype	Destructivum	*Pisum sativum*	USA	KM105172	KM105522	KM105242	KM105312	KM105382	KM105452
C. pleopeltidis	CBS 147082*	Holotype	Destructivum	*Pleopeltis* sp.	South Africa	MW883412	—	MW890035	—	MW890024	—
C. plurivorum	CBS 125474*	Holotype	Orchidearum	*Coffea* sp.	Vietnam	MG600718	MG600781	MG600841	MG600887	MG600925	MG600985
C. plurivorum	CBS 132443		Orchidearum	*Gossypium* sp.	Brazil	MG600719	MG600782	MG600842	MG600888	MG600926	MG600986
C. plurivorum	LC8240, M51		Orchidearum	*Paederia foetida*	China	**MZ595848**	**MZ664113**	**MZ799291**	**MZ673868**	**MZ664146**	**MZ673969**
C. plurivorum	LC8244, M55		Orchidearum	*Paederia foetida*	China	**MZ595849**	**MZ772868**	**MZ799292**	**MZ673869**	**MZ664147**	**MZ673970**
C. plurivorum	LC8322, M136		Orchidearum	*Paederia foetida*	China	**MZ595853**	**MZ664114**	**MZ799293**	**MZ673873**	**MZ664151**	**MZ673974**
C. plurivorum	LC8337, M151		Orchidearum	*Vigna unguiculata*	China	**MZ595855**	**MZ664115**	**MZ799294**	**MZ673875**	**MZ664153**	**MZ673976**
C. proteae	CBS 132882*, CPC 14859	Holotype	Gloeosporioides	*Protea* sp.	South Africa	KC297079	KC297009	KC296986	KC297045	KC296940	KC297101
C. pseudoacutatum	CBS 436.77*	Holotype	singleton	*Pinus radiata*	Chile	JQ948480	JQ948811	JQ949141	JQ949471	JQ949801	JQ950131
C. pseudomajus	CBS 571.88*	Holotype	Gigasporum	*Camellia sinensis*	Taiwan	KF687722	KF687826	KF687779	KF687864	KF687801	KF687883
C. pseudotheobromicola	MFLUCC 18–1602*	Holotype	Gloeosporioides	*Prunus avium*	China	MH817395	MH853675	MH853678	—	MH853681	MH853684
C. psidii	CBS 145.29*, ICMP 19120	Authentic stra	Gloeosporioides	*Psidium* sp.	Italy	JX010219	JX009967	JX009901	—	JX009515	JX010443
C. pyricola	CBS 128531, ICMP 12924, PRJ 977.1*	Holotype	Acutatum	*Pyrus communis* , fruit rot	New Zealand	JQ948445	JQ948776	JQ949106	JQ949436	JQ949766	JQ950096
C. pyrifoliae	CGMCC 3.18902*, PAFQ22	Holotype	singleton	*Pyrus pyrifolia* cv. Jinshui	China	MG748078	MG747996	MG747914	—	MG747768	MG748158
C. pyrifoliae	PAFQ22a		singleton	*Pyrus pyrifolia* cv. Jinshui	China	MG874834	MG874826	MG874818	—	MG874810	MG874842
C. queenslandicum	ICMP 1778*	Epitype	Gloeosporioides	*Carica papaya*	Australia	JX010276	JX009934	JX009899	—	JX009447	JX010414
C. quinquefoliae	MFLU 14-0626*	Holotype	Dematium	*Parthenocissus quinquefolia* (*Vitaceae*)	Russia	KU236391	KU236390	—	—	KU236389	KU236392
C. radicis	CBS 529.93*	Holotype	Gigasporum	Unknown	Costa Rica	KF687719	KF687825	KF687762	KF687847	KF687785	KF687869
C. reniforme sp. nov.	LC8230, M41	Holotype	Orchidearum	*Smilax cocculoides*	China	**MZ595847**	**MZ664110**	**MZ799290**	**MZ673867**	**MZ664145**	**MZ673968**
C. reniforme sp. nov.	LC8248, M59		Orchidearum	*Paederia foetida*	China	**MZ595850**	**MZ664111**	**MZ799295**	**MZ673870**	**MZ664148**	**MZ673971**
C. rhexiae	Coll1026, BPI 884112, CBS 133134*	Epitype	Gloeosporioides	*Rhexia virginica*	Sussex	JX145128	**MZ664046**	**MZ799258**	**MZ673834**	**MZ664127**	JX145179
C. rhombiforme	CBS 129953, PT250, RB011*	Holotype	Acutatum	*Olea europaea*	Portugal	JQ948457	JQ948788	JQ949118	JQ949448	JQ949778	JQ950108
C. rhombiforme	CBS 131322, DAOM 233253, C10, MS1L34		Acutatum	*Vaccinium macrocarpum*	USA	JQ948458	JQ948789	JQ949119	JQ949449	JQ949779	JQ950109
C. riograndense	COAD 928*	Holotype	Spaethianum	*Tradescantia fluminensis*	Brazil	KM655299	KM655298	KM655297	—	KM655295	KM655300
C. roseum	CBS 145754*	Holotype	Acutatum	*Lapageria rosea*	Chile	MK903611	MK903603	—	—	MK903604	MK903607
C. rusci	CBS 119206*	Holotype	singleton	*Ruscus* sp.	Italy	GU227818	GU228210	GU228308	GU228014	GU227916	GU228112
C. salicis	CBS 607.94*	Epitype	Acutatum	*Salix* sp., leaf, spot	Netherlands	JQ948460	JQ948791	JQ949121	JQ949451	JQ949781	JQ950111
C. salicis	CBS 191.56		Acutatum	*Salix* sp.	Germany	JQ948461	JQ948792	JQ949122	JQ949452	JQ949782	JQ950112
C. salsolae	ICMP 19051*	Holotype	Gloeosporioides	*Salsola tragus*	Hungary	JX010242	JX009916	JX009863	—	JX009562	JX010403
C. sambucicola	2902-2		Dematium	*Sambucus ebulus*	Italy	KY595193	KY595192	KY595191	—	KY595190	KY595194
C. sambucicola	MFLUCC 16-1388*	Holotype	Dematium	*Sambucus ebulus*	Italy	KY098781	KY098780	KY098779	—	KY098778	KY098782
C. sansevieriae	MAFF 239721*	Holotype	Agaves	*Sansevieria trifasciata*	Japan	AB212991	LC180130	LC180129	LC180126	LC180127	LC180128
C. schimae sp. nov.	LC13880, NN046984*	Holotype	Acutatum	*Schima* sp.	China	**MZ595885**	**MZ664105**	**MZ799347**	**MZ673905**	**MZ664183**	**MZ674003**
C. schimae sp. nov.	LC13881, NN047247		Acutatum	*Schima* sp.	China	**MZ595887**	**MZ664106**	**MZ799348**	**MZ673907**	**MZ664185**	**MZ674005**
C. scovillei	CBS 126529, PD 94/921-3, BBA 70349*	Holotype	Acutatum	*Capsicum* sp.	Indonesia	JQ948267	JQ948597	JQ948928	JQ949258	JQ949588	JQ949918
C. scovillei	CBS 126530, PD 94/921-4		Acutatum	*Capsicum* sp.	Indonesia	JQ948268	JQ948598	JQ948929	JQ949259	JQ949589	JQ949919
C. scovillei	CBS 120708, HKUCC 10893, Mj6		Acutatum	*Capsicum annuum*	Thailand	JQ948269	JQ948599	JQ948930	JQ949260	JQ949590	JQ949920
C. sedi	MFLUCC 14-1002*	Holotype	Dematium	*Sedum* sp.	Russia	KM974758	KM974755	KM974754	—	KM974756	KM974757
C. serranegrense	COAD 2100*	Holotype	Gigasporum	*Cattleya jongheana*	Brazil	KY400111	—	KY407894	—	KY407892	KY407896
C. shisoi	JCM 31818*	Holotype	Destructivum	*Perilla frutescens* var. *crispa*	Japan	MH660930	MH660931	MH660929	—	MH660928	MH660932
C. siamense	ICMP 18578*, CBS 130417	Holotype	Gloeosporioides	*Coffea arabica*	Thailand	JX010171	JX009924	JX009865	—	FJ907423	JX010404
C. sidae	CBS 504.97*, LARS 76, ATCC 58399, NRRL 8096	Holotype	Orbiculare	*Sida spinosa*	USA	KF178472	KF178497	KF178521	KF178545	KF178569	KF178593
C. simmondsii	CBS 122122, BRIP 28519*	Holotype	Acutatum	*Carica papaya* , fruit	Australia	JQ948276	JQ948606	JQ948937	JQ949267	JQ949597	JQ949927
C. simmondsii	CBS 295.67, DPI 16518		Acutatum	*Fragaria* sp., fruit	Australia	JQ948278	JQ948608	JQ948939	JQ949269	JQ949599	JQ949929
C. sinuatum sp. nov.	LC13874, NN055266*	Holotype	Dracaenophilum	*Ophiopogon japonicus* , dead leaves	China	**MZ595900**	**MZ664064**	**MZ799286**	**MZ673920**	**MZ664198**	**MZ674018**
C. sloanei	IMI 364297, CPC 18929*	Holotype	Acutatum	*Theobroma cacao* , leaf	Malaysia	JQ948287	JQ948617	JQ948948	JQ949278	JQ949608	JQ949938
C. sojae	ATCC 62257*	Holotype	Orchidearum	*Glycine max*	USA	MG600749	MG600810	MG600860	MG600899	MG600954	MG601016
C. sojae	CBS 128510		Orchidearum	*Medicago sativa*	USA	MG600751	MG600812	MG600862	MG600901	MG600956	MG601018
C. sojae	LC8335, M149		Orchidearum	*Patrinia villosa*	China	**MZ595854**	**MZ664112**	**MZ799300**	**MZ673874**	**MZ664152**	**MZ673975**
C. sojae	LC8492, M316		Orchidearum	*Phaseolus vulgaris*	China	**MZ595858**	**MZ664116**	**MZ799301**	**MZ673878**	**MZ664156**	**MZ673979**
C. sonchicola	MFLUCC 17-1299*, IT3115a	Holotype	Dematium	*Sonchus* sp.	Italy	KY962757	KY962754	KY962751	—	KY962748	—
C. sonchicola	MFLUCC17-1300		Dematium	*Sonchus* sp.	Italy	KY962758	KY962755	KY962752	—	KY962749	—
C. spaethianum	CBS 167.49*	Epitype	Spaethianum	*Funkia sieboldiana* , dead stem	Germany	GU227807	GU228199	GU228297	GU228003	GU227905	GU228101
C. spinaciae	CBS 128.57		Dematium	*Spinacia oleracea*	Netherlands	GU227847	GU228239	GU228337	GU228043	GU227945	GU228141
C. spinosum	CBS 515.97*, LARS 465, DAR 48942	Holotype	Orbiculare	*Xanthium spinosum*	Australia	KF178474	KF178498	KF178523	KF178547	KF178571	KF178595
C. subacidae sp. nov.	LC13857, LH01*	Holotype	Truncatum	*Tetrastigma obovatum*	China	**MZ595846**	**MZ664068**	**MZ799307**	**MZ673866**	**MZ664144**	**MZ673967**
C. subacidae sp. nov.	NN054605		Truncatum	*Asparagus officinalis*	China	**MZ595893**	**MZ664075**	**MZ799309**	**MZ673913**	**MZ664191**	**MZ674011**
C. subacidae sp. nov.	NN054609		Truncatum	*Hosta* sp.	China	**MZ595894**	**MZ664076**	**MZ799310**	**MZ673914**	**MZ664192**	**MZ674012**
C. subacidae sp. nov.	NN071129		Truncatum	*Ailanthus altissima* , dead leaf petiole	China	**MZ595909**	**MZ664071**	**MZ799311**	**MZ673929**	**MZ664207**	**MZ674027**
C. subacidae sp. nov.	NN071131		Truncatum	*Ailanthus altissima* , dead leaf petiole	China	**MZ595910**	**MZ664072**	**MZ799312**	**MZ673930**	**MZ664208**	**MZ674028**
C. subacidae sp. nov.	MH0562		Truncatum	*Tetrastigma obovatum*	China	**MZ595872**	**MZ664069**	**MZ799313**	**MZ673892**	**MZ664170**	**MZ673991**
C. subacidae sp. nov.	MH0564		Truncatum	*Tetrastigma obovatum*	China	**MZ595873**	**MZ664074**	**MZ799308**	**MZ673893**	**MZ664171**	**MZ673992**
C. subacidae sp. nov.	MH0565		Truncatum	*Tetrastigma obovatum*	China	**MZ595874**	**MZ664073**	**MZ799315**	**MZ673894**	**MZ664172**	**MZ673993**
C. subacidae sp. nov.	MH0566		Truncatum	*Tetrastigma obovatum*	China	**MZ595875**	**MZ664070**	**MZ799314**	**MZ673895**	**MZ664173**	**MZ673994**
C. subsalicis sp. nov.	LC13863, CQ1168*	Holotype	Acutatum	*Populus alba*	China	**MZ852849**	—	**MZ799346**	**MZ673836**	**MZ664128**	**MZ673953**
C. subvariabile sp. nov.	LC13876, NN040649*	Holotype	Gigasporum	Unknown plant	China	**MZ595883**	**MZ664054**	**MZ799343**	**MZ673903**	**MZ664181**	**MZ674001**
C. sydowii	CBS 135819*, CPC 20071	Holotype	singleton	*Sambucus*	Taiwan	KY263783	KY263785	KY263787	KY263789	KY263791	KY263793
C. sydowii	CBS 132889		singleton	*Sambucus*	Taiwan	KY263784	KY263786	KY263788	KY263790	KY263792	KY263794
C. syngoniicola sp. nov.	LC8894, M745*	Holotype	Orchidearum	*Syngonium* sp.	China	**MZ595863**	**MZ664117**	**MZ799296**	**MZ673883**	**MZ664161**	**MZ673982**
C. syngoniicola sp. nov.	LC8895, M746		Orchidearum	*Syngonium* sp.	China	**MZ595864**	**MZ664118**	**MZ799297**	**MZ673884**	**MZ664162**	**MZ673983**
C. syngoniicola sp. nov.	LC8896, M747		Orchidearum	*Syngonium* sp.	China	**MZ595865**	**MZ664119**	**MZ799298**	**MZ673885**	**MZ664163**	**MZ673984**
C. syngoniicola sp. nov.	LC8897, M748		Orchidearum	*Syngonium* sp.	China	**MZ595866**	**MZ664120**	**MZ799299**	**MZ673886**	**MZ664164**	**MZ673985**
C. syzygiicola	DNCL021, MFLUCC 10-0624*	Holotype	Gloeosporioides	*Syzygium samarangense*	Thailand	KF242094	KF242156	—	—	KF157801	KF254880
C. tabacum	N150, CPC 18945*	Neotype	Destructivum	*Nicotiana tabacum*	Canada	KM105204	KM105557	KM105274	KM105344	KM105414	KM105484
C. tainanense	CBS 143666*	Holotype	Gloeosporioides	*Capsicum annuum*	Taiwan	MH728818	MH728823	MH805845	—	MH781475	MH846558
C. tamarilloi	CBS 129814, T.A.6*	Holotype	Acutatum	*Solanum betaceum* , fruit, anthracnose	Colombia	JQ948184	JQ948514	JQ948845	JQ949175	JQ949505	JQ949835
C. tamarilloi	CBS 129811, T.A.3		Acutatum	*Solanum betaceum* , fruit, anthracnose	Colombia	JQ948185	JQ948515	JQ948846	JQ949176	JQ949506	JQ949836
C. tanaceti	UM01, CBS 132693, BRIP 57314*	Holotype	Destructivum	*Tanacetum cinerariifolium*	Ulverstone (Tasm	JX218228	JX218243	—	—	JX218238	JX218233
C. tanaceti	TAS060-0003, CBS 132818, BRIP 57315		Destructivum	*Tanacetum cinerariifolium*	Ulverstone (Tasm	JX218229	JX218244	—	—	JX218239	JX218234
C. tebeestii	CBS 522.97*, LARS 733, 83-43	Holotype	Orbiculare	*Malva pusilla*	Canada	KF178473	KF178505	KF178522	KF178546	KF178570	KF178594
C. telosmae sp. nov.	LC13872, NN052858*	Holotype	singleton	*Telosma cordatum*	China	**MZ595888**	**MZ664058**	**MZ799303**	**MZ673908**	**MZ664186**	**MZ674006**
C. temperatum	CBS 133122*, Coll883, BPI 884100	Holotype	Gloeosporioides	*Vaccinium macrocarpon*	Bronx	JX145159	**MZ664045**	**MZ799254**	**MZ673833**	**MZ664125**	JX145211
C. theobromicola	CBS 124945*, ICMP 18649	Neotype	Gloeosporioides	*Theobroma cacao*	Panama	JX010294	JX010006	JX009869	—	JX009444	JX010447
C. ti	ICMP 4832*	Holotype	Gloeosporioides	*Cordyline* sp.	New Zealand	JX010269	JX009952	JX009898	—	JX009520	JX010442
C. tofieldiae	CBS 495.85		Spaethianum	*Tofieldia calyculata*	Switzerland	GU227801	GU228193	GU228291	GU227997	GU227899	GU228095
C. tofieldiae	CBS 168.49		Spaethianum	*Lupinus polyphyllus*	Germany	GU227802	GU228194	GU228292	GU227998	GU227900	GU228096
C. tongrenense	GMBC 0209*	Holotype	Dracaenophilum	*Nothapodytes pittosporoides*	China	MH482933	MH705332	—	—	MH717074	MH729805
C. torulosum	CBS 128544, ICMP 18586*	Holotype	Boninense	*Solanum melongena*	New Zealand	JQ005164	JQ005251	JQ005338	JQ005425	JQ005512	JQ005598
C. torulosum	CBS 102667		Boninense	*Passiflora edulis* , leaf blotch	New Zealand	JQ005165	JQ005252	JQ005339	JQ005426	JQ005513	JQ005599
C. trichellum	CBS 217.64		singleton	*Hedera helix*	Germany	GU227812	GU228204	GU228302	GU228008	GU227910	GU228106
C. trichellum	CBS 118198		singleton	*Hedera* sp.	UK	GU227813	GU228205	GU228303	GU228009	GU227911	GU228107
C. trifolii	CBS 158.83*, BBA 70709	Holotype	Orbiculare	*Trifolium*	USA	KF178478	KF178502	KF178527	KF178551	KF178575	KF178599
C. tropicale	CBS 124949*, ICMP 18653, MTCC 11371	Holotype	Gloeosporioides	*Theobroma cacao*	Panama	JX010264	JX010007	JX009870	**MZ673832**	JX009489	JX010407
C. tropicicola	BCC 38877*, LC0598	Holotype	Dracaenophilum	*Citrus maxima* , leaf	Thailand	JN050240	JN050229	**MZ799279**	**MZ673840**	JN050218	JN050246
C. tropicicola	CBS 127555		Dracaenophilum	*Citrus* sp.	Mexico	MG600715	MG600778	MG600838	MG600884	MG600922	MG600982
C. truncatum	CBS 151.35*	Epitype	Truncatum	*Phaseolus lunatus*	USA	GU227862	GU228254	GU228352	GU228058	GU227960	GU228156
C. truncatum	CBS 120709		Truncatum	*Capsicum frutescens*	India	GU227877	GU228269	GU228367	GU228073	GU227975	GU228171
C. utrechtense	CBS 130243*	Holotype	Destructivum	*Trifolium pratense*	Netherlands	KM105201	KM105554	KM105271	KM105341	KM105411	KM105481
C. variabile sp. nov.	LC13875, NN040656*	Holotype	Gigasporum	Unknown plant	China	**MZ595884**	**MZ664055**	**MZ799344**	**MZ673904**	**MZ664182**	**MZ674002**
C. verruculosum	IMI 45525*	Holotype	Spaethianum	*Crotalaria juncea*	Zimbabwe	GU227806	GU228198	GU228296	GU228002	GU227904	GU228100
C. vietnamense	CBS 125477, BMT25(L3)		Gigasporum	*Coffea* sp.	Vietnam	KF687720	KF687831	KF687768	KF687854	KF687791	KF687876
C. vietnamense	CBS 125478, LD16(L2)*	Holotype	Gigasporum	*Coffea* sp.	Vietnam	KF687721	KF687832	KF687769	KF687855	KF687792	KF687877
C. vignae	CBS 501.97, LARS 56*	Holotype	Destructivum	*Vigna unguiculata*	Nigeria	KM105183	KM105534	KM105253	KM105323	KM105393	KM105463
C. viniferum	GZAAS 5.08601*, yg1	Holotype	Gloeosporioides	*Vitis vinifera* cv. Shuijing	China	JN412804	JN412798	—	—	JN412795	—
C. vittalense	CBS 126.25		Orchidearum	Orchid	unknown	MG600735	MG600797	MG600852	MG600894	MG600941	MG601002
C. vittalense	CBS 181.82*	Holotype	Orchidearum	*Theobroma cacao*	India	MG600734	MG600796	MG600851	MG600893	MG600940	MG601001
C. walleri	CBS 125472, BMT(HL)19*	Holotype	Acutatum	*Coffea* sp., leaf tissue	Vietnam	JQ948275	JQ948605	JQ948936	JQ949266	JQ949596	JQ949926
C. wanningense	CGMCC 3.18936*	Holotype	Acutatum	Rubber tree	China	MG830462	MG830318	MG830302	—	MG830270	MG830286
C. watphraense	MFLUCC 14-0123*	Holotype	Boninense	*Dendrobium* sp.	Thailand	MF448523	MH049479	—	—	MH376384	MH351276
C. wuxiense	CGMCC 3.17894*	Holotype	Gloeosporioides	*Camellia sinensis*	China	KU251591	KU252045	KU251939	—	KU251672	KU252200
C. xanthorrhoeae	BRIP 45094*, ICMP 17903, CBS 127831	Holotype	Gloeosporioides	*Xanthorrhoea preissii*	Australia	JX010261	JX009927	JX009823	—	JX009478	JX010448
C. xishuangbannaense	MFLUCC 19-0107*	Holotype	Gloeosporioides	*Magnolia liliifera*	China	MW346469	MW537586	MW660832	—	MW652294	—
C. yulongense	CFCC 50818*	Holotype	Gloeosporioides	*Vaccinium dunalianum* var. *urophyllum*	China	MH751507	MK108986	MH793605	—	MH777394	MK108987
C. yunnanense	AS 3.9167, CBS 132135*, LC1526	Holotype	Dracaenophilum	*Buxus* sp.	China	JX546804	JX546706	JX519231	JX546755	JX519239	JX519248
C. zhaoqingense sp. nov.	LC13877, NN058985*	Holotype	Gigasporum	On dead petiole of palm	China	**MZ595905**	**MZ664065**	**MZ799304**	**MZ673925**	**MZ664203**	**MZ674023**
C. zhaoqingense sp. nov.	LC13878, NN071035		Gigasporum	On dead petiole of palm	China	**MZ595906**	**MZ664066**	**MZ799305**	**MZ673926**	**MZ664204**	**MZ674024**
C. zhaoqingense sp. nov.	LC13879, NN071036		Gigasporum	On dead petiole of palm	China	**MZ595907**	**MZ664067**	**MZ799306**	**MZ673927**	**MZ664205**	**MZ674025**
C. zhejiangense sp. nov.	LC13887, NN076215*	Holotype	Dematium	On dead leaves of unidentified tree	China	**MZ595912**	**MZ664124**	**MZ799342**	**MZ673932**	**MZ664210**	**MZ674030**
Colletotrichum sp. CBS 123921	CBS 123921, MAFF 238642		Boninense	*Dendrobium kingianum*	Japan	JQ005163	JQ005250	JQ005337	JQ005424	JQ005511	JQ005597
Colletotrichum sp. M0342	LC8517, M342		Destructivum	*Lycopersicon esculentum*	China	**MZ595861**	**MZ664102**	**MZ799349**	**MZ673881**	**MZ664159**	—
Colletotrichum sp. MH0413	MH0413		Magnum	*Vigna unguiculata*	China	**MZ595871**	**MZ664109**	**MZ799289**	**MZ673891**	**MZ664169**	**MZ673990**
Monilochaetes infuscans	CBS 869.96		outgroup	*Ipomoea batatas*	South Africa	JQ005780	JX546612	JQ005801	JQ005822	JQ005843	JQ005864

[a] *C. hedericola* in the table is not *Colletotrichum hedericola* Laubert (1907);

[b] Asterisk (*) refers to ex-type strains;

[c] Bold (highlighted in blue) indicated the sequences generated in this study.

Table S2. DNA barcodes of the accepted *Colletotrichum* spp. in the *C. caudatum* species complex.

Species	Culture[a]	Type	Species complex	Host	Country	GenBank numbers[b]								
						ITS	Mat1/APN2	*apn2*	*sod2*	*gapdh*	*chs-1*	*his3*	*act*	*tub2*	ApMat (AMF/AMR)
C. alcornii	IMI 176619*	Holotype	Caudatum	*Imperata cylindrica* var. *major*	Australia	JX076858	–	–	–	–	–	–	–	–	–
C. alcornii	IMI 176617		Caudatum	*Bothriochloa bladhii*	Australia	JX076857	–	–	–	–	–	–	–	–	–
C. baltimorense	BPI 892771, SD-11*	Holotype	Caudatum	*Sorghastrum nutans*	USA	JX076866	JX076905	JX076927	JX076886	–	–	–	–	–	–
C. caudatum	CBS 131602, BPI 892767, NY07-CC04*	Epitype	Caudatum	*Sorghastrum nutans* cv. Rumsey	USA	JX076860	JX076893	JX076932	JX076878	–	–	–	–	–	–
C. caudisporum	CGMCC 3.15106*, LC2311	Holotype	Caudatum	*Bletilla ochracea*	China	JX625162	**OK225173**	**MZ799227**	**MZ674035**	KC843512	**MZ799318**	**MZ673852**	KC843526	JX625190	**MZ799232**
C. caudisporum	LC11362		Caudatum	*Poaceae*	China	**MZ595845**	–	–	**MZ674039**	**MZ664089**	**MZ799319**	**MZ673865**	**MZ664143**	**MZ673966**	–
C. duyunense	CGMCC 3.15105*, LC2307	Holotype	Caudatum	*Bletilla ochracea*	China	JX625160	–	–	**MZ674034**	KC843515	**MZ799320**	**MZ673851**	KC843530	JX625187	**MZ799231**
C. gloeosporioides	IMI 356878*, ICMP 17821, CBS 112999	Epitype	Gloeosporioides	*Citrus sinensis*	Italy	JX010152	–	**MZ799225**	JX010365	JX010056	JX009818	JQ005413	JX009531	JX010445	JQ807843
C. ochraceae	CGMCC 3.15104*, LC2303	Holotype	Caudatum	*Bletilla ochracea*	China	JX625156	**OK225172**	**MZ799226**	**MZ674033**	KC843513	**MZ799317**	**MZ673849**	KC843527	JX625183	**MZ799230**
C. shivasii sp. nov.	LC1400, BRIP15842a*	Holotype	Caudatum	*Themeda thriandra*	Australia	**MZ595836**	**OK225171**	–	**MZ674032**	**MZ664088**	**MZ799316**	**MZ673848**	**MZ664134**	**MZ673957**	–
C. somersetense	CBS 131599, JAC 11-11*	Holotype	Caudatum	*Sorghastrum nutans*	USA	JX076862	JX076895	JX076918	JX076880	–	–	–	–	–	–
C. somersetense	CBS 131601, JAC 11-13		Caudatum	*Sorghastrum nutans*	USA	JX076863	JX076896	JX076919	JX076881	–	–	–	–	–	–
C. zoysiae	MAFF 238573*	Holotype	Caudatum	*Zoysia tenuifolia*	Japan	JX076871	JX076899	JX076922	–	–	–	–	–	–	–
C. zoysiae	MAFF 238576		Caudatum	*Zoysia tenuifolia*	Japan	JX076874	JX076902	JX076924	JX076884	–	–	–	–	–	–
C. zoysiae	MAFF 238574		Caudatum	*Zoysia tenuifolia*	Japan	JX076872	JX076900	JX076923	JX076882	–	–	–	–	–	–

[a]Asterisk (*) refers to ex-type strains.

[b]Bold (highlighted in blue) indicated the sequences generated in this study.

Table S3. DNA barcodes of the accepted *Colletotrichum* spp. in the *C. graminicola* species complex.

Species	Culture[a]	Type	Species complex	Host	Country	GenBank numbers[b]								
						ITS	*chs-1*	*act*	*tub2*	*sod2*	*mat1-2*	*apn2*	*his3*	*gapdh*
C. axonopodi	IMI 279189*	Holotype	Graminicola	*Axonopus affinis*	Australia	MN521699	–	–	–	–	–	EU364993	FJ377907	–	–
C. cereale	CBS 129663, KS20BIG		Graminicola	*Bromus inermis*	USA	JQ005774	JQ005795	JQ005837	JQ005858	DQ133277	DQ131946	–	–	JQ005816	–
C. danxiashanense sp. nov.	LC13885, NN055218*	Holotype	Graminicola	Probably dead leaves of *Miscanthus* sp.	China	**MZ595898**	**MZ799330**	**MZ664196**	**MZ674016**	**MZ674042**	–	–	–	**MZ673918**	**MZ664101**
C. dolichoconidiophori sp. nov.	LC13889, NN054966*	Holotype	Graminicola	Grass	China	**MZ595896**	**MZ799329**	**MZ664194**	**MZ674014**	**MZ674041**	–	–	–	**MZ673916**	**MZ664094**
C. echinochloae	MAFF 511473*	Holotype	Graminicola	*Echinochloa esculenta*	Japan	AB439811	–	–	–	AB440153	AB439820	–	–	–	–
C. eleusines	MAFF 511155*	Epitype	Graminicola	*Eleusine indica*	Japan	JX519218	JX519226	JX519234	JX519243	EU554234	–	EU365038	–	–	–
C. endophytum	CGMCC 3.15108*, LC2338	Holotype	Graminicola	*Blettila ochracea*	China	JX625177	**MZ799327**	KC843533	JX625206	**MZ674036**	–	–	–	**MZ673853**	KC843521
C. eremochloae	CBS 129661*	Holotype	Graminicola	*Eremochloa ophiuroides* , diseased leaf tissue	USA	JX519220	JX519228	JX519236	JX519245	JQ478449	–	JQ478476	JQ478462	–	–
C. falcatum	CGMCC 3.14187, CBS 147945*	Neotype	Graminicola	*Saccharum officinarum*	Indonesia	HM171677	JQ005793	JQ005835	JQ005856	–	–	HM569770	HM569769	JQ005814	–
C. gloeosporioides	IMI 356878*, ICMP 17821, CBS 112999	Epitype	Gloeosporioides	*Citrus sinensis*	Italy	JX010152	JX009818	JX009531	JX010445	JX010365	–	–	–	JQ005413	JX010056
C. graminicola	CBS 130836*, M 1.001	Epitype	Graminicola	*Zea mays*	USA	JQ005767	JQ005788	JQ005830	JQ005851	**MZ674031**	EU365081	–	FJ377994	HQ005809	–
C. hainanense	CBS 145900*	Holotype	Graminicola	*Axonopus compressus*	China	KY242705	–	–	–	KY242711	–	KY242714	KY242708	–	–
C. hanaui	MAFF 305404*	Holotype	Graminicola	*Digitaria ciliaris*	Japan	JX519217	JX519225	–	JX519242	EU554205	–	EU365008	FJ377922	–	–
C. jacksonii	MAFF 305460*	Holotype	Graminicola	*Echinochloa esculenta*	Japan	JX519216	JX519224	JX519233	JX519241	EU554212	–	–	–	–	–
C. miscanthi	MAFF 510857*	Holotype	Graminicola	*Miscanthus sinensis*	Japan	JX519221	JX519229	JX519237	JX519246	EU554224	–	EU365028	–	–	–
C. multiseptatum sp. nov.	LC13886, NN055357*	Holotype	Graminicola	Dead culm of grass	China	**MZ595901**	**MZ799331**	**MZ664199**	**MZ674019**	**MZ674043**	–	–	–	**MZ673921**	**MZ664099**
C. navitas	CBS 125086*	Holotype	Graminicola	*Panicum virgatum*	USA	JQ005769	JQ005790	JQ005832	JQ005853	GQ919073	–	GQ919069	GQ919071	JQ005811	–
C. nicholsonii	MAFF 511115*	Holotype	Graminicola	*Paspalum dilatatum*	Japan	JQ005770	JQ005791	JQ005833	JQ005854	EU554229	–	EU365033	FJ377946	JQ005812	–
C. paraendophytum sp. nov.	LC13888, NN054963*	Holotype	Graminicola	Grass	China	**MZ595895**	**MZ799328**	**MZ664193**	**MZ674013**	**MZ674040**	–	–	–	**MZ673915**	**MZ664057**
C. paspali	MAFF 305403*	Holotype	Graminicola	*Paspalum notatum*	Japan	JX519219	JX519227	JX519235	JX519244	EU554204	–	EU365007	FJ377921	–	–
C. sublineola	CBS 131301*, S3.001	Epitype	Graminicola	*Sorghum vulgare*	Burkina Fa	JQ005771	JQ005792	JQ005834	JQ005855	DQ132051	DQ002865	EU365121	FJ378029	JQ005813	–
C. tibetense sp. nov.	LC7364*	Holotype	Graminicola	*Poaceae*	China	**MZ595840**	**MZ799339**	**MZ664138**	**MZ673961**	**MZ674037**	–	–	–	**MZ673860**	**MZ772866**
C. tibetense sp. nov.	LC7366		Graminicola	*Poaceae*	China	**MZ595841**	**MZ799340**	**MZ664139**	**MZ673962**	**MZ674038**	–	–	–	**MZ673861**	**MZ772867**

[a]Asterisk (*) refers to ex-type strains.

[b]Bold (highlighted in blue) indicated the sequences generated in this study.

Table S4. *Colletotrichum* species for which whole-genome sequences are available, retrieved from NCBI and JGI, or generated in the current study (Part A: NCBI). Note: The content in black colour was retrieved from NCBI website, and the content in blue colour was annotated in this study.

Species	New identification herein	Used in phylogenomic	Ex-type	Accessable in JGI	Species complex	Strain number	Taxonomy id	Assembly Name	Assembly Accession	Source	Annotation	Level	Contig N50	Size	Size (M)	Submission Date	Gene Count	BioProject	BioSample	No-repeat (bp)	No-repeat	Repeat (bp)	Repeat (M	Repeat%	Gene coun	No. of ann	CAZyme	AA	CBM	CE	GH	GT	PL	P450	Effector	Transporter
Colletotrichum acutatum	*C. scovillei*	YES			Acutatum	strain: 1	27357	ASM159374v1	GCA_001593745.1	GenBank		Contig	4.416.304	52.129.059	52,13	18/03/2016		PRJNA314171	SAMN04530072	49.602.862	49,60	2.526.197	2,53	4,85	12.552	10.180	580	82	25	49	317	87	39	2.012	325	2.501
Colletotrichum acutatum		YES			Acutatum	strain: C71	27357	ASM166275v1	GCA_001662755.1	GenBank		Scaffold	12.423	44.919.977	44,92	14/06/2016		PRJNA314187	SAMN04530278	43.181.864	43,18	1.738.113	1,74	3,87	10.990	8.858	482	69	22	40	264	70	35	1.741	305	2.118
Colletotrichum aenigma		YES			Gloeosporioides	strain: Cg56	1215731	ASM1339018v1	GCA_013390185.1	GenBank	From INSDC submitter	Contig	5.181.253	59.189.926	59,19	06/07/2020	15.211	PRJNA476648	SAMN09531619	54.388.894	54,39	4.801.032	4,80	8,11	14.283	11.185	609	90	24	48	335	91	39	2.250	382	2.728
Colletotrichum asianum		YES			Gloeosporioides	strain: ICMP 18580	702518	ASM980641v1	GCA_009806415.1	GenBank	From INSDC submitter	Scaffold	381.785	64.731.264	64,73	27/12/2019	17.966	PRJNA504379	SAMN13475008	56.130.657	56,13	8.600.607	8,60	13,29	14.297	11.279	615	96	22	46	334	92	40	2.305	374	2.742
Colletotrichum australisinense (*nom. inval.*)		YES			Acutatum	strain: GX1655	2231729	ASM1470636v1	GCA_014706365.1	GenBank		Contig	5.698.484	55.304.262	55,30	23/09/2020		PRJNA597926	SAMN13693772	51.071.216	51,07	4.233.046	4,23	7,65	13.170	10.447	574	85	21	45	310	89	40	2.061	352	2.542
Colletotrichum camelliae		YES			Gloeosporioides	strain: CcLH18	538528	ASM1194748v1	GCA_011947485.1	GenBank	From INSDC submitter	Scaffold	164.580	62.345.008	62,35	03/04/2020	15.984	PRJNA613862	SAMN14421087	56.361.818	56,36	5.983.190	5,98	9,6	14.519	11.437	628	91	24	52	342	91	45	2.367	383	2.766
Colletotrichum chlorophyti		YES		YES	singleton	strain: NTL11	708187	ASM193710v1	GCA_001937105.1	GenBank	From INSDC submitter	Scaffold	164.384	52.387.045	52,39	05/01/2017	10.419	PRJNA350752	SAMN05945917	46.967.570	46,97	5.419.475	5,42	10,35	11.600	9.449	527	70	17	42	276	93	40	1.783	319	2.319
Colletotrichum coccodes		YES			singleton	strain: NJ-RT1	27358	ASM224977v1	GCA_002249775.1	GenBank		Scaffold	294.833	50.121.991	50,12	11/08/2017		PRJNA285890	SAMN03761679	49.085.893	49,09	1.036.098	1,04	2,07	12.338	10.070	588	86	21	48	303	98	48	1.988	326	2.442
Colletotrichum coccodes					singleton	strain: RP180a	27358	ASM224980v1	GCA_002249805.1	GenBank		Scaffold	227.998	51.499.764		11/08/2017		PRJNA285895	SAMN03761686																	
Colletotrichum destructivum		YES			Destructivum	strain: YC1	34406	ASM990006v1	GCA_009900065.1	GenBank		Contig	3.611.167	52.145.981	52,15	17/01/2020		PRJNA598348	SAMN13703342	47.031.033	47,03	5.114.948	5,11	9,81	12.865	10.247	540	77	17	42	278	92	45	2.049	330	2.525
Colletotrichum echinochloae		YES			Graminicola	strain: B-48	537474	ASM1661809v1	GCA_016618095.1	GenBank		Contig	5.346.453	62.246.358	62,25	12/01/2021		PRJNA672254	SAMN16551125	43.524.448	43,52	18.721.910	18,72	30,08	11.262	9.062	445	67	14	34	237	82	15	1.640	236	2.225
Colletotrichum eleusines		YES			Graminicola	strain: NJC-16	516970	ASM1680784v1	GCA_016807845.1	GenBank		Contig	5.135.075	53.507.824	53,51	04/02/2021		PRJNA671855	SAMN16552423	43.868.551	43,87	9.639.273	9,64	18,01	11.226	8.939	439	68	14	35	233	80	15	1.540	245	2.167
Colletotrichum falcatum		YES			Graminicola	strain: Cf671	129314	ASM148452v1	GCA_001484525.1	GenBank		Scaffold	16.629	48.186.431	48,19	04/01/2016		PRJNA272959	SAMN03287978	41.794.541	41,79	6.391.890	6,39	13,26	11.593	9.260	388	55	11	30	208	76	12	1.554	292	2.140
Colletotrichum fioriniae				YES	Acutatum	strain: PJ7	1445577	CFIO01	GCA_000582985.1	GenBank	From INSDC submitter	Scaffold	34.930	49.002.765		27/02/2014	13.759	PRJNA233987	SAMN02580179																	
Colletotrichum fioriniae					Acutatum	strain: HC91	710243	ASM293042v1	GCA_002930425.1	GenBank		Scaffold	37.365	49.792.461		16/02/2018		PRJNA270309	SAMN08289092																	
Colletotrichum fioriniae		YES			Acutatum	strain: HC89	710243	ASM293045v1	GCA_002930455.1	GenBank		Scaffold	38.339	50.150.864	50,15	16/02/2018		PRJNA270309	SAMN08289069	48.631.657	48,63	1.519.207	1,52	3,03	12.735	10.257	578	86	22	45	312	89	41	2.047	345	2.533
Colletotrichum fioriniae					Acutatum	strain: KY615	710243	ASM1470511v1	GCA_014705115.1	GenBank		Scaffold	29.324	49.988.189		22/09/2020		PRJNA625663	SAMN14604530																	
Colletotrichum fioriniae					Acutatum	strain: KY648	710243	ASM1470520v1	GCA_014705205.1	GenBank		Scaffold	26.625	50.396.376		22/09/2020		PRJNA625663	SAMN14604524																	
Colletotrichum fioriniae					Acutatum	strain: KY646	710243	ASM1470524v1	GCA_014705245.1	GenBank		Scaffold	31.077	50.064.071		22/09/2020		PRJNA625663	SAMN14604523																	
Colletotrichum fioriniae					Acutatum	strain: KY640	710243	ASM1470526v1	GCA_014705265.1	GenBank		Scaffold	30.825	49.691.380		22/09/2020		PRJNA625663	SAMN14604522																	
Colletotrichum fioriniae					Acutatum	strain: KY119	710243	ASM1470527v1	GCA_014705275.1	GenBank		Scaffold	32.429	49.840.158		22/09/2020		PRJNA625663	SAMN14604521																	
Colletotrichum fioriniae					Acutatum	strain: KY116	710243	ASM1470528v1	GCA_014705285.1	GenBank		Scaffold	20.168	50.237.383		22/09/2020		PRJNA625663	SAMN14604520																	
Colletotrichum fioriniae					Acutatum	strain: KY323	710243	ASM1470533v1	GCA_014705335.1	GenBank		Scaffold	34.003	49.661.969		22/09/2020		PRJNA625663	SAMN14604519																	
Colletotrichum fioriniae					Acutatum	strain: KY6	710243	ASM1470536v1	GCA_014705365.1	GenBank		Scaffold	30.151	49.740.091		22/09/2020		PRJNA625663	SAMN14604517																	
Colletotrichum fioriniae					Acutatum	strain: HC296	710243	ASM1470554v1	GCA_014705545.1	GenBank		Scaffold	32.519	49.753.773		22/09/2020		PRJNA625663	SAMN14604510																	
Colletotrichum fioriniae					Acutatum	strain: HC25	710243	ASM1470555v1	GCA_014705555.1	GenBank		Scaffold	31.866	49.841.025		22/09/2020		PRJNA625663	SAMN14604507																	
Colletotrichum fructicola					Gloeosporioides	strain: Nara gc5	1213859	ASM31963v2	GCA_000319635.2	GenBank	From INSDC submitter	Contig	5.461.344	59.542.867		12/05/2020	17.388	PRJNA171218	SAMN02981487																	
Colletotrichum fructicola					Gloeosporioides	strain: 1104-7	690256	ASM231427v2	GCA_002314275.2	GenBank		Scaffold	4.984.911	58.690.411		23/03/2020		PRJNA588516	SAMN06348201																	
Colletotrichum fructicola					Gloeosporioides	strain: 15060	690256	ASM288768v1	GCA_002887685.1	GenBank		Contig	480.505	55.915.688		17/01/2018		PRJNA418608	SAMN08031206																	
Colletotrichum fructicola					Gloeosporioides	strain: CGMCC 3.17371	690256	ASM977102v1	GCF_009771025.1	RefSeq	From INSDC submitter	Contig	905.947	58.056.435		18/12/2019	18.140	PRJNA532407	SAMN11398962																	
Colletotrichum fructicola		YES			Gloeosporioides	strain: Cg38 S1	690256	RIKEN_CfrS1_1	GCA_012932255.1	GenBank	From INSDC submitter	Scaffold	486.905	58.952.871	58,95	29/04/2020	16.137	PRJNA476648	SAMN09448926	56.564.681	56,56	2.388.190	2,39	4,05	14.935	11.697	627	95	23	46	344	91	44	2.396	422	2.818
Colletotrichum fructicola					Gloeosporioides	strain: CfS4	690256	ASM1320187v1	GCA_013201875.1	GenBank	From INSDC submitter	Scaffold	249.725	57.426.314		01/06/2020	16.156	PRJNA476648	SAMN09531624																	
Colletotrichum fructicola					Gloeosporioides	strain: Cf415	690256	ASM1320190v1	GCA_013201905.1	GenBank	From INSDC submitter	Scaffold	281.554	56.012.246		01/06/2020	15.769	PRJNA476648	SAMN09531622																	
Colletotrichum fructicola					Gloeosporioides	strain: Cf245	690256	ASM1320192v1	GCA_013201925.1	GenBank	From INSDC submitter	Scaffold	337.174	56.060.367		01/06/2020	15.754	PRJNA476648	SAMN09531623																	
Colletotrichum fructicola					Gloeosporioides	strain: Cf413	690256	ASM1339020v1	GCA_013390205.1	GenBank	From INSDC submitter	Contig	4.902.990	56.528.462		06/07/2020	15.647	PRJNA476648	SAMN09531621																	
Colletotrichum fructicola					Gloeosporioides	strain: HC540	690256	ASM1470548v1	GCA_014705485.1	GenBank		Scaffold	53.276	57.126.425		22/09/2020		PRJNA625663	SAMN14604511																	
Colletotrichum fructicola					Gloeosporioides	strain: 1104-6	690256	NWSUAF_1104_6	GCA_017589655.1	GenBank		Scaffold	228.772	56.580.086		26/03/2021		PRJNA705288	SAMN18080036																	
Colletotrichum gloeosporioides				YES	Gloeosporioides	strain: Cg-14	1237896	Colletotrichum gloeosporioides1	GCA_000446055.1	GenBank	From INSDC submitter	Contig	25.337	53.209.944		13/08/2013	16.538	PRJNA176412	SAMN02981466																	
Colletotrichum gloeosporioides	*C. fructicola*				Gloeosporioides	isolate: 030206	474922	ASM218958v1	GCA_002189585.1	GenBank		Scaffold	183.416	57.603.470		09/06/2017		PRJNA377876	SAMN06473425																	
Colletotrichum gloeosporioides	*C. truncatum s. l.*				Truncatum	strain: TYU	474922	ASM290110v1	GCA_002901105.1	GenBank		Contig	1.905.770	53.008.665		26/01/2018		PRJNA395616	SAMN07411592																	
Colletotrichum gloeosporioides		YES			Gloeosporioides	strain: SMCG1#C	474922	ASM324385v1	GCA_003243855.1	GenBank		Scaffold	4.696.547	61.916.549	61,92	18/06/2018		PRJNA471237	SAMN09205517	55.486.922	55,49	6.429.627	6,43	10,38	14.286	11.245	621	97	21	45	340	92	41	2.291	376	2.724
Colletotrichum gloeosporioides	*C. gloeosporioides s. l.*				Gloeosporioides	strain: ES026	474922	ASM356874v1	GCA_003568745.1	GenBank		Scaffold	130.450	58.519.738		13/09/2018		PRJNA488958	SAMN09946147																	
Colletotrichum gloeosporioides	*C. jiangxiense*				Gloeosporioides	strain: Cg01	474922	ASM366612v1	GCA_003666125.1	GenBank		Scaffold	400.620	55.772.594		17/10/2018		PRJNA484086	SAMN09759449																	
Colletotrichum gloeosporioides					Gloeosporioides	strain: COLG-95	474922	ASM1142805v1	GCA_011428055.1	GenBank		Scaffold	20.870	53.724.932		18/03/2020		PRJNA554995	SAMN12924925																	
Colletotrichum gloeosporioides					Gloeosporioides	strain: Lc1	474922	NFU_CgLc1_1.0	GCA_011800055.1	GenBank	From INSDC submitter	Scaffold	429.093	61.904.035		31/03/2020	15.672	PRJNA577812	SAMN13038012																	
Colletotrichum gloeosporioides					Gloeosporioides	strain: CgLH19	474922	ASM1194741v1	GCA_011947415.1	GenBank		Scaffold	442.561	55.563.689		03/04/2020		PRJNA613862	SAMN14421088																	
Colletotrichum gloeosporioides	*C. gloeosporioides s. l.*				Gloeosporioides	strain: KY332	474922	ASM1470516v1	GCA_014705165.1	GenBank		Scaffold	42.575	58.002.434		22/09/2020		PRJNA625663	SAMN14604526																	
Colletotrichum godetiae		YES			Acutatum	strain: C184	1209918	ASM166335v1	GCA_001663355.1	GenBank		Scaffold	17.039	35.034.269	35,03	15/06/2016		PRJNA315612	SAMN04566614	34.269.864	34,27	764.405	0,76	2,18	8.424	6.721	363	44	12	28	201	58	29	1.267	219	1.644
Colletotrichum graminicola		YES		YES	Graminicola	strain: M1.001	645133	C_graminicola_M1_001_V1	GCF_000149035.1	RefSeq	From INSDC submitter	Scaffold	228.959	51.604.658	51,60	12/10/2010	12.400	PRJNA37879	SAMN02953757	43.065.999	43,07	8.538.659	8,54	16,53	10.648	8.674	438	65	13	38	228	81	16	1.494	203	2.087
Colletotrichum graminicola					Graminicola	strain: M5.001	31870	ASM195120v1	GCA_001951205.1	GenBank		Contig	16.615	59.914.086		13/01/2017		PRJNA354205	SAMN06043298																	
Colletotrichum higginsianum		YES		YES	Destructivum	strain: IMI 349063	759273	ASM167251v1	GCF_001672515.1	RefSeq	From INSDC submitter	Chromosome	5.201.688	50.716.103	50,72	21/06/2016	14.650	PRJNA47061	SAMN04420120	46.749.669	46,75	3.966.434	3,97	7,82	12.644	10.116	543	77	19	40	282	93	45	2.041	332	2.522
Colletotrichum higginsianum					Destructivum	strain: MAFF 305635-RFP	80884	ASM492035v1	GCA_004920355.1	GenBank	From INSDC submitter	Contig	5.064.939	49.786.461		29/04/2019	12.924	PRJNA352900	SAMN06008763																	
Colletotrichum incanum		YES			Spaethianum	strain: MAFF 238704	1573173	Ci238704v1	GCA_001625285.1	GenBank	From INSDC submitter	Scaffold	177.164	53.597.417	53,60	19/04/2016	12.809	PRJNA286717	SAMN03769590	50.448.894	50,45	3.148.523	3,15	5,87	12.380	10.039	577	85	20	47	306	89	44	1.865	274	2.433
Colletotrichum incanum				YES	Spaethianum	strain: MAFF 238712	1573173	ASM185523v1	GCA_001855235.1	GenBank	From INSDC submitter	Scaffold	39.757	53.254.579		27/10/2016	12.001	PRJNA267650	SAMN03199084																	
Colletotrichum karsti		YES			Boninense	strain: CkLH20	1095194	ASM1194739v2	GCF_011947395.1	RefSeq	From INSDC submitter	Scaffold	460.919	51.850.041	51,85	08/12/2020	13.328	PRJNA613862	SAMN14421089	50.028.615	50,03	1.821.426	1,82	3,51	13.843	10.927	633	93	27	46	347	94	45	2.181	341	2.674
Colletotrichum lentis		YES			Destructivum	isolate: CT-30	1585795	ASM338648v1	GCA_003386485.1	GenBank		Scaffold	50.944	56.100.083	56,10	14/08/2018		PRJNA407672	SAMN07660998	44.466.706	44,47	11.633.377	11,63	20,74	11.149	8.881	462	67	9	38	237	80	35	1.534	277	2.153
Colletotrichum lindemuthianum					Orbiculare	strain: 83.501	290576	ASM169301v2	GCA_001693015.2	GenBank		Scaffold	100.419	97.411.422		04/02/2017		PRJNA325493	SAMN05235603																	
Colletotrichum lindemuthianum		YES			Orbiculare	strain: 89 A2 2-3	290576	ASM169302v2	GCA_001693025.2	GenBank		Scaffold	134.950	99.166.722	99,17	04/02/2017		PRJNA325493	SAMN05235602	44.485.097	44,49	54.681.625	54,68	55,14	11.632	9.289	498	71	13	40	259	86	37	1.677	335	2.250
Colletotrichum liriopes		YES			Spaethianum	strain: A2	708192	ASM1583246v1	GCA_015832465.1	GenBank		Contig	288.433	53.087.791	53,09	08/12/2020		PRJNA669110	SAMN16434550	49.636.758	49,64	3.451.033	3,45	6,5	12.502	10.067	594	88	22	51	314	91	42	1.951	270	2.455
Colletotrichum musae		NO, receive none result in gene prediction			Gloeosporioides	strain: GM20	5464	cmusae1.0	GCA_002814275.1	GenBank		Contig	7.105	49.118.800		08/12/2017		PRJNA407219	SAMN07638925																	
Colletotrichum musicola		YES			Orchidearum	strain: LFN0074	2175873	CMUS01	GCA_014235935.1	GenBank	From INSDC submitter	Scaffold	41.073	52.725.698	52,73	18/08/2020	16.826	PRJNA577394	SAMN13025166	48.404.889	48,40	4.320.809	4,32	8,19	13.794	10.823	599	84	20	45	322	95	49	2.250	403	2.625
Colletotrichum nymphaeae		YES		YES	Acutatum	strain: SA-01	1460502	CNYM01	GCA_001563115.1	GenBank	From INSDC submitter	Scaffold	75.338	49.956.273	49,96	17/02/2016	14.404	PRJNA237763	SAMN02639527	49.058.676	49,06	897.597	0,90	1,8	13.059	10.474	589	86	24	49	319	89	40	2.030	359	2.526
Colletotrichum nymphaeae					Acutatum	strain: KY613	306554	ASM1470508v1	GCA_014705085.1	GenBank		Scaffold	39.463	50.577.973		22/09/2020		PRJNA625663	SAMN14604529																	
Colletotrichum nymphaeae					Acutatum	strain: KY567	306554	ASM1470509v1	GCA_014705095.1	GenBank		Scaffold	39.466	51.509.711		22/09/2020		PRJNA625663	SAMN14604528																	
Colletotrichum nymphaeae					Acutatum	strain: KY745	306554	ASM1470512v1	GCA_014705125.1	GenBank		Scaffold	32.274	50.509.097		22/09/2020		PRJNA625663	SAMN14604532																	
Colletotrichum nymphaeae					Acutatum	strain: KY563	306554	ASM1470515v1	GCA_014705155.1	GenBank		Scaffold	44.307	50.391.861		22/09/2020		PRJNA625663	SAMN14604527																	
Colletotrichum nymphaeae					Acutatum	strain: HC646	306554	ASM1470545v1	GCA_014705455.1	GenBank		Scaffold	42.596	51.255.053		22/09/2020		PRJNA625663	SAMN14604512																	
Colletotrichum orbiculare		YES		YES	Orbiculare	strain: 104-T, MAFF 240422	1213857	KSG_Corb_v2	GCA_000350065.2	GenBank	From INSDC submitter	Scaffold	50.717	89.748.316	89,75	22/03/2019	13.253	PRJNA171217	SAMN02981452	47.560.987	47,56	42.187.329	42,19	47,01	12.398	9.913	545	74	19	40	288	91	48	1.892	416	2.399
Colletotrichum orchidophilum		YES		YES	singleton	strain: IMI 309357	1209926	CORC01	GCF_001831195.1	RefSeq	From INSDC submitter	Scaffold	284.473	48.556.462	48,56	21/10/2016	14.453	PRJNA342923	SAMN05771038	45.419.573	45,42	3.136.889	3,14	6,46	11.348	9.263	458	64	15	37	238	83	31	1.679	217	2.230
Colletotrichum plurivorum		YES			Orchidearum	strain: LFN00145	2175906	CPLU01	GCA_014235945.1	GenBank	From INSDC submitter	Scaffold	112.734	49.703.650	49,70	18/08/2020	16.153	PRJNA577396	SAMN13025176	48.234.929	48,23	1.468.721	1,47	2,95	13.564	10.685	592	85	22	46	313	96	48	2.237	392	2.629
Colletotrichum salicis		YES		YES	Acutatum	strain: CBS 607.94	1209931	CSAL01	GCA_001563125.1	GenBank	From INSDC submitter	Scaffold	25.648	48.373.413	48,37	17/02/2016	13.783	PRJNA238477	SAMN02644731	47.288.667	47,29	1.084.746	1,08	2,24	12.167	9.923	537	81	18	41	281	87	39	1.831	294	2.392
Colletotrichum sansevieriae		YES			Agaves	strain: Sa-1-2	328473	ASM274977v1	GCA_002749775.1	GenBank		Contig	15.119	51.201.343	51,20	03/11/2017		PRJNA391063	SAMN07267235	47.149.126	47,15	4.052.217	4,05	7,91	11.982	9.540	469	81	12	35	230	84	29	1.593	248	2.200
Colletotrichum scovillei		YES			Acutatum	strain: TJNH1	1209932	ASM1107515v1	GCA_011075155.1	GenBank	From INSDC submitter	Contig	4.871.440	52.001.227	52,00	09/03/2020	13.459	PRJNA605574	SAMN14073982	49.613.499	49,61	2.387.728	2,39	4,59	12.612	10.218	590	87	26	49	319	89	40	2.021	329	2.511
Colletotrichum shisoi		YES			Destructivum	strain: PG-2018a	2078593	ASM678308v1	GCA_006783085.1	GenBank	From INSDC submitter	Scaffold	8.230	69.667.657	69,67	09/07/2019	11.848	PRJNA431477	SAMN08389744	44.094.361	44,09	25.573.296	25,57	36,71	11.957	9.530	456	60	10	38	226	85	39	1.633	287	2.239
Colletotrichum siamense		YES	ex-type		Gloeosporioides	isolate: ICMP 18578	690259	ASM852028v1	GCA_008520285.1	GenBank		Scaffold	734.081	55.961.623	55,96	18/09/2019		PRJNA504379	SAMN10390762	54.136.933	54,14	1.824.690	1,82	3,26	14.062	11.175	625	95	25	46	344	91	42	2.263	396	2.719
Colletotrichum siamense					Gloeosporioides	strain: COLG-38	690259	ASM1142637v1	GCA_011426375.1	GenBank		Scaffold	270.039	55.426.472		18/03/2020		PRJNA554995	SAMN12924920																	
Colletotrichum siamense					Gloeosporioides	strain: COLG-34	690259	ASM1142638v1	GCA_011426385.1	GenBank		Scaffold	91.764	50.611.973		18/03/2020		PRJNA554995	SAMN12924919																	
Colletotrichum siamense					Gloeosporioides	strain: COLG-50	690259	ASM1142809v1	GCA_011428095.1	GenBank		Scaffold	16.936	54.084.473		18/03/2020		PRJNA554995	SAMN12924922																	
Colletotrichum siamense					Gloeosporioides	strain: COLG-44	690259	ASM1142811v1	GCA_011428115.1	GenBank		Scaffold	17.122	55.623.133		18/03/2020		PRJNA554995	SAMN12924921																	
Colletotrichum siamense					Gloeosporioides	strain: COLG-90	690259	ASM1144511v1	GCA_011445115.1	GenBank		Scaffold	49.549	55.892.736		19/03/2020		PRJNA554995	SAMN12924924																	
Colletotrichum siamense					Gloeosporioides	strain: CsLH17	690259	ASM1194746v1	GCA_011947465.1	GenBank		Contig	441.266	60.116.880		03/04/2020		PRJNA613862	SAMN14421086																	
Colletotrichum siamense					Gloeosporioides	strain: CAD2	690259	ASM1320174v1	GCA_013201745.1	GenBank	From INSDC submitter	Scaffold	493.461	58.148.672		01/06/2020	15.044	PRJNA476648	SAMN09531626																	
Colletotrichum siamense					Gloeosporioides	strain: CAD5	690259	ASM1320175v1	GCA_013201755.1	GenBank	From INSDC submitter	Scaffold	536.909	57.642.425		01/06/2020	15.097	PRJNA476648	SAMN09531628																	
Colletotrichum siamense					Gloeosporioides	strain: CAD4	690259	ASM1320179v1	GCA_013201795.1	GenBank	From INSDC submitter	Scaffold	572.163	58.153.656		01/06/2020	15.056	PRJNA476648	SAMN09531627																	
Colletotrichum siamense					Gloeosporioides	strain: CAD1	690259	ASM1320186v1	GCA_013201865.1	GenBank	From INSDC submitter	Scaffold	603.962	58.399.603		01/06/2020	15.120	PRJNA476648	SAMN09531625																	
Colletotrichum siamense					Gloeosporioides	strain: Cg363	690259	ASM1339019v1	GCF_013390195.1	RefSeq	From INSDC submitter	Contig	5.441.060	62.936.415		06/07/2020	15.190	PRJNA476648	SAMN09531620																	
Colletotrichum siamense					Gloeosporioides	strain: KY748	690259	ASM1470505v1	GCA_014705055.1	GenBank		Scaffold	44.229	57.077.230		22/09/2020		PRJNA625663	SAMN14604533																	
Colletotrichum siamense					Gloeosporioides	strain: KY687	690259	ASM1470510v1	GCA_014705105.1	GenBank		Scaffold	61.874	57.441.683		22/09/2020		PRJNA625663	SAMN14604531																	
Colletotrichum siamense					Gloeosporioides	strain: KY777	690259	ASM1470519v1	GCA_014705195.1	GenBank		Scaffold	57.396	57.710.956		22/09/2020		PRJNA625663	SAMN14604525																	
Colletotrichum siamense					Gloeosporioides	strain: KY8	690259	ASM1470534v1	GCA_014705345.1	GenBank		Scaffold	45.768	57.566.763		22/09/2020		PRJNA625663	SAMN14604518																	
Colletotrichum siamense					Gloeosporioides	strain: KY540	690259	ASM1470538v1	GCA_014705385.1	GenBank		Scaffold	37.220	58.415.579		22/09/2020		PRJNA625663	SAMN14604516																	
Colletotrichum siamense					Gloeosporioides	strain: KY254	690259	ASM1470540v1	GCA_014705405.1	GenBank		Scaffold	40.575	58.481.968		22/09/2020		PRJNA625663	SAMN14604515																	
Colletotrichum siamense					Gloeosporioides	strain: KY146	690259	ASM1470543v1	GCA_014705435.1	GenBank		Scaffold	36.516	58.125.311		22/09/2020		PRJNA625663	SAMN14604513																	
Colletotrichum siamense		YES			Gloeosporioides	strain: HBCG01	690259	ASM1470634v1	GCA_014706345.1	GenBank		Contig	4.579.047	58.357.740	58,36	23/09/2020		PRJNA597657	SAMN13679468	56.327.924	56,33	2.029.816	2,03	3,48	14.447	11.416	636	96	27	48	350	93	44	2.471	457	2.863
Colletotrichum sidae		YES			Orbiculare	strain: CBS 518.97	1347389	ASM436793v1	GCA_004367935.1	GenBank	From INSDC submitter	Scaffold	36.815	86.827.816	86,83	22/03/2019	12.442	PRJNA445190	SAMN08770262	46.643.389	46,64	40.184.427	40,18	46,28	12.556	10.013	539	74	18	42	280	91	47	1.889	406	2.410
Colletotrichum simmondsii		YES		YES	Acutatum	strain: CBS 122122	703756	CSIM01	GCA_001563135.1	GenBank	From INSDC submitter	Scaffold	55.252	50.474.234	50,47	17/02/2016	13.884	PRJNA239224	SAMN02650484	48.699.721	48,70	1.774.513	1,77	3,52	12.283	9.983	588	84	22	49	325	86	39	1.989	314	2.468
Colletotrichum sojae		YES			Orchidearum	strain: LFN0009	2175907	CSOJ01	GCA_014235955.1	GenBank	From INSDC submitter	Scaffold	93.216	49.351.125	49,35	18/08/2020	16.124	PRJNA577398	SAMN13025178	47.814.398	47,81	1.536.727	1,54	3,11	13.508	10.610	586	84	18	48	308	95	47	2.190	380	2.575
Colletotrichum sp.						strain: JS-367	1938904	ASM312270v1	GCA_003122705.1	GenBank		Scaffold	8.071.359	87.196.530		14/05/2018		PRJNA368787	SAMN06272963																	
Colletotrichum sp.						strain: COLG31	2596971	ASM980099v1	GCA_009800995.1	GenBank		Scaffold	162.796	53.760.195		27/12/2019		PRJNA554995	SAMN12288446																	
Colletotrichum sp.						strain: COLG25	2596970	ASM980109v1	GCA_009801095.1	GenBank		Scaffold	714.863	56.915.549		27/12/2019		PRJNA554995	SAMN12288445																	
Colletotrichum sp.						strain: HC278	2776170	ASM1470549v1	GCA_014705495.1	GenBank		Scaffold	5.545	53.185.075		22/09/2020		PRJNA625663	SAMN14604508																	
Colletotrichum sp.						strain: HC292	2776171	ASM1470552v1	GCA_014705525.1	GenBank		Scaffold	18.742	54.637.437		22/09/2020		PRJNA625663	SAMN14604509																	
Colletotrichum spinosum		YES			Orbiculare	strain: CBS 515.97	1347390	ASM436682v1	GCA_004366825.1	GenBank	From INSDC submitter	Scaffold	56.120	82.734.851	82,73	22/03/2019	12.540	PRJNA445190	SAMN08770268	46.248.955	46,25	36.485.896	36,49	44,1	12.469	9.951	544	75	20	41	284	91	48	1.889	422	2.410
Colletotrichum sublineola				YES	Graminicola	strain: TX430BB	1173701	ASM69613v1	GCA_000696135.1	GenBank	From INSDC submitter	Scaffold	13.516	46.755.813		27/05/2014	12.699	PRJNA246670	SAMN02769489																	
Colletotrichum sublineola		YES			Graminicola	strain: CgSl1	1173701	ASM195119v1	GCA_001951195.1	GenBank		Scaffold	44.622	64.848.627	64,85	13/01/2017		PRJNA356071	SAMN06102611	48.704.751	48,70	16.143.876	16,14	24,89	11.585	9.189	471	67	19	42	253	83	18	1.671	261	2.228
Colletotrichum tanaceti		YES			Destructivum	isolate: BRIP 57314	1306861	ASM535089v1	GCA_005350895.1	GenBank	From INSDC submitter	Scaffold	36.517	57.912.474	57,91	14/05/2019	12.172	PRJNA421029	SAMN08130444	44.004.383	44,00	13.908.091	13,91	24,02	11.145	8.875	454	60	11	36	234	77	40	1.518	236	2.140
Colletotrichum theobromicola		YES			Gloeosporioides	strain: CF75	912112	ASM1470504v1	GCA_014705045.1	GenBank		Scaffold	59.058	55.881.512	55,88	22/09/2020		PRJNA625663	SAMN14604534	54.199.877	54,20	1.681.635	1,68	3,01	13.787	10.963	607	89	22	46	333	90	43	2.197	409	2.667
Colletotrichum theobromicola					Gloeosporioides	strain: KY152	912112	ASM1470541v1	GCA_014705415.1	GenBank		Scaffold	15.820	56.531.194		22/09/2020		PRJNA625663	SAMN14604514																	
Colletotrichum tofieldiae				YES	Spaethianum	strain: CBS 168.49	708197	Ct168.49v1	GCA_001618705.1	GenBank		Scaffold	284.889	52.962.735		12/04/2016		PRJNA286723	SAMN03769595																	
Colletotrichum tofieldiae		YES			Spaethianum	strain: CBS 127615	708197	Ct127615v1	GCA_001618715.1	GenBank		Scaffold	372.643	52.719.552	52,72	12/04/2016		PRJNA286721	SAMN03769593	50.076.312	50,08	2.643.240	2,64	5,01	11.836	9.658	577	82	20	47	306	92	44	1.796	268	2.330
Colletotrichum tofieldiae					Spaethianum	strain: CBS 495.85	708197	Ct495.85v1	GCA_001618725.1	GenBank		Scaffold	245.346	53.491.261		12/04/2016		PRJNA286757	SAMN03769835																	
Colletotrichum tofieldiae					Spaethianum	strain: CBS 130851	708197	Ct130851v1	GCA_001618735.1	GenBank		Scaffold	364.528	53.216.229		12/04/2016		PRJNA286720	SAMN03769592																	
Colletotrichum tofieldiae				YES	Spaethianum	strain: 0861	708197	Ct0861v1	GCA_001625265.1	GenBank	From INSDC submitter	Scaffold	209.340	52.836.184		19/04/2016	12.501	PRJNA286731	SAMN03769761																	
Colletotrichum trifolii		YES			Orbiculare	strain: 543-2	5466	KSG_Cotri_v1	GCA_004367215.1	GenBank	From INSDC submitter	Scaffold	26.965	109.659.959	109,66	22/03/2019	12.292	PRJNA506861	SAMN10475057	51.222.449	51,22	58.437.510	58,44	53,29	12.344	9.874	525	73	16	40	272	90	43	1.873	398	2.382
Colletotrichum tropicale		YES			Gloeosporioides	strain: CgS9275	912113	ASM1320178v1	GCA_013201785.1	GenBank	From INSDC submitter	Scaffold	343.236	55.848.179	55,85	01/06/2020	14.794	PRJNA476648	SAMN09531630	53.243.472	53,24	2.604.707	2,60	4,66	13.951	11.129	630	94	25	47	348	92	43	2.255	376	2.703
Colletotrichum truncatum					Truncatum	strain: MTCC 3414	5467	ASM263245v2	GCA_002632455.2	GenBank		Scaffold	29.525	57.912.832		09/03/2018		PRJNA380187	SAMN06629161																	
Colletotrichum truncatum					Truncatum	isolate: KLC.C5	5467	ASM813116v1	GCA_008131165.1	GenBank		Scaffold	49.640	59.632.073		30/08/2019		PRJNA531610	SAMN11371088																	
Colletotrichum truncatum					Truncatum	strain: KLC.C- 4	5467	ASM1194727v1	GCA_011947275.1	GenBank		Scaffold	58.895	44.146.251		03/04/2020		PRJNA594831	SAMN13531420																	
Colletotrichum truncatum		YES			Truncatum	strain: CMES1059	5467	CTRU02	GCF_014235925.1	RefSeq	From INSDC submitter	Contig	831.709	56.102.516	56,10	18/08/2020	15.888	PRJNA563581	SAMN12683944	50.708.654	50,71	5.393.862	5,39	9,61	13.236	10.589	658	93	25	49	354	100	57	2.128	366	2.567
Colletotrichum viniferum		YES			Gloeosporioides	strain: CGW01	1131913	ASM1320176v1	GCA_013201765.1	GenBank	From INSDC submitter	Scaffold	107.975	68.452.207	68,45	01/06/2020	14.534	PRJNA476648	SAMN09531629	55.531.524	55,53	12.920.683	12,92	18,88	14.066	11.017	589	90	20	45	317	90	41	2.144	380	2.655

Table S4 *Colletotrichum* species for which whole-genome sequences are available, retrieved from NCBI and JGI, or generated in the current study (Part B: JGI).

Species	Project Name	Accessible in NCBI	Principal Investigator	Product Name	Status	Status Date	User Program	Proposal	JGI Project Id	Taxonomy ID	NCBI Project Id	SRA	Sequencing Project ID	Analysis project ID
Colletotrichum abscissum	Colletotrichum abscissum IMI 504890				Not Applicable					759383				
Colletotrichum acutatum	Colletotrichum acutatum CBS 112729 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	Complete	27/04/2017	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064281	27357	334455	SRP066540	1064372	1064282
Colletotrichum acutatum	Colletotrichum acutatum CBS 112990 Annotated Standard Draft		Jo Anne Crouch joanne.crouch@ars.usda.gov	Fungal Annotated Standard Draft	Complete	27/04/2017	CSP 2012	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1060989	27357	334354 444440	SRP066397 SRP173779	1061001 1061001	1060989 1060990 1147086 1060991
Colletotrichum acutatum	Colletotrichum acutatum CBS 126586 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	Complete	27/04/2017	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064278	27357	334355	SRP066539	1064373	1064280
Colletotrichum acutatum	Colletotrichum acutatum CBS 129955 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	Complete	27/04/2017	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064275	27357	333311	SRP066536	1064369	1064276
Colletotrichum acutatum	Colletotrichum acutatum CBS 144.29 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	Complete	27/04/2017	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064273	27357	333312	SRP066533	1064368	1064274
Colletotrichum acutatum	Colletotrichum acutatum RB110 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	Complete	27/04/2017	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064283	27357	333313	SRP066538	1064373	1064284
Colletotrichum acutatum	Colletotrichum acutatum RB117 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	Complete	27/04/2017	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064277	27357	333314	SRP066537	1064370	1064278
Colletotrichum brithsamense	Colletotrichum brisbanense CBS 292.67 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	03/11/2016	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064309	1209914	333315	SRP066555	1064386	1064310
Colletotrichum caudatum	Colletotrichum caudatum CBS 131002 Annotated Standard Draft		Jo Anne Crouch joanne.crouch@ars.usda.gov	Fungal Annotated Standard Draft	Complete	07/02/2013	CSP 2012	Genomic signatures of pathogenicity and endophytism in five species of grass-associated Colletotrichum impacting the health and production of bioenergy feedstocks, agriculture and the environment	1006148	5460	262368 262373	SRP096027 SRP096075	1006149 1006150	1006149
Colletotrichum cereale	Colletotrichum cereale CA-SH29 Resequencing		Jo Anne Crouch joanne.crouch@ars.usda.gov	Fungal Resequencing, Isolate	Complete	31/01/2017	CSP 2012	Genomic signatures of pathogenicity and endophytism in five species of grass-associated Colletotrichum impacting the health and production of bioenergy feedstocks, agriculture and the environment	1006177	343994	262377	SRP092685	1006178	1006179
Colletotrichum cereale	Colletotrichum cereale CBS 129642 Annotated Standard Draft		Jo Anne Crouch joanne.crouch@ars.usda.gov	Fungal Annotated Standard Draft	Complete	25/01/2017	CSP 2012	Genomic signatures of pathogenicity and endophytism in five species of grass-associated Colletotrichum impacting the health and production of bioenergy feedstocks, agriculture and the environment	1043096	343994	403325 262440	SRP117842 SRP092693	1043098 1043097	1043101 1043100 1043099
Colletotrichum cereale	Colletotrichum cereale KS-F15-W16A Resequencing		Jo Anne Crouch joanne.crouch@ars.usda.gov	Fungal Resequencing, Isolate	Complete	31/01/2017	CSP 2012	Genomic signatures of pathogenicity and endophytism in five species of grass-associated Colletotrichum impacting the health and production of bioenergy feedstocks, agriculture and the environment	1006183	343994	262376	SRP092688	1006184	1006185
Colletotrichum cereale	Colletotrichum cereale NI-DGCA25 Resequencing		Jo Anne Crouch joanne.crouch@ars.usda.gov	Fungal Resequencing, Isolate	Complete	31/01/2017	CSP 2012	Genomic signatures of pathogenicity and endophytism in five species of grass-associated Colletotrichum impacting the health and production of bioenergy feedstocks, agriculture and the environment	1006189	343994	262375	SRP092725	1006190	1006191
Colletotrichum chlorophyti	Colletotrichum chlorophyti NTL11	YES			Not Applicable					768187				
Colletotrichum chrysanthemi	Colletotrichum chrysanthemi CBS 126519 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064323	1145235	333316	SRP066559	1064393	1064324
Colletotrichum chrysanthemi	Colletotrichum chrysanthemi IMI 085623 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064325	1145235	333317	SRP066560	1064394	1064326
Colletotrichum costaricaense	Colletotrichum costaricaense IMI 309622				Not Applicable					1209916				
Colletotrichum costaricensis	Colletotrichum costaricense CBS 211.78 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064289	1209916	333309	SRP066564	1064376	1064290
Colletotrichum costaricense	Colletotrichum costaricense CBS 118994 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064281	1209916	333308	SRP066557	1064374	1064286
Colletotrichum cremoelluae	Colletotrichum cremoelluae CBS 129841 Annotated Standard Draft		Jo Anne Crouch joanne.crouch@ars.usda.gov	Fungal Annotated Standard Draft	Complete	07/02/2013	CSP 2012	Genomic signatures of pathogenicity and endophytism in five species of grass-associated Colletotrichum impacting the health and production of bioenergy feedstocks, agriculture and the environment	1043108	1173702	262412 262442	SRP096442 SRP092709	1043110 1043109	1043113
Colletotrichum falcatum	Colletotrichum falcatum MAFF 106170 Annotated Standard Draft		Jo Anne Crouch joanne.crouch@ars.usda.gov	Fungal Annotated Standard Draft	Complete	07/02/2013	CSP 2012	Genomic signatures of pathogenicity and endophytism in five species of grass-associated Colletotrichum impacting the health and production of bioenergy feedstocks, agriculture and the environment	1043114	129114	262215 262221	SRP096443 SRP092712	1043116 1043115	1043119
Colletotrichum fioriniae	Colletotrichum fioriniae ATCC MYA-662 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064265	710243	333319	SRP066531	1064384	1064266
Colletotrichum fioriniae	Colletotrichum fioriniae ATCC MYA-663 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064271	710243	333320	SRP066534	1064367	1064272
Colletotrichum fioriniae	Colletotrichum fioriniae CBS 128498 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064259	710243	333321	SRP066528	1064361	1064260
Colletotrichum fioriniae	Colletotrichum fioriniae CBS 129948 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	03/11/2016	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064269	710243	333324	SRP066535	1064366	1064270
Colletotrichum fioriniae	Colletotrichum fioriniae CBS 293.67 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064267	710243	333322	SRP066532	1064365	1064268
Colletotrichum fioriniae	Colletotrichum fioriniae CBS 797.72 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064257	710243	333323	SRP066519	1064360	1064258
Colletotrichum fioriniae	Colletotrichum fioriniae IMI 345578 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064261	710243	333325	SRP066529	1064362	1064262
Colletotrichum fioriniae	Colletotrichum fioriniae IMI 348499 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064263	710243	333326	SRP066530	1064363	1064264
Colletotrichum fioriniae	Colletotrichum fioriniae PJ7 Annotated Standard Draft	YES	Michael Thon mthon@uasl.es	Fungal Annotated Standard Draft	Complete	23/03/2016	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1063112	710243	372827 346883	SRP106425	1063123 1063122	1274149 1063314 1063313 1063315
Colletotrichum gloeosporioides1	Colletotrichum gloeosporioides Cg-14	YES	Manoj Pillay mpillay@lbl.gov		Not Applicable					1237896	176412			
Colletotrichum godetiae	Colletotrichum godetiae CBS 126527 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064243	1209918	333327	SRP066512	1064353	1064244
Colletotrichum godetiae	Colletotrichum godetiae CBS 129951 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064255	1209918	333329	SRP066523	1064358	1064256
Colletotrichum godetiae	Colletotrichum godetiae CBS 193.32 Annotated Standard Draft		Michael Thon mthon@uasl.es	Fungal Annotated Standard Draft	Complete	21/04/2016	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1060984	1209918	333328 372825	SRP066393 SRP106428	1060998 1060999	1060986 1060985 1060987
Colletotrichum godetiae	Colletotrichum godetiae IMI 367466 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064253	1209918	333330	SRP066524	1064354	1064254
Colletotrichum godetiae	Colletotrichum godetiae RB006 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064247	1209918	333331	SRP066517	1064357	1064248
Colletotrichum godetiae	Colletotrichum godetiae RB008 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064248	1209918	333332	SRP066522	1064356	1064246
Colletotrichum godetiae	Colletotrichum godetiae RB010 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064247	1209918	333333	SRP066510	1064355	1064248
Colletotrichum godetiae	Colletotrichum godetiae RB093 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064241	1209918	333334	SRP066518	1064352	1064242
Colletotrichum godetiae	Colletotrichum godetiae RB168 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064251	1209918	333335	SRP066517	1064357	1064252
Colletotrichum graminicola	Colletotrichum graminicola CBS 130834 Gene Expression Profiling		Michael Thon mthon@uasl.es	Fungal Transcriptions, Counting-Only	In Progress	25/08/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1074566	31870	408358 408359 408356 408357	SRP123416 SRP123408 SRP123409 SRP123410 SRP123411 SRP123412 SRP123413 SRP123414 SRP123415	1074572	1074567
Colletotrichum graminicola	Colletotrichum graminicola M1.001	YES			Not Applicable					645133	37879			
Colletotrichum guajavae	Colletotrichum guajavae IMI 350839 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064319	1209919	333336	SRP066545	1064391	1064320
Colletotrichum higginsianum	Colletotrichum higginsianum IMI 349063 Gene Expression Profiling	YES	Michael Thon mthon@uasl.es	Fungal Transcriptions, Counting-Only	In Progress	25/08/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1074568	80884	408369 408367 408368 408361	SRP123418 SRP123419 SRP123420 SRP123421 SRP123422 SRP123423 SRP123424 SRP123425 SRP123426	1074573	1074569
Colletotrichum higginsianum	Colletotrichum higginsianum non-segmented dsRNA virus 1 (ChNRV1)		Manoj Pillay mpillay@lbl.gov		Not Applicable					1565088	301019			
Colletotrichum incanum	Colletotrichum incanum MAFF 238712	YES			Not Applicable					1573173				
Colletotrichum johnstonii	Colletotrichum johnstonii IMI 357027 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064239	1209921	333337	SRP066511	1064351	1064240
Colletotrichum kinghornii	Colletotrichum kinghornii CBS 198.35 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	03/11/2016	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064225	1209922	333338	SRP066509	1064344	1064226
Colletotrichum lentisphilum	Colletotrichum lentisphilum CBS 115989 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064307	1209923	333339	SRP066552	1064385	1064308
Colletotrichum lupini	Colletotrichum lupini CBS 109225 Annotated Standard Draft		Michael Thon mthon@uasl.es	Fungal Annotated Standard Draft	Complete	04/05/2016	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1060992	145971	333340 372826	SRP066381 SRP106426	1061002 1061003	1060993 1060994 1060995
Colletotrichum lupini	Colletotrichum lupini IMI 150308 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064299	145971	333341	SRP066543	1064383	1064300
Colletotrichum lupini	Colletotrichum lupini IMI 504893				Not Applicable					145971				
Colletotrichum lupini	Colletotrichum lupini RB120 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064301	145971	333342	SRP066550	1064382	1064302
Colletotrichum lupini	Colletotrichum lupini RB121 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064305	145971	333343	SRP066547	1064384	1064306
Colletotrichum lupini	Colletotrichum lupini RB221 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064303	145971	333344	SRP066558	1064383	1064304
Colletotrichum melonis	Colletotrichum melonis CBS 134738				Not Applicable					1209925				
Colletotrichum navitas	Colletotrichum navitas CBS 125086 Annotated Standard Draft		Jo Anne Crouch joanne.crouch@ars.usda.gov	Fungal Annotated Standard Draft	Complete	19/04/2017	CSP 2012	Genomic signatures of pathogenicity and endophytism in five species of grass-associated Colletotrichum impacting the health and production of bioenergy feedstocks, agriculture and the environment	1006160	681940	403313 262371	SRP117846 SRP108159	1006162 1006161	1070570 1070571 1006163
Colletotrichum navitas	Colletotrichum navitas CN71 Resequencing		Jo Anne Crouch joanne.crouch@ars.usda.gov	Fungal Resequencing, Isolate	Complete	01/05/2017	CSP 2012	Genomic signatures of pathogenicity and endophytism in five species of grass-associated Colletotrichum impacting the health and production of bioenergy feedstocks, agriculture and the environment	1043120	681940	262411	SRP092703	1043122	1043122
Colletotrichum navitas	Colletotrichum navitas VF38 Resequencing		Jo Anne Crouch joanne.crouch@ars.usda.gov	Fungal Resequencing, Isolate	Complete	01/05/2017	CSP 2012	Genomic signatures of pathogenicity and endophytism in five species of grass-associated Colletotrichum impacting the health and production of bioenergy feedstocks, agriculture and the environment	1043123	681940	262220	SRP092705	1043124	1043125
Colletotrichum navitas	Colletotrichum navitas VF76 Resequencing		Jo Anne Crouch joanne.crouch@ars.usda.gov	Fungal Resequencing, Isolate	Complete	01/05/2017	CSP 2012	Genomic signatures of pathogenicity and endophytism in five species of grass-associated Colletotrichum impacting the health and production of bioenergy feedstocks, agriculture and the environment	1043126	681940	262224	SRP092706	1043127	1043128
Colletotrichum navitas	Colletotrichum navitas V547 Resequencing		Jo Anne Crouch joanne.crouch@ars.usda.gov	Fungal Resequencing, Isolate	Complete	01/05/2017	CSP 2012	Genomic signatures of pathogenicity and endophytism in five species of grass-associated Colletotrichum impacting the health and production of bioenergy feedstocks, agriculture and the environment	1043129	681940	262222	SRP092707	1043130	1043131
Colletotrichum nymphaeae	Colletotrichum nymphaeae CBS 515973 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064335	306554	333345	SRP066561	1064399	1064336
Colletotrichum nymphaeae	Colletotrichum nymphaeae CBS 129943 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064337	306554	333346	SRP066567	1064400	1064338
Colletotrichum nymphaeae	Colletotrichum nymphaeae CBS 526.77 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064331	306554	333347	SRP066549	1064397	1064332
Colletotrichum nymphaeae	Colletotrichum nymphaeae IMI 335544 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064327	306554	333348	SRP066559	1064395	1064328
Colletotrichum nymphaeae	Colletotrichum nymphaeae IMI 345027 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064339	306554	333349	SRP066565	1064401	1064340
Colletotrichum nymphaeae	Colletotrichum nymphaeae IMI 345910 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064333	306554	333350	SRP066551	1064398	1064334
Colletotrichum nymphaeae	Colletotrichum nymphaeae IMI 348160 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064341	306554	333351	SRP066566	1064402	1064342
Colletotrichum nymphaeae	Colletotrichum nymphaeae IMI 504889 Gene Expression Profiling		Michael Thon mthon@uasl.es	Fungal Transcriptions, Counting-Only	In Progress	25/08/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1074564	306554	408347 408348 408345 408346	SRP123470 SRP123471 SRP123472 SRP123473 SRP123474 SRP123466 SRP123467 SRP123468 SRP123469	1074571	1074565
Colletotrichum nymphaeae	Colletotrichum nymphaeae SA-01 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064329	306554	333352	SRP066553	1064389	1064330
Colletotrichum nymphaeae	Colletotrichum nymphaeae SA-01 Annotated Standard Draft	YES	Michael Thon mthon@uasl.es	Fungal Annotated Standard Draft	In Progress	09/06/2017	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1061326	306554	346878		1061333 1061330	1061329 1274147 1061327 1061328
Colletotrichum orbiculare	Colletotrichum orbiculare 104-T	YES			Not Applicable					5465				
Colletotrichum orchidophilum	Colletotrichum orchidophilum IMI 309357	YES			Not Applicable					1209926	342923			
Colletotrichum paranaense	Colletotrichum paranaense IMI 364185 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064291	1212762	333366	SRP066542	1064377	1064292
Colletotrichum paxtonii	Colletotrichum paxtonii IMI 165753 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064313	1209927	333353	SRP066541	1064388	1064314
Colletotrichum phormii	Colletotrichum phormii CBS 102054 Annotated Standard Draft		Michael Thon mthon@uasl.es	Fungal Annotated Standard Draft	Complete	28/07/2017	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1060980	359142	333354	SRP066398	1060992 1060996	1060982 1060981 1060983
Colletotrichum phormii	Colletotrichum phormii CBS 118194 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	03/11/2016	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064223	359142	333355	SRP066508	1064343	1064224
Colletotrichum phormii	Colletotrichum phormii CBS 118197 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	03/11/2016	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064229	359142	333356	SRP066505	1064346	1064230
Colletotrichum plurivorum	Colletotrichum plurivorum CBS 329.33 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	03/11/2016	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064227	1209930	333357	SRP066507	1064345	1064228
Colletotrichum salicis	Colletotrichum salicis CBS 130.97 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064231	1209931	333358	SRP066515	1064347	1064232
Colletotrichum salicis	Colletotrichum salicis CBS 607.94 Annotated Standard Draft	YES	Michael Thon mthon@uasl.es	Fungal Annotated Standard Draft	In Progress	09/06/2017	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1063116	1209931	346879		1063125 1063124	1063119 1063318 1274150 1063117
Colletotrichum salicis	Colletotrichum salicis RB095 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064237	1209931	333359	SRP066513	1064350	1064238
Colletotrichum salicis	Colletotrichum salicis RB098 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064233	1209931	333360	SRP066525	1064348	1064234
Colletotrichum salicis	Colletotrichum salicis RB129 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064235	1209931	333361	SRP066520	1064349	1064236
Colletotrichum simmondsii	Colletotrichum simmondsii CBS 122122 Annotated Standard Draft	YES	Michael Thon mthon@uasl.es	Fungal Annotated Standard Draft	In Progress	09/06/2017	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1063108	703756	346880		1063121 1063120	1274148 1063309 1063110 1063311
Colletotrichum simmondsii	Colletotrichum simmondsii IMI 313949 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064315	703756	333362	SRP066562	1064389	1064316
Colletotrichum simmondsii	Colletotrichum simmondsii IMI 349107 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064317	703756	333363	SRP066563	1064390	1064318
Colletotrichum starrii	Colletotrichum starrii IMI 364287 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064311	1209931	333364	SRP066564	1064387	1064312
Colletotrichum sublineola	Colletotrichum sublineola CBS 131301 Annotated Standard Draft		Jo Anne Crouch joanne.crouch@ars.usda.gov	Fungal Annotated Standard Draft	Complete	07/02/2013	CSP 2012	Genomic signatures of pathogenicity and endophytism in five species of grass-associated Colletotrichum impacting the health and production of bioenergy feedstocks, agriculture and the environment	1006164	1173701	262379 262370	SRP096076 SRP084629	1006166 1006165	1006166
Colletotrichum sublineola	Colletotrichum sublineola TX430BB	YES			Not Applicable					1173701				
Colletotrichum sublineola	Colletotrichum sublineola TX-8R-SIDA Resequencing		Jo Anne Crouch joanne.crouch@ars.usda.gov	Fungal Resequencing, Isolate	Complete	21/04/2016	CSP 2012	Genomic signatures of pathogenicity and endophytism in five species of grass-associated Colletotrichum impacting the health and production of bioenergy feedstocks, agriculture and the environment	1006210	1173701	262374	SRP092680	1006211	1006212
Colletotrichum tamarilloi	Colletotrichum tamarilloi CBS 129954 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064297	1209914	333370	SRP066562	1064380	1064298
Colletotrichum tamarilloi	Colletotrichum tamarilloi CBS 129955 Resequencing		Michael Thon mthon@uasl.es	Fungal Resequencing, Isolate	In Progress	02/11/2015	CSP 2015	Evolution and adaptation of carbohydrate utilization in the Colletotrichum acutatum species complex	1064295	1209914	333371	SRP066541	1064379	1064296
Colletotrichum tofieldiae	Colletotrichum tofieldiae 0861	YES			Not Applicable					768197				
Colletotrichum tofieldiae	Colletotrichum tofieldiae CBS 168.49	YES			Not Applicable					768197				
Colletotrichum trifolii	Colletotrichum trifolii MAFF 215875 Annotated Standard Draft		Jo Anne Crouch joanne.crouch@ars.usda.gov	Fungal Annotated Standard Draft	Complete	07/02/2013	CSP 2012	Genomic signatures of pathogenicity and endophytism in five species of grass-associated Colletotrichum impacting the health and production of bioenergy feedstocks, agriculture and the environment	1043138	1216348	262216 262217	SRP096446 SRP092710	1043140 1043139	1043143

Table S4 *Colletotrichum* species for which whole-genome sequences are available, retrieved from NCBI and JGI, or generated in the current study (Part C: this study).

Species	Species complex	Strain No.	Type	Lifestyle of this isolate	Bioproject	Biosample	Assembly Accession	Level	Contig	N50 (bp)	Size (bp)	Size (Mbp)	No-repeat (bp)	No-repeat (Mbp)	Repeat (bp)	Repeat (Mbp)	Repeat (%)	Gene count	No. of ann	CAZyme	AA	CBM	CE	GH	GT	PL	P450	Effector	Transporter
*C. araceae*arum	Orchidearum	LC1033, CGMCC 3.14982	ex-holotype	plant pathogen	NMDC10017886	NMDC20023467	NMDC60029080	Contig	1.307	624.834	51.487.301	51,49	48.910.230	48,91	2.577.071	2,58	5,01	13.617	10.645	603	88	21	45	323	99	48	2.257	401	2.641
*C. arecaceae*arum *sp. nov.*	singleton	LC13850, MH0003	ex-holotype	plant pathogen	NMDC10017886	NMDC20023468	NMDC60029081	Contig	2.606	96.192	44.368.422	44,37	39.220.504	39,22	5.147.918	5,15	11,6	10.406	8.508	446	57	17	38	247	80	19	1.503	191	2.086
C. bambusicola	Bambusicola	LC8469, M0288		plant pathogen	NMDC10017886	NMDC20023469	NMDC60029082	Contig	650	215.167	44.443.500	44,44	43.956.212	43,96	1.497.287	1,50	3,29	11.034	8.824	488	72	17	43	262	84	18	1.533	261	2.132
C. bicolorutum sp. nov.	Spathianium	LC13882, NN055229	ex-holotype	saprobe	NMDC10017886	NMDC20023470	NMDC60029083	Contig	703	234.257	46.811.801	46,81	46.042.652	46,04	769.149	0,77	1,64	11.615	9.533	539	81	18	47	285	85	35	1.740	253	2.315
C. brevisporum	Magnum	LC0600, BCC 38876	ex-holotype	endophyte	NMDC10017886	NMDC20023471	NMDC60029084	Contig	2.455	239.732	53.230.155	53,23	48.279.429	48,28	4.950.726	4,95	9,3	13.228	10.392	605	89	20	45	322	99	51	2.138	389	2.576
C. bromeliacearum sp. nov.	Boninense	LC0951	ex-holotype	plant pathogen	NMDC10017886	NMDC20023472	NMDC60029085	Contig	794	157.840	47.025.771	47,03	46.092.411	46,09	933.360	0,93	1,98	12.365	9.616	483	70	18	37	265	87	17	1.873	263	2.368
C. buxi sp. nov.	Dracaenophilum	LC13873, NN047139	ex-holotype	endophyte	NMDC10017886	NMDC20023473	NMDC60029086	Contig	1.888	290.870	45.438.540	45,44	43.473.144	43,47	1.965.396	1,97	4,33	11.848	9.373	474	68	18	32	247	87	34	1.642	266	2.220
C. camelliae-japonicae	Boninense	LC6416, CGMCC 3.18118	ex-holotype	plant pathogen	NMDC10017886	NMDC20023474	NMDC60029087	Contig	2.831	226.535	54.303.781	54,30	49.171.683	49,17	5.132.098	5,13	9,45	13.819	10.869	602	84	23	48	328	97	44	2.127	327	2.641
C. caudasporum	Caudatum	LC2311, CGMCC 3.15106	ex-holotype	endophyte	NMDC10017886	NMDC20023475	NMDC60029088	Contig	4.575	67.141	50.371.376	50,37	45.605.064	45,61	4.766.312	4,77	9,46	11.620	9.169	473	76	19	42	246	90	16	1.667	261	2.207
C. chamaedoreae sp. nov.	Boninense	LC13868, NN052885	ex-holotype	endophyte	NMDC10017886	NMDC20023476	NMDC60029089	Contig	14.892	30.776	60.149.886	60,15	47.016.168	47,02	13.133.718	13,13	21,83	13.078	10.239	526	74	17	40	276	90	37	1.835	293	2.424
C. crousii sp. nov.	Dracaenophilum	LC13858, MH0588	ex-holotype	plant pathogen	NMDC10017886	NMDC20023477	NMDC60029090	Contig	18.996	32.379	73.530.388	73,53	46.192.313	46,19	27.338.075	27,34	37,18	12.216	9.271	496	76	17	39	252	89	36	1.713	241	2.244
C. danxiashanense sp. nov.	Graminicola	LC13885, NN055218	ex-holotype	saprobe	NMDC10017886	NMDC20023478	NMDC60029091	Contig	4.227	90.095	48.722.175	48,72	45.352.678	45,35	3.369.497	3,37	6,92	11.578	9.113	451	66	12	38	243	82	15	1.646	263	2.206
C. diversisporum sp. nov.	singleton	LC13890, NN072578	ex-holotype	saprobe	NMDC10017886	NMDC20023479	NMDC60029092	Contig	1.972	103.783	46.508.435	46,51	45.196.295	45,20	1.312.105	1,31	2,82	13.257	10.406	572	83	21	44	299	92	46	2.048	385	2.521
C. diversum sp. nov.	Boninense	LC11292, CQ775	ex-holotype	plant pathogen	NMDC10017886	NMDC20023480	NMDC60029093	Contig	2.107	143.202	51.633.692	51,63	49.129.423	49,13	2.504.269	2,50	4,85	13.670	10.783	596	91	23	48	316	91	46	2.146	328	2.653
C. dolichoconidiophori sp. nov.	Graminicola	LC13889, NN054966	ex-holotype	plant pathogen	NMDC10017886	NMDC20023481	NMDC60029094	Contig	4.488	84.667	51.165.321	51,17	44.075.117	44,08	7.090.204	7,09	13,86	11.384	9.164	489	69	13	38	265	86	21	1.632	260	2.187
C. endophytum	Graminicola	LC2338, CGMCC 3.15108	ex-holotype	endophyte	NMDC10017886	NMDC20023482	NMDC60029095	Contig	2.770	103.016	46.595.259	46,60	43.699.028	43,70	2.896.231	2,90	6,22	11.198	8.986	446	67	16	40	232	88	17	1.614	244	2.189
C. excelsum-altitudum	Dracaenophilum	LC2344, CGMCC 3.15130	ex-holotype	endophyte	NMDC10017886	NMDC20023483	NMDC60029096	Contig	3.056	117.219	54.543.671	54,54	51.979.092	51,98	2.564.579	2,56	4,7	14.085	10.940	590	88	22	47	312	95	48	2.250	341	2.669
C. gigasporum	Gigasporum	LC1023		plant pathogen	NMDC10017886	NMDC20023484	NMDC60029097	Contig	597	480.264	54.657.154	54,66	51.932.379	51,93	2.724.775	2,72	4,99	14.841	11.621	644	92	30	60	346	101	43	2.498	371	2.816
C. guizhouensis	Spathianium	LC2305, CGMCC 3.15112	ex-holotype	endophyte	NMDC10017886	NMDC20023485	NMDC60029098	Contig	733	438.744	48.027.017	48,03	46.148.697	46,15	1.878.320	1,88	3,91	11.137	9.208	544	80	22	50	291	87	35	1.661	224	2.220
C. hemerocallidis	Dematium	LC0560, CGMCC 3.14971	ex-holotype	saprobe	NMDC10017886	NMDC20023486	NMDC60029099	Contig	11.949	76.745	57.726.429	57,73	51.054.651	51,05	6.671.778	6,67	11,56	14.774	11.480	554	71	23	51	288	96	44	1.947	320	2.617
C. iris sp. nov.	Spathianium	LC3697	ex-holotype	plant pathogen	NMDC10017886	NMDC20023487	NMDC60029100	Contig	1.643	222.961	52.209.906	52,21	50.549.629	50,55	1.660.277	1,66	3,18	12.162	9.819	583	87	21	49	304	93	43	1.872	275	2.411
C. karsti	Boninense	LC0042, CGMCC 3.14194	ex-holotype	plant pathogen	NMDC10017886	NMDC20023488	NMDC60029101	Contig	970	481.094	52.015.550	52,02	50.542.587	50,54	1.472.963	1,47	2,83	13.749	10.865	628	93	26	48	343	98	45	2.203	336	2.681
C. liaoningense	Magnum	LC6228, CGMCC 3.17616	ex-holotype of *C. liaoningense*	plant pathogen	NMDC10017886	NMDC20023489	NMDC60029102	Contig	4.304	91.623	57.960.550	57,96	49.477.869	49,48	8.482.681	8,48	14,64	13.693	10.608	588	85	19	45	307	101	49	2.138	415	2.559
C. monsterae sp. nov.	Orchidearum	LC13871, NN055214	ex-holotype	plant pathogen	NMDC10017886	NMDC20023490	NMDC60029103	Contig	2.935	177.943	45.720.969	45,72	42.851.016	42,85	2.869.953	2,87	6,28	11.624	9.203	473	66	11	35	245	85	36	1.684	236	2.207
C. multiseptatum sp. nov.	Graminicola	LC13886, NN055357	ex-holotype	saprobe	NMDC10017886	NMDC20023491	NMDC60029104	Contig	6.732	78.521	49.720.048	49,72	43.780.729	43,78	5.939.271	5,94	11,95	11.536	9.183	445	67	15	32	241	79	17	1.684	251	2.251
C. nageiae sp. nov.	singleton	LC13866, NN004492	ex-holotype	endophyte	NMDC10017886	NMDC20023492	NMDC60029105	Contig	2.101	151.943	50.668.649	50,67	48.491.148	48,49	2.177.501	2,18	4,3	12.926	10.373	575	86	21	48	306	90	40	2.073	356	2.563
C. obovoides sp. nov.	singleton	LC6085	ex-holotype	plant pathogen	NMDC10017886	NMDC20023493	NMDC60029106	Contig	9.917	74.464	49.289.538	49,29	42.055.391	42,06	7.234.147	7,23	14,68	11.069	8.923	502	70	13	40	269	87	29	1.551	242	2.143
C. ochraceae	Caudatum	LC2303, CGMCC 3.15104	ex-holotype	endophyte	NMDC10017886	NMDC20023494	NMDC60029107	Contig	3.815	93.071	50.113.414	50,11	45.455.121	45,46	4.658.293	4,66	9,3	12.027	9.375	473	74	16	42	248	91	16	1.702	276	2.259
C. parabambusicola sp. nov.	Bambusicola	LC13884, NN058956	ex-holotype	saprobe	NMDC10017886	NMDC20023495	NMDC60029108	Contig	952	204.721	45.453.499	45,45	43.451.384	43,45	992.116	0,99	2,23	10.819	8.781	493	74	18	42	267	84	18	1.530	251	2.140
C. paraendophytum sp. nov.	Graminicola	LC13888, NN054963	ex-holotype	plant pathogen	NMDC10017886	NMDC20023496	NMDC60029109	Contig	1.420	120.278	43.957.980	43,96	42.038.255	42,04	1.919.725	1,92	4,37	11.014	8.793	438	60	15	36	236	82	16	1.584	247	2.135
C. plurivorum	Orchidearum	LC8240, M0051		plant pathogen	NMDC10017886	NMDC20023497	NMDC60029110	Contig	3.595	105.468	50.413.686	50,41	48.507.366	48,51	1.906.320	1,91	3,78	13.868	10.833	602	88	19	49	319	95	48	2.272	394	2.666
C. pseudomajus	Gigasporum	LC6272, CBS 571.88	ex-holotype	plant pathogen	NMDC10017886	NMDC20023498	NMDC60029111	Contig	4.054	102.548	67.435.186	67,44	52.197.223	52,20	15.237.963	15,24	22,6	14.382	11.224	614	87	25	59	331	95	40	2.277	323	2.674
C. reniforme sp. nov.	Orchidearum	LC8230, M41	ex-holotype	plant pathogen	NMDC10017886	NMDC20023499	NMDC60029112	Contig	4.499	209.407	55.282.663	55,28	48.386.782	48,39	6.895.881	6,90	12,47	13.599	10.656	593	85	21	49	313	93	47	2.200	398	2.599
C. schimae sp. nov.	Acutatum	LC13880, NN046984	ex-holotype	endophyte	NMDC10017886	NMDC20023500	NMDC60029113	Contig	1.056	519.564	51.646.865	51,65	50.358.067	50,36	1.288.798	1,29	2,5	12.893	10.297	565	82	20	44	307	88	37	2.030	358	2.535
C. shivasii sp. nov.	Caudatum	LC1400, BRIP 15842a	ex-holotype	plant pathogen	NMDC10017886	NMDC20023501	NMDC60029114	Contig	2.162	189.627	45.380.978	45,38	41.883.268	41,88	3.497.710	3,50	7,71	10.806	8.783	462	74	14	40	241	84	15	1.526	234	2.120
C. sinuatum sp. nov.	Dracaenophilum	LC13874, NN055266	ex-holotype	saprobe	NMDC10017886	NMDC20023502	NMDC60029115	Contig	3.235	181.603	47.724.330	47,72	42.880.381	42,88	4.843.949	4,84	10,15	12.320	9.652	485	64	18	37	251	89	37	1.730	259	2.289
C. subacidae sp. nov.	Truncatum	LC13857, LF2354	ex-holotype	plant pathogen	NMDC10017886	NMDC20023503	NMDC60029116	Contig	557	488.412	50.706.188	50,71	49.471.568	49,47	1.234.620	1,23	2,43	12.578	10.310	633	87	22	47	344	97	53	2.073	340	2.521
C. subsalicis sp. nov.	Acutatum	LC13863, CQ1168	ex-holotype	plant pathogen	NMDC10017886	NMDC20023504	NMDC60029117	Contig	3.177	147.957	54.835.889	54,84	48.193.364	48,19	6.642.525	6,64	12,11	12.388	10.044	539	77	19	41	285	89	40	1.887	302	2.458
C. subvariabile sp. nov.	Gigasporum	LC13876, NN040649	ex-holotype	endophyte	NMDC10017886	NMDC20023505	NMDC60029118	Contig	13.071	92.510	62.198.992	62,20	48.534.712	48,53	13.664.280	13,66	21,97	12.717	10.111	516	73	19	41	271	89	37	1.895	311	2.392
C. syngoniicola sp. nov.	Orchidearum	LC8894, M0745	ex-holotype	plant pathogen	NMDC10017886	NMDC20023506	NMDC60029119	Contig	4.180	208.829	52.010.317	52,01	48.862.933	48,86	3.147.384	3,15	6,05	13.995	10.772	569	77	23	39	304	95	47	2.193	380	2.579
C. telosmae sp. nov.	singleton	LC13872, NN052858	ex-holotype	endophyte	NMDC10017886	NMDC20023507	NMDC60029120	Contig	2.975	195.897	50.354.948	50,35	45.986.905	45,99	4.368.043	4,37	8,67	12.956	10.316	502	74	16	42	257	88	34	1.913	325	2.460
C. tibetense sp. nov.	Graminicola	LC7364	ex-holotype	plant pathogen	NMDC10017886	NMDC20023508	NMDC60029121	Contig	710	219.672	45.110.956	45,11	43.997.671	44,00	1.113.285	1,11	2,47	11.350	9.223	545	104	15	42	272	87	29	1.699	243	2.219
C. tropicicola	Dracaenophilum	LC0598, BCC 38877	ex-holotype	plant pathogen	NMDC10017886	NMDC20023509	NMDC60029122	Contig	3.514	136.974	56.103.532	56,10	52.468.503	52,47	3.635.029	3,64	6,48	14.173	10.893	584	86	27	45	313	95	45	2.166	349	2.639
C. variabile sp. nov.	Gigasporum	LC13875, NN040656	ex-holotype	endophyte	NMDC10017886	NMDC20023510	NMDC60029123	Contig	1.358	132.083	49.642.357	49,64	48.169.651	48,17	1.472.706	1,47	2,97	12.850	10.157	520	72	18	44	273	89	36	1.876	323	2.402
C. vietnamense	Gigasporum	LC6276, CBS 125478	ex-holotype	plant pathogen	NMDC10017886	NMDC20023511	NMDC60029124	Contig	1.480	308.549	60.707.178	60,71	56.125.138	56,13	4.582.040	4,58	7,55	15.585	11.963	660	96	28	65	351	99	47	2.551	431	2.909
C. yunnanense	Dracaenophilum	LC1526, CBS 132135	ex-holotype	endophyte	NMDC10017886	NMDC20023513	NMDC60029126	Contig	3.338	194.579	48.649.582	48,65	44.159.560	44,16	4.490.022	4,49	9,23	12.259	9.693	482	68	18	36	252	91	35	1.708	260	2.265
C. zhaoqingense sp. nov.	Gigasporum	LC13878, NN071035	ex-paratype	saprobe	NMDC10017886	NMDC20023512	NMDC60029125	Contig	1.513	342.772	58.283.086	58,28	52.336.807	52,34	5.946.279	5,95	10,2	15.025	11.715	645	95	28	57	347	95	44	2.555	349	2.820
C. zhejiangense sp. nov.	Dematium	LC13887, NN076215	ex-holotype	saprobe	NMDC10017886	NMDC20023514	NMDC60029127	Contig	1.108	142.314	46.859.026	46,86	45.002.234	45,00	1.856.766	1,86	3,96	11.342	9.226	503	64	14	42	262	87	42	1.689	246	2.233

Note: CAZymes: gene number with the distribution of CAZyme classes, AA: auxiliary activities, CBM: carbohydrate binding molecules, CE: carbohydrate esterases, GH: glycoside hydrolases, GT: glycosyl transferases, PL: polysaccharide lyases

Table S5. All strains identified in the current study.

Organism ID	Other code 1	Other code 2	Species	Species complex	Collector	Collection date	Source country	Host	Host family	Lifestyle of this isolate
LC5303	FZ0003	K1A15C-2	*Colletotrichum aenigma*	Gloeosporioides	Zhang ZF	2014.07.23	China, Guizhou, Kuankuoshui national natural reserve, unnamed karst cave, N 28° 12’ 629’’, E 107° 13’ 639’’	Air	—	Pathogen
LC5870	JAU0293	G-jyg-2-3	*Colletotrichum aenigma*	Gloeosporioides	Guan GX	2014.6.29	China, Jiangxi, Nanchang, Jiangxi Agricultural University, South Campus	Submerged wood	—	Pathogen
LC5997	JAU0457	LXQ-021	*Colletotrichum aenigma*	Gloeosporioides	Liu YC	2014.10.14	China, Jiangxi, Nanchang, Jiangxi Agricultural University, South Campus	*Manglietia fordiana*	*Magnoliaceae*	Pathogen
LC4451	YH311	ZYL64-4	*Colletotrichum aeschynomenes*	Gloeosporioides	Gao YH, Zhou N & Zhang Y	2013.09.05	China, Jiangxi	*Schima superba*	*Theaceae*	Pathogen
LC15741	MH0182	BS91L1a	*Colletotrichum aeschynomenes*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Maesa indica*	*Primulaceae*	Pathogen
LC0947	BTL11(B02)		*Colletotrichum agaves*	Agaves	Parinn N	—	Thailand, Chiang Rai, CRU	*Agave* sp.	*Asparagaceae*	Pathogen
LC0722	G12-24-2	S21	*Colletotrichum alienum*	Gloeosporioides	Sun W	—	China, Zhejiang, Gu Tian Shan	*Lespedeza formosa*	*Fabaceae*	Pathogen
LC0726	G5-25-1-1	S1	*Colletotrichum alienum*	Gloeosporioides	Su YY	—	China, Zhejiang, Gu Tian Shan	*Smilax china*	*Smilacaceae*	Pathogen
LC0770	G5-2-1	S78	*Colletotrichum alienum*	Gloeosporioides	Sun W	—	China, Zhejiang, Gu Tian Shan	*Schima superba*	*Theaceae*	Pathogen
LC0826	G12-24-2	S4	*Colletotrichum alienum*	Gloeosporioides	Sun W	—	China, Zhejiang, Gu Tian Shan	*Lespedeza formosa*	*Fabaceae*	Pathogen
LC1121	G17-9-1	S108	*Colletotrichum alienum*	Gloeosporioides	Sun W	—	China	*Lithocarpus glabra*	*Fagaceae*	Pathogen
LC1122	G25-7-1	S109	*Colletotrichum alienum*	Gloeosporioides	Sun W	—	China	*Lithocarpus glabra*	*Fagaceae*	Pathogen
LC0954	BTL26		*Colletotrichum annellatum*	Boninense	Parinn N	—	Thailand, Chiang Rai, Doi Tung	*Coffea* sp.	*Rubiaceae*	Pathogen
LC8517	M0342	WYS5-3-1	*Colletotrichum antirrhinicola*	Destructivum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Lycopersicon esculentum*	*Solanaceae*	Pathogen
LC13850	MH0003	NN05L1c	*Colletotrichum arecacearum*	singleton	Ma ZY, Hou LW	2017,6	China	—	*Arecaceae*	Pathogen
LC13851	MH0003_1		*Colletotrichum arecacearum*	singleton	Ma ZY, Hou LW	2017,6	China	—	*Arecaceae*	Pathogen
LC13852	MH0003_2		*Colletotrichum arecacearum*	singleton	Ma ZY, Hou LW	2017,6	China	—	*Arecaceae*	Pathogen
LC13853	MH0003_3		*Colletotrichum arecacearum*	singleton	Ma ZY, Hou LW	2017,6	China	—	*Arecaceae*	Pathogen
LC1510	KSU-M3		*Colletotrichum asianum*	Gloeosporioides	—	—	Saudi Arabia	*Mangifera* sp.	*Anacardiaceae*	Pathogen
LC1514	KSU-M6		*Colletotrichum asianum*	Gloeosporioides	—	—	Saudi Arabia	*Mangifera* sp.	*Anacardiaceae*	Pathogen
LC8468	M0287	WYS14-2-1	*Colletotrichum bambusicola*	Bambusicola	Cai L	2016,08	China, Fuzhou, Wuyishan	*Petasites hybridus*	*Compositae*	Pathogen
LC8469	M0288	WYS14-1-5	*Colletotrichum bambusicola*	Bambusicola	Cai L	2016,08	China, Fuzhou, Wuyishan	*Petasites hybridus*	*Compositae*	Pathogen
LC8498	M0322	WYS40-2-1-1	*Colletotrichum bambusicola*	Bambusicola	Cai L	2016,08	China, Fuzhou, Wuyishan	*Petasites hybridus*	*Compositae*	Pathogen
LC8533	M0362	WYS66-2-2-1-1	*Colletotrichum bambusicola*	Bambusicola	Cai L	2016,08	China, Fuzhou, Wuyishan	*Patrinia villosa*	*Valerianaceae*	Pathogen
NN004142	12-15-1		*Colletotrichum beeveri*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Yucca* sp.	*Asparagaceae*	Endophyte
NN055229	12419		*Colletotrichum bicoloratum*	Spaethianum	Wu WP	2012.12.29	China, Guangdong, Guangzhou, Yuexiu Park	*Ophiopogon japonicus*	*Asparagaceae*	Pathogen
NN055229	12419		*Colletotrichum bicoloratum*	Spaethianum	Wu WP	2012.12.29	China, Guangdong, Guangzhou, Yuexiu Park	*Ophiopogon japonicus*	*Asparagaceae*	Pathogen
LC11196	XY02-2	CQ642	*Colletotrichum boninense*	Boninense	Chen Q	2015.7.4	China, Guizhou, Xingyi	*Dendrobium fimbriatum*	*Orchidaceae*	Pathogen
LC8223	M0034	WYS3-1-2	*Colletotrichum boninense*	Boninense	Cai L	2016,08	China, Fuzhou, Wuyishan	*Smilax cocculoides*	*Liliaceae*	Pathogen
LC8224	M0035	WYS3-1-4	*Colletotrichum boninense*	Boninense	Cai L	2016,08	China, Fuzhou, Wuyishan	*Smilax cocculoides*	*Liliaceae*	Pathogen
LC8225	M0036	WYS3-1-3	*Colletotrichum boninense*	Boninense	Cai L	2016,08	China, Fuzhou, Wuyishan	*Smilax cocculoides*	*Liliaceae*	Pathogen
LC8226	M0037	WYS3-2-1	*Colletotrichum boninense*	Boninense	Cai L	2016,08	China, Fuzhou, Wuyishan	*Smilax cocculoides*	*Liliaceae*	Pathogen
LC8227	M0038	WYS3-2-2-2	*Colletotrichum boninense*	Boninense	Cai L	2016,08	China, Fuzhou, Wuyishan	*Smilax cocculoides*	*Liliaceae*	Pathogen
LC8231	M0042	WYS4-1-2	*Colletotrichum boninense*	Boninense	Cai L	2016,08	China, Fuzhou, Wuyishan	*Machilus* sp.	*Lauraceae*	Pathogen
LC8331	M0145	WYS32-1-3-2	*Colletotrichum boninense*	Boninense	Cai L	2016,08	China, Fuzhou, Wuyishan	*Cucumis sativus*	*Cucurbitaceae*	Pathogen
LC8420	M0236	WYS14-2-4-1	*Colletotrichum boninense*	Boninense	Cai L	2016,08	China, Fuzhou, Wuyishan	*Petasites hybridus*	*Compositae*	Pathogen
LC8464	M0281	WYS11-1-1-2	*Colletotrichum boninense*	Boninense	Cai L	2016,08	China, Fuzhou, Wuyishan	*Petasites hybridus*	*Compositae*	Pathogen
LC8885	M0736	SZ34-2-3	*Colletotrichum boninense*	Boninense	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Paramongaia weberbaueri*	*Amaryllidaceae*	Pathogen
LC15726	MH0058	NN25L1-2	*Colletotrichum boninense*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Homalomena occulta*	*Araceae*	Pathogen
LC15734	MH0114	BS007c	*Colletotrichum boninense*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Baise, CengWangLaoShan National Nature Reserve	*Rubus reflexus*	*Rosaceae*	Pathogen
LC15727	MH0059	NN25L1a	*Colletotrichum boninense*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Homalomena occulta*	*Araceae*	Pathogen
NN052752			*Colletotrichum brevisporum*	Magnum	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	—	—	Endophyte
NN052784	BN04-2		*Colletotrichum brevisporum*	Magnum	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Citrus grandis*	*Rutaceae*	Endophyte
NN052785	BN04-3		*Colletotrichum brevisporum*	Magnum	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Citrus grandis*	*Rutaceae*	Endophyte
NN054626	15038		*Colletotrichum brevisporum*	Magnum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Abutilon theophrasti*	*Malvaceae*	Pathogen
NN054630	15044		*Colletotrichum brevisporum*	Magnum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Datura strumonium*	*Solanaceae*	Pathogen
NN054679	15079		*Colletotrichum brevisporum*	Magnum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Lablab purpureus*	*Fabaceae*	Pathogen
NN054987	15113		*Colletotrichum brevisporum*	Magnum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Glycine max*	*Fabaceae*	Pathogen
NN054992	15111-3		*Colletotrichum brevisporum*	Magnum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Glycine max*	*Fabaceae*	Pathogen
NN054996	15115-1		*Colletotrichum brevisporum*	Magnum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Solanum tuberosum*	*Solanaceae*	Pathogen
LC0951	LC0951		*Colletotrichum bromeliacearum*	Boninense	Liu F	—	China, Yunnan	Bromeliad	*Bromeliaceae*	Pathogen
LC13854	LC13854		*Colletotrichum bromeliacearum*	Boninense	Liu F	—	China, Yunnan	Bromeliad	*Bromeliaceae*	Pathogen
LC13855	LC13855		*Colletotrichum bromeliacearum*	Boninense	Liu F	—	China, Yunnan	Bromeliad	*Bromeliaceae*	Pathogen
LC13856	LC13856		*Colletotrichum bromeliacearum*	Boninense	Liu F	—	China, Yunnan	Bromeliad	*Bromeliaceae*	Pathogen
NN004149	70-6-1		*Colletotrichum buxi*	Dracaenophilum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Buxus sinica* var. *parvifolia*	*Buxaceae*	Endophyte
NN047139	G15-2		*Colletotrichum buxi*	Dracaenophilum	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Buxus* sp.	*Buxaceae*	Endophyte
LC15707	QLS08	CQ976	*Colletotrichum camelliae*	Gloeosporioides	Liu YW	—	China, Jiangsu, Suzhou, Qionglong Mountain National Forest Park, 31°16'16"N，120°26'2"E，40m	*Camellia japonica*	*Theaceae*	Pathogen
LC15710	DYS05	CQ1015	*Colletotrichum camelliae-japonicae*	Boninense	Liu YW	—	China, Jiangsu, Suzhou, Dayangshan National Forest Park, 31°20'33"N，120°28'1"E，30m	*Prunus mume*	*Rosaceae*	Pathogen
LC0944	RPAK47		*Colletotrichum cattleyicola*	Orchidearum	Parinn N	—	Thailand, Chiang Mai, Ang khang	*Cymbidium* sp.	*Orchidaceae*	Pathogen
LC11362	WLC15-2	CQ864	*Colletotrichum caudisporum*	Caudatum	Chen Q	2016.5.14	China, Yunnan, Honghe Autonomous Prefecture, Mengzi County, Wulichong Reservoir	—	*Poaceae*	Pathogen
NN052884	BN33-4		*Colletotrichum chamaedoreae*	Boninense	Wu WP	2010.3.19	China, Yunnan Province, Jinghong, Xishuangbanna Botanical Garden	*Chamaedorea erumpens*	*Arecaceae*	Endophyte
NN052885	BN33-5		*Colletotrichum chamaedoreae*	Boninense	Wu WP	2010.3.19	China, Yunnan Province, Jinghong, Xishuangbanna Botanical Garden	*Chamaedorea erumpens*	*Arecaceae*	Endophyte
NN052890	BN33-10		*Colletotrichum chamaedoreae*	Boninense	Wu WP	2010.3.19	China, Yunnan Province, Jinghong, Xishuangbanna Botanical Garden	*Chamaedorea erumpens*	*Arecaceae*	Endophyte
NN052891	BN33-11		*Colletotrichum chamaedoreae*	Boninense	Wu WP	2010.3.19	China, Yunnan Province, Jinghong, Xishuangbanna Botanical Garden	*Chamaedorea erumpens*	*Arecaceae*	Endophyte
LC8273	M0084	WYS36-2-1	*Colletotrichum chlorophyti*	singleton	Cai L	2016,08	China, Fuzhou, Wuyishan	*Arachis hypogaea*	*Leguminosae*	Pathogen
LC8288	M0101	WYS31-3-3	*Colletotrichum chlorophyti*	singleton	Cai L	2016,08	China, Fuzhou, Wuyishan	*Ipomoea batatas*	*Convolvulaceae*	Pathogen
NN047147	9-3		*Colletotrichum cigarro*	Gloeosporioides	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Daphniphyllum macropodum*	*Daphniphyllaceae*	Endophyte
NN053010	BN31-1		*Colletotrichum cigarro*	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Caryota monostachys*	*Arecaceae*	Endophyte
MH0324	BS37L3a		*Colletotrichum cigarro*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Baise, Leye county, Dashiwei Sinkhole	*Itea chinensis*	*Iteaceae*	Pathogen
NN040606			*Colletotrichum circinans*	Dematium	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN043615	1127		*Colletotrichum circinans*	Dematium	Wu WP	1997.8.21	China, Ningxia, Yinchuan	*Fraxinus* sp.	*Oleaceae*	Pathogen
NN054631	15045		*Colletotrichum circinans*	Dematium	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Lilium brownii*	*Liliaceae*	Pathogen
NN054637	15067		*Colletotrichum circinans*	Dematium	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Lilium brownii*	*Liliaceae*	Pathogen
NN054644	15074		*Colletotrichum circinans*	Dematium	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Rhizoma Belamcandae*	*Iridaceae*	Pathogen

Table S5. All strains identified in the current study.

Organism ID	Other code 1	Other code 2	Species	Species complex	Collector	Collection date	Source country	Host	Host family	Lifestyle of this isolate
NN054647	15017		*Colletotrichum circinans*	Dematium	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Lilium brownii*	*Liliaceae*	Pathogen
NN054993	15121a		*Colletotrichum circinans*	Dematium	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Allium fistulosum* var. *giganteum*	*Amaryllidaceae*	Pathogen
NN055004	15121		*Colletotrichum circinans*	Dematium	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Allium fistulosum* var. *giganteum*	*Amaryllidaceae*	Pathogen
LC2161	HU0141	N6	*Colletotrichum citricola*	Boninense	Tan XM	—	China, Jiangxi, Ganzhou	*Citrus sinensis* var. *brasiliensis*	*Rutaceae*	Pathogen
LC3707	ZN203	GN5-4	*Colletotrichum citricola*	Boninense	Zhou N	2013.9.7	China, Jiangxi, Ganzhou, Gannan Normal University	*Cinnamomum camphora*	*Lauraceae*	Pathogen
LC7264	WM498	GZ9-2	*Colletotrichum citricola*	Boninense	Cai L	2016.07.08	China, Guangdong, Guangzhou, Zhongshan University	Bamboo	*Poaceae*	Pathogen
LC15770	MH0415	NG10L2a	*Colletotrichum citricola*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Acalypha insulana*	*Euphorbiaceae*	Pathogen
LC15771	MH0416	NG10L2b	*Colletotrichum citricola*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Acalypha insulana*	*Euphorbiaceae*	Pathogen
LC15772	MH0417	NG10L2c	*Colletotrichum citricola*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Acalypha insulana*	*Euphorbiaceae*	Pathogen
LC15799	MH0614	NG65L4a	*Colletotrichum citricola*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Magnolia henryi*	*Magnoliaceae*	Pathogen
LC15800	MH0615	NG65L4b	*Colletotrichum citricola*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Magnolia henryi*	*Magnoliaceae*	Pathogen
LC15811	MH0699	NG12L1h	*Colletotrichum citricola*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Gynochthodes nanlingensis*	*Rubiaceae*	Pathogen
LC15816	MH0737	NG65L4c	*Colletotrichum citricola*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Magnolia henryi*	*Magnoliaceae*	Pathogen
LC15826	LH07	NG65L4	*Colletotrichum citricola*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Magnolia henryi*	*Magnoliaceae*	Pathogen
NN047044	HN3-11		*Colletotrichum cliviicola*	Orchidearum	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Daphniphyllum macropodum*	*Daphniphyllaceae*	Endophyte
LC4476	YH339	ZYL53-4	*Colletotrichum cliviicola*	Orchidearum	Gao YH, Zhou N & Zhang Y	2013.09.05	China, Jiangxi	—	*Oleaceae*	Pathogen
LC4508	YH372	ZYL31-2	*Colletotrichum cliviicola*	Orchidearum	Gao YH, Zhou N & Zhang Y	2013.09.05	China, Jiangxi	*Camellia sinensis*	*Theaceae*	Pathogen
LC8334	M0148	WYS66-3-4	*Colletotrichum cliviicola*	Orchidearum	Cai L	2016,08	China, Fujiang, Fuzhou, Wuyishan	*Patrinia villosa*	*Valerianaceae*	Pathogen
LC15798	MH0594	NG58L1b	*Colletotrichum cliviicola*	Orchidearum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Rhaphidophora* sp.	*Araceae*	Pathogen
NN054619	15023		*Colletotrichum coccodes*	singleton	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Malva* sp.	*Malvaceae*	Pathogen
NN054998	15115		*Colletotrichum coccodes*	singleton	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Solanum tuberosum*	*Solanaceae*	Pathogen
LC1376	BRIP4734		*Colletotrichum coccodes*	singleton	—	—	Australia, Queensland	*Lycopersicon esculentum*	*Solanaceae*	Pathogen
LC1398	BRIP45359a		*Colletotrichum coccodes*	singleton	—	—	Australia	*Beta vulgaris*	*Amaranthaceae*	Pathogen
LC1399	BRIP44494a		*Colletotrichum coccodes*	singleton	—	—	Australia	*Beta vulgaris*	*Amaranthaceae*	Pathogen
NN052994	BN13-7		*Colletotrichum cosmi*	Acutatum	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Cassia fistula*	*Fabaceae*	Endophyte
LC13858	MH0588	NG56L3a	*Colletotrichum crousii*	Dracaenophilum	Ma ZY, Hou LW	2017,6	China	*Rhaphidophora* sp.	*Araceae*	Pathogen
LC13859	MH0589	NG56L3b	*Colletotrichum crousii*	Dracaenophilum	Ma ZY, Hou LW	2017,6	China	*Rhaphidophora* sp.	*Araceae*	Pathogen
LC13860	MH0592	NG56L3e	*Colletotrichum crousii*	Dracaenophilum	Ma ZY, Hou LW	2017,6	China	*Rhaphidophora* sp.	*Araceae*	Pathogen
LC13861	MH0727	NG56L3f	*Colletotrichum crousii*	Dracaenophilum	Ma ZY, Hou LW	2017,6	China	*Rhaphidophora* sp.	*Araceae*	Pathogen
LC13862	MH0759	NG58L2a	*Colletotrichum crousii*	Dracaenophilum	Ma ZY, Hou LW	2017,6	China	*Rhaphidophora* sp.	*Araceae*	Pathogen
NN047106	17-4		*Colletotrichum cymbidiicola*	Boninense	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Daphniphyllum macropodum*	*Daphniphyllaceae*	Endophyte
NN051374	WU015A Conidia isolate		*Colletotrichum cymbidiicola*	Boninense	Wu WP	2011.11.6	China, Beijing, Haidian, Shangdi	—	—	Pathogen
NN051375	WU015 asci state		*Colletotrichum cymbidiicola*	Boninense	Wu WP	2011.11.6	China, Beijing, Haidian, Shangdi	—	—	Pathogen
NN052788	BN04-6		*Colletotrichum cymbidiicola*	Boninense	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Citrus grandis*	*Rutaceae*	Endophyte
NN053000	BN13-13		*Colletotrichum cymbidiicola*	Boninense	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Cassia fistula*	*Fabaceae*	Endophyte
NN055215	12399		*Colletotrichum cymbidiicola*	Boninense	Wu WP	2012.12.24	China, Guangdong, Guangzhou, Zhaoqing, Qixingyan	Unknown plant leaves	—	Pathogen
NN055215	12399		*Colletotrichum cymbidiicola*	Boninense	Wu WP	2012.12.24	China, Guangdong, Guangzhou, Zhaoqing, Qixingyan	—	—	Pathogen
NN055218	12422		*Colletotrichum danxiashanense*	Graminicola	Wu WP	2012.12.25	China, Guangdong, Shaoguan, Danxiashan	?*Miscanthus* sp., dead leaves	*Poaceae*	Pathogen
NN055218	12422		*Colletotrichum danxiashanense*	Graminicola	Wu WP	2012.12.25	China, Guangdong, Shaoguan, Danxiashan	*Miscanthus* sp.?	*Poaceae*	Pathogen
NN054606	15030		*Colletotrichum dematium*	Dematium	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Thalictrum* sp.	*Ranunculaceae*	Pathogen
NN054610	15035		*Colletotrichum dematium*	Dematium	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Hosta* sp.	*Asparagaceae*	Pathogen
NN054618	15020		*Colletotrichum dematium*	Dematium	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Ricinus communis*	*Euphorbiaceae*	Pathogen
NN054624	15030A		*Colletotrichum dematium*	Dematium	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Thalictrum* sp.	*Ranunculaceae*	Pathogen
NN054652	15049		*Colletotrichum dematium*	Dematium	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Radix bupleuri*	*Apiaceae*	Pathogen
NN040583			*Colletotrichum destructivum*	Destructivum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN072578	12729		*Colletotrichum diversisporum*	singleton	Wu WP	2016.2.28	China, Guangdong, Guangzhou, South China Botanical Garden,	*Dracaena angustifolia*	*Asparagaceae*	Pathogen
LC11292	MZ08-4	CQ775	*Colletotrichum diversum*	Boninense	Chen Q	2016.5.12	China, Yunnan, Honghe Autonomous Prefecture, Mengzi County, South Lake Park	*Philodendron selloum*	*Araceae*	Pathogen
NN054966	15092		*Colletotrichum dolichoconidiophori*	Graminicola	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	Grass	—	Pathogen
LC0830	SW-1	S88	*Colletotrichum dracaenophilum*	Dracaenophilum	Sun W	—	China	*Dracaena sanderiana*	*Asparagaceae*	Pathogen
LC11274	SSY19-2	CQ741	*Colletotrichum duyunensis*	Spaethianum	Chen Q	2016.5.10	China, Guangxi, Nanning, Laibin City, Sanshan Village	*Lactuca canadensis*	*Asteraceae*	Pathogen
LC0873	BTL29		*Colletotrichum endophyticum*	Gloeosporioides	Parinn N	—	Thailand, Chiang Mai, Phalad	*Rhynchostylis coelestris*	*Orchidaceae*	Pathogen
LC0953	BTL08		*Colletotrichum endophyticum*	Gloeosporioides	Parinn N	—	Thailand, Chiang Mai, Phalad	*Gustavia* sp.	*Lecythidaceae*	Pathogen
LC1044	h43-1		*Colletotrichum endophyticum*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Aphanamixis polystachya*	*Meliaceae*	Pathogen
LC1215	GEN005E		*Colletotrichum endophyticum*	Gloeosporioides	Udayanga D	—	Thailand, Chiang Rai	—	—	Pathogen
LC8836	M0687	SZ26-2-2-2	*Colletotrichum endophyticum*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Solanum rostratum*	*Solanaceae*	Pathogen
LC8849	M0700	SZ28-3-2-1	*Colletotrichum endophyticum*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Acacia confusa*	*Mimosaceae*	Pathogen
LC15747	MH0220	NN06L1a	*Colletotrichum endophyticum*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Alocasia odora*	*Araceae*	Pathogen
LC15748	MH0221	NN06L1b	*Colletotrichum endophyticum*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Alocasia odora*	*Araceae*	Pathogen
LC15749	MH0222	NN06L1c	*Colletotrichum endophyticum*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Alocasia odora*	*Araceae*	Pathogen
LC15750	MH0224	NN06L2c	*Colletotrichum endophyticum*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Alocasia odora*	*Araceae*	Pathogen
LC15759	MH0311	NN06L4a	*Colletotrichum endophyticum*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Alocasia odora*	*Araceae*	Pathogen
NN043889	1453b		*Colletotrichum fioriniae*	Acutatum	Wu WP	1997.12.20	China, Guangxi, Damingshan	—	—	Pathogen
NN045802	2582a		*Colletotrichum fioriniae*	Acutatum	Wu WP	1999.10.22	China, Yunnan, Kunming, Kunming Botanical Garden	*Cinnamomum* sp.	*Lauraceae*	Pathogen
NN047014	54-3		*Colletotrichum fioriniae*	Acutatum	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Litsea* sp.	*Lauraceae*	Endophyte
NN047025	8-10		*Colletotrichum fioriniae*	Acutatum	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Schima argentea*	*Theaceae*	Endophyte
NN047027	21-2		*Colletotrichum fioriniae*	Acutatum	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Exbucklandia populnea*	*Hamamelidaceae*	Endophyte
NN047051	2-13		*Colletotrichum fioriniae*	Acutatum	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Dendrobenthamia hongkongensis*	*Cornaceae*	Endophyte
NN047054	2-6		*Colletotrichum fioriniae*	Acutatum	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Dendrobenthamia hongkongensis*	*Cornaceae*	Endophyte
NN047067	55-9		*Colletotrichum fioriniae*	Acutatum	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Rhododendron* sp.	*Ericaceae*	Endophyte
NN047077	28-9		*Colletotrichum fioriniae*	Acutatum	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	—	*Fagaceae*	Endophyte
NN047086	36-4		*Colletotrichum fioriniae*	Acutatum	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Cinnamomum burmannii*	*Lauraceae*	Endophyte
NN047111	16-3		*Colletotrichum fioriniae*	Acutatum	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Neolitsea aurata*	*Lauraceae*	Endophyte
NN047113	10-1		*Colletotrichum fioriniae*	Acutatum	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Semiliquidambar cathayensis*	*Altingiaceae*	Endophyte
NN047149	9-17		*Colletotrichum fioriniae*	Acutatum	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Daphniphyllum macropodum*	*Daphniphyllaceae*	Endophyte

Table S5. All strains identified in the current study.

Organism ID	Other code 1	Other code 2	Species	Species complex	Collector	Collection date	Source country	Host	Host family	Lifestyle of this isolate
LC0727	G8-10-2	S44	*Colletotrichum fioriniae*	Acutatum	Su YY	—	China, Zhejiang, Gu Tian Shan	*Schima superba*	*Theaceae*	Pathogen
LC0750	G8-6-3	S33	*Colletotrichum fioriniae*	Acutatum	Sun W	—	China, Zhejiang, Gu Tian Shan	*Cinnamomum chingii*	*Lauraceae*	Pathogen
LC0756	G20-0-2-1	S50	*Colletotrichum fioriniae*	Acutatum	Su YY	—	China, Zhejiang, Gu Tian Shan	*Machilus pauhoi*	*Lauraceae*	Pathogen
LC0760	G8-7-2	S42	*Colletotrichum fioriniae*	Acutatum	Sun W	—	China, Zhejiang, Gu Tian Shan	*Lithocarpus glabra*	*Fagaceae*	Pathogen
LC0773	G8-9-2	S34	*Colletotrichum fioriniae*	Acutatum	Sun W	—	China, Zhejiang, Gu Tian Shan	*Manglietia yuyuanensis*	*Magnoliaceae*	Pathogen
LC11485	XNS03-2	CQ954	*Colletotrichum fioriniae*	Acutatum	Chen Q	2016.5.23	China, Chongqing, Wulong District, Fairy Mountain Town	*Carex* sp.	*Cyperaceae*	Pathogen
LC8314	M0127	WYS1-1-4	*Colletotrichum fioriniae*	Acutatum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Woodwardia japonica*	*Blechnaceae*	Pathogen
LC8459	M0276	WYS1-2-2	*Colletotrichum fioriniae*	Acutatum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Woodwardia japonica*	*Blechnaceae*	Pathogen
LC8478	M0299	WYS17-2-4-1	*Colletotrichum fioriniae*	Acutatum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Liquidambar formosana*	*Hamamelidaceae*	Pathogen
LC8484	M0307	WYS25-2-2-1	*Colletotrichum fioriniae*	Acutatum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Magnolia acuminata*	*Magnoliaceae*	Pathogen
LC8491	M0315	WYS30-1-2-1	*Colletotrichum fioriniae*	Acutatum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Phaseolus vulgaris*	*Leguminosae*	Pathogen
LC8511	M0335	WYS58-1-1	*Colletotrichum fioriniae*	Acutatum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Dichroa febrifuga*	*Hydrangeaceae*	Pathogen
LC8612	M0442	WYS60D	*Colletotrichum fioriniae*	Acutatum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Cinnamomum micranthum*	*Lauraceae*	Pathogen
LC8637	M0469	WYS61-2-3	*Colletotrichum fioriniae*	Acutatum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Liquidambar formosana*	*Hamamelidaceae*	Pathogen
LC8642	M0474	WYS48-2-3	*Colletotrichum fioriniae*	Acutatum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Machilus yunnanensis*	*Lauraceae*	Pathogen
LC8643	M0475	WYS48-2-4	*Colletotrichum fioriniae*	Acutatum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Machilus yunnanensis*	*Lauraceae*	Pathogen
LC9603	FZ2598	C1S01-3-1-3	*Colletotrichum fioriniae*	Acutatum	Zhang ZF	2016,05	China, Chongqing, Wulong county, Erwang cave	Soil	—	Pathogen
LC15739	MH0167	BS81L1a	*Colletotrichum fioriniae*	Acutatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Vitex negundo*	*Lamiaceae*	Pathogen
LC15740	MH0168	BS81L1c	*Colletotrichum fioriniae*	Acutatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Vitex negundo*	*Lamiaceae*	Pathogen
LC15757	MH0271	BS020Z-3	*Colletotrichum fioriniae*	Acutatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Baise, Leye county, Xiafu Village	*Laurus nobilis*	*Lauraceae*	Pathogen
LC15806	MH0661	BS019ZL1-1	*Colletotrichum fioriniae*	Acutatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Baise, Leye County, Xiafu Village	*Laurus nobilis*	*Lauraceae*	Pathogen
LC15808	MH0687	BS103L1h	*Colletotrichum fioriniae*	Acutatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Glochidion ellipticum*	*Euphorbiaceae*	Pathogen
LC15809	MH0688	BS103L1i	*Colletotrichum fioriniae*	Acutatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Glochidion ellipticum*	*Euphorbiaceae*	Pathogen
LC15810	MH0689	BS103L1g	*Colletotrichum fioriniae*	Acutatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Glochidion ellipticum*	*Euphorbiaceae*	Pathogen
NN054595	15006		*Colletotrichum fructi*	Dematium	Wu WP	2012.5.8	China, Beijing, Yanqing, Songshan	—	—	Pathogen
LC15711	DYS06	CQ1016	*Colletotrichum fructicola*	Gloeosporioides	Liu YW	—	China, Jiangsu, Suzhou, Dayangshan National Forest Park, 31°20'33"N，120°28'1"E，30m	*Cinnamomum* sp.	*Lauraceae*	Pathogen
LC15714	DYS12-2	CQ1026	*Colletotrichum fructicola*	Gloeosporioides	Liu YW	—	China, Jiangsu, Suzhou, Dayangshan National Forest Park, 31°20'33"N，120°28'1"E，30m	*Loropetalum chinense* var. *rubrum*	*Hamamelidaceae*	Pathogen
LC15715	PMF09-2	CQ1065	*Colletotrichum fructicola*	Gloeosporioides	Liu YW	—	China, Jiangsu, Suzhou, Taihu Xishan National Forest Park, 31°7'9"N，120°15'34"E，10m	*Lindera glauca*	*Lauraceae*	Pathogen
LC15716	PMF10	CQ1066	*Colletotrichum fructicola*	Gloeosporioides	Liu YW	—	China, Jiangsu, Suzhou, Taihu Xishan National Forest Park, 31°7'9"N，120°15'34"E，10m	*Lespedeza bicolor*	*Fabaceae*	Pathogen
LC15704	QLS01-1	CQ960	*Colletotrichum fructicola*	Gloeosporioides	Liu YW	—	China, Jiangsu, Suzhou, Qionglong Mountain National Forest Park, 31°16'16"N，120°26'2"E，40m	*Rhododendron* sp.	*Ericaceae*	Pathogen
LC0050	JM002		*Colletotrichum fructicola*	Gloeosporioides	Jutamart	—	Thailand	*Magnolia liliifera*	*Magnoliaceae*	Pathogen
LC0547	GEN002D		*Colletotrichum fructicola*	Gloeosporioides	Manamgoda DS	—	Thailand, Chiang Rai	Grass	—	Pathogen
LC0718	GR-0-14-2	S23	*Colletotrichum fructicola*	Gloeosporioides	Sun W	—	China, Zhejiang, Gu Tian Shan	*Santalum album*	*Santalaceae*	Pathogen
LC0721	G20-0-6-1	S14	*Colletotrichum fructicola*	Gloeosporioides	Su YY	—	China, Zhejiang, Gu Tian Shan	*Dryopteris setosa*	*Dryopteridaceae*	Pathogen
LC0723	G9-5-2	S22	*Colletotrichum fructicola*	Gloeosporioides	Su YY	—	China, Zhejiang, Gu Tian Shan	Rectangular	*Saxifragaceae*	Pathogen
LC0724	G16-22-2	S20	*Colletotrichum fructicola*	Gloeosporioides	Sun W	—	China, Zhejiang, Gu Tian Shan	*Lithocarpus glabra*	*Fagaceae*	Pathogen
LC0731	G0-9-3	S17	*Colletotrichum fructicola*	Gloeosporioides	Sun W	—	China, Zhejiang, Gu Tian Shan	*Rhododendron latoucheae*	*Ericaceae*	Pathogen
LC0733	G5-24-1	S24	*Colletotrichum fructicola*	Gloeosporioides	Su YY	—	China, Zhejiang, Gu Tian Shan	*Vaccinium bracteatum*	*Ericaceae*	Pathogen
LC0736	G5-23-1	S10	*Colletotrichum fructicola*	Gloeosporioides	Su YY	—	China, Zhejiang, Gu Tian Shan	*Castanopsis eyrei*	*Fagaceae*	Pathogen
LC0740	G9-12-2	S84	*Colletotrichum fructicola*	Gloeosporioides	Su YY	—	China, Zhejiang, Gu Tian Shan	*Lithocarpus glabra*	*Fagaceae*	Pathogen
LC0758	G8-21-2	S40	*Colletotrichum fructicola*	Gloeosporioides	Sun W	—	China, Zhejiang, Gu Tian Shan	*Lithocarpus glabra*	*Fagaceae*	Pathogen
LC0819	G5-29-2	S76	*Colletotrichum fructicola*	Gloeosporioides	Sun W	—	China, Zhejiang, Gu Tian Shan	*Lithocarpus glabra*	*Fagaceae*	Pathogen
LC0820	SW-2	S89	*Colletotrichum fructicola*	Gloeosporioides	Cai L	—	China	*Citrus* sp.	*Rutaceae*	Pathogen
LC0829	G9-8-2	S5	*Colletotrichum fructicola*	Gloeosporioides	Sun W	—	China, Zhejiang, Gu Tian Shan	*Machilus thunbergii*	*Lauraceae*	Pathogen
LC0876	BTL13		*Colletotrichum fructicola*	Gloeosporioides	Parinn N	—	Thailand, Chiang Rai, CRU	*Passiflora* sp.	*Passifloraceae*	Pathogen
LC1045	h88-1		*Colletotrichum fructicola*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Vanda coerulea*	*Orchidaceae*	Pathogen
LC1050	h71-1		*Colletotrichum fructicola*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	Orchid	*Orchidaceae*	Pathogen
LC1103	G8-20-3	S90	*Colletotrichum fructicola*	Gloeosporioides	Sun W	—	China	*Lithocarpus glabra*	*Fagaceae*	Pathogen
LC1104	G8-17-3	S91	*Colletotrichum fructicola*	Gloeosporioides	Sun W	—	China	*Lithocarpus glabra*	*Fagaceae*	Pathogen
LC11188	PTS01-1	CQ631	*Colletotrichum fructicola*	Gloeosporioides	Chen Q	2015.9.9	China, Zhejiang, Zhoushan, Putuo Mountain	*Loropetalum chinense*	*Hamamelidaceae*	Pathogen
LC11238	YSLT24-3	CQ702	*Colletotrichum fructicola*	Gloeosporioides	Chen Q	2016.5.7	China, Guangxi, Guilin, Yangshuo County, Xingping Town, Luotian Dayan	*Alchornea* sp.	*Euphorbiaceae*	Pathogen
LC11240	SSY01-2	CQ704	*Colletotrichum fructicola*	Gloeosporioides	Chen Q	2016.5.10	China, Guangxi, Nanning, Laibin City, Sanshan Village	*Eucalyptus* sp.	*Myrtaceae*	Pathogen
LC11245	SSY02-4	CQ710	*Colletotrichum fructicola*	Gloeosporioides	Chen Q	2016.5.10	China, Guangxi, Nanning, Laibin City, Sanshan Village	*Vitex negundo*	*Lamiaceae*	Pathogen
LC11250	SSY05-3	CQ716	*Colletotrichum fructicola*	Gloeosporioides	Chen Q	2016.5.10	China, Guangxi, Nanning, Laibin City, Sanshan Village	*Vitex negundo*	*Lamiaceae*	Pathogen
LC11352	WLC11-3	CQ853	*Colletotrichum fructicola*	Gloeosporioides	Chen Q	2016.5.14	China, Yunnan, Honghe Autonomous Prefecture, Mengzi County, Wulichong Reservoir	—	*Fabaceae*	Pathogen
LC11353	WLC11-4	CQ854	*Colletotrichum fructicola*	Gloeosporioides	Chen Q	2016.5.14	China, Yunnan, Honghe Autonomous Prefecture, Mengzi County, Wulichong Reservoir	—	*Fabaceae*	Pathogen
LC11428	XW04-3	CQ942	*Colletotrichum fructicola*	Gloeosporioides	Chen Q	2016.5.18	China, Sichuan, Yibin, Xing wen County, Shihai	*Clematis* sp.	*Ranunculaceae*	Pathogen
LC11802	JXN4-34		*Colletotrichum fructicola*	Gloeosporioides	Zhou X	2015.10.05	China, Jiangxi, Nongda, N28.77192, E115.8421	*Oryza sativa*	*Poaceae*	Pathogen
LC1211	MPU040		*Colletotrichum fructicola*	Gloeosporioides	Udayanga D	—	Thailand, Chiang Rai	—	—	Pathogen
LC1672	4007-3		*Colletotrichum fructicola*	Gloeosporioides	—	—	China, Guizhou	*Citrus* sp.	*Rutaceae*	Pathogen
LC1673	4007-4		*Colletotrichum fructicola*	Gloeosporioides	—	—	China, Guizhou	*Citrus* sp.	*Rutaceae*	Pathogen
LC1674	4014-1		*Colletotrichum fructicola*	Gloeosporioides	—	—	China, Guizhou	—	—	Pathogen
LC1675	4014-2		*Colletotrichum fructicola*	Gloeosporioides	—	—	China, Guizhou	—	—	Pathogen
LC1681	4017s3		*Colletotrichum fructicola*	Gloeosporioides	—	—	China, Guizhou	—	—	Pathogen
LC1682	4017s4		*Colletotrichum fructicola*	Gloeosporioides	—	—	China, Guizhou	—	—	Pathogen
LC2025	HU0005	B1	*Colletotrichum fructicola*	Gloeosporioides	Tan XM	2011.11.19	China, Jiangxi, Ganzhou, Gannan Normal University	*Citrus sinensis* var. *brasiliensis*	*Rutaceae*	Pathogen
LC2029	HU0009	4	*Colletotrichum fructicola*	Gloeosporioides	Tan XM	2012.3.11	China, Jiangxi, Ganzhou, Gannan Normal University	*Citrus sinensis* var. *brasiliensis*	*Rutaceae*	Pathogen
LC2038	HU0018	13	*Colletotrichum fructicola*	Gloeosporioides	Tan XM	2012.3.11	China, Jiangxi, Ganzhou, Gannan Normal University	*Citrus sinensis* var. *brasiliensis*	*Rutaceae*	Pathogen
LC2159	HU0139	N4	*Colletotrichum fructicola*	Gloeosporioides	Tan XM	—	China, Jiangxi, Ganzhou	*Citrus sinensis* var. *brasiliensis*	*Rutaceae*	Pathogen
LC4446	YH306	ZYL60-1	*Colletotrichum fructicola*	Gloeosporioides	Gao YH, Zhou N & Zhang Y	2013.09.05	China, Jiangxi	*Eurya chinensis*	*Pentaphylacaceae*	Pathogen
LC4630	YH497	ZYL76-2	*Colletotrichum fructicola*	Gloeosporioides	Gao YH, Zhou N & Zhang Y	2013.09.05	China, Jiangxi	*Dioscorea* sp.	*Taccaceae*	Pathogen
LC5151	JXLG03-1	CQ402	*Colletotrichum fructicola*	Gloeosporioides	Chen Q	2013.4.26	China, Jiangxi, Jiangxi University of Science and Technology	*Jasminum mesnyi*	*Oleaceae*	Pathogen
LC5240	WS01-3-2	CQ584	*Colletotrichum fructicola*	Gloeosporioides	Chen Q	2014.7.19	China, Guizhou, Suiyang County, Wangshui Town, near Xiangshuwan Resort	—	—	Pathogen
LC5242	WS01-2	YT107	*Colletotrichum fructicola*	Gloeosporioides	Chen Q	2014.7.19	China, Guizhou, Suiyang County, Wangshui Town, near Xiangshuwan Resort	—	—	Pathogen

Table S5. All strains identified in the current study.

Organism ID	Other code 1	Other code 2	Species	Species complex	Collector	Collection date	Source country	Host	Host family	Lifestyle of this isolate
LC7149	WM383	BP5-2	*Colletotrichum fructicola*	Gloeosporioides	Huang JN	2016.07.01	China, Jiangxi, Jiangxi Agriculture University	Bamboo	*Poaceae*	Pathogen
LC7857	LJM661	HN20	*Colletotrichum fructicola*	Gloeosporioides	Liu Xiufeng	2016.4.2	China, Hainan	*Saccharum* sp.	*Poaceae*	Pathogen
LC7943	JXNC8		*Colletotrichum fructicola*	Gloeosporioides	Hu DM	2015,1	China, Jiangxi	*Capsicum* sp.	*Solanaceae*	Pathogen
LC7948	JXNC20		*Colletotrichum fructicola*	Gloeosporioides	Hu DM	2015,1	China, Jiangxi	*Capsicum* sp.	*Solanaceae*	Pathogen
LC7957	JXNC3		*Colletotrichum fructicola*	Gloeosporioides	Hu DM	2015,1	China, Jiangxi	*Capsicum* sp.	*Solanaceae*	Pathogen
LC7958	JXNC4		*Colletotrichum fructicola*	Gloeosporioides	Hu DM	2015,1	China, Jiangxi	*Capsicum* sp.	*Solanaceae*	Pathogen
LC7959	JXNC4-1		*Colletotrichum fructicola*	Gloeosporioides	Hu DM	2015,1	China, Jiangxi	*Capsicum* sp.	*Solanaceae*	Pathogen
LC7960	JXNC6-1		*Colletotrichum fructicola*	Gloeosporioides	Hu DM	2015,1	China, Jiangxi	*Capsicum* sp.	*Solanaceae*	Pathogen
LC8229	M0040	WYS3-3-1	*Colletotrichum fructicola*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Smilax cocculoides*	*Liliaceae*	Pathogen
LC8247	M0058	WYS8-2-3-2	*Colletotrichum fructicola*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Paederia foetida*	*Rubiaceae*	Pathogen
LC8269	M0080	WYS31-2-2	*Colletotrichum fructicola*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Ipomoea batatas*	*Convolvulaceae*	Pathogen
LC8270	M0081	WYS31-2-3	*Colletotrichum fructicola*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Ipomoea batatas*	*Convolvulaceae*	Pathogen
LC8279	M0091	WYS66-3-2-2	*Colletotrichum fructicola*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Patrinia villosa*	*Valerianaceae*	Pathogen
LC8536	M0365	WYS8-3-3	*Colletotrichum fructicola*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Paederia foetida*	*Rubiaceae*	Pathogen
LC8560	M0389	WYS25-2-4-4	*Colletotrichum fructicola*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Magnolia acuminata*	*Magnoliaceae*	Pathogen
LC8738	M0589	SZ8-2-3	*Colletotrichum fructicola*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Machilus* sp.	*Lauraceae*	Pathogen
LC8766	M0617	SZ15-2-2-1	*Colletotrichum fructicola*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Schefflera heptaphylla*	*Araliaceae*	Pathogen
LC8791	M0642	SZ18-1-1	*Colletotrichum fructicola*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Pteris quadriaurita*	*Pteridaceae*	Pathogen
LC8797	M0648	SZ18-2-3	*Colletotrichum fructicola*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Pteris quadriaurita*	*Pteridaceae*	Pathogen
LC8804	M0655	SZ21-1-2	*Colletotrichum fructicola*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Archontophoenix maxima*	*Palmae*	Pathogen
LC8888	M0739	SZ34-1-4	*Colletotrichum fructicola*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Paramongaia weberbaueri*	*Amaryllidaceae*	Pathogen
LC8911	M0762	SZ33-2-1	*Colletotrichum fructicola*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Calliandra haematocephala*	*Mimosaceae*	Pathogen
LC8912	M0763	SZ33-2-2	*Colletotrichum fructicola*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Calliandra haematocephala*	*Mimosaceae*	Pathogen
LC8913	M0764	SZ33-2-3-1	*Colletotrichum fructicola*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Calliandra haematocephala*	*Mimosaceae*	Pathogen
LC8929	M0780	SZ17-2-2-1	*Colletotrichum fructicola*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Excoecaria cochinchinensis*	*Euphorbiaceae*	Pathogen
LC8942	M0794	SZ28-2-2	*Colletotrichum fructicola*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Acacia confusa*	*Mimosaceae*	Pathogen
LC8970	M0822	SZ34-1-2-2	*Colletotrichum fructicola*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Paramongaia weberbaueri*	*Amaryllidaceae*	Pathogen
LC15722	MH0045	NN17L1d	*Colletotrichum fructicola*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Saururus chinensis*	*Saururaceae*	Pathogen
LC15746	MH0198	BS095L3d	*Colletotrichum fructicola*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Maesa montana*	*Primulaceae*	Pathogen
LC15756	MH0270	BS019ZL1-2	*Colletotrichum fructicola*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Baise, Leye county, Xiafu Village	*Laurus nobilis*	*Lauraceae*	Pathogen
LC15769	MH0357	BS92L2a	*Colletotrichum fructicola*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Hemidiodia ocimifolia*	*Rubiaceae*	Pathogen
LC15773	MH0454	NG15L5b	*Colletotrichum fructicola*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Smilax corbularia*	*Smilacaceae*	Pathogen
NN045801	2619b		*Colletotrichum gigasporum*	Gigasporum	Wu WP	1999.10.22	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Pathogen
NN046268	2908b		*Colletotrichum gigasporum*	Gigasporum	Wu WP	1999.10.20	China, Yunnan, Xishuangbannan	—	—	Pathogen
NN052740	BN15-3		*Colletotrichum gigasporum*	Gigasporum	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Ixora chinensis*	*Rubiaceae*	Endophyte
NN052749	BN20-4		*Colletotrichum gigasporum*	Gigasporum	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Coffea* sp.	*Rubiaceae*	Endophyte
NN052771			*Colletotrichum gigasporum*	Gigasporum	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	—	—	Endophyte
NN052869	BN27-2		*Colletotrichum gigasporum*	Gigasporum	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Dimocarpus longan*	*Sapindaceae*	Endophyte
NN052874	BN27-7		*Colletotrichum gigasporum*	Gigasporum	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Dimocarpus longan*	*Sapindaceae*	Endophyte
NN052875	BN27-8		*Colletotrichum gigasporum*	Gigasporum	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Dimocarpus longan*	*Sapindaceae*	Endophyte
NN053081	BN23-6		*Colletotrichum gigasporum*	Gigasporum	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	—	—	Endophyte
NN055284	12446		*Colletotrichum gigasporum*	Gigasporum	Wu WP	2012.12.24	China, Guangdong, Zhaoqing, Qixingyan	*Musa* sp., dead leaves	*Musaceae*	Pathogen
NN055307	12508		*Colletotrichum gigasporum*	Gigasporum	Wu WP	2012.12.25	China, Guangdong, Shaoguan, Danxiashan	*Monstera deliciosa*	*Araceae*	Pathogen
NN055352	12576		*Colletotrichum gigasporum*	Gigasporum	Wu WP	2012.12.25	China, Guangdong, Shaoguan, Danxiashan	On dead leaves of tree	—	Pathogen
NN057644	12693		*Colletotrichum gigasporum*	Gigasporum	Wu WP	2013.12.10	China, Guangdong, Guangzhou	*Carica papaya* , dead leaf stipe	*Caricaceae*	Pathogen
LC1023	h73-SI-1		*Colletotrichum gigasporum*	Gigasporum	Su YY	—	China, Guangdong, South China Botanical Garden	Orchid	*Orchidaceae*	Pathogen
LC1053	h64-1		*Colletotrichum gigasporum*	Gigasporum	Su YY	—	China, Guangdong, South China Botanical Garden	Orchid	*Orchidaceae*	Pathogen
LC1078	h36-2		*Colletotrichum gigasporum*	Gigasporum	Su YY	—	China, Guangdong, South China Botanical Garden	*Hamelia patens*	*Rubiaceae*	Pathogen
LC15787	MH0530	NG36L2b	*Colletotrichum gigasporum*	Gigasporum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC15788	MH0531	NG36L2c	*Colletotrichum gigasporum*	Gigasporum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC15789	MH0533	NG36L2e	*Colletotrichum gigasporum*	Gigasporum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC15790	MH0535	NG36L2g	*Colletotrichum gigasporum*	Gigasporum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC15817	MH0742	NG69L1a	*Colletotrichum gigasporum*	Gigasporum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Streblus tonkinensis*	*Moraceae*	Pathogen
NN071124	13405		*Colletotrichum gloeosporioides*	Gloeosporioides	Wu WP	2015.8.2	China, Wuhan, Wuhan Botanical Garden	*Ailanthus altissima* , dead leaf petiole	—	Pathogen
LC15708	DYS01-1	CQ1002	*Colletotrichum gloeosporioides*	Gloeosporioides	Liu YW	—	China, Jiangsu, Suzhou, Dayangshan National Forest Park, 31°20'33"N，120°28'1"E，30m	*Fatsia japonica*	*Araliaceae*	Pathogen
LC15709	DYS01-3	CQ1004	*Colletotrichum gloeosporioides*	Gloeosporioides	Liu YW	—	China, Jiangsu, Suzhou, Dayangshan National Forest Park, 31°20'33"N，120°28'1"E，30m	*Fatsia japonica*	*Araliaceae*	Pathogen
LC0559	CDLG1		*Colletotrichum gloeosporioides*	Gloeosporioides	Yang YL	—	China, Guizhou	*Hemerocallis citrina*	*Xanthorrhoeaceae*	Pathogen
LC0639	P1-1		*Colletotrichum gloeosporioides*	Gloeosporioides	Cai L	—	China (probably)	*Pyrus* sp.	*Rosaceae*	Pathogen
LC0640	P1-2		*Colletotrichum gloeosporioides*	Gloeosporioides	Cai L	—	China (probably)	*Pyrus* sp.	*Rosaceae*	Pathogen
LC11204	EGY02-1	CQ655	*Colletotrichum gloeosporioides*	Gloeosporioides	Chen Q	2016.5.6	China, Guangxi, Guilin, Yangshuo County, Eguyan	*Conyza canadensis*	*Asteraceae*	Pathogen
LC11207	EGY04	CQ658	*Colletotrichum gloeosporioides*	Gloeosporioides	Chen Q	2016.5.6	China, Guangxi, Guilin, Yangshuo County, Eguyan	*Lysimachia coreana*	*Primulaceae*	Pathogen
LC11223	YSLT13-2	CQ685	*Colletotrichum gloeosporioides*	Gloeosporioides	Chen Q	2016.5.7	China, Guangxi, Guilin, Yangshuo County, Xingping Town, Luotian Dayan	*Vitex* sp.	*Lamiaceae*	Pathogen
LC11229	YSLT18-2	CQ691	*Colletotrichum gloeosporioides*	Gloeosporioides	Chen Q	2016.5.7	China, Guangxi, Guilin, Yangshuo County, Xingping Town, Luotian Dayan	*Fallopia* sp.	*Polygonaceae*	Pathogen
LC11230	YSLT18-3	CQ692	*Colletotrichum gloeosporioides*	Gloeosporioides	Chen Q	2016.5.7	China, Guangxi, Guilin, Yangshuo County, Xingping Town, Luotian Dayan	*Fallopia* sp.	*Polygonaceae*	Pathogen
LC11267	SSY16-1	CQ734	*Colletotrichum gloeosporioides*	Gloeosporioides	Chen Q	2016.5.10	China, Guangxi, Nanning, Laibin City, Sanshan Village	*Oplismenus compositus*	*Poaceae*	Pathogen
LC11268	SSY16-2	CQ735	*Colletotrichum gloeosporioides*	Gloeosporioides	Chen Q	2016.5.10	China, Guangxi, Nanning, Laibin City, Sanshan Village	*Oplismenus compositus*	*Poaceae*	Pathogen
LC5868	JAU0291	WLP-a	*Colletotrichum gloeosporioides*	Gloeosporioides	Wu LP	2014.7.1	China, Jiangxi, Nanchang, Jiangxi Agricultural University	Submerged wood	—	Pathogen
LC6892	WM126	J-11	*Colletotrichum gloeosporioides*	Gloeosporioides	Zhou X	2015,09	China, Hunan	*Citrus reticulata*	*Rutaceae*	Pathogen
LC6976	WM210	JXXW02	*Colletotrichum gloeosporioides*	Gloeosporioides	Wang M	2015,09	China, Jiangxi	*Citrus reticulata*	*Rutaceae*	Pathogen
LC7091	WM325	MZ02-11	*Colletotrichum gloeosporioides*	Gloeosporioides	Zhao P	2016.05.15	China, Yunnan, Mengzi, South Lake Park	*Musa basjoo*	*Musaceae*	Pathogen
LC15761	MH0331	BS062L2a	*Colletotrichum gloeosporioides*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Baise, Leye county, Luomei Lotus Cave	*Iodes seretii*	*Icacinaceae*	Pathogen
LC15762	MH0332	BS062L2c	*Colletotrichum gloeosporioides*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Baise, Leye county, Luomei Lotus Cave	*Iodes seretii*	*Icacinaceae*	Pathogen
LC15763	MH0334	BS063L2b	*Colletotrichum gloeosporioides*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Baise, Leye county, Luomei Lotus Cave	*Arthraxon lanceolatus*	*Poaceae*	Pathogen
LC15765	MH0337	BS66L1c	*Colletotrichum gloeosporioides*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Baise, Leye county, Luomei Lotus Cave	*Cladrastis sikokiana*	*Fabaceae*	Pathogen

Table S5. All strains identified in the current study.

Organism ID	Other code 1	Other code 2	Species	Species complex	Collector	Collection date	Source country	Host	Host family	Lifestyle of this isolate
LC15781	MH0484	NG24L2a	*Colletotrichum gloeosporioides*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Alchornea tiliifolia*	*Euphorbiaceae*	Pathogen
LC15783	MH0488	NG27L1c	*Colletotrichum gloeosporioides*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Pseudodracontium lacourii*	*Araceae*	Pathogen
LC15803	MH0641	NG78L2	*Colletotrichum gloeosporioides*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Amischotolype monosperma*	*Commelinaceae*	Pathogen
LC15807	MH0668	BS062L2b	*Colletotrichum gloeosporioides*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Baise, Leye county, Luomei Lotus Cave	*Iodes seretii*	*Icacinaceae*	Pathogen
LC15812	MH0706	NG27L1h	*Colletotrichum gloeosporioides*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Pseudodracontium lacourii*	*Araceae*	Pathogen
LC15813	MH0710	NG34L3a	*Colletotrichum gloeosporioides*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Pterospermum xylocarpum*	*Sterculiaceae*	Pathogen
LC15814	MH0711	NG34L3b	*Colletotrichum gloeosporioides*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Pterospermum xylocarpum*	*Sterculiaceae*	Pathogen
LC15815	MH0716	NG36L1d	*Colletotrichum gloeosporioides*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC15818	MH0762	NG491L3h	*Colletotrichum gloeosporioides*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Pinellia tripartita*	*Araceae*	Pathogen
LC15825	LH06	NG411L1L2	*Colletotrichum gloeosporioides*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China	--	--	Pathogen
NN003488	17-9-2		*Colletotrichum godetiae*	Acutatum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Nothopnax delavayi*	*Araliaceae*	Endophyte
NN003661	19-7-1		*Colletotrichum godetiae*	Acutatum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Orixa japonica*	*Rutaceae*	Endophyte
NN003664	17-12-1		*Colletotrichum godetiae*	Acutatum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Nothopnax delavayi*	*Araliaceae*	Endophyte
NN003667	69-F-1		*Colletotrichum godetiae*	Acutatum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Rhododendron* sp.	*Ericaceae*	Endophyte
NN003670	16-1-2		*Colletotrichum godetiae*	Acutatum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Acanthopanax senticosus*	*Araliaceae*	Endophyte
NN003684	112-10-1		*Colletotrichum godetiae*	Acutatum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	--	--	Endophyte
NN004344	52-26-1		*Colletotrichum godetiae*	Acutatum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Camellia sinensis*	*Theaceae*	Endophyte
NN004377	53-5-1		*Colletotrichum godetiae*	Acutatum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Pithecolobium* sp.	*Fabaceae*	Endophyte
NN004381	53-26-1		*Colletotrichum godetiae*	Acutatum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Pithecolobium* sp.	*Fabaceae*	Endophyte
NN004398	9-C-2		*Colletotrichum godetiae*	Acutatum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Pleioblastus amarus*	*Poaceae*	Endophyte
NN040529			*Colletotrichum godetiae*	Acutatum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	--	--	Endophyte
NN040541	1.8.1		*Colletotrichum godetiae*	Acutatum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Mucuna sempervirens*	*Fabaceae*	Endophyte
NN040559	L1.4		*Colletotrichum godetiae*	Acutatum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Mucuna sempervirens*	*Fabaceae*	Endophyte
NN047143	G13-3		*Colletotrichum godetiae*	Acutatum	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Trachelospermum* sp.	*Apocynaceae*	Endophyte
NN047154	G5-17		*Colletotrichum godetiae*	Acutatum	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Pittosporum* sp.	*Pittosporaceae*	Endophyte
NN058857	12926b		*Colletotrichum godetiae*	Acutatum	Wu WP	2015.4.10	China, Yunnan, Kunming, Botanical Garden	--	--	Pathogen
NN058866	12926a		*Colletotrichum godetiae*	Acutatum	Wu WP	2015.4.10	China, Yunnan, Kunming, Botanical Garden	--	--	Pathogen
LC6064	JJR032	TM05-4	*Colletotrichum godetiae*	Acutatum	Chen Q	2015.6.13	China, Tibet, near Tongmai Bridge	--	--	Pathogen
NN058958	13273		*Colletotrichum hemerocallidis*	Dematium	Wu WP	2015.6.12	China, Hangzhou Botanical Garden	*Hemerocallis* sp.	*Liliaceae*	Pathogen
LC8220	M0030	WYS1-1-1	*Colletotrichum henanense*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Woodwardia japonica*	*Blechnaceae*	Pathogen
LC8232	M0043	WYS4-1-1	*Colletotrichum henanense*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Machilus* sp.	*Lauraceae*	Pathogen
LC8369	M0183	WYS46-3-3	*Colletotrichum henanense*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Embelia vestita*	*Myrsinaceae*	Pathogen
NN058941	12970a		*Colletotrichum higginsianum*	Destructivum	Wu WP	2015.5.22	China, Shanghai, Shanghai Botanical Garden	Monocotyledon plant	--	Pathogen
LC7595	LJM79	NYH2-3	*Colletotrichum higginsianum*	Destructivum	Liu F	2015.6.16	China, Tibet, Mi Lin, Nan Yi Gou	--	*Poaceae*	Pathogen
LC8516	M0341	WYS5-2-3-2	*Colletotrichum higginsianum*	Destructivum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Lycopersicon esculentum*	*Solanaceae*	Pathogen
NN047000	50-10		*Colletotrichum horii*	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Cleyera* sp.	*Pentaphylacaceae*	Endophyte
LC5174	MD08-2	CQ472	*Colletotrichum horii*	Gloeosporioides	Chen Q	2013.9.2	China, Qinghai, Xunhua County, Mengda Tianchi	*Rosa multiflora*	*Rosaceae*	Pathogen
LC8777	M0628	SZ16-2-2-2-1	*Colletotrichum horii*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Cratoxylum cochinchinense*	*Guttiferae*	Pathogen
LC8779	M0630	SZ16-1-1	*Colletotrichum horii*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Cratoxylum cochinchinense*	*Guttiferae*	Pathogen
NN055217	12396		*Colletotrichum incanum*	Spaethianum	Wu WP	2012.12.24	China, Guangdong, Shaoguan, Danxiashan	--	--	Pathogen
NN052799	BN06-2		*Colletotrichum indonesiense*	Acutatum	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Mangifera indica*	*Anacardiaceae*	Endophyte
LC3697	ZN169	LS105-2	*Colletotrichum iris*	Spaethianum	Zhou N	2013.9.4	China, Jiangxi, Jiujiang, Lushan Botanical Garden	*Iris japonica*	*Iridaceae*	Pathogen
LC0814	G17-7-1	S11	*Colletotrichum jiangxiense*	Gloeosporioides	Sun W	--	China, Zhejiang, Gu Tian Shan	*Eurya rubiginosa* var. *attenuata*	*Theaceae*	Pathogen
LC3693	ZN141	LS103-1	*Colletotrichum jiangxiense*	Gloeosporioides	Zhou N	2013.9.4	China, Jiangxi, Jiujiang, Lushan Botanical Garden	--	*Berberidaceae*	Pathogen
LC8509	M0333	WYS49-2-2	*Colletotrichum jinshuiense*	Dematium	Cai L	2016,08	China, Fuzhou, Wuyishan	*Dioscorea zingiberensis*	*Dioscoreaceae*	Pathogen
LC5307	FZ0007	K1A23P-2	*Colletotrichum kahawae clade*	Gloeosporioides	Zhang ZF	2014.07.23	China, Guizhou, Kuankuoshui national natural reserve, unnamed karst cave, N 28° 12' 629'', E 107° 13' 639''	Air	--	Pathogen
LC7060	WM294	YNJX01-4	*Colletotrichum kahawae clade*	Gloeosporioides	Zhao P	2016.05.15	China, Yunnan, Jiuxiang	*Musa basjoo*	*Musaceae*	Pathogen
LC7062	WM296	YNJX01-6	*Colletotrichum kahawae clade*	Gloeosporioides	Zhao P	2016.05.15	China, Yunnan, Jiuxiang	*Musa basjoo*	*Musaceae*	Pathogen
LC7232	WM466	G10-2	*Colletotrichum kahawae clade*	Gloeosporioides	Huang JN	2016.07.01	China, Jiangxi, Jiangxi Agriculture University	Bamboo	*Poaceae*	Pathogen
LC7950	JXNC22G		*Colletotrichum kahawae clade*	Gloeosporioides	Hu DM	2015,1	China, Jiangxi	*Capsicum* sp.	*Solanaceae*	Pathogen
LC8250	M0061	WYS8-4-2-1	*Colletotrichum kahawae clade*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Paederia foetida*	*Rubiaceae*	Pathogen
LC8321	M0135	WYS8-3-1-2	*Colletotrichum kahawae clade*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Paederia foetida*	*Rubiaceae*	Pathogen
LC8386	M0202	WYS17-3-1-2	*Colletotrichum kahawae clade*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Liquidambar formosana*	*Hamamelidaceae*	Pathogen
LC8427	M0243	WYS14-1-1	*Colletotrichum kahawae clade*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Petasites hybridus*	*Compositae*	Pathogen
LC8431	M0247	WYS25-3-2	*Colletotrichum kahawae clade*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Magnolia acuminata*	*Magnoliaceae*	Pathogen
LC8440	M0257	WYS33-1-1	*Colletotrichum kahawae clade*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Veronicastrum axillare*	*Scrophulariaceae*	Pathogen
LC8461	M0278	WYS7-2-4-1	*Colletotrichum kahawae clade*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Plagiogyria glauca*	*Plagiogyriaceae*	Pathogen
LC8568	M0397	WYS30-2-3-2	*Colletotrichum kahawae clade*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Phaseolus vulgaris*	*Leguminosae*	Pathogen
LC8570	M0399	WYS30-3-3-1	*Colletotrichum kahawae clade*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Phaseolus vulgaris*	*Leguminosae*	Pathogen
LC8571	M0400	WYS30-3-3-2	*Colletotrichum kahawae clade*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Phaseolus vulgaris*	*Leguminosae*	Pathogen
LC8574	M0404	WYS38-1-4-2	*Colletotrichum kahawae clade*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Osmunda regalis*	*Osmundaceae*	Pathogen
LC8577	M0407	WYS38-3-2	*Colletotrichum kahawae clade*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Osmunda regalis*	*Osmundaceae*	Pathogen
LC8630	M0462	WYS56-3-3	*Colletotrichum kahawae clade*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Machilus yunnanensis*	*Lauraceae*	Pathogen
LC8689	M0521	WYS56-2-1	*Colletotrichum kahawae clade*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Machilus yunnanensis*	*Lauraceae*	Pathogen
LC8702	M0551	SZ1D-1	*Colletotrichum kahawae clade*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Schefflera heptaphylla*	*Araliaceae*	Pathogen
LC8703	M0552	SZ1D-2	*Colletotrichum kahawae clade*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Schefflera heptaphylla*	*Araliaceae*	Pathogen
NN003522	4-24-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Pittosporum tobira*	*Pittosporaceae*	Endophyte
NN003529	63-18-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Callistemon rigidus*	*Myrtaceae*	Endophyte
NN003546	67-3-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Litsea pungens*	*Lauraceae*	Endophyte
NN003591	29-1-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Aesculus wangii*	*Sapindaceae*	Endophyte
NN003592	26-22-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	--	--	Endophyte
NN003636	69-A-1-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Rhododendron* sp.	*Ericaceae*	Endophyte
NN003637	19-1-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Orixa japonica*	*Rutaceae*	Endophyte
NN003638	19-2-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Orixa japonica*	*Rutaceae*	Endophyte

Table S5. All strains identified in the current study.

Organism ID	Other code 1	Other code 2	Species	Species complex	Collector	Collection date	Source country	Host	Host family	Lifestyle of this isolate
NN003639	18-9-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Firmiana simplex*	*Malvaceae*	Endophyte
NN003643	14-A-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN003644	13-20-3		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Illicium simonse*	*Illiciaceae*	Endophyte
NN003645	13-24-3		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Illicium simonse*	*Illiciaceae*	Endophyte
NN003647	94-28-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN003668	16-26-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Acanthopanax senticosus*	*Araliaceae*	Endophyte
NN003673	4-23-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Pittosporum tobira*	*Pittosporaceae*	Endophyte
NN003675	10-A-3		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Juniperus formosana*	*Cupressaceae*	Endophyte
NN003677	87-1-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Mahonia fortunei*	*Magnoliaceae*	Endophyte
NN003679	4-8-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Pittosporum tobira*	*Pittosporaceae*	Endophyte
NN003690	5-3-2		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN003691	5-8-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN003854	85-3-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Euonymus japonica*	*Celastraceae*	Endophyte
NN003865	62-23-4		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Buxus bodinieri*	*Buxaceae*	Endophyte
NN003877	62-9-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Buxus bodinieri*	*Buxaceae*	Endophyte
NN003878	62-23-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Buxus bodinieri*	*Buxaceae*	Endophyte
NN003881	62-30-2		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Buxus bodinieri*	*Buxaceae*	Endophyte
NN003883	82-6-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Rhododendron* sp.	*Ericaceae*	Endophyte
NN003890	71-1-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Ilex* sp.	*Aquifoliaceae*	Endophyte
NN003931	78-3-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Camellia japonica*	*Theaceae*	Endophyte
NN003975	47-1-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN003977	95-4-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Colquhounia coccinea* var. *mollis*	*Lamiaceae*	Endophyte
NN003989	78-21-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Camellia japonica*	*Theaceae*	Endophyte
NN003992	84-20-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Trachycarpus fortunei*	*Arecaceae*	Endophyte
NN004097	38-2-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Phoebe chinensis*	*Lauraceae*	Endophyte
NN004099	38-9-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Phoebe chinensis*	*Lauraceae*	Endophyte
NN004100	38-16-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Phoebe chinensis*	*Lauraceae*	Endophyte
NN004102	39-2-2		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Camellia recticulata*	*Theaceae*	Endophyte
NN004312	83-8-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Cycas revoluta*	*Cycadaceae*	Endophyte
NN004337	52-8-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Camellia sinensis*	*Theaceae*	Endophyte
NN004370	9-C-3		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Pleioblastus amarus*	*Poaceae*	Endophyte
NN004386	55-4-2		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN004436	75-C-2		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Podocarpus nogi*	*Poaceae*	Endophyte
NN004496	92-21-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Cinnamomum glanduliferum*	*Lauraceae*	Endophyte
NN040129	51-1-1		*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Cyclobalanopsis glavia*	*Fagaceae*	Endophyte
NN040626			*Colletotrichum karsti*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN047015	HN47-6		*Colletotrichum karsti*	Boninense	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Daphniphyllum oldhamii*	*Daphniphyllaceae*	Endophyte
HN3-6	HN3-6		*Colletotrichum karsti*	Boninense	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Daphniphyllum macropodum*	*Daphniphyllaceae*	Endophyte
NN047110	HN17-15		*Colletotrichum karsti*	Boninense	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Daphniphyllum macropodum*	*Daphniphyllaceae*	Endophyte
NN047121	G17-3		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN047128	G22-4		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Livistona chinensis*	*Arecaceae*	Endophyte
NN047132	G27-2		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Magnolia* sp.	*Magnoliaceae*	Endophyte
NN047138	G15-4		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Buxus* sp.	*Buxaceae*	Endophyte
NN047142	G16-9		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Tsuga* sp.	*Pinaceae*	Endophyte
NN047150	G3-1		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Mahonia* sp.	*Magnoliaceae*	Endophyte
NN047151	G3-4		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Mahonia* sp.	*Magnoliaceae*	Endophyte
NN047153	G5-20		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Pittosporum* sp.	*Pittosporaceae*	Endophyte
NN047155	G5-8		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Pittosporum* sp.	*Pittosporaceae*	Endophyte
NN047158	G7-3		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Camellia* sp.	*Theaceae*	Endophyte
NN047169	G8-5		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Buxus* sp.	*Buxaceae*	Endophyte
NN047172	G12-10		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Taxus* sp.	*Taxaceae*	Endophyte
NN047175	G11-5		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN047184	G6-2		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Camellia* sp.	*Theaceae*	Endophyte
NN047188	G4-1		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Cycas revoluta*	*Cycadaceae*	Endophyte
NN047203	G34-6		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Michelia figo*	*Magnoliaceae*	Endophyte
NN047209	G30-4		*Colletotrichum karsti*	Boninense	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN047231	HN49-3		*Colletotrichum karsti*	Boninense	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*?Ilex* sp.	*Aquifoliaceae*	Endophyte
NN052728	BN10-10		*Colletotrichum karsti*	Boninense	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Pseuduvaria indochinensis*	*Annonaceae*	Endophyte
NN052743	BN15-5		*Colletotrichum karsti*	Boninense	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Ixora chinensis*	*Rubiaceae*	Endophyte
NN052934	BN32-6		*Colletotrichum karsti*	Boninense	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Pinanga sinii*	*Palmae*	Endophyte
NN053004	BN13-17		*Colletotrichum karsti*	Boninense	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Cassia fistula*	*Fabaceae*	Endophyte
NN053038	BN14-8		*Colletotrichum karsti*	Boninense	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Knema furfuracea*	*Myristicaceae*	Endophyte
NN053054	BN19-13		*Colletotrichum karsti*	Boninense	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Saraca dives*	*Fabaceae*	Endophyte
NN053055	BN19-14		*Colletotrichum karsti*	Boninense	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Saraca dives*	*Fabaceae*	Endophyte
NN053057	BN19-16		*Colletotrichum karsti*	Boninense	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Saraca dives*	*Fabaceae*	Endophyte
NN053083	BN23-8		*Colletotrichum karsti*	Boninense	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	—	—	Endophyte
NN053086	BN23-11		*Colletotrichum karsti*	Boninense	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	—	—	Endophyte
NN053103	BN17-11		*Colletotrichum karsti*	Boninense	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Ficus altissima*	*Moraceae*	Endophyte
NN057403	13122		*Colletotrichum karsti*	Boninense	Wu WP	2013.11.12	China, Guangxi, Nanning, Qing Xiu shang	*Monstera deliciosa*	*Araceae*	Pathogen
NN057403	13122		*Colletotrichum karsti*	Boninense	Wu WP	2013.11.12	China, Guangxi, Nanning, Qing Xiu shang	*Monstera deliciosa* , living leaves	*Araceae*	Pathogen
LC15712	DYS09-2	CQ1021	*Colletotrichum karsti*	Boninense	Liu YW	—	China, Jiangsu, Suzhou, Dayangshan National Forest Park, 31°20'33"N，120°28'1"E，30m	*Bealei mahonia*	*Berberidaceae*	Pathogen
LC15713	DYS12-1	CQ1025	*Colletotrichum karsti*	Boninense	Liu YW	—	China, Jiangsu, Suzhou, Dayangshan National Forest Park, 31°20'33"N，120°28'1"E，30m	*Loropetalum chinense* var. *rubrum*	*Hamamelidaceae*	Pathogen
LC11194	XY01-5	CQ639	*Colletotrichum karsti*	Boninense	Chen Q	2015.7.4	China, Guizhou, Xingyi	*Dendrobium officinale*	*Orchidaceae*	Pathogen
LC11222	YSLT13-1	CQ684	*Colletotrichum karsti*	Boninense	Chen Q	2016.5.7	China, Guangxi, Guilin, Yangshuo County, Xingping Town, Luotian Dayan	*Vitex* sp.	*Lamiaceae*	Pathogen

Table S5. All strains identified in the current study.

Organism ID	Other code 1	Other code 2	Species	Species complex	Collector	Collection date	Source country	Host	Host family	Lifestyle of this isolate
LC1209	LEN004B		*Colletotrichum karsti*	Boninense	Udayanga D	–	Thailand, Chiang Rai	–	–	Pathogen
LC4626	YH493	ZYL80-3	*Colletotrichum karsti*	Boninense	Gao YH, Zhou N & Zhang Y	2013.09.05	China, Jiangxi	–	*Lamiales*	Pathogen
LC5690	FZ0392	K2O13P-Z-1	*Colletotrichum karsti*	Boninense	Zhang ZF	2014.07.23	China, Guizhou, Kuankuoshui national natural reserve, unnamed karst cave, N 28°12’ 599’’, E 107°13’ 661’’	–	–	Pathogen
LC7061	WM295	YNJX01-5	*Colletotrichum karsti*	Boninense	Zhao P	2016.05.15	China, Yunnan, Jiuxiang	*Musa basjoo*	*Musaceae*	Pathogen
LC15732	MH0112	BS007a	*Colletotrichum karsti*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Baise, CengWangLaoShan National Nature Reserve	*Rubus reflexus*	*Rosaceae*	Pathogen
LC15733	MH0113	BS007b	*Colletotrichum karsti*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Baise, CengWangLaoShan National Nature Reserve	*Rubus reflexus*	*Rosaceae*	Pathogen
LC15743	MH0188	BS92L1b	*Colletotrichum karsti*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Hemidiodia ocimifolia*	*Rubiaceae*	Pathogen
LC15744	MH0189	BS92L1c	*Colletotrichum karsti*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Hemidiodia ocimifolia*	*Rubiaceae*	Pathogen
LC15758	MH0278	BS030Z-1	*Colletotrichum karsti*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Baise, Leye county, Dashiwei Sinkhole	*Pteris cretica*	*Pteridaceae*	Pathogen
LC15766	MH0348	BS73L1a	*Colletotrichum karsti*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Clerodendrum philippinum*	*Lamiaceae*	Pathogen
LC15767	MH0349	BS73L1b	*Colletotrichum karsti*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Clerodendrum philippinum*	*Lamiaceae*	Pathogen
LC15768	MH0352	BS73L2c	*Colletotrichum karsti*	Boninense	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Clerodendrum philippinum*	*Lamiaceae*	Pathogen
NN043626	1172		*Colletotrichum linicola*	Destructivum	Wu WP	1997.8.25	China, Ningxia, Liupanshan, Qiuqianjia	–	–	Pathogen
NN003961	53-25-1		*Colletotrichum liriopes*	Spaethianum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Pithecolobium* sp.	*Fabaceae*	Endophyte
NN004383	53-32-1		*Colletotrichum liriopes*	Spaethianum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Pithecolobium* sp.	*Fabaceae*	Endophyte
NN040102	53-25-1		*Colletotrichum liriopes*	Spaethianum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Pithecolobium* sp.	*Fabaceae*	Endophyte
NN054604	15024		*Colletotrichum liriopes*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Ophiopogon japonicus*	*Asparagaceae*	Pathogen
NN054636	15066		*Colletotrichum liriopes*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Hosta* sp.	*Asparagaceae*	Pathogen
NN054648	15021		*Colletotrichum liriopes*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Anemarrhena asphodeloides*	*Asparagaceae*	Pathogen
NN054663	15043		*Colletotrichum liriopes*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Hemerocallis fulva*	*Xanthorrhoeaceae*	Pathogen
NN055311	12513		*Colletotrichum liriopes*	Spaethianum	Wu WP	2012.12.25	China, Guangdong, Shaoguan, Danxiashan	*Ophiopogon japonicus*	*Asparagaceae*	Pathogen
NN055311	12513		*Colletotrichum liriopes*	Spaethianum	Wu WP	2012.12.25	China, Guangdong, Shaoguan, Danxiashan	*Ophiopogon japonicus*	*Asparagaceae*	Pathogen
NN058957	13260		*Colletotrichum liriopes*	Spaethianum	Wu WP	2015.6.12	China, Hangzhou Botanical Garden	*Agave* sp.	*Asparagaceae*	Pathogen
NN071073	13367		*Colletotrichum liriopes*	Spaethianum	Wu WP	2015.7.1	China, Shan'xi, Xi An, Hua Qingchi	*Osmanthus fragrans*	*Oleaceae*	Pathogen
LC0044			*Colletotrichum liriopes*	Spaethianum	Bo	–	China, Beijing, Institute of Microbiology, Chinese Academy of Sciences	Grass	–	Pathogen
LC11287	MZ06	CQ770	*Colletotrichum liriopes*	Spaethianum	Chen Q	2016.5.12	China, Yunnan, Honghe Autonomous Prefecture, Mengzi County, Datunhai	*Liriope spicata*	*Asparagaceae*	Pathogen
LC2158	HU0138	N3	*Colletotrichum liriopes*	Spaethianum	Tan XM	–	China, Jiangxi, Ganzhou	*Citrus sinensis* var. *brasiliensis*	*Rutaceae*	Pathogen
LC7623	LJM109	BMX	*Colletotrichum liriopes*	Spaethianum	Liu F	2015.6.13	China, Tibet, Bomi, Suotong village	–	*Poaceae*	Pathogen
LC7941	WCCT124		*Colletotrichum liriopes*	Spaethianum	Diao YZ	2015,1	China, Shandong	*Capsicum* sp.	*Solanaceae*	Pathogen
LC15724	MH0055	NN23L1-1	*Colletotrichum liriopes*	Spaethianum	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Heliconia collinsiana*	*Heliconiaceae*	Pathogen
LC15804	MH0651	NN23L1h	*Colletotrichum liriopes*	Spaethianum	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Heliconia collinsiana*	*Heliconiaceae*	Pathogen
NN054769	15081		*Colletotrichum magnum*	Magnum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Sorghum bicolor*	*Solanaceae*	Pathogen
NN052770	BN10-11		*Colletotrichum magnusporum*	Gigasporum	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Pseuduvaria indochinensis*	*Annonaceae*	Endophyte
NN055214	12400		*Colletotrichum monsterae*	Orchidearum	Wu WP	2012.12.24	China, Guangdong, Guangzhou, Zhaoqing, Qixingyan	*Monstera deliciosa*	*Araceae*	Pathogen
NN055357	12578		*Colletotrichum multiseptatum*	Graminicola	Wu WP	2012.12.25	China, Guangdong, Shaoguan, Danxiashan	–	–	Pathogen
NN055357	12578		*Colletotrichum multiseptatum*	Graminicola	Wu WP	2012.12.25	China, Guangdong, Shaoguan, Danxiashan	Grass	*Poaceae*	Pathogen
NN055216	12397		*Colletotrichum musae*	Gloeosporioides	Wu WP	2012.12.30	China, Guangdong, Shaoguan, Danxiashan	*Musa* sp.	*Musaceae*	Pathogen
LC1237	GEN005A		*Colletotrichum musicola*	Orchidearum	Udayanga D	–	Thailand, Chiang Rai	–	–	Pathogen
LC1238	GEN005I		*Colletotrichum musicola*	Orchidearum	Udayanga D	–	Thailand, Chiang Rai	–	–	Pathogen
NN004492	75-J-2		*Colletotrichum nageiae*	singleton	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Nageia nagi*	*Poaceae*	Endophyte
LC8348	M0162	WYS8-3-4-1-2	*Colletotrichum nymphaeae*	Acutatum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Paederia foetida*	*Rubiaceae*	Pathogen
LC8604	M0434	WYS63-3-2	*Colletotrichum nymphaeae*	Acutatum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Acer buergerianum*	*Aceraceae*	Pathogen
LC8657	M0489	WYS56-2-2	*Colletotrichum nymphaeae*	Acutatum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Machilus yunnanensis*	*Lauraceae*	Pathogen
LC6085	JJR053	ST10-3	*Colletotrichum obovoides*	singleton	Chen Q	2015.6.13	China, Tibet, Bomi, Suotong village	–	–	Pathogen
LC11257	SSY09-2	CQ723	*Colletotrichum ocimi*	Destructivum	Chen Q	2016.5.10	China, Guangxi, Nanning, Laibin City, Sanshan Village	*Croton megalobotrys*	*Euphorbiaceae*	Pathogen
NN003594	69-C-2		*Colletotrichum oncidii*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Rhododendron* sp.	*Ericaceae*	Endophyte
NN003979	44-2-1		*Colletotrichum oncidii*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	–	–	Endophyte
NN004484	49-18-1		*Colletotrichum oncidii*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Rhododendron spinuliferium*	*Ericaceae*	Endophyte
NN040633			*Colletotrichum oncidii*	Boninense	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	–	–	Endophyte
NN055009	15131		*Colletotrichum oncidii*	Boninense	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Vigna radiata*	*Fabaceae*	Pathogen
NN055277	12434		*Colletotrichum oncidii*	Boninense	Wu WP	2012.12.29	China, Guangdong, Guangzhou, Lanyuan	–	–	Pathogen
NN051376	WU016		*Colletotrichum orbiculare*	Orbiculare	Wu WP	2011.11.6	China, Beijing, Haidian, Shangdi	–	–	Pathogen
NN054672	15087		*Colletotrichum orbiculare*	Orbiculare	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Benincasa hispida*	*Cucurbitaceae*	Pathogen
NN055208	12417		*Colletotrichum orchidearum*	Orchidearum	Wu WP	2012.12.29	China, Guangdong, Guangzhou, Yuexiu Park	On dead leaves of orchard	–	Pathogen
LC1030	h76-2		*Colletotrichum orchidearum*	Orchidearum	Su YY	–	China, Guangdong, South China Botanical Garden	*Cymbidium eburneum*	*Orchidaceae*	Pathogen
LC0316	Eng08		*Colletotrichum orchidophilum*	singleton	Cai L	–	UK, England Kew garden	*Phragmipedium* sp.	*Orchidaceae*	Pathogen
NN058925	12978b		*Colletotrichum parabambusicola*	Bambusicola	Wu WP	2015.5.22	China, Shanghai, Shanghai Botanical Garden	Bamboo	–	Pathogen
NN058956	12978a		*Colletotrichum parabambusicola*	Bambusicola	Wu WP	2015.5.22	China, Shanghai, Shanghai Botanical Garden	On dead culm of bamboo	–	Pathogen
NN054963	15099		*Colletotrichum paraendophytum*	Graminicola	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	Leaf of grass	–	Pathogen
LC0550	GEN0017B		*Colletotrichum plurivorum*	Orchidearum	Manamgoda DS	–	Thailand, Chiang Rai	Grass	–	Pathogen
LC1074	h60-2		*Colletotrichum plurivorum*	Orchidearum	Su YY	–	China, Guangdong, South China Botanical Garden	Orchid	*Orchidaceae*	Pathogen
LC4452	YH312	ZYL62-3	*Colletotrichum plurivorum*	Orchidearum	Gao YH, Zhou N & Zhang Y	2013.09.05	China, Jiangxi	*Liquidambar* sp.	*Hamamelidaceae*	Pathogen
LC6679	QY493-9		*Colletotrichum plurivorum*	Orchidearum	Lindong	2015,8	China, Guangdong	*Capsicum* sp.	*Solanaceae*	Pathogen
LC8240	M0051	WYS8-1-3-1	*Colletotrichum plurivorum*	Orchidearum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Paederia foetida*	*Rubiaceae*	Pathogen
LC8244	M0055	WYS8-2-1	*Colletotrichum plurivorum*	Orchidearum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Paederia foetida*	*Rubiaceae*	Pathogen
LC8278	M0090	WYS66-3-1	*Colletotrichum plurivorum*	Orchidearum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Patrinia villosa*	*Valerianaceae*	Pathogen
LC8322	M0136	WYS8-3-2-2-1	*Colletotrichum plurivorum*	Orchidearum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Paederia foetida*	*Rubiaceae*	Pathogen
LC8333	M0147	WYS66-3-2-1	*Colletotrichum plurivorum*	Orchidearum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Patrinia villosa*	*Valerianaceae*	Pathogen
LC8337	M0151	FJWYS01-1-2-2	*Colletotrichum plurivorum*	Orchidearum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Vigna unguiculata*	*Leguminosae*	Pathogen
LC8753	M0604	SZ14-1-1	*Colletotrichum queenslandicum*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Lagerstroemia speciosa*	*Lythraceae*	Pathogen
LC8230	M0041	WYS3-3-2	*Colletotrichum reniforme*	Orchidearum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Smilax cocculoides*	*Liliaceae*	Pathogen
LC8248	M0059	WYS8-3-2-1	*Colletotrichum reniforme*	Orchidearum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Paederia foetida*	*Rubiaceae*	Pathogen
NN040620	V.1.8.2		*Colletotrichum rhombiforme*	Acutatum	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	–	–	Endophyte
NN046984	40-7		*Colletotrichum schimae*	Acutatum	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Schima* sp.	*Theaceae*	Endophyte

Table S5. All strains identified in the current study.

Organism ID	Other code 1	Other code 2	Species	Species complex	Collector	Collection date	Source country	Host	Host family	Lifestyle of this isolate
NN047247	40-34		*Colletotrichum schimae*	Acutatum	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Schima* sp.	*Theaceae*	Endophyte
LC11841	YN53-2		*Colletotrichum scovillei*	Acutatum	Gu AY	2016.7.14	China, Yunnan	*Capsicum* sp.	*Solanaceae*	Pathogen
LC11843	YN54-1		*Colletotrichum scovillei*	Acutatum	Gu AY	2016.8.11	China, Yunnan	*Capsicum* sp.	*Solanaceae*	Pathogen
LC7929	WCS49		*Colletotrichum scovillei*	Acutatum	Diao YZ	2015,9	China, Shandong	*Capsicum* sp.	*Solanaceae*	Pathogen
LC15782	MH0487	NG27L1b	*Colletotrichum scovillei*	Acutatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Pseudodracontium lacourii*	*Araceae*	Pathogen
LC1400	BRIP15842a		*Colletotrichum shivasii*	Caudatum	—	—	Australia	*Themeda triandra*	*Poaceae*	Pathogen
NN055271	12427		*Colletotrichum siamense*	Gloeosporioides	Wu WP	2012.12.29	China, Guangdong, Guangzhou, Lanyuan	—	*Orchidaceae*	Pathogen
NN055355	12569		*Colletotrichum siamense*	Gloeosporioides	Wu WP	2012.12.25	China, Guangdong, Shaoguan, Danxiashan	—	—	Pathogen
NN055362	12545		*Colletotrichum siamense*	Gloeosporioides	Wu WP	2012.12.25	China, Guangdong, Shaoguan, Danxiashan	—	—	Pathogen
NN057530	12604		*Colletotrichum siamense*	Gloeosporioides	Wu WP	2013.12.10	China, Guangdong, Guangzhou	—	—	Pathogen
NN057558	12638		*Colletotrichum siamense*	Gloeosporioides	Wu WP	2013.12.10	China, Guangdong, Guangzhou	—	—	Pathogen
NN072577	12728		*Colletotrichum siamense*	Gloeosporioides	Wu WP	2016.2.28	China, Guangdong, Guangzhou, South China Botanical Garden,	*Dracaena angustifolia*	*Asparagaceae*	Pathogen
LC15717	YS10	CQ1089	*Colletotrichum siamense*	Gloeosporioides	Liu YW	—	China, Jiangsu, changshu, Yushan National Forest Park, 31°39'10"N，120°44'1"E，10m	*Jasminum mesnyi*	*Oleaceae*	Pathogen
LC15718	YS25-1	CQ1138	*Colletotrichum siamense*	Gloeosporioides	Liu YW	—	China, Jiangsu, Changshu, Yushan National Forest Park, 31°39'10"N，120°44'1"E，10m	—	*Lauraceae*	Pathogen
LC15705	QLS04-1	CQ965	*Colletotrichum siamense*	Gloeosporioides	Liu YW	—	China, Jiangsu, Suzhou, Qionglong Mountain National Forest Park, 31°16'16"N，120°26'2"E，40m	*Ilex cornuta*	*Aquifoliaceae*	Pathogen
LC15706	QLS04-2	CQ966	*Colletotrichum siamense*	Gloeosporioides	Liu YW	—	China, Jiangsu, Suzhou, Qionglong Mountain National Forest Park, 31°16'16"N，120°26'2"E，40m	*Ilex cornuta*	*Aquifoliaceae*	Pathogen
LC0012	NFW12		*Colletotrichum siamense*	Gloeosporioides	Nilam	—	Thailand	*Amaryllis* sp.	*Amaryllidaceae*	Pathogen
LC0140	PE002-2		*Colletotrichum siamense*	Gloeosporioides	Hu DM	—	China, Yunnan, Pu'er Laiyang River	*Coffea* sp.	*Rubiaceae*	Pathogen
LC0323	GENITD		*Colletotrichum siamense*	Gloeosporioides	Manamgoda DS	—	Thailand, Chiang Rai	Grass	—	Pathogen
LC0328	GEN004A		*Colletotrichum siamense*	Gloeosporioides	Manamgoda DS	—	Thailand, Chiang Rai	Grass	—	Pathogen
LC0329	GEN0018A		*Colletotrichum siamense*	Gloeosporioides	Manamgoda DS	—	Thailand, Chiang Rai	Grass	—	Pathogen
LC0347	LEN06A		*Colletotrichum siamense*	Gloeosporioides	Manamgoda DS	—	Thailand, Chiang Rai	*Cymbopogon* sp.	*Poaceae*	Pathogen
LC0351	GEN017A		*Colletotrichum siamense*	Gloeosporioides	Manamgoda DS	—	Thailand, Chiang Rai	Grass	—	Pathogen
LC0515	GEN004A		*Colletotrichum siamense*	Gloeosporioides	Manamgoda DS	—	Thailand, Chiang Rai	Grass	—	Pathogen
LC0537	GEN0017E		*Colletotrichum siamense*	Gloeosporioides	Manamgoda DS	—	Thailand, Chiang Rai	Grass	—	Pathogen
LC0719	G20-0-2-2	S12	*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Zhejiang, Gu Tian Shan	*Machilus pauhoi*	*Lauraceae*	Pathogen
LC0855	BTL04 (B03)		*Colletotrichum siamense*	Gloeosporioides	Parinn N	—	Thailand, Mai, Doi sutep	*Magnolia* sp.	*Magnoliaceae*	Pathogen
LC0866	BTL14		*Colletotrichum siamense*	Gloeosporioides	Parinn N	—	Thailand, Chiang Rai, CRU	*Clinacanthus nutans*	*Acanthaceae*	Pathogen
LC0868	BTL03(003)		*Colletotrichum siamense*	Gloeosporioides	Parinn N	—	Thailand, Chiang Rai, Doi Chang	*Coffea* sp.	*Rubiaceae*	Pathogen
LC0869	BTL02(002)		*Colletotrichum siamense*	Gloeosporioides	Parinn N	—	Thailand, Chiang Rai, Doi Chang	*Coffea* sp.	*Rubiaceae*	Pathogen
LC0874	BTL20		*Colletotrichum siamense*	Gloeosporioides	Parinn N	—	Thailand, Chiang Mai, Sarapee	*Peperomia* sp.	*Piperaceae*	Pathogen
LC0875	BTL19		*Colletotrichum siamense*	Gloeosporioides	Parinn N	—	Thailand, Chiang Rai, Phan	—	—	Pathogen
LC0878	BTL10		*Colletotrichum siamense*	Gloeosporioides	Parinn N	—	Thailand, Chiang Rai, MFU	*Magnolia* × *alba*	*Magnoliaceae*	Pathogen
LC0924	LLBM-04		*Colletotrichum siamense*	Gloeosporioides	McKenzie EHC	—	China (probably)	*Jasminum sambac*	*Oleaceae*	Pathogen
LC0930	R03		*Colletotrichum siamense*	Gloeosporioides	Bo	—	China (probably)	*Hevea* sp.	*Euphorbiaceae*	Pathogen
LC0940	CRU39		*Colletotrichum siamense*	Gloeosporioides	Parinn N	—	Thailand, Chiang Rai, Bandu	Crinum lily	*Amaryllidaceae*	Pathogen
LC0941	CMSS50		*Colletotrichum siamense*	Gloeosporioides	Parinn N	—	Thailand, Chiang Mai, San Sai	*Anthurium* sp.	*Araceae*	Pathogen
LC0942	CMSS49		*Colletotrichum siamense*	Gloeosporioides	Parinn N	—	Thailand, Chiang Mai, San Sai	*Jatropha integerrima*	*Euphorbiaceae*	Pathogen
LC0946	CRU37		*Colletotrichum siamense*	Gloeosporioides	Parinn N	—	Thailand, Chiang Rai, Bandu	*Pterocarpus* sp.	*Fabaceae*	Pathogen
LC0949	BTL15 (CN03)		*Colletotrichum siamense*	Gloeosporioides	Parinn N	—	Thailand, Chiang Mai, Chang Dao	*Dracaena angustifolia*	*Asparagaceae*	Pathogen
LC0956	CMMH33(R03)		*Colletotrichum siamense*	Gloeosporioides	Parinn N	—	Thailand, Chiang Mai	*Hevea* sp.	*Euphorbiaceae*	Pathogen
LC0959	BTL30 (B04)		*Colletotrichum siamense*	Gloeosporioides	Parinn N	—	Thailand, Chiang Mai, Sarapee	*Amherstia nobilis*	*Fabaceae*	Pathogen
LC0961	CRDP45		*Colletotrichum siamense*	Gloeosporioides	Parinn N	—	Thailand, Chiang Rai, Doi Tung	*Clerodendrum wallichii*	*Lamiaceae*	Pathogen
LC1002	D1-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, Guangzhou, Dinghu Mountain	*Smilax* sp.	*Smilacaceae*	Pathogen
LC1005	h52-3		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Aspidistra* sp.	*Asparagaceae*	Pathogen
LC1019	h75-Si-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Dracaena fragrans*	*Asparagaceae*	Pathogen
LC1025	h62-SI-3		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	Orchid	*Orchidaceae*	Pathogen
LC1029	h22		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Zantedeschia aethiopica?*	*Araceae*	Pathogen
LC1031	h38-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Washingtonia robusta*	*Arecaceae*	Pathogen
LC1032	h42-2		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Pongamia pinnata*	*Leguminosae*	Pathogen
LC1034	D2-2		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, Guangzhou, Dinghu Mountain	Fern	—	Pathogen
LC1035	h82-2		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Renanthera coccinea*	*Orchidaceae*	Pathogen
LC1038	D6-3		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, Guangzhou, Dinghu Mountain	Grass	—	Pathogen
LC1039	h14-2		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Zantedeschia aethiopica?*	*Araceae*	Pathogen
LC1040	h24-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	Orchid	*Orchidaceae*	Pathogen
LC1042	h33-2		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Philodendron selloum*	*Araceae*	Pathogen
LC1043	h70-2		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	Orchid	*Orchidaceae*	Pathogen
LC1046	h72-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Amaryllis vittata*	*Amaryllidaceae*	Pathogen
LC1047	h75-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Dracaena fragrans*	*Asparagaceae*	Pathogen
LC1051	h74-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	Orchid	*Orchidaceae*	Pathogen
LC1051	h74-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	Orchid	*Orchidaceae*	Pathogen
LC1052	h19-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Ophiopogon japonicus*	*Asparagaceae*	Pathogen
LC1054	h13-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Cinnamomum burmannii*	*Lauraceae*	Pathogen
LC1063	h78-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Cymbidium* hybrid	*Orchidaceae*	Pathogen
LC1064	h31-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	—	*Liliaceae*	Pathogen
LC1067	h82A-SI-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Renanthera coccinea*	*Orchidaceae*	Pathogen
LC1072	h59-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Dracaena cambodiana*	*Asparagaceae*	Pathogen
LC1073	DY1-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, Guangzhou, Dinghu Mountain	*Castanea henryi*	*Fagaceae*	Pathogen
LC1076	h84-3		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	—	*Orchidaceae*	Pathogen
LC1077	h37-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Chrysalidocarpus lutescens*	*Palmae*	Pathogen
LC1079	h54-1		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Rhaphiolepis indica*	*Rosaceae*	Pathogen
LC1080	h80-2		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	*Cymbidium ensifolium*	*Orchidaceae*	Pathogen
LC1083	h84-3		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	—	*Orchidaceae*	Pathogen
LC1085	h73-2		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China, Guangdong, South China Botanical Garden	—	*Orchidaceae*	Pathogen

Table S5. All strains identified in the current study.

Organism ID	Other code 1	Other code 2	Species	Species complex	Collector	Collection date	Source country	Host	Host family	Lifestyle of this isolate
LC1088	h62-SI-2		*Colletotrichum siamense*	Gloeosporioides	Su YY	—	China	—	*Orchidaceae*	Pathogen
LC11234	YSLT21-1	CQ697	*Colletotrichum siamense*	Gloeosporioides	Chen Q	2016.5.7	China, Guangxi, Guilin, Yangshuo County, Xingping Town, Luotian Dayan	*Ficus* sp.	*Moraceae*	Pathogen
LC11289	MZ08-1	CQ772	*Colletotrichum siamense*	Gloeosporioides	Chen Q	2016.5.12	China, Yunnan, Honghe Autonomous Prefecture, Mengzi County, South Lake Park	*Philodendron selloum*	*Araceae*	Pathogen
LC11290	MZ08-2	CQ773	*Colletotrichum siamense*	Gloeosporioides	Chen Q	2016.5.12	China, Yunnan, Honghe Autonomous Prefecture, Mengzi County, South Lake Park	*Philodendron selloum*	*Araceae*	Pathogen
LC11291	MZ08-3	CQ774	*Colletotrichum siamense*	Gloeosporioides	Chen Q	2016.5.12	China, Yunnan, Honghe Autonomous Prefecture, Mengzi County, South Lake Park	*Philodendron selloum*	*Araceae*	Pathogen
LC1214	GEN0017E		*Colletotrichum siamense*	Gloeosporioides	Udayanga D	—	Thailand, Chiang Rai	—	—	Pathogen
LC1219	GEN002J		*Colletotrichum siamense*	Gloeosporioides	Udayanga D	—	Thailand, Chiang Rai	—	—	Pathogen
LC1222	GEN002A		*Colletotrichum siamense*	Gloeosporioides	Udayanga D	—	Thailand, Chiang Rai	—	—	Pathogen
LC1223	GEN002I		*Colletotrichum siamense*	Gloeosporioides	Udayanga D	—	Thailand, Chiang Rai	—	—	Pathogen
LC1225	GEN0017J		*Colletotrichum siamense*	Gloeosporioides	Udayanga D	—	Thailand, Chiang Rai	—	—	Pathogen
LC1234	GEN004I		*Colletotrichum siamense*	Gloeosporioides	Udayanga D	—	Thailand, Chiang Rai	—	—	Pathogen
LC1235	GEN0017I		*Colletotrichum siamense*	Gloeosporioides	Udayanga D	—	Thailand, Chiang Rai	—	—	Pathogen
LC1368	Ⅰ		*Colletotrichum siamense*	Gloeosporioides	—	—	China (probably)	—	—	Pathogen
LC1369	Ⅱ		*Colletotrichum siamense*	Gloeosporioides	—	—	China (probably)	*Erythrophloeum fordii*	*Leguminosae*	Pathogen
LC1387	KSU-A3		*Colletotrichum siamense*	Gloeosporioides	Saudi Arabia	—	Turkey	—	—	Pathogen
LC1512	KSU-A4		*Colletotrichum siamense*	Gloeosporioides	—	—	Saudi Arabia	*Avocado* sp.	*Lauraceae*	Pathogen
LC1518	KSU-A2		*Colletotrichum siamense*	Gloeosporioides	—	—	Saudi Arabia	*Avocado* sp.	*Lauraceae*	Pathogen
LC2028	HU0008	3	*Colletotrichum siamense*	Gloeosporioides	Tan XM	2012.3.11	China, Jiangxi, Ganzhou, Gannan Normal University	*Citrus sinensis* var. *brasiliensis*	*Rutaceae*	Pathogen
LC4672	YH539	ZYL101-4	*Colletotrichum siamense*	Gloeosporioides	Gao YH, Zhou N & Zhang Y	2013.09.05	China, Jiangxi	*Smilax ocreata*	*Smilacaceae*	Pathogen
LC4952	CX11-3	CQ112	*Colletotrichum siamense*	Gloeosporioides	Cai L	2012.10.14	China, Chongqing, Jinfo Mountain National Park	*Dichotomanthus tristaniaecarpa*	*Rosaceae*	Pathogen
LC5963	JAU0416	XMP-橡树叶7a Ⅰ	*Colletotrichum siamense*	Gloeosporioides	Xiao MP	2014.8.18	China, Jiangxi, Nanchang, Jiangxi Agricultural University, North Campus	Submerged wood	—	Pathogen
LC5993	JAU0452	XMP-5a Ⅱ	*Colletotrichum siamense*	Gloeosporioides	Xiao MP	2014.9.18	China, Jiangxi, Nanchang, Jiangxi Agricultural University, North Campus	Submerged wood	—	Pathogen
LC6448	QY510-5		*Colletotrichum siamense*	Gloeosporioides	Lindong	2015,8	China, Guangdong	*Capsicum* sp.	*Solanaceae*	Pathogen
LC7023	WM257	HN-17	*Colletotrichum siamense*	Gloeosporioides	Liu FJ	2015,12	China, Hainan, Chengmai County, Dafeng Town, Ru'e Village	*Musa paradisiaca*	*Musaceae*	Pathogen
LC7024	WM258	HN-15-1	*Colletotrichum siamense*	Gloeosporioides	Liu FJ	2015,12	China, Hainan, Chengmai County, Dafeng Town, Ru'e Village	*Musa paradisiaca*	*Musaceae*	Pathogen
LC7231	WM465	G10-1	*Colletotrichum siamense*	Gloeosporioides	Huang JN	2016.07.01	China, Jiangxi, Jiangxi Agriculture University	Bamboo	*Poaceae*	Pathogen
LC7565	LJM707	YB4-2	*Colletotrichum siamense*	Gloeosporioides	Zhang ZF	2016.5.18	China, Hubei, Yibin	—	*Poaceae*	Pathogen
LC7944	JXNC9-1		*Colletotrichum siamense*	Gloeosporioides	Hu DM	2015,1	China, Jiangxi	*Capsicum* sp.	*Solanaceae*	Pathogen
LC7951	JXNC9		*Colletotrichum siamense*	Gloeosporioides	Hu DM	2015,1	China, Jiangxi	*Capsicum* sp.	*Solanaceae*	Pathogen
LC7952	JXNC24		*Colletotrichum siamense*	Gloeosporioides	Hu DM	2015,1	China, Jiangxi	*Capsicum* sp.	*Solanaceae*	Pathogen
LC8735	M0586	SZ8-1-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Machilus* sp.	*Lauraceae*	Pathogen
LC8737	M0588	SZ8-2-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Machilus* sp.	*Lauraceae*	Pathogen
LC8742	M0593	SZ11-1-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Excoecaria cochinchinensis*	*Euphorbiaceae*	Pathogen
LC8743	M0594	SZ11-1-2	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Excoecaria cochinchinensis*	*Euphorbiaceae*	Pathogen
LC8746	M0597	SZ11-2-3-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Excoecaria cochinchinensis*	*Euphorbiaceae*	Pathogen
LC8748	M0599	SZ12-1-2	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Sphagneticola trilobata*	*Asteraceae*	Pathogen
LC8749	M0600	SZ12-1-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Sphagneticola trilobata*	*Asteraceae*	Pathogen
LC8754	M0605	SZ14-1-2	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Lagerstroemia speciosa*	*Lythraceae*	Pathogen
LC8757	M0608	SZ14-2-4	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Lagerstroemia speciosa*	*Lythraceae*	Pathogen
LC8758	M0609	SZ14-2-2	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Lagerstroemia speciosa*	*Lythraceae*	Pathogen
LC8764	M0615	SZ14-2-3	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Lagerstroemia speciosa*	*Lythraceae*	Pathogen
LC8769	M0620	SZ15-3-2	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Schefflera heptaphylla*	*Araliaceae*	Pathogen
LC8770	M0621	SZ15-3-3	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Schefflera heptaphylla*	*Araliaceae*	Pathogen
LC8771	M0622	SZ15-3-4	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Schefflera heptaphylla*	*Araliaceae*	Pathogen
LC8781	M0632	SZ17-1-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Excoecaria cochinchinensis*	*Euphorbiaceae*	Pathogen
LC8788	M0639	SZ17-3-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Excoecaria cochinchinensis*	*Euphorbiaceae*	Pathogen
LC8806	M0657	SZ22-1-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Artabotrys hexapetalus*	*Annonaceae*	Pathogen
LC8807	M0658	SZ22-1-3	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Artabotrys hexapetalus*	*Annonaceae*	Pathogen
LC8810	M0661	SZ22-2-2	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Artabotrys hexapetalus*	*Annonaceae*	Pathogen
LC8819	M0670	SZ24-1-3	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Chamaerops humilis*	*Arecaceae*	Pathogen
LC8833	M0684	SZ26-2-1-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Solanum rostratum*	*Solanaceae*	Pathogen
LC8848	M0699	SZ28-3-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Acacia confusa*	*Mimosaceae*	Pathogen
LC8850	M0701	SZ28-3-2-2	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Acacia confusa*	*Mimosaceae*	Pathogen
LC8854	M0705	SZ29-1-2-2	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Bauhinia purpurea*	*Caesalpiniaceae*	Pathogen
LC8864	M0715	SZ30-1-2-2	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Celtis sinensis*	*Ulmaceae*	Pathogen
LC8865	M0716	SZ30-1-3-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Celtis sinensis*	*Ulmaceae*	Pathogen
LC8879	M0730	SZ33-1-3	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Calliandra haematocephala*	*Mimosaceae*	Pathogen
LC8883	M0734	SZ34-2-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Paramongaia weberbaueri*	*Amaryllidaceae*	Pathogen
LC8884	M0735	SZ34-2-2	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Paramongaia weberbaueri*	*Amaryllidaceae*	Pathogen
LC8886	M0737	SZ34-2-4	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Paramongaia weberbaueri*	*Amaryllidaceae*	Pathogen
LC8904	M0755	SZ37-1-4	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Schima noronhae*	*Theaceae*	Pathogen
LC8915	M0766	SZ8-1-4-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Machilus* sp.	*Lauraceae*	Pathogen
LC8916	M0767	SZ11-1-4-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Excoecaria cochinchinensis*	*Euphorbiaceae*	Pathogen
LC8917	M0768	SZ11-2-2	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Excoecaria cochinchinensis*	*Euphorbiaceae*	Pathogen
LC8918	M0769	SZ12-1-3	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Sphagneticola trilobata*	*Asteraceae*	Pathogen
LC8921	M0772	SZ12-3-2-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Sphagneticola trilobata*	*Asteraceae*	Pathogen
LC8924	M0775	SZ14-2-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Lagerstroemia speciosa*	*Lythraceae*	Pathogen
LC8925	M0776	SZ15-1-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Schefflera heptaphylla*	*Araliaceae*	Pathogen
LC8932	M0783	SZ17-3-4	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Excoecaria cochinchinensis*	*Euphorbiaceae*	Pathogen
LC8944	M0796	SZ29-1-1-1-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Bauhinia purpurea*	*Caesalpiniaceae*	Pathogen
LC8973	M0825	SZ36-3-1	*Colletotrichum siamense*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Syngonium auritum*	*Araceae*	Pathogen
LC9274	FZ2225	Y3S01-3-2-11	*Colletotrichum siamense*	Gloeosporioides	Zhang ZF	2016,05	China, Yunnan, Yuxi county, Niumo cave	Soil	—	Pathogen
LC9644	FZ2648	Y3S01-3-2-6	*Colletotrichum siamense*	Gloeosporioides	Zhang ZF	2016,05	China, Yunnan, Yuxi county, Niumo cave	Soil	—	Pathogen
LC15719	MH0033	NN15L3-2	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Alpinia pusilla*	*Zingiberaceae*	Pathogen

Table S5. All strains identified in the current study.

Organism ID	Other code 1	Other code 2	Species	Species complex	Collector	Collection date	Source country	Host	Host family	Lifestyle of this isolate
LC15720	MH0036	NN15L5b	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Alpinia pusilla*	*Zingiberaceae*	Pathogen
LC15721	MH0037	NN15L5d	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Alpinia pusilla*	*Zingiberaceae*	Pathogen
LC15723	MH0046	NN17L1e	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Saururus chinensis*	*Saururaceae*	Pathogen
LC15728	MH0063	NN25L4a	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Homalomena occulta*	*Araceae*	Pathogen
LC15729	MH0064	NN25L4b	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Homalomena occulta*	*Araceae*	Pathogen
LC15730	MH0065	NN25L4c	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Homalomena occulta*	*Araceae*	Pathogen
LC15731	MH0069	NN31L2b	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Litsea honghoensis*	*Lauraceae*	Pathogen
LC15735	MH0135	BS074L1a	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Rubus reflexus*	*Rosaceae*	Pathogen
LC15736	MH0136	BS074L1b	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Rubus reflexus*	*Rosaceae*	Pathogen
LC15737	MH0138	BS074L1d	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Rubus reflexus*	*Rosaceae*	Pathogen
LC15738	MH0139	BS074L1e	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Rubus reflexus*	*Rosaceae*	Pathogen
LC15742	MH0183	BS91L1b	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Maesa indica*	*Primulaceae*	Pathogen
LC15745	MH0197	BS095L3c	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Jingxi, Gulong Mountain	*Maesa montana*	*Primulaceae*	Pathogen
LC15774	MH0463	NG19ZL1-1	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Cinnamomum* sp.	*Lauraceae*	Pathogen
LC15775	MH0465	NG19ZL1-5	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Cinnamomum camphora*	*Lauraceae*	Pathogen
LC15776	MH0470	NG20L1b	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Arenga caudata*	*Arecaceae*	Pathogen
LC15777	MH0471	NG20L1c	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Arenga caudata*	*Arecaceae*	Pathogen
LC15778	MH0472	NG20L1d	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Arenga caudata*	*Arecaceae*	Pathogen
LC15779	MH0482	NG24L1a	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Alchornea tiliifolia*	*Euphorbiaceae*	Pathogen
LC15780	MH0483	NG24L1b	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Alchornea tiliifolia*	*Euphorbiaceae*	Pathogen
LC15784	MH0512	NG35L1a	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC15785	MH0513	NG35L1b	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC15786	MH0514	NG35L1c	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC15792	MH0544	NG36L4a	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC15793	MH0545	NG36L4b	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC15794	MH0546	NG36L4c	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC15795	MH0577	NG50L1d	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Psidium guajava*	*Myrtaceae*	Pathogen
LC15796	MH0578	NG50L2a	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Psidium guajava*	*Myrtaceae*	Pathogen
LC15801	MH0623	NG68L2a	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Uvaria chamae*	*Annonaceae*	Pathogen
LC15802	MH0624	NG68L2b	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Uvaria chamae*	*Annonaceae*	Pathogen
LC15805	MH0653	NN33L3h	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Excentrodendron hsienmu*	*Malvaceae*	Pathogen
LC15819	MH0828	FCG56Z-1	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Fangchenggang, Shiwan Great Mountain National Forest Park	*Cinnamomum camphora*	*Lauraceae*	Pathogen
LC15820	MH0829	FCG56Z-2	*Colletotrichum siamense*	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Fangchenggang, Shiwan Great Mountain National Forest Park	*Cinnamomum camphora*	*Lauraceae*	Pathogen
LC1377	BRIP4685		*Colletotrichum simmondsii*	Acutatum	Lynch	—	Australia, Queensland	*Capsicum frutescens*	*Solanaceae*	Pathogen
LC1378	BRIP4864		*Colletotrichum simmondsii*	Acutatum	Muirhead IF	—	Australia, Queensland	*Fragaria ananassa*	*Rosaceae*	Pathogen
NN055266	12418		*Colletotrichum sinuatum*	Dracaenophilum	Wu WP	2012.12.29	China, Guangdong, Guangzhou, Yuexiu Park	*Ophiopogon japonicus*	*Asparagaceae*	Pathogen
NN055266	12418		*Colletotrichum sinuatum*	Dracaenophilum	Wu WP	2012.12.29	China, Guangdong, Guangzhou, Yuexiu Park	*Ophiopogon japonicus*	*Asparagaceae*	Pathogen
NN054602	15019		*Colletotrichum sojae*	Orchidearum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Impatiens balsamina*	*Balsaminaceae*	Pathogen
NN054623	15029		*Colletotrichum sojae*	Orchidearum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Nicandra physaloides*	*Solanaceae*	Pathogen
NN054649	15029		*Colletotrichum sojae*	Orchidearum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Nicandra physaloides*	*Solanaceae*	Pathogen
NN054972	15123		*Colletotrichum sojae*	Orchidearum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Humulus scandens*	*Cannabaceae*	Pathogen
NN054973	15129		*Colletotrichum sojae*	Orchidearum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Vigna radiata*	*Fabaceae*	Pathogen
NN054974	15130		*Colletotrichum sojae*	Orchidearum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Vigna radiata*	*Fabaceae*	Pathogen
NN054995	14124b		*Colletotrichum sojae*	Orchidearum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Humulus scandens*	*Cannabaceae*	Pathogen
NN055208	12417		*Colletotrichum sojae*	Orchidearum	Wu WP	2012.12.29	China, Guangdong, Guangzhou, Yuexiu Park	—	—	Pathogen
LC11537	WMM0084	G506	*Colletotrichum sojae*	Orchidearum	Dong CH	2012.9.25	China, Beijing	*Vitis vinifera*	*Vitaceae*	Pathogen
LC11541	WMM0095	G522	*Colletotrichum sojae*	Orchidearum	Dong CH	2012.9.25	China, Beijing	*Vitis vinifera*	*Vitaceae*	Pathogen
LC7917	WCS81		*Colletotrichum sojae*	Orchidearum	Diao YZ	2015,9	China, Shandong	*Capsicum* sp.	*Solanaceae*	Pathogen
LC8332	M0146	WYS66-2-3	*Colletotrichum sojae*	Orchidearum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Patrinia villosa*	*Valerianaceae*	Pathogen
LC8335	M0149	WYS66-2-2-2	*Colletotrichum sojae*	Orchidearum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Patrinia villosa*	*Valerianaceae*	Pathogen
LC8492	M0316	WYS30-1-3-2	*Colletotrichum sojae*	Orchidearum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Phaseolus vulgaris*	*Leguminosae*	Pathogen
NN003515	68-1-1		*Colletotrichum* sp.	Gloeosporioides	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN003598	15-13-1		*Colletotrichum* sp.	Gloeosporioides	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Pithecolobium* sp.	*Fabaceae*	Endophyte
NN003624	87-14-1		*Colletotrichum* sp.	Gloeosporioides	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Mahonia fortunei*	*Magnoliaceae*	Endophyte
NN003689	16-26-2		*Colletotrichum* sp.	Gloeosporioides	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Acanthopanax senticosus*	*Araliaceae*	Endophyte
NN003848			*Colletotrichum* sp.	Gloeosporioides	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN003856	85-8-1		*Colletotrichum* sp.	Gloeosporioides	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Euonymus japonica*	*Celastraceae*	Endophyte
NN003924	48-H-3		*Colletotrichum* sp.	Gloeosporioides	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Eucalyptus citriodora*	*Myrtaceae*	Endophyte
NN003953	110-F-1		*Colletotrichum* sp.	Gloeosporioides	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Cinnamomum subarenium*	*Lauraceae*	Endophyte
NN004302	60-24-1		*Colletotrichum* sp.	Gloeosporioides	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Cunninghamia lanceolata*	*Cupressaceae*	Endophyte
NN004305	76-10-1		*Colletotrichum* sp.	Gloeosporioides	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Cinnamomum subarenium*	*Lauraceae*	Endophyte
NN004335	52-2-2		*Colletotrichum* sp.	Gloeosporioides	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Camellia sinensis*	*Theaceae*	Endophyte
NN004391	69-I-2		*Colletotrichum* sp.	Gloeosporioides	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Rhododendron* sp.	*Ericaceae*	Endophyte
NN004466	55-1-2		*Colletotrichum* sp.	Gloeosporioides	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN040119	13-6-3		*Colletotrichum* sp.	Gloeosporioides	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	*Illicium simonse*	*Illiciaceae*	Endophyte
NN040646			*Colletotrichum* sp.	Gloeosporioides	Wu WP	1993.12.20	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN044001	1627c		*Colletotrichum* sp.	Gloeosporioides	Wu WP	1997.3.1	China, Guangxi, Nanning	—	—	Pathogen
NN044466	1599b		*Colletotrichum* sp.	Gloeosporioides	Wu WP	1997.12.31	China, Guangxi, Shiwandashan	*Yucca* sp.	*Asparagaceae*	Pathogen
NN046132	2807		*Colletotrichum* sp.	Gloeosporioides	Wu WP	1999.10.20	China, Yunnan, Xishuangbannan	*Citrus* sp.	*Rutaceae*	Pathogen
NN046975	38-3		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Symplocos* sp.	*Symplocaceae*	Endophyte
NN046986	HN40-4		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Schima* sp.	*Theaceae*	Endophyte
NN046993	HN43-7		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Rhododendron* sp.	*Ericaceae*	Endophyte
NN046999	HN50-6		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Cleyera* sp.	*Pentaphylacaceae*	Endophyte
NN047001	50-12		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Cleyera* sp.	*Pentaphylacaceae*	Endophyte

Table S5. All strains identified in the current study.

Organism ID	Other code 1	Other code 2	Species	Species complex	Collector	Collection date	Source country	Host	Host family	Lifestyle of this isolate
NN047013	54-10		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Litsea* sp.	*Lauraceae*	Endophyte
NN047026	8-11		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Schima argentea*	*Theaceae*	Endophyte
NN047032	22-2		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Daphniphyllum oldhamii*	*Daphniphyllaceae*	Endophyte
NN047038	HN24-4		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Rhododendron* sp.	*Ericaceae*	Endophyte
NN047047	3-4		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Daphniphyllum macropodum*	*Daphniphyllaceae*	Endophyte
NN047050	4-6		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Rhododendron* sp.	*Ericaceae*	Endophyte
NN047053	2-7		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Dendrobenthamia hongkongensis*	*Cornaceae*	Endophyte
NN047066	55-5		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Rhododendron* sp.	*Ericaceae*	Endophyte
NN047071	57-4		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Euonymus* sp.	*Celastraceae*	Endophyte
NN047078	28-8		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	—	*Fagaceae*	Endophyte
NN047126	G18-3		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Chrysophyllum cainito*	*Sapotaceae*	Endophyte
NN047146	9-2		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Daphniphyllum macropodum*	*Daphniphyllaceae*	Endophyte
NN047170	G1-12		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Caryota ochlanda*	*Arecaceae*	Endophyte
NN047185	G5-3		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Pittosporum* sp.	*Pittosporaceae*	Endophyte
NN047205	G12-3		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Taxus* sp.	*Taxaceae*	Endophyte
NN047206	G31-2		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	—	—	Endophyte
NN047222	HN21-12		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Exbucklandia populnea*	*Hamamelidaceae*	Endophyte
NN047228	3-3		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Daphniphyllum macropodum*	*Daphniphyllaceae*	Endophyte
NN047229	3-8		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Daphniphyllum macropodum*	*Daphniphyllaceae*	Endophyte
NN047238	48-33		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Schima* sp.	*Theaceae*	Endophyte
NN047255	HN43-34		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Rhododendron* sp.	*Ericaceae*	Endophyte
NN047278	HN57-34		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*?Ilex* sp.	*Aquifoliaceae*	Endophyte
NN047280	HN57-31		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*?Ilex* sp.	*Aquifoliaceae*	Endophyte
NN047292	HN34-3		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Semiliquidambar cathayensis*	*Altingiaceae*	Endophyte
NN047299	3-1		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2002.4.12	China, Hunan Province, Chenzhou, Yizhang County, Mangshan	*Daphniphyllum macropodum*	*Daphniphyllaceae*	Endophyte
NN047875	7573		*Colletotrichum* sp.	Spaethianum	Wu WP	2003.10	China, Yunnan, Gaoligongshan	—	—	Pathogen
NN052703	BN03-1		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Coffea robusta*	*Rubiaceae*	Endophyte
NN052722	BN10-4		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Pseuduvaria indochinensis*	*Annonaceae*	Endophyte
NN052727	BN10-9		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Pseuduvaria indochinensis*	*Annonaceae*	Endophyte
NN052738	BN12-7		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Persea americana*	*Lauraceae*	Endophyte
NN052742	BN15-4		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Ixora chinensis*	*Rubiaceae*	Endophyte
NN052745	BN15-7		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Ixora chinensis*	*Rubiaceae*	Endophyte
NN052747			*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	—	—	Endophyte
NN052750			*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	—	—	Endophyte
NN052751			*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	—	—	Endophyte
NN052755	BN07-3		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Mangifera* sp.	*Anacardiaceae*	Endophyte
NN052772	BN10-13		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Pseuduvaria indochinensis*	*Annonaceae*	Endophyte
NN052818	BN28-3		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Mesua ferrea*	*Calophyllaceae*	Endophyte
NN052829	BN24-6		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Ficus* sp.	*Moraceae*	Endophyte
NN052837	BN30-3		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Syzygium fluviatile*	*Myrtaceae*	Endophyte
NN052845	BN30-11		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Syzygium fluviatile*	*Myrtaceae*	Endophyte
NN052860	BN16-5		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Telosma cordarum*	*Apocynaceae*	Endophyte
NN052873	BN27-6		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Dimocarpus longan*	*Sapindaceae*	Endophyte
NN052877	BN27-10		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Dimocarpus longan*	*Sapindaceae*	Endophyte
NN052882	BN33-2		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Chamaedorea erumpens*	*Arecaceae*	Endophyte
NN052900	BN26-2		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Ficus* sp.	*Moraceae*	Endophyte
NN052901	BN26-3		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Ficus* sp.	*Moraceae*	Endophyte
NN052903	BN26-5		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Ficus* sp.	*Moraceae*	Endophyte
NN052904	BN26-6		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Ficus* sp.	*Moraceae*	Endophyte
NN052932	BN32-4		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Pinanga sinii*	*Palmae*	Endophyte
NN052938	BN32-10		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Pinanga sinii*	*Palmae*	Endophyte
NN052944	BN32-16		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Pinanga sinii*	*Palmae*	Endophyte
NN052962	BN18-3		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Cycas revoluta*	*Cycadaceae*	Endophyte
NN052969	BN18-10		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Cycas revoluta*	*Cycadaceae*	Endophyte
NN052984	BN22-7		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	—	—	Endophyte
NN052988	BN13-1		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Cassia fistula*	*Fabaceae*	Endophyte
NN052989	BN13-2		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Cassia fistula*	*Fabaceae*	Endophyte
NN052990	BN13-3		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Cassia fistula*	*Fabaceae*	Endophyte
NN052991	BN13-4		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Cassia fistula*	*Fabaceae*	Endophyte
NN052992	BN13-5		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Cassia fistula*	*Fabaceae*	Endophyte
NN052993	BN13-6		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Cassia fistula*	*Fabaceae*	Endophyte
NN053003	BN13-16		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Cassia fistula*	*Fabaceae*	Endophyte
NN053031	BN14-1		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Knema furfuracea*	*Myristicaceae*	Endophyte
NN053032	BN14-2		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Knema furfuracea*	*Myristicaceae*	Endophyte
NN053033	BN14-3		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Knema furfuracea*	*Myristicaceae*	Endophyte
NN053034	BN14-4		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Knema furfuracea*	*Myristicaceae*	Endophyte
NN053035	BN14-5		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Knema furfuracea*	*Myristicaceae*	Endophyte
NN053040	BN14-10		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Knema furfuracea*	*Myristicaceae*	Endophyte
NN053044	BN19-3		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Saraca dives*	*Fabaceae*	Endophyte
NN053046	BN19-5		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Saraca dives*	*Fabaceae*	Endophyte
NN053047	BN19-6		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Saraca dives*	*Fabaceae*	Endophyte
NN053048	BN19-7		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Saraca dives*	*Fabaceae*	Endophyte
NN053052	BN19-11		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Saraca dives*	*Fabaceae*	Endophyte
NN054612	15037		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Abutilon theophrasti*	*Malvaceae*	Pathogen

Table S5. All strains identified in the current study.

Organism ID	Other code 1	Other code 2	Species	Species complex	Collector	Collection date	Source country	Host	Host family	Lifestyle of this isolate
NN054622	15028		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Asparagus officinalis*	*Asparagaceae*	Pathogen
NN054625	15034		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Hosta* sp.	*Asparagaceae*	Pathogen
NN054635	15065		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Hosta* sp.	*Asparagaceae*	Pathogen
NN054640	15070		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Euonymus japonica*	*Celastraceae*	Pathogen
NN054988	15109		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Glycine max*	*Fabaceae*	Pathogen
NN054989	15110		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Glycine max*	*Fabaceae*	Pathogen
NN054990	15111-1		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Glycine max*	*Fabaceae*	Pathogen
NN055006	15126		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Bidens pilosa*	*Asteraceae*	Pathogen
NN055216	12397		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2012.12.30	China, Guangdong, Guangdong, Shaoguan, Danxiashan	*Musa* sp.	*Musaceae*	Pathogen
NN055271	12427		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2012.12.29	China, Guangdong, Guangzhou, Lanyuan	—	—	Pathogen
NN055352	12576		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2012.12.25	China, Guangdong, Shaoguan, Danxiashan	—	—	Pathogen
NN055354	12575		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2012.12.25	China, Guangdong, Shaoguan, Danxiashan	—	—	Pathogen
NN055354	12575		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2012.12.25	China, Guangdong, Shaoguan, Danxiashan	—	—	Pathogen
NN055355	12569		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2012.12.25	China, Guangdong, Shaoguan, Danxiashan	—	—	Pathogen
NN057530	12604		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2013.12.10	China, Guangdong, Guangzhou	—	—	Pathogen
NN057558	12638		*Colletotrichum* sp.	Gloeosporioides	Wu WP	2013.12.10	China, Guangdong, Guangzhou	—	—	Pathogen
NN058903	12970b		*Colletotrichum* sp.	singleton	Wu WP	2015.5.22	China, Shanghai, Shanghai Botanical Garden	Monocotyledon plant	—	Pathogen
LC0717=LC0688	G8-5-2	S32	*Colletotrichum* sp.	Gloeosporioides	Sun W	—	China, Zhejiang, Gu Tian Shan	*Dicranopteris linearis*	*Gleicheniaceae*	Pathogen
LC11174	LY05-4	CQ608	*Colletotrichum* sp.	Gloeosporioides	Chen Q	2015.6.15	China, Tibet, Lulang Town, Layue Village, 94°52'43", 29°59'57", 2476m	*Ocimum* sp.	*Lamiaceae*	Pathogen
LC11202	LY04-1-2	CQ651	*Colletotrichum* sp.	Gloeosporioides	Chen Q	2015.6.15	China, Tibet, Lulang Town, Layue Village, 94°52'43", 29°59'57", 2476m	—	—	Pathogen
LC11296	MZ12	CQ781	*Colletotrichum* sp.	Gloeosporioides	Chen Q	2016.5.12	China, Yunnan, Honghe Autonomous Prefecture, Mengzi County, South Lake Park	*Cinnamomum camphora*	*Lauraceae*	Pathogen
LC1670	4007s1		*Colletotrichum* sp.	Gloeosporioides	—	—	China, Guizhou	*Citrus* sp.	*Rutaceae*	Pathogen
LC1671	4007s2		*Colletotrichum* sp.	Gloeosporioides	—	—	China, Guizhou	*Citrus* sp.	*Rutaceae*	Pathogen
LC4586	YH453	ZYL92-1	*Colletotrichum* sp.	Gloeosporioides	Gao YH, Zhou N & Zhang Y	2013.09.05	China, Jiangxi	*Osmanthus*	*Oleaceae*	Pathogen
LC4616	YH483	ZYL94-3A	*Colletotrichum* sp.	Gloeosporioides	Gao YH, Zhou N & Zhang Y	2013.09.05	China, Jiangxi	*Osmanthus*	*Oleaceae*	Pathogen
LC5241	WS01-1	YT106	*Colletotrichum* sp.	Gloeosporioides	Chen Q	2014.7.19	China, Guizhou, Suiyang County, Wangshui Town, near Xiangshuwan Resort	—	—	Pathogen
LC5305	FZ0005	K1A16C-2	*Colletotrichum* sp.	Gloeosporioides	Zhang ZF	2014.07.23	China, Guizhou, Kuankuoshui national natural reserve, unnamed karst cave, N 28° 12' 629'', E 107° 13' 639''	Air	—	Pathogen
LC6036	JJR004		*Colletotrichum* sp.	Gloeosporioides	Cai L	2015.6.15	China, Tibet, Lulang, Layue	—	*Fabaceae*	Pathogen
LC6040	JJR008		*Colletotrichum* sp.	Gloeosporioides	Cai L	2015.6.15	China, Tibet, Lulang, Layue	—	*Fabaceae*	Pathogen
LC6047	JJR015		*Colletotrichum* sp.	Gloeosporioides	Cai L	2015.6.15	China, Tibet, Lulang, Layue	—	*Fabaceae*	Pathogen
LC6049	JJR017		*Colletotrichum* sp.	Gloeosporioides	Cai L	2015.6.15	China, Tibet, Lulang, Layue	—	*Fabaceae*	Pathogen
LC6118	JJR086	XZLYC08-7	*Colletotrichum* sp.	Gloeosporioides	Liu F	2015.6.15	China, Tibet, Lulang, Layue	—	—	Pathogen
LC6773	WM007	YWB-7	*Colletotrichum* sp.	Gloeosporioides	—	2014.09.14	China, Yunnan, Yiwu, Lotus Pond Tea Garden	*Camellia sinensis*	*Theaceae*	Pathogen
LC6775	WM009	YWB-9	*Colletotrichum* sp.	Gloeosporioides	—	2014.09.14	China, Yunnan, Yiwu, Lotus Pond Tea Garden	*Camellia sinensis*	*Theaceae*	Pathogen
LC7049	WM283	HN-22-7	*Colletotrichum* sp.	Gloeosporioides	Liu FJ	2015,12	China, Hainan, Chengmai County, Dafeng Town, Ru'e Village	*Musa paradisiaca*	*Musaceae*	Pathogen
LC7116	WM350	S 6-2	*Colletotrichum* sp.	Gloeosporioides	Xiao DW	2016.07.10	China, Guangdong, Shenzhen	Bamboo	*Poaceae*	Pathogen
LC7949	JXNC22A		*Colletotrichum* sp.	Gloeosporioides	Hu DM	2015,1	China, Jiangxi	*Capsicum* sp.	*Solanaceae*	Pathogen
LC8234	M0045	WYS7-1-2	*Colletotrichum* sp.	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Plagiogyria glauca*	*Plagiogyriaceae*	Pathogen
LC8235	M0046	WYS7-1-3	*Colletotrichum* sp.	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Plagiogyria glauca*	*Plagiogyriaceae*	Pathogen
LC8236	M0047	WYS7-1-4	*Colletotrichum* sp.	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Plagiogyria glauca*	*Plagiogyriaceae*	Pathogen
LC8237	M0048	WYS7-2-3	*Colletotrichum* sp.	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Plagiogyria glauca*	*Plagiogyriaceae*	Pathogen
LC8508	M0332	WYS49-2-3-2	*Colletotrichum* sp.	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Dioscorea zingiberensis*	*Dioscoreaceae*	Pathogen
LC8564	M0393	WYS30-1-1-2	*Colletotrichum* sp.	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Phaseolus vulgaris*	*Leguminosae*	Pathogen
LC8565	M0394	WYS30-1-1-1	*Colletotrichum* sp.	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Phaseolus vulgaris*	*Leguminosae*	Pathogen
LC8590	M0420	WYS47-1-1-1	*Colletotrichum* sp.	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Arachniodes cavalerii*	*Dryopteridaceae*	Pathogen
LC8648	M0480	WYS25-2-4-1	*Colletotrichum* sp.	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Magnolia acuminata*	*Magnoliaceae*	Pathogen
LC8691	M0523	WYS62-1-2	*Colletotrichum* sp.	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Liquidambar formosana*	*Hamamelidaceae*	Pathogen
LC8720	M0569	SZ5-1-1	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Caryota mitis*	*Palmae*	Pathogen
LC8732	M0582	SZ6D-1	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Syngonium auritum*	*Araceae*	Pathogen
LC8733	M0583	SZ6D-2	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Syngonium auritum*	*Araceae*	Pathogen
LC8734	M0584	SZ6D-3	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Syngonium auritum*	*Araceae*	Pathogen
LC8745	M0596	SZ11-2-1	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Excoecaria cochinchinensis*	*Euphorbiaceae*	Pathogen
LC8768	M0619	SZ15-3-1	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Schefflera heptaphylla*	*Araliaceae*	Pathogen
LC8782	M0633	SZ17-1-2	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Excoecaria cochinchinensis*	*Euphorbiaceae*	Pathogen
LC8801	M0652	SZ21-1-1	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Archontophoenix maxima*	*Palmae*	Pathogen
LC8802	M0653	SZ21-1-3	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Archontophoenix maxima*	*Palmae*	Pathogen
LC8831	M0682	SZ26-1-4-1	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Solanum rostratum*	*Solanaceae*	Pathogen
LC8860	M0711	SZ29-2-4-1	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Bauhinia purpurea*	*Caesalpiniaceae*	Pathogen
LC8872	M0723	SZ32-1-1-2	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Blechnum orientale*	*Blechnaceae*	Pathogen
LC8881	M0732	SZ34-1-1-1	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Paramongaia weberbaueri*	*Amaryllidaceae*	Pathogen
LC8882	M0733	SZ34-1-1-2	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Paramongaia weberbaueri*	*Amaryllidaceae*	Pathogen
LC8898	M0749	SZ36-3-2-1	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Syngonium* sp.	*Araceae*	Pathogen
LC8903	M0754	SZ37-1-2	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Schima noronhae*	*Theaceae*	Pathogen
LC8905	M0756	SZ37-2-1-2	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Schima noronhae*	*Theaceae*	Pathogen
LC8927	M0778	SZ15-1-4	*Colletotrichum* sp.	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Schefflera heptaphylla*	*Araliaceae*	Pathogen
LC15760	MH0325	BS37L3b	*Colletotrichum* sp.	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Baise, Leye county, Dashiwei Sinkhole	*Itea chinensis*	*Iteaceae*	Pathogen
LC15764	MH0335	BS66L1a	*Colletotrichum* sp.	Gloeosporioides	Ma ZY, Hou LW	2017,6	China, Guangxi, Baise, Leye county, Luomei Lotus Cave	*Cladrastis sikokiana*	*Fabaceae*	Pathogen
MH0412	NG08L2b		*Colletotrichum* sp. MH0413	Magnum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Vigna unguiculata*	*Fabaceae*	Pathogen
MH0413	NG08L2c		*Colletotrichum* sp. MH0413	Magnum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Vigna unguiculata*	*Fabaceae*	Pathogen
NN043002	1133a		*Colletotrichum spaethianum*	Spaethianum	Wu WP	1997.8.22	China, Ningxia Province, Lingwu	*Gramineae* sp.	*Poaceae*	Pathogen
NN043212	1133a		*Colletotrichum spaethianum*	Spaethianum	Wu WP	1997.8.22	China, Ningxia, Lingwu	*Gramineae* sp.	*Poaceae*	Pathogen
NN043852	1133a		*Colletotrichum spaethianum*	Spaethianum	Wu WP	1997.8.22	China, Ningxia, Lingwu	*Gramineae* sp.	*Poaceae*	Pathogen
NN051372	WU014		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2011.11.6	China, Beijing, Haidian, Shangdi	—	—	Pathogen
NN051373	WU013		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2011.11.6	China, Beijing, Haidian, Shangdi	—	—	Pathogen

Table S5. All strains identified in the current study.

Organism ID	Other code 1	Other code 2	Species	Species complex	Collector	Collection date	Source country	Host	Host family	Lifestyle of this isolate
NN054599	15014		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Belamcanda chinensis*	*Iridaceae*	Pathogen
NN054600	15015		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Hemerocallis fulva*	*Xanthorrhoeaceae*	Pathogen
NN054601	15018		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Lilium brownii*	*Liliaceae*	Pathogen
NN054613	15009		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Gladiolus gandavensis*	*Iridaceae*	Pathogen
NN054614	15011		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Hosta* sp.	*Asparagaceae*	Pathogen
NN054615	15012		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Hosta* sp.	*Asparagaceae*	Pathogen
NN054616	15013		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Stemona sessilifolia*	*Stemonaceae*	Pathogen
NN054620	15025		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Allium* sp.	*Amaryllidaceae*	Pathogen
NN054632	15046		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Belamcanda chinensis*	*Iridaceae*	Pathogen
NN054633	15047		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Belamcanda chinensis*	*Iridaceae*	Pathogen
NN054639	15069		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Polygonatum odoratum*	*Asparagaceae*	Pathogen
NN054642	15072B		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Rhizoma belamcandae*	*Iridaceae*	Pathogen
NN054643	15073		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Hosta* sp.	*Asparagaceae*	Pathogen
NN054659	15072a		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Rhizoma Belamcandae*	*Iridaceae*	Pathogen
NN054994	15122		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Allium fistulosum* var. *giganteum*	*Amaryllidaceae*	Pathogen
NN055005	15125		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Belamcanda chinensis*	*Iridaceae*	Pathogen
NN055011	15133		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	—	—	Pathogen
NN055217	12396		*Colletotrichum spaethianum*	Spaethianum	Wu WP	2012.12.24	China, Guangdong, Shaoguan, Danxiashan	—	—	Pathogen
LC8950	M0802	SZ34-1-2-1	*Colletotrichum spaethianum*	Spaethianum	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Paramongaia weberbaueri*	*Amaryllidaceae*	Pathogen
LC8966	M0818	SZ30-1-4-1	*Colletotrichum spaethianum*	Spaethianum	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Celtis sinensis*	*Ulmaceae*	Pathogen
LC15725	MH0056	NN23L1-2	*Colletotrichum spaethianum*	Spaethianum	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Heliconia collinsiana*	*Heliconiaceae*	Pathogen
NN054605	15027		*Colletotrichum subacidae*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Asparagus officinalis*	*Asparagaceae*	Pathogen
NN054609	15033		*Colletotrichum subacidae*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Hosta* sp.	*Asparagaceae*	Pathogen
NN071129	13394		*Colletotrichum subacidae*	Truncatum	Wu WP	2015.8.2	China, Wuhan, Wuhan Botanical Garden	*Ailanthus altissima*	*Simaroubaceae*	Pathogen
NN071131	13393		*Colletotrichum subacidae*	Truncatum	Wu WP	2015.8.2	China, Wuhan, Wuhan Botanical Garden	*Ailanthus altissima*	*Simaroubaceae*	Pathogen
MH0562	NG41L3a		*Colletotrichum subacidae*	truncatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
MH0564	NG41L4a		*Colletotrichum subacidae*	truncatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
MH0565	NG41L4b		*Colletotrichum subacidae*	truncatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
MH0566	NG41L4c		*Colletotrichum subacidae*	truncatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC13857	LH01	NG41L4-1	*Colletotrichum subacidae*	truncatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC15821	LH02	NG41L4-2	*Colletotrichum subacidae*	truncatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC15822	LH03	NG41L4-3	*Colletotrichum subacidae*	truncatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC15823	LH04	NG41L4-4	*Colletotrichum subacidae*	truncatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC15824	LH05	NG41L4-5	*Colletotrichum subacidae*	truncatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
LC13863	BHS05-2	CQ1168	*Colletotrichum subsalicis*	Acutatum	Chen Q	2018.9.19	China, Beijing, Baihuashan National Nature Reserve Forest Station	*Populus alba*	*Salicaceae*	Pathogen
NN040649			*Colletotrichum subvariabile*	Gigasporum	Wu WP	1993.12.20	China, Yunnan Province, Kunming, Kunming Botanical Garden	—	—	Pathogen
NN053045	BN19-4		*Colletotrichum sydowii*	singleton	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Saraca dives*	*Fabaceae*	Endophyte
NN058906	12969b		*Colletotrichum sydowii*	singleton	Wu WP	2015.5.22	China, Shanghai, Shanghai Botanical Garden	Monocotyledon plant	—	Pathogen
NN058907	12969a		*Colletotrichum sydowii*	singleton	Wu WP	2015.5.22	China, Shanghai, Shanghai Botanical Garden	Monocotyledon plant	—	Pathogen
NN058932	12972b		*Colletotrichum sydowii*	singleton	Wu WP	2015.5.22	China, Shanghai, Shanghai Botanical Garden	Monocotyledon plant	—	Pathogen
NN058933	12972a		*Colletotrichum sydowii*	singleton	Wu WP	2015.5.22	China, Shanghai, Shanghai Botanical Garden	Monocotyledon plant	—	Pathogen
NN058953	12969a		*Colletotrichum sydowii*	singleton	Wu WP	2015.5.22	China, Shanghai, Shanghai Botanical Garden	Monocotyledon plant	—	Pathogen
LC8894	M0745	SZ36-2-1	*Colletotrichum syngoniicola*	Orchidearum	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Syngonium* sp.	*Araceae*	Pathogen
LC8895	M0746	SZ36-2-2	*Colletotrichum syngoniicola*	Orchidearum	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Syngonium* sp.	*Araceae*	Pathogen
LC8896	M0747	SZ36-2-3	*Colletotrichum syngoniicola*	Orchidearum	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Syngonium* sp.	*Araceae*	Pathogen
LC8897	M0748	SZ36-2-4	*Colletotrichum syngoniicola*	Orchidearum	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Syngonium* sp.	*Araceae*	Pathogen
LC0919	N150		*Colletotrichum tabacum*	Destructivum	—	—	China	—	—	Pathogen
NN052858	BN16-3		*Colletotrichum telosmae*	singleton	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Telosma cordarum*	*Apocynaceae*	Endophyte
LC8228	M0039	WYS3-2-4-2	*Colletotrichum temperatum*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Smilax cocculoides*	*Liliaceae*	Pathogen
LC8606	M0436	WYS66-2-2-1-2	*Colletotrichum temperatum*	Gloeosporioides	Cai L	2016,08	China, Fuzhou, Wuyishan	*Patrinia villosa*	*Valerianaceae*	Pathogen
LC7364	LJM48	BM12-3	*Colletotrichum tibetense*	Graminicola	Liu F	2015.6.13	China, Tibet, Bomi, Suotong village	—	*Poaceae*	Pathogen
NN044002	1599c		*Colletotrichum tofieldiae*	Spaethianum	Wu WP	1997.12.31	China, Guangxi, Shiwandashan	*?Yucca* sp.	*Asparagaceae*	Pathogen
NN047187	G4-7		*Colletotrichum tofieldiae*	Spaethianum	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Cycas revoluta*	*Cycadaceae*	Endophyte
NN047644	7035		*Colletotrichum trichellum*	singleton	Wu WP	2003.10	China, Yunnan, Gaoligongshan	*Trachycarpus* sp.	*Arecaceae*	Pathogen
NN055399	12582		*Colletotrichum tropicale*	Gloeosporioides	Wu WP	2012.12.25	China, Guangdong, Shaoguan, Danxiashan	*Trachycarpus* sp.	*Arecaceae*	Pathogen
LC8862	M0713	SZ30-1-1-1	*Colletotrichum tropicale*	Gloeosporioides	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Celtis sinensis*	*Ulmaceae*	Pathogen
NN052710	BN05-2		*Colletotrichum tropicicola*	Dracaenophilum	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Citrus grandis*	*Rutaceae*	Endophyte
NN052787	BN04-5		*Colletotrichum tropicicola*	Dracaenophilum	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Citrus grandis*	*Rutaceae*	Endophyte
NN052794	BN04-12		*Colletotrichum tropicicola*	Dracaenophilum	Wu WP	2010.3.24	China, Yunnan, Xishuangbannan, Jinghong	*Citrus grandis*	*Rutaceae*	Endophyte
NN055309	12511		*Colletotrichum tropicicola*	Dracaenophilum	Wu WP	2012.12.25	China, Guangdong, Shaoguan, Danxiashan	—	—	Pathogen
LC15791	MH0536	NG36L2h	*Colletotrichum tropicicola*	Dracaenophilum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Tetrastigma obovatum*	*Vitaceae*	Pathogen
NN054597	15008		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Hosta* sp.	*Asparagaceae*	Pathogen
NN054603	15022		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	—	—	Pathogen
NN054607	15031		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Helianthus tuberosus*	*Asteraceae*	Pathogen
NN054608	15032		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Fagopyrum esculentum*	*Polygonaceae*	Pathogen
NN054611	15036		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Abutilon theophrasti*	*Malvaceae*	Pathogen
NN054627	15039		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	—	—	Pathogen
NN054628	15041		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Dianthus chinensis*	*Caryophyllaceae*	Pathogen
NN054634	15048		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Physalis alkekengi*	*Solanaceae*	Pathogen
NN054638	15068		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Polygonum* sp.	*Polygonaceae*	Pathogen
NN054650	15040A		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Dianthus chinensis*	*Caryophyllaceae*	Pathogen
NN054651	15040B		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Dianthus chinensis*	*Caryophyllaceae*	Pathogen
NN054666	15078		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Lablab purpureus*	*Fabaceae*	Pathogen
NN054667	15082		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Chenopodium glaucum*	*Chenopodiaceae*	Pathogen

Table S5. All strains identified in the current study.

Organism ID	Other code 1	Other code 2	Species	Species complex	Collector	Collection date	Source country	Host	Host family	Lifestyle of this isolate
NN054668	15084		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Chenopodium glaucum*	*Chenopodiaceae*	Pathogen
NN054670	15085B		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Malva sinensis*	*Malvaceae*	Pathogen
NN054671	15086		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Chenopodium album*	*Chenopodiaceae*	Pathogen
NN054680	15088		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.9	China, Beijing, Xibeiwang, Beijing Medical Botanical Garden	*Capsicum frutescens*	*Solanaceae*	Pathogen
NN054965	15128		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Glycine max*	*Fabaceae*	Pathogen
NN054985	15111a		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Glycine max*	*Fabaceae*	Pathogen
NN054986	15114		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Glycine max*	*Fabaceae*	Pathogen
NN054991	15111-2		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Glycine max*	*Fabaceae*	Pathogen
NN054999	15117		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Vigna unguiculata*	*Fabaceae*	Pathogen
NN055000	15116		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Chenopodium glaucum*	*Chenopodiaceae*	Pathogen
NN055001	15118		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Humulus scandens*	*Cannabaceae*	Pathogen
NN055007	15127b		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Bidens pilosa*	*Asteraceae*	Pathogen
NN055008	15127		*Colletotrichum truncatum*	Truncatum	Wu WP	2012.9.10	China, Beijing, Huairou, Beigoucun	*Bidens pilosa*	*Asteraceae*	Pathogen
NN057650	12694		*Colletotrichum truncatum*	Truncatum	Wu WP	2013.12.10	China, Guangdong, Guangzhou	*Carica papaya*	*Caricaceae*	Pathogen
NN057650	12694		*Colletotrichum truncatum*	Truncatum	Wu WP	2013.12.10	China, Guangdong, Guangzhou	*Carica papaya*	*Caricaceae*	Pathogen
NN058904	12964a		*Colletotrichum truncatum*	Truncatum	Wu WP	2015.5.22	China, Shanghai, Shanghai Botanical Garden	Monocotyledon plant	—	Pathogen
NN058905	12964b		*Colletotrichum truncatum*	Truncatum	Wu WP	2015.5.22	China, Shanghai, Shanghai Botanical Garden	Monocotyledon plant	—	Pathogen
NN058961	12964a		*Colletotrichum truncatum*	Truncatum	Wu WP	2015.5.22	China, Shanghai, Shanghai Botanical Garden	Monocotyledon plant	—	Pathogen
NN076216	16085		*Colletotrichum truncatum*	Truncatum	Wu WP	2018.10.18	China, Zhejiang, Chun'an County, Qiandaohu	—	—	Pathogen
LC1370	lll		*Colletotrichum truncatum*	truncatum	—	—	China (probably)	—	—	Pathogen
LC8605	M0435	WYS66-2-1	*Colletotrichum truncatum*	Truncatum	Cai L	2016,08	China, Fuzhou, Wuyishan	*Patrinia villosa*	*Valerianaceae*	Pathogen
LC8887	M0738	SZ34-1-3-3	*Colletotrichum truncatum*	Truncatum	Diao YZ	2016,11	China, Guangdong, Shenzhen	*Paramongaia weberbaueri*	*Amaryllidaceae*	Pathogen
LC15751	MH0235	NN12L2a	*Colletotrichum truncatum*	truncatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Cissus hexangularis*	*Vitaceae*	Pathogen
LC15752	MH0236	NN12L2b	*Colletotrichum truncatum*	truncatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Cissus hexangularis*	*Vitaceae*	Pathogen
LC15753	MH0237	NN12L2c	*Colletotrichum truncatum*	truncatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Cissus hexangularis*	*Vitaceae*	Pathogen
LC15754	MH0238	NN12L2d	*Colletotrichum truncatum*	truncatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Cissus hexangularis*	*Vitaceae*	Pathogen
LC15755	MH0239	NN12L2e	*Colletotrichum truncatum*	truncatum	Ma ZY, Hou LW	2017,6	China, Guangxi, Nanning, Botanical Garden of Medicinal Plants	*Cissus hexangularis*	*Vitaceae*	Pathogen
NN040656			*Colletotrichum variabile*	Gigasporum	Wu WP	1993.12.20	China, Yunnan Province, Kunming, Kunming Botanical Garden	Leaf	—	Endophyte
NN046042	2775b3		*Colletotrichum vietnamense*	Gigasporum	Wu WP	1999.10.16	China, Yunnan, Xishuangbannan	—	—	Pathogen
NN046204	2923a		*Colletotrichum vietnamense*	Gigasporum	Wu WP	1999.10.20	China, Yunnan, Xishuangbannan	—	—	Pathogen
NN071117	13415		*Colletotrichum viniferum*	Gloeosporioides	Wu WP	2015.8.15	China, Beijing, Haidian, Yongfeng	*Vitis* sp.	*Vitaceae*	Pathogen
NN071142	13416		*Colletotrichum viniferum*	Gloeosporioides	Wu WP	2015.8.15	China, Beijing, Haidian, Yongfeng	*Vitis* sp.	*Vitaceae*	Pathogen
LC1028	h62-SI-1		*Colletotrichum vittalense*	Orchidearum	Su YY	—	China, Guangdong, South China Botanical Garden	Orchid	*Orchidaceae*	Pathogen
LC15797	MH0593	NG58L1a	*Colletotrichum vittalense*	Orchidearum	Ma ZY, Hou LW	2017,6	China, Guangxi, Chongzuo, Nonggang Nature Reserve	*Rhaphidophora* sp.	*Araceae*	Pathogen
LC7094	WM328	XW01-6	*Colletotrichum wuxiense*	Gloeosporioides	Zhao P	2016.05.15	China, Yunnan, Wenxing, Shihai	*Musa basjoo*	*Musaceae*	Pathogen
LC7095	WM329	XW01-7	*Colletotrichum wuxiense*	Gloeosporioides	Zhao P	2016.05.15	China, Yunnan, Wenxing, Shihai	*Musa basjoo*	*Musaceae*	Pathogen
NN047166	G8-10		*Colletotrichum yunnanense*	Dracaenophilum	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Buxus* sp.	*Buxaceae*	Endophyte
NN047182	G8-20		*Colletotrichum yunnanense*	Dracaenophilum	Wu WP	2002.5.10	China, Yunnan, Kunming, Kunming Botanical Garden	*Buxus* sp.	*Buxaceae*	Endophyte
NN055284	12446		*Colletotrichum zhaoqingense*	Gigasporum	Wu WP	2012.12.24	China, Guangdong, Zhaoqing, Qixingyan	*Musa* sp.	*Musaceae*	Pathogen
NN057644	12693		*Colletotrichum zhaoqingense*	Gigasporum	Wu WP	2013.12.10	China, Guangdong, Guangzhou	*Carica papaya*	*Caricaceae*	Pathogen
NN058985	13352b		*Colletotrichum zhaoqingense*	Gigasporum	Wu WP	2015.6.12	China, Hangzhou, Botanical Garden	*Trachycarpus fortunei*	*Arecaceae*	Pathogen
NN059035	13353b		*Colletotrichum zhaoqingense*	Gigasporum	Wu WP	2015.6.12	China, Hangzhou, Botanical Garden	*Trachycarpus fortunei*	*Arecaceae*	Pathogen
NN059036	13353a		*Colletotrichum zhaoqingense*	Gigasporum	Wu WP	2015.6.12	China, Hangzhou, Botanical Garden	*Trachycarpus fortunei*	*Arecaceae*	Pathogen
NN071035	13353b		*Colletotrichum zhaoqingense*	Gigasporum	Wu WP	2015.6.12	China, Hangzhou, Botanical Garden	*Trachycarpus fortunei*	*Arecaceae*	Pathogen
NN071036	13353a		*Colletotrichum zhaoqingense*	Gigasporum	Wu WP	2015.6.12	China, Hangzhou, Botanical Garden	*Trachycarpus fortunei*	*Arecaceae*	Pathogen
NN076215	16080		*Colletotrichum zhejiangense*	Dematium	Wu WP	2018.10.18	China, Zhejiang, Chun'an County, Qiandaohu	On dead leaves of unidentified tree	—	Pathogen

Table S6. The substrate/host information for *Colletotrichum* species analysed in the current study, and host information of species reported from China retrieved from literature.

Species	Species complex	This study[a]		Previous studies (2009-)[b]		Note[c]	Note[d]
		Location	Substrates	Substrates in China	References[e]		
C. acutatum	Acutatum	—	—	*Camellia sinensis* , *Juglans regia*	Chen *et al.* (2016a), He *et al.* (2019)		
C. aenigma	Gloeosporioides	China: Guizhou, Jiangxi	Air, submerged wood, *Manglietia fordiana*	*Actinidia arguta* , *Camellia japonica* , *Camellia oleifera* , *Camellia sasanqua* , *Camellia sinensis* , *Capsicum* sp., *Fragaria* × *ananassa* , *Juglans regia* , *Prunus avium* , *Pyrus bretschneideri* , *Pyrus pyrifolia* , *Vitis vinifera*	Yan *et al.* (2015), Han *et al.* (2016), Wang *et al.* (2016a, 2019a, 2020a, 2020e), Diao *et al.* (2017), Chen *et al.* (2019a, 2020), Chethana *et al.* (2019), Fu *et al.* (2019), Yang *et al.* (2019a)		
C. aeschynomenes	Gloeosporioides	China: Jiangxi	*Schima superba* , *Maesa indica*	*Platostoma palustre*	Hsieh *et al.* (2020)		
C. agaves	singleton	Thailand	*Agave* sp.	—	—	S	
C. alatae	Gloeosporioides	—	—	*Dioscorea alata*	Lin *et al.* (2018)	S	
C. alienum	Gloeosporioides	China: Zhejiang	*Lespedeza formosa, Lithocarpus glabra, Schima superba* , *Smilax china*	*Aquilaria sinensis* , *Camellia sinensis*	Liu *et al.* (2015, 2020a)		
C. americae-borealis	Destructivum	—	—	*Glycyrrhiza uralensis*	Lyu & Li (2020)	S	
C. annellatum	Boninense	Thailand	*Coffea* sp.	—	—	S	
C. antirrhinicola	Destructivum	China: Fujian	*Lycopersicon esculentum*	—	—	S	New record
C. arecacearum sp. nov.	singleton	China: Guangxi	*Arecaceae*	—	—	S	
C. arecicola	Gloeosporioides	—	—	*Areca catechu*	Cao *et al.* (2020)	S	
C. asianum	Gloeosporioides	Saudi Arabia	*Mangifera* sp.	*Malus domestica* , *Mangifera indica*	Li *et al.* (2019a), Wang *et al.* (2020d), Wu *et al.* (2020)		
C. atractylodicola	Destructivum	—	—	*Atractylodes lancea*	Xu *et al.* (2018)	S	
C. bambusicola	Bambusicola	China: Fujian	*Petasites hybridus*	*Phyllostachys edulis*	Wang *et al.* (2021)		
C. beeveri	Boninense	China	*Yucca* sp.	*Pleione bulbocodioides*	Damm *et al.* (2012b)		
C. bicoloratum sp. nov.	Spaethianum	China: Guangdong	*Ophiopogon japonicus*	—	—	S	
C. blettilae	Spaethianum	—	—	*Blettila ochracea*	Tao *et al.* (2013)	S	
C. boninense	Boninense	China: Fujian, Guangdong, Guizhou	*Cucumis sativus* , *Dendrobium fimbriatum* , *Homalomena occulta* , *Machilus* sp., *Paramongaia weberbaueri* , *Petasites hybridus* , *Rubus reflexus* , *Smilax cocculoides*	*Bletilla ochracea* , *Camellia sinensis* , *Capsicum frutescens* , *Citrus medica* , *Coptis chinensis* , *Dendrobium catenatum* , *Eucalyptus robusta* , *Fragaria* × *ananassa* , *Philodendron tatei*	Diao *et al.* (2013), Tao *et al.* (2013), Liu *et al.* (2015), Bi *et al.* (2017b), Guarnaccia *et al.* (2017), Ma *et al.* (2018), Zhang & Zhu (2018), Ding *et al.* (2020), Xue *et al.* (2020)		
C. brevisporum	Magnum	China	*Abutilon theophrasti* , *Citrus grandis* , *Datura strumonium* , *Glycine max* , *Lablab purpureus* , *Solanum tuberosum*	*Capsicum annuum* , *Carica papaya* , *Citrus medica* , *Coffea* sp., *Cucurbita pepo* , *Morus alba* , *Passiflora edulis* , *Glycine max*	Liu *et al.* (2016c, 2018c, 2019c), Du *et al.* (2017), Guarnaccia *et al.* (2017), Duan *et al.* (2018a), Cao *et al.* (2019a), Damm *et al.* (2019), Xue *et al.* (2019), Shi *et al.* (2020)		
C. bromeliacearum sp. nov.	Boninense	China: Yunnan	*Bromeliaceae*	—	—	S	
C. buxi sp. nov.	Dracaenophilum	China	*Buxus sinica* var. *parvifolia* , *Buxus* sp.	—	—	S	
C. camelliae	Gloeosporioides	China: Jiangsu	*Camellia japonica*	*Camellia oleifera* , *Camellia sinensis*	Liu *et al.* (2015), Wang *et al.* (2016a, 2020a), Lu *et al.* (2018), He *et al.* (2019)		
C. camelliae-japonicae	Boninense	China: Jiangsu	*Prunus mume*	—	—	S	New record
C. cattleyicola	Orchidearum	Thailand	*Cymbidium* sp.	—	—	S	
C. caudisporum	Caudatum	China: Yunnan	*Poaceae*	*Blettila ochracea*	Tao *et al.* (2013)		
C. cereale	Graminicola	—	—	*Blettila ochracea*	Tao *et al.* (2013)	S	
C. chamaedoreae sp. nov.	Boninense	China	*Chamaedorea erumpens*	—	—	S	
C. changpingense	Gloeosporioides	—	—	*Fragaria* × *ananassa*	Jayawardena *et al.* (2016)	S	
C. chlorophyti	singleton	China: Fujian	*Arachis hypogaea* , *Ipomoea batatas*	*Atractylodes lancea* , *Moringa oleifera*	Cai *et al.* (2016b), Sun *et al.* (2019a)		
C. chrysanthemi	Acutatum	—	—	*Glebionis coronaria*	Damm *et al.* (2012a)	S	
C. cigarro	Gloeosporioides	China	*Caryota monostachys* , *Daphniphyllum macropodum* , *Itea chinensis*	*Areca catechu* , *Morus alba*	Xue *et al.* (2019), Zhang *et al.* (2020d)		
C. circinans	Dematium	China	*Allium fistulosum* var. *giganteum* , *Fraxinus* sp., *Lilium brownii* , Rhizoma Belamcandae	—	—		New record
C. citricola	Boninense	China: Jiangxi, Guangdong	*Acalypha insulana* , Bamboo, *Cinnamomum camphora* , *Citrus sinensis* var. *brasiliensis* , *Gynochthodes nanlingensis* , *Magnolia henryi*	*Citrus unchiu* , *Pyrus pyrifolia*	Huang *et al.* (2013), Fu *et al.* (2019)		
C. clivicola	Orchidearum	China: Fujian, Guangxi, Hunan, Jiangxi	*Camellia sinensis* , *Daphniphyllum macropodum* , *Oleaceae* , *Patrinia villosa* , *Rhaphidophora* sp.	*Clivia miniata* , *Clivia* sp., *Mangifera indica* , *Morus alba* , *Pennisetum americanum* × *P. purpureum* , *Zamioculcas zamiifolia*	Zhou & Li (2017), Damm *et al.* (2019), Han *et al.* (2019), Li *et al.* (2019a), Xue *et al.* (2019)		
C. coccodes	singleton	Australia: Queensland; China	*Beta vulgaris* , *Lycopersicon esculentum* , *Malva* sp., *Solanum tuberosum*	*Solanum tuberosum*	Tian *et al.* (2019)		
C. conoides	Gloeosporioides	—	—	*Capsicum annuum* var. *conoides* , *Pyrus pyrifolia*	Diao *et al.* (2017), Fu *et al.* (2019)		
C. cordylinicola	Gloeosporioides	—	—	*Areca catechu* , *Mangifera indica*	Li *et al.* (2019a) , Cao *et al.* (2020)		
C. cosmi	Acutatum	China	*Cassia fistula*	—	—	S	New record
C. crousii sp. nov.	Dracaenophilum	China: Guangxi	*Rhaphidophora* sp.	—	—	S	
C. curcumae	Truncatum	—	—	*Curcuma wenyujin*	Li *et al.* (2016c)	S	
C. cymbidiicola	Boninense	China: Guangdong	*Cassia fistula* , *Citrus grandis* , *Daphniphyllum macropodum*	*Cymbidium ensifolium*	Liu *et al.* (2018a)		
C. danxiashanense sp. nov.	Graminicola	China: Guangdong	*Miscanthus* sp.?	—	—	S	
C. dematium	Dematium	China	*Hosta* sp., *Radix bupleuri* , *Ricinus communis* , *Thalictrum* sp.	*Lycopus lucidus* , *Polygonum aviculare*	Guan *et al.* (2016), Liu *et al.* (2016d)		
C. destructivum	Destructivum	China	Unknown plant	*Aster tataricus* , *Blettila ochracea* , *Cynanchum atratum* , *Helianthus annuus* , *Rumex crispus* , *Trifolium repens*	Tao *et al.* (2013), Liu *et al.* (2017b), Miao *et al.* (2017), Cong *et al.* (2018), Sun & Liang (2018), Xue *et al.* (2018b)		
C. diversisporum sp. nov.	singleton	China: Guangdong	*Dracaena angustifolia*	—	—	S	
C. diversum sp. nov.	Boninense	China: Yunnan	*Philodendron selloum*	—	—	S	
C. dolichoconidiophori sp. nov	Graminicola	China	Unknown plant	—	—	S	
C. dracaenophilum	Dracaenophilum	China	*Dracaena sanderiana*	*Dracaena sanderiana*	Damm *et al.* (2019)	S	
C. duyunense	Caudatum	—	—	*Blettila ochracea*	Tao *et al.* (2013)	S	
C. duyunensis	Spaethianum	China: Guangxi	*Lactuca canadensis*	*Blettila ochracea*	Tao et al . (2013)		
C. endophyticum	Gloeosporioides	China: Guangdong; Thailand: Chiangmai, Chaing Rai	*Acacia confusa* , *Alocasia odora* , *Aphananixis polystachya* , *Gustavia* sp., *Rhynchostylis coelestris* , *Solanum rostratum*	*Camellia sinensis* , *Capsicum annuum* var. *conoides* , *Coffea* sp., *Mangifera indica*	Wang *et al.* (2016a), Diao *et al.* (2017), Cao *et al.* (2019a), Li *et al.* (2019a)		
C. endophytum	Graminicola	—	—	*Blettila ochracea*	Tao *et al.* (2013)	S	
C. eremochloae	Graminicola	—	—	*Eremochloa ophiuroides*	Crouch & Tomaso-Peterson (2012)	S	
C. eriobotryae	Acutatum	—	—	*Eriobotrya japonica*	Damm *et al.* (2020)	S	
C. excelsum-altitudinum	Dracaenophilum	—	—	*Blettila ochracea*	Tao *et al.* (2013)	S	
C. fioriniae	Acutatum	China: Chongqing, Fujian, Zhejiang	*Carex* sp., *Cinnamomum burmannii* , *Cinnamomum chingii* , *Cinnamomum micranthum* , *Cinnamomum* sp., *Daphniphyllum macropodum* , *Dendrobenthamia hongkongensis* , *Dichroa febrifuga* , *Exbucklandia populnea* , *Fagaceae* , *Glochidion ellipticum* , *Laurus nobilis* , *Liquidambar formosana* , *Lithocarpus glabra* , *Litsea* sp., *Machilus pauhoi* , *Machilus yunnanensis* , *Magnolia acuminata* , *Manglietia yuyuanensis* , *Neolitsea aurata* , *Phaseolus vulgaris* , *Rhododendron* sp., *Schima argentea* , *Schima superba* , *Semiliquidambar cathayensis* , soil, *Vitex negundo* , *Woodwardia japonica*	*Camellia reticulata* , *Camellia sinensis* , *Capsicum annuum* var. *conoides* , *Cinnamomum subavenium* , *Ficus virens* , *Juglans regia* , *Lycium barbarum* , *Magnolia champaca* , *Morus alba* , *Pyrus communis* , *Pyrus pyrifolia*	Damm *et al.* (2012a), Yang *et al.* (2012b), Liu *et al.* (2015, 2016a), Zhu *et al.* (2015), Wang *et al.* (2016a), Diao *et al.* (2017), Xue *et al.* (2017, 2019), Zhang *et al.* (2018a), Fu *et al.* (2019)		
C. fructi	Dematium	China	Unknown plant	—	—		New record
C. fructicola	Gloeosporioides	China: Fujian, Guangdong, Guangxi, Guizhou, Hainan, Jiangxi, Jiangsu, Sichuan, Yunnan, Zhejiang; Thailand: Chiang Rai	*Acacia confusa* , *Alchornea* sp., *Archontophoenix maxima* , *Bamboo* , *Calliandra haematocephala* , *Capsicum* sp., *Capsicum* sp., *Castanopsis eyrei* , *Cinnamomum* sp., *Citrus sinensis* var. *brasiliensis* , *Citrus* sp., *Clematis* sp., *Dioscorea* sp., *Dryopteris setosa* , *Eucalyptus* sp., *Eurya chinensis* , *Excoecaria cochinchinensis* , *Fabaceae* , grass, *Hemidlodia ocimifolia* , *Ipomoea batatas* , *Jasminum mesnyi* , *Laurus nobilis* , *Lespeseza bicolor* , *Lindera glauca* , *Lithocarpus glabra* , *Loropetalum chinense var.rubrum* , *Loropetalum chinense* , *Machilus* sp., *Machilus thunbergii* , *Maesa montana* , *Magnolia acuminata* , *Magnolia lilifera* , *orchid* , *Oryza sativa* , *Paederia foetida* , *Paramongaia weberbaueri* , *Passiflora* sp., *Patrinia villosa* , *Pteris quadriaurita* , *Rectangular* , *Rhododendron latoucheae* , *Rhododendron* sp., *Saccharum* , *Santalum album* , *Saururus chinensis* , *Schefflera heptaphylla* , *Smilax cocculoides* , *Smilax corbularia* , *Vaccinium bracteatum* , *Vanda coerulea* , *Vitex negundo*	*Areca catechu* , *Aucuba japonica* , *Camellia oleifera* , *Camellia sinensis* , *Capsicum annuum* , *Capsicum* sp. , *Citrus japonica* , *Citrus reticulata* , *Citrus sinensis* , *Coffea* sp. , *Corchorus capsularis* , *Dendrobium officinale* , *Fatsia japonica* , *Fragaria* × *ananassa* , *Hevea brasiliensis* , *Juglans regia* , *Malus domestica* , *Mangifera indica* , *Manihot esculenta* , *Morus alba* , *Nicotiana tabacum* , *Paris polyphylla* , *Pyrus bretschneideri* , *Pyrus pyrifolia* , *Pouteria campechiana* , *Peucedanum praeruptorum* , *Aesculus chinensis* , *Camellia sinensis* , *Zizyphus mauritiana*	Fu *et al.* (2013b, 2019), Huang *et al.* (2013), Li *et al.* (2013b, 2016d, 2019a), Liu *et al.* (2015a, 2016c, 2019a), Zhang *et al.* (2015b), Han *et al.* (2016), Jayawardena *et al.* (2016), Niu *et al.* (2016a, 2016b), Wang *et al.* (2016a, 2016c), Diao *et al.* (2017), Shi *et al.* (2017, 2018), Lu *et al.* (2018), Wang *et al.* (2018, 2020a), Cao *et al.* (2019a, 2019b, 2020), He *et al.* (2019), Hu *et al.* (2019), Silva *et al.* (2019), Xue *et al.* (2019), Chen *et al.* (2020), Lin *et al.* (2020b), Ma *et al.* (2020a, 2020c), Shu *et al.* (2020), Sun *et al.* (2020d), Wu *et al.* (2020), Yang *et al.* (2020b), Zhou *et al.* (2020)		
C. gigasporum	Gigasporum	China: Guangdong	*Carica papaya* , *Coffea* sp., *Dimocarpus longan* , *Hamelia patens* , *Ixora chinensis* , *Monstera deliciosa* , *Musa* sp., orchid, *Strebilus tonkinensis* , *Tetrastigma obovatum*	*Coffea* sp., *Dalbergia odorifera* , *Mangifera indica*	Wan *et al.* (2018) , Cao *et al.* (2019a), Li *et al.* (2019b)		
C. gloeosporioides	Gloeosporioides	China: Fujian, Guangdong, Guangxi, Guizhou, Hubei, Hunan, Jiangsu, Jiangxi, Yunnan	*Ailanthus altissima* , *Alchornea tiliifolia* , *Amischotolype monosperma* , *Arthraxon lanceolatus* , *Citrus reticulata* , *Citrus* sp., *Cladrastis sikokiana* , *Conyza canadensis* , *Fallopia* sp., *Fatsia japonica* , *Hemerocallis citrina* , *Iodes seretii* , *Itea chinensis* , *Lysimachia coreana* , *Musa basjoo* , *Oplismenus compositus* , *Osmanthus* , *Pinellia tripartita* , *Pseudodracontium lacourii* , *Pterospermum xylocarpum* , *Pyrus* sp., submerged wood, *Tetrastigma obovatum* , *Vitex* sp.	*Abelmoschus esculentus* , *Acer coriaceifolium* , *Actinidia arguta* , *Actinidia chinensis* , *Anoectochilus roxburghii* , *Areca catechu* , *Bauhinia blakeana* , *Camellia oleifera* , *Camellia sinensis* , *Capsicum annuum* , *Capsicum* sp. , *Catalpa fargesii* f. *ducouxii* , *Chaerospondias axillaris* , *Citrus aurantifolia* , *Citrus grandis* , *Citrus reticulata* , *Citrus sinensis* , *Citrus unchiu* , *Cunninghamia lanceolata* , *Dendrobium officinale* , *Elaeocarpus sylvestris* , *Euonymus japonicus* , *Falcataria moluccana* , *Fragaria* × *ananassa* , *Hemerocallis citrina* , *Hymenocallis littoralis* , *Juglans regia* , *Ligustrum japonicum* , *Liriodendron chinense* × *tulipifera* , *Liriope cymbidiomorpha* , *Mangifera indica* , *Mikania micrantha* , *Olea europaea* , *Osmanthus fragrans* , *Paeonia lactiflora* , *Pouteria caimito* , *Pteridium aquilinum* , *Pyrus bretschneideri* , *Pyrus pyrifolia* , *Robinia pseudoacacia* , *Rubia cordifolia* , *Schefflera actinophylla* , *Smilax sieboldii* , *Sorbaria sorbifolia* , *Viburnum odoratissimum* , *Vitis* sp. , *Canna indica* , *Aesculus chinensis* , *Akebia trifoliata*	Yang *et al.* (2012a, 2015, 2020a), Fu *et al.* (2013a, 2019), Huang (2013), Huang *et al.* (2013, 2016, 2019), Guo *et al.* (2014a), Schena *et al.* (2014), Liu *et al.* (2015, 2016c), Han *et al.* (2016), Lan *et al.* (2016), Li *et al.* (2016a, 2016b, 2017a, 2017b, 2017c, 2019b, 2019c), Chen *et al.* (2016b, 2019b, 2020), Deng *et al.* (2017), Diao *et al.* (2017), Shen *et al.* (2017), Tan *et al.* (2017), Xu *et al.* (2017b), Zhang & Dai (2017), Zhang *et al.* (2017), Duan *et al.* (2018b), Shu *et al.* (2018), Tang *et al.* (2018), Xue *et al.* (2018a), He *et al.* (2019), Shi *et al.* (2019b), Wang *et al.* (2019d, 2020a, 2020b), Zhao *et al.* (2019), Zhu *et al.* (2019a, 2019b, 2020), Cao *et al.* (2020), Pan *et al.* (2020), Sun *et al.* (2020c, 2020d), Tang & Tan (2020)		
C. godetiae	Acutatum	China: Tibet, Yunnan	*Acanthopanax senticosus* , *Camellia sinensis* , *Mucuna sempervirens* , *Nothopnax delavayi* , *Orixa japonica* , *Pithecolobium* sp., *Pittosporum* sp., *Pleioblastus amarus* , *Rhododendron* sp., *Trachelospermum* sp.	—	—		New record
C. graminicola	Graminicola	—	—	*Zea mays*	Duan *et al.* (2019)	S	
C. grossum	Gloeosporioides	—	—	*Capsicum annuum* var. *grossum*	Diao *et al.* (2017)	S	
C. guangxiense	Bambusicola	—	—	*Phyllostachys edulis*	Wang *et al.* (2021)	S	
C. guizhouensis	Spaethianum	—	—	*Blettila ochracea* , *Phlegmariurus phlegmaria*	Tao *et al.* (2013), Zhang *et al.* (2015)		
C. hainanense	Graminicola	—	—	*Axonopus compressus*	Zhang *et al.* (2020c)	S	
C. hanaui	Graminicola	—	—	*Digitaria sanguinalis*	Qu *et al.* (2010)	S	
C. hebeiense	Gloeosporioides	—	—	*Vitis vinifera*	Yan *et al.* (2015)	S	
C. hemerocallidis	Dematium	China: Zhejiang	*Hemerocallis* sp.	*Hemerocallis fulva*	Yang *et al.* (2012a)	S	
C. henanense	Gloeosporioides	China: Fujian	*Embelia vestita* , *Machilus* sp., *Woodwardia japonica*	*Camellia oleifera* , *Camellia sinensis* , *Cirsium japonicum*	Liu *et al.* (2015), Li *et al.* (2018c)		
C. higginsianum	Destructivum	China: Fujian, Shanghai, Tibet	*Lycopersicon esculentum* , *Poaceae*	*Rumex acetosa*	Zhang *et al.* (2018b)		
C. hippeastri	Boninense	—	—	*Hippeastrum vittatum*	Damm *et al.* (2012b)	S	

Table S6. The substrate/host information for *Colletotrichum* species analysed in the current study, and host information of species reported from China retrieved from literature.

Species	Species complex	This study[a]		Previous studies (2009-)[b]		Note[c]	Note[d]
		Location	Substrates	Substrates in China	References[e]		
C. horii	Gloeosporioides	China: Guangdong, Qinghai	*Cleyera* sp., *Cratoxylum cochinchinense*, *Rosa multiflora*	*Diospyros kaki*	Weir *et al.* (2012)		
C. incanum	Spaethianum	Probably China	Unknown plant	*Capsicum* sp.	Diao *et al.* (2017)		
C. indonesiense	Acutatum	China	*Mangifera indica*	—	—	S	New record
C. iris sp. nov.	Spaethianum	China: Jiangxi	*Iris japonica*	—	—	S	
C. jiangxiense	Gloeosporioides	China: Jiangxi, Zhejiang	*Berberidaceae*, *Dioscorea zingiberensis*, *Eurya rubiginosa* var. *attenuata*	*Camellia sinensis*	Liu *et al.* (2015)		
C. jinshuiense	Dematium	China: Fujian	*Dioscorea zingiberensis*	*Pyrus pyrifolia*	Fu *et al.* (2019)		
C. jishouense	Gigasporum	—	—	*Nothapodytes pittosporoides*	Zhou *et al.* (2019)	S	
C. karsti	Boninense	China: Guangxi, Guizhou, Jiangsu, Jiangxi, Yunnan; Thailand: Chaing Rai	*Acanthopanax senticosus*, *Aesculus wangii*, *Bealei mahonia*, *Buxus bodinieri*, *Buxus* sp., *Callistemon rigidus*, *Camellia japonica*, *Camellia recticulata*, *Camellia sinensis*, *Camellia* sp., *Cassia fistula*, *Cinnamomum glanduliferum*, *Clerodendrum philippinum*, *Colquhounia coccinea* var. *mollis*, *Cycas revoluta*, *Cycas revolute*, *Cyclobalanopsis glavia*, *Daphniphyllum macropodum*, *Daphniphyllum oldhamii*, *Dendrobium officinale*, *Euonymus japonica*, *Ficus altissima*, *Firmiana simplex*, *Hemidiodia ocimifolia*, *Ilex* sp., *Illicium simonse*, *Ixora chinensis*, *Juniperus formosana*, *Knema furfuracea*, *Lamiales*, *Litsea pungens*, *Monstera deliciosa*, *Livistona chinensis*, *Loropetalum chinense* var. *rubrum*, *Magnolia* sp., *Mahonia fortunei*, *Mahonia* sp., *Michelia figo*, *Monstera deliciosa*, *Musa basjoo*, *Orixa japonica*, *Phoebe chinensis*, *Pinanga sinii*, *Pittosporum* sp., *Pittosporum tobira*, *Pleioblastus amarus*, *Podocarpus nogi*, *Pseuduvaria indochinensis*, *Pteris cretica*, *Rhododendron* sp., *Rubus reflexus*, *Saraca dives*, *Taxus* sp., *Trachycarpus fortunei*, *Tsuga* sp., *Vitex* sp.	*Alocasia macrorrhizos*, *Areca catechu*, *Bletilla ochracea*, *Camellia oleifera*, *Camellia sinensis*, *Capsicum* sp., *Citrus grandis*, *Citrus limon*, *Coffea* sp., *Diospyros kaki*, *Dracaena sanderiana*, *Fatsia japonica*, *Hevea brasiliensis*, *Mangifera indica*, *Manihot esculenta*, *Morus alba*, *Nandina domestica*, *Pachira* sp., *Pyrus pyrifolia*, *Stylosanthes guianensis*, *Synsepalum dulcificum*, *Taxus wallichiana*	Damm *et al.* (2012b), Huang *et al.* (2013), Tao *et al.* (2013), He *et al.* (2014), Liu *et al.* (2015, 2019a), Cai *et al.* (2016a), Wang *et al.* (2016a, 2016b), Diao *et al.* (2017), Jia *et al.* (2017), Jiang & Li (2018), Li *et al.* (2018a, 2018b, 2019a), Cao *et al.* (2019a, 2020), Fu *et al.* (2019), Xue *et al.* (2019), Xu *et al.* (2019, 2020)		
C. laticiphilum	Acutatum	—	—	*Hevea brasiliensis*	Shi *et al.* (2019a)	S	
C. lentis	Destructivum	—	—	*Vicia sativa*	Xu *et al.* (2017a)	S	
C. lindemuthianum	Orbiculare	—	—	*Capsicum annuum*	Gao *et al.* (2018)	S	
C. linicola	Destructivum	China	Unknown plant	*Medicago sativa*	Wang *et al.* (2018)		
C. liriopes	Spaethianum	China: Beijing, Guangdong, Jiangxi, Shandong, Shan'xi, Tibet, Yunnan, Zhejiang	*Agaves* sp., *Anemarrhena asphodeloides*, *Capsicum* sp., *Citrus sinensis* var. *brasiliensis*, grass, *Heliconia collinsiana*, *Hemerocallis fulva*, *Hosta* sp., *Liriope spicata*, *Ophiopogon japonicus*, *Osmanthus fragrans*, *Pithecolobium* sp., *Poaceae*	*Bletilla ochracea*, *Eria coronaria*, *Hemerocallis fulva*, *Liriope cymbidiomorpha*, *Liriope spicata*, *Pleione bulbocodioides*	Yang *et al.* (2012a, 2020a), Tao *et al.* (2013), Chen *et al.* (2019c)		
C. lupini	Acutatum	—	—	*Lupinus polyphyllus*	Zou *et al.* (2019)	S	
C. magnum	Magnum	China	*Sorghum bicolor*	*Capsicum annuum* var. *conoides*, *Lobelia chinensis*, *Mangifera indica*	Diao *et al.* (2017), Li *et al.* (2013a, 2019a)		
C. magnusporum	Gigasporum	China	*Pseuduvaria indochinensis*	—	—	S	New record
C. metake	Bambusicola	—	—	*Chimonobambusa quadrangularis*	Wang *et al.* (2021)	S	
C. miscanthi	Graminicola	—	—	*Bletilla ochracea*	Tao *et al.* (2013)	S	
C. monsterae sp. nov.	Orchidearum	China: Guangdong	*Monstera deliciosa*	—	—	S	
C. multiseptatum sp. nov.	Graminicola	China: Guangdong	Grass	—	—	S	
C. musae	Gloeosporioides	China: Guangdong	*Musa* sp.	*Mangifera indica*	Li *et al.* (2019b)		
C. musicola	Orchidearum	Thailand: Chaing Rai	Unknown plant, endophyte	—	—		
C. nageiae sp. nov.	singleton	China	*Podocarpus nogi*	—	—	S	
C. nymphaeae	Acutatum	China: Fujian	*Acer buergerianum*, *Machilus yunnanensis*, *Paederia foetida*	*Camellia oleifera*, *Carya illinoinensis*, *Citrus aurantifolia*, *Eriobotrya japonica*, *Fragaria* × *ananassa*, *Vitis vinifera*	Huang *et al.* (2013), Han *et al.* (2016), Jayawardena *et al.* (2016), Liu *et al.* (2016b), Wu *et al.* (2018), Zhang *et al.* (2019a), Li & Li (2020)		
C. obovoides sp. nov.	singleton	China: Tibet	Unknown plant	—	—	S	
C. ocimi	Destructivum	China: Guangxi	*Croton megalobotrys*	—	—	S	New record
C. oncidii	Boninense	China	*Rhododendron spinuliferium*, *Vigna radiata*	—	—		New record
C. orbiculare	Orbiculare	China	*Benincasa hispida*	—	—	S	New record
C. orchidearum	Orchidearum	China: Guangdong	*Cymbidium eburneum*	*Arctium lappa*, *Monstera deliciosa*, *Philodendron bipinnatifidum*	Hou *et al.* (2016), Xu *et al.* (2016)		
C. orchidophilum	singleton	England	*Citrus grandis*, *Phragmipedium* sp.	—	—		
C. panacicola	Destructivum	—	—	*Panax ginseng*	Liu *et al.* (2020c)	S	
C. parabambusicola sp. nov.	Bambusicola	China: Shanghai	Bamboo	*Phyllostachys edulis*, *Phyllostachys sulphurea* var. *viridis*, *Phyllostachys aureosulcata* cv. *spectabilis*, *Brachystachyum densiflorum*	Wang *et al.* (2021)	S	
C. paraendophytum sp. nov.	Graminicola	China	Unknown plant	—	—	S	
C. parsonsiae	Boninense	—	—	*Bletilla ochracea*	Tao *et al.* (2013)	S	
C. petchii	Boninense	—	—	*Dracaena sanderiana*	Damm *et al.* (2012b)	S	
C. plurivorum	Orchidearum	China: Fujian, Guangdong, Jiangxi; Thailand: Chiang Rai	*Capsicum* sp, grass, *Liquidambar* sp., orchid, Paederia foetida, *Patrinia villosa*, *Vigna unguiculata*	*Capsicum annuum*, *Carica papaya*, *Manihot esculenta*, *Pyrus bretschneideri*	Liu *et al.* (2016c, 2019a), Fu *et al.* (2019), Sun *et al.* (2019b)		
C. pseudotheobromicola	Gloeosporioides	—	—	*Prunus avium*	Chethana *et al.* (2019)	S	
C. pyrifoliae	singleton	—	—	*Pyrus pyrifolia*	Fu *et al.* (2019)	S	
C. queenslandicum	Gloeosporioides	China: Guangdong	*Lagerstroemia speciosa*	—	—	S	New record
C. reniforme sp. nov.	Orchidearum	China: Fujian	*Paederia foetida*, *Smilax cocculoides*	—	—		
C. rhombiforme	Acutatum	China	Unknown plant	*Malus domestica*, *Vaccinium dunalianum* var. *urophyllum*	Wu *et al.* (2017), Wang *et al.* (2019b)		
C. schimae sp. nov.	Acutatum	China	*Schima* sp.	—	—	S	
C. scovillei	Acutatum	China: Shandong, Yunnan	*Capsicum* sp, *Pseudodracontium lacourii*	*Capsicum annuum*, *Capsicum annuum* var. *conoides*, *Clausena lansium*, *Mangifera indica*, *Musa acuminata*	Baroncelli *et al.* (2015), Liu *et al.* (2016c), Zhao *et al.* (2016a), Diao *et al.* (2017), Zhou *et al.* (2017), Li *et al.* (2019a), Qin *et al.* (2019), Lin *et al.* (2020a), Wu *et al.* (2020)		
C. shivasii sp. nov.	Caudatum	Australia	*Themeda thriandra*	—	—	S	
C. siamense	Gloeosporioides	China: Chongqing, Guangdong, Guangxi, Hainan, Hubei, Jiangsu, Jiangxi, Yunnan, Zhejiang; Saudi Arabia; Thailand: Chiang Mai, Chiang Rai; Turkey	*Acacia confusa*, *Alchornea tiliifolia*, *Alpinia pusilla*, *Amaryllis* sp., *Amaryllis vittata*, *Amherstia nobilis*, *Anthurium* sp., *Arenga caudata*, *Artabotrys hexapetalus*, *Aspidistra* sp., *Avocado* sp., bamboo, *Bauhinia purpurea*, *Calliandra haematocephala*, *Capsicum* sp., *Castanea henryi*, *Celtis sinensis*, *Chamaerops humilis*, *Chrysalidocarpus lutescens*, *Cinnamomum burmannii*, *Cinnamomum camphora*, *Cinnamomum* sp., *Citrus sinensis* var. *brasiliensis*, *Clerodendrum wallichii*, *Clinacanthus nutans*, *Coffea* sp., *Crinum lily*, *Cymbidium ensifolium*, *Cymbidium hybrid*, *Cymbopogon* sp., *Dichotomanthus tristaniaecarpa*, *Dracaena angustifolia*, *Dracaena cambodiana*, *Dracaena fragrans*, *Erythrophloeum fordii*, *Excentrodendron hsienmu*, *Excoecaria cochinchinensis*, fern, *Ficus* sp., grass, *Hevea* sp., *Homalomena occulta*, *Ilex cornuta*, *Jasminum mesnyi*, *Jasminum sambac*, *Jatropha integerrima*, *Lagerstroemia speciosa*, *Lauraceae*, *Liliaceae*, *Litsea honghoensis*, *Machilus pauhoi*, *Machilus* sp., *Maesa indica*, *Maesa montana*, *Magnolia* × *alba*, *Magnolia* sp., *Musa paradisiaca*, *Ophiopogon japonicus*, *Orchidaceae*, *Paramongaia weberbaueri*, *Peperomia* sp., *Philodendron selloum*, *Poaceae*, *Pongamia pinnata*, *Psidium guajava*, *Pterocarpus* sp., *Renanthera coccinea*, *Rhaphiolepis indica*, *Rubus reflexus*, *Saururus chinensis*, *Schefflera heptaphylla*, *Schima noronhae*, *Smilax ocreata*, *Smilax* sp., soil, *Solanum rostratum*, *Sphagneticola trilobata*, submerged wood, *Syngonium auritum*, *Tetrastigma obovatum*, *Uvaria chamae*, *Washingtonia*	*Areca catechu*, *Camellia oleifera*, *Camellia sinensis*, *Capsicum annuum*, *Capsicum* sp., *Cercis chinensis*, *Cinnamomum kotoense*, *Citrus reticulata*, *Coffea* sp., *Corchorus capsularis*, *Dypsis lutescens*, *Erythrina crista-galli*, *Euonymus japonicus*, *Fragaria* × *ananassa*, *Hevea brasiliensis*, *Hylocereus lemairei*, *Hymenocallis littoralis*, *Iris tectorum*, *Jasminum mesnyi*, *Juglans regia*, *Liriodendron chinense* × *tulipifera*, *Litchi chinensis*, *Machilus ichangensis*, *Mangifera indica*, *Manihot esculenta*, *Monstera deliciosa*, *Nelumbo nucifera*, *Parthenocissus tricuspidata*, *Photinia* × *fraseri*, *Plukenetia volubilis*, *Pyrus communis*, *Pyrus pyrifolia*, *Rosa chinensis*, *Sarcandra glabra*, *Sterculia lanceolata*, *Sterculia nobilis*, *Zinnia elegans*, *Zizyphus mauritiana*	Weir *et al.* (2012), Cheng *et al.* (2013, 2019), Liu *et al.* (2015, 2016c, 2017a, 2017d, 2019a, 2020d), Han *et al.* (2016), Niu *et al.* (2016a, 2016b), Wang *et al.* (2016a, 2017, 2020a, 2020c), Ye *et al.* (2016), Zhou *et al.* (2016), Diao *et al.* (2017), Ni *et al.* (2017), Qin *et al.* (2017), Chen & Kirschner (2018), Zhao *et al.* (2018, 2020), Cao *et al.* (2019a, 2019b, 2020), Chou *et al.* (2019), Chung *et al.* (2019), Feng *et al.* (2019), Fu *et al.* (2019), Ji *et al.* (2019), Li *et al.* (2019a, 2020), Zhu *et al.* (2019a), Zhang *et al.* (2019b, 2020a, 2020b), Chen *et al.* (2020), Mao *et al.* (2020), Shu *et al.* (2020), Wang *et al.* (2020a, 2020c), Wu *et al.* (2020), Wu (2020)		
C. simmondsii	Acutatum	Australia: Queensland	*Capsicum frutescens*, *Fragaria ananassa*	*Citrus reticulata*	Guarnaccia *et al.* (2017)		
C. sinuatum sp. nov.	Dracaenophilum	China: Guangdong	*Ophiopogon japonicus*	—	—	S	
C. sojae	Orchidearum	China: Beijing, Guangdong, Fujian, Shandong	*Capsicum* sp., *Humulus scandens*, *Impatiens balsamina*, *Nicandra physaloides*, *Patrinia villosa*, *Phaseolus vulgaris*, *Vigna radiata*, *Vitis vinifera*	*Arctium lappa*, *Bletilla ochracea*, *Capsicum* sp.	Damm *et al.* (2019)		
C. spaethianum	Spaethianum	China	*Allium fistulosum* var. *giganteum*, *Allium* sp., *Belamcanda chinensis*, *Celtis sinensis*, *Gladiolus gandavensis*, *Gramineae* sp., *Heliconia collinsiana*, *Hemerocallis fulva*, *Hosta* sp., *Lilium brownii*, *Paramongaia weberbaueri*, *Polygonatum odoratum*, *Rhizoma Belamcandae*, *Stemona sessilifolia*	*Anemarrhena asphodeloides*, *Atractylodes japonica*, *Hemerocallis citrina*, *Hemerocallis fulva*, *Hosta ventricosa*, *Lilium lancifolium*, *Paris polyphylla*, *Peucedanum praeruptorum*, *Phaseolus vulgaris*, *Polygonatum cyrtonema*, *Polygonatum odoratum*	Yang *et al.* (2012a, 2019b), Guo *et al.* (2013), Zhao *et al.* (2016b), Guan *et al.* (2018), Okorley *et al.* (2019), Liu *et al.* (2020b), Ma *et al.* (2020b), Sun *et al.* (2020a), Zhong *et al.* (2020)		
C. spinaciae	Dematium	—	—	*Vicia sativa*	Wang *et al.* (2019c)	S	
C. subacidae sp. nov.	Truncatum	China: Guangxi, Hubei	*Ailanthus altissima*, *Asparagus officinalis*, *Hosta* sp., *Tetrastigma obovatum*	—	—		
C. subsalicis sp. nov.	Acutatum	China: Beijing	*Populus alba*	—	—	S	
C. subvariabile sp. nov.	Gigasporum	China	Unknown plant	—	—	S	
C. sydowii	singleton	China: Shanghai	Monocotyledon plant	*Sambucus* sp.	Marín-Felix *et al.* (2017)		
C. syngoniicola sp. nov.	Orchidearum	China: Guangdong	*Syngonium* sp.	—	—	S	
C. tabacum	Destructivum	China	Unknown plant	—	—		New record
C. telosmae sp. nov.	singleton	China	*Telosma cordarum*	—	—	S	
C. temperatum	Gloeosporioides	China: Fujian	*Patrinia villosa*, *Smilax cocculoides*	—	—		New record
C. tibetense sp. nov.	Graminicola	China: Tibet	*Poaceae*	—	—	S	
C. tofieldiae	Spaethianum	China	*Cycas revolute*, *Yucca* sp.?	*Bletilla ochracea*, *Tofieldia* sp.	Tao *et al.* (2013), Damm *et al.* (2009)		
C. tongrenense	Dracaenophilum	—	—	*Nothapodytes pittosporoides*	Zhou *et al.* (2019)	S	
C. trichellum	singleton	China	*Trachycarpus* sp.	—	—	S	New record
C. trifolii	Orbiculare	—	—	*Malva crispa*, *Malva sylvestri*	Zhou *et al.* (2014), Liu *et al.* (2017c)	S	
C. tropicale	Gloeosporioides	China: Guangdong	*Celtis sinensis*, *Trachycarpus* sp.	*Areca catechu*, *Coffea* sp., *Ficus binnendijkii* var. *variegata*, *Mangifera indica*, *Nelumbo nucifera*, *Sauropus androgynus*	Chen & Kirschner (2018), Liu *et al.* (2018b), Cao *et al.* (2019a, 2020), Li *et al.* (2019a), Kong *et al.* (2020), Wu *et al.* (2020)		
C. tropicicola	Dracaenophilum	China: Guangdong	*Citrus grandis*, *Tetrastigma obovatum*	—	—		New record
C. truncatum	Truncatum	China: Fujian, Guangdong, Jiangsu, Shanghai	*Abutilon theophrasti*, *Bidens pilosa*, *Capsicum frutescens*, *Carica papaya*, *Chenopodium album*, *Chenopodium glaucum*, *Cissus hexangularis*, *Dianthus chinensis*, *Fagopyrum esculentum*, *Glycine max*, *Helianthus tuberosus*, *Hosta* sp., *Humulus scandens*, *Lablab purpureus*, *Malva sinensis*, *Paramongaia weberbaueri*, *Patrinia villosa*, *Physalis alkekengi*, *Polygonum* sp., *Vigna unguiculata*	*Abutilon theophrasti*, *Alocasia macrorrhizos*, *Arachis hypogaea*, *Basella alba*, *Begonia* × *semperflorens*, *Begonia* sp., *Brassica parachinensis*, *Camellia sinensis*, *Capsicum annuum*, *Capsicum* sp., *Citrus flamea*, *Citrus limon*, *Citrus reticulata*, *Citrus* sp., *Dracaena braunii*, *Fragaria* × *ananassa*, *Glycine max*, *Hylocereus undatus*, *Passiflora edulis*, *Piper betle*, *Solanum lycopersicum*, *Vitis labruscana* × *V. vinifera*	Huang *et al.* (2013), Cheng *et al.* (2014), Diao *et al.* (2014, 2017), Guo *et al.* (2014b), He *et al.* (2016), Liu *et al.* (2016c, 2019b), Wang *et al.* (2016a), Bi *et al.* (2017a), Guarnaccia *et al.* (2017), Chen *et al.* (2018), Chen & Huang (2018), Yang *et al.* (2018), Zhai *et al.* (2018), Zhang *et al.* (2018c), Ben *et al.* (2020), Cong *et al.* (2020), Sun *et al.* (2020b), Yu *et al.* (2020)		

Table S6. The substrate/host information for *Colletotrichum* species analysed in the current study, and host information of species reported from China retrieved from literature.

Species	Species complex	This study[a]		Previous studies (2009-)[b]		Note[c]	Note[d]
		Location	Substrates	Substrates in China	References[e]		
C. variabile sp. nov.	Gigasporum	China	Unknown plant	—	—	S	
C. vietnamense	Gigasporum	China	Unknown plant	—	—	S	New record
C. viniferum	Gloeosporioides	China: Beijing	*Vitis* sp.	*Capsicum* sp., *Fragaria × ananassa* , *Juglans regia* , *Vitis lambruscana* , *Vitis vinifera*	Peng *et al.* (2013), Yan *et al.* (2015), Lei *et al.* (2016), Diao *et al.* (2017), He *et al.* (2019)		
C. vittalense	Orchidearum	China: Guangdong, Yunnan	*Alloschemone occidentalis* , *Musa basjoo* , orchid	—	—		New record
C. wanningense	Acutatum	—	—	*Hevea brasiliensis*	Cao *et al.* (2019b)	S	
C. wuxiense	Gloeosporioides	—	—	*Camellia sinensis* , *Pyrus pyrifolia*	Wang *et al.* (2016a) , Fu *et al.* (2019)		
C. yunnanense	Dracaenophilum	China	*Buxus* sp.	*Buxus* sp.	Damm *et al.* (2019)	S	
C. zhaoqingense sp. nov.	Gigasporum	China: Guangdong, Zhejiang	*Carica papaya* , *Musa* sp., *Trachycarpus fortunei*	—	—		
C. zhejiangense sp. nov.	Dematium	China: Jiangsu	Unknown plant	—	—	S	

[a]*Colletotrichum* species analysed in the current study and their distribution and substrates.
[b]*Colletotrichum* species reported in China retrieved from previous literature.
[c]"S" represents that the *Colletotrichum* species has only been reported on a single host plant species or genus in China.
[d]New record species for China discorved in this study.
[e]All the references cited in the table:

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Table S6. The substrate/host information for *Colletotrichum* species analysed in the current study, and host information of species reported from China retrieved from literature.

Species	Species complex	This study[a]		Previous studies (2009-)[b]		Note[c]	Note[d]
		Location	Substrates	Substrates in China	References[e]		

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Table S7. *Colletotrichum* species reported as endophytes in previous publications and in the current study.

Species	Endophyte	Pathogen	Saprobe	Species complex	Reference
C. aotearoa	Yes	Yes		Gloeosporioides	Bhunjun *et al.* (2021)
C. arxii	Yes			Gigasporum	Bhunjun *et al.* (2021)
C. bambusicola	Yes			Bambusicola	Wang *et al.* (2021)
C. bambusicola		Yes		Bambusicola	This study
C. beeveri	Yes			Boninense	This study
C. bletillae	Yes			Spaethianum	Bhunjun *et al.* (2021)
C. boninense	Yes	Yes		Boninense	Bhunjun *et al.* (2021)
C. brevisporum	Yes	Yes		Magnum	Bhunjun *et al.* (2021)
C. brevisporum	Yes	Yes		Magnum	This study
C. buxi sp. nov.	Yes			Dracaenophilum	This study
C. cacao	Yes			Magnum	Bhunjun *et al.* (2021)
C. cariniferi	Yes			Dracaenophilum	Bhunjun *et al.* (2021)
C. caudisporum	Yes			Caudatum	Bhunjun *et al.* (2021)
C. caudisporum		Yes		Caudatum	This study
C. cereale	Yes	Yes		Graminicola/caudatum	Bhunjun *et al.* (2021)
C. chamaedoreae sp. nov.	Yes			Boninense	This study
C. chiangraiense	Yes			Boninense	Bhunjun *et al.* (2021)
C. cigarro	Yes	Yes		Gloeosporioides	This study
C. circinans	Yes	Yes		Dematium	This study
C. cliviicola	Yes	Yes		Orchidearum	This study
C. cordylinicola	Yes	Yes		Gloeosporioides	Bhunjun *et al.* (2021)
C. cosmi	Yes			Acutatum	This study
C. cymbidiicola	Yes	Yes		Boninense	This study
C. dacrycarpi	Yes			Boninense	Bhunjun *et al.* (2021)
C. dematium	Yes	Yes	Yes	Dematium	Bhunjun *et al.* (2021)
C. destructivum	Yes			Destructivum	This study
C. doitungense	Yes			Boninense	Bhunjun *et al.* (2021)
C. duyunensis	Yes			Graminicola/caudatum	Bhunjun *et al.* (2021)
C. duyunensis		Yes		Graminicola/caudatum	This study
C. endophytum	Yes		Yes	Graminicola/caudatum	Bhunjun *et al.* (2021)
C. excelsum-altitudinum	Yes			Dracaenophilum	Bhunjun *et al.* (2021)
C. fioriniae	Yes	Yes		Acutatum	Bhunjun *et al.* (2021)
C. fioriniae	Yes	Yes		Acutatum	This study
C. fructicola	Yes	Yes	Yes	Gloeosporioides	Bhunjun *et al.* (2021)
C. fructivorum	Yes	Yes		Gloeosporioides	Bhunjun *et al.* (2021)
C. gigasporum	Yes	Yes		Gigasporum	This study
C. godetiae	Yes	Yes		Acutatum	This study
C. guangxiense	Yes			Bambusicola	Wang *et al.* (2021)
C. guizhouensis	Yes			Spaethianum	Bhunjun *et al.* (2021)
C. horii	Yes	Yes		Gloeosporioides	This study
C. indonesiense	Yes			Acutatum	This study
C. jiangxiense	Yes	Yes		Gloeosporioides	Bhunjun *et al.* (2021)
C. jishouense	Yes			Gigasporum	Bhunjun *et al.* (2021)
C. karstii	Yes	Yes		Boninense	This study
C. liriopes	Yes	Yes		Spaethianum	Bhunjun *et al.* (2021)
C. liriopes	Yes	Yes		Spaethianum	This study
C. magnusporum	Yes			Gigasporum	This study
C. metake	Yes	Yes		Bambusicola	Sato *et al.* (2012), Wang *et al.* (2021)
C. merremiae	Yes			Magnum	Bhunjun *et al.* (2021)
C. miscanthi	Yes			Graminicola/caudatum	Bhunjun *et al.* (2021)
C. musae	Yes	Yes		Gloeosporioides	Bhunjun *et al.* (2021)
C. nageiae sp. nov.	Yes			singleton	This study
C. oncidii	Yes	Yes		Boninense	This study
C. panamense	Yes			Magnum	Bhunjun *et al.* (2021)
C. pandanicola	Yes			Gloeosporioides	Bhunjun *et al.* (2021)
C. parallelophorum	Yes			Dracaenophilum	Bhunjun *et al.* (2021)
C. parsonsiae	Yes			Boninense	Bhunjun *et al.* (2021)
C. phyllanthi	Yes	Yes		Boninense	Bhunjun *et al.* (2021)
C. rhexiae	Yes	Yes		Gloeosporioides	Bhunjun *et al.* (2021)

Table S7. *Colletotrichum* species reported as endophytes in previous publications and in the current study.

Species	Endophyte	Pathogen	Saprobe	Species complex	Reference
C. rhombiforme	Yes			Acutatum	This study
C. schimae sp. nov.	Yes			Acutatum	This study
C. serranegrense	Yes			Gigasporum	Bhunjun *et al.* (2021)
C. sydowii	Yes	Yes		singleton	This study
C. telosmae sp. nov.	Yes			singleton	This study
C. temperatum	Yes	Yes		Gloeosporioides	Bhunjun *et al.* (2021)
C. theobromicola	Yes	Yes		Gloeosporioides	Bhunjun *et al.* (2021)
C. tofieldiae	Yes			Spaethianum	Bhunjun *et al.* (2021)
C. tofieldiae	Yes	Yes		Spaethianum	This study
C. tongrenense	Yes			Dracaenophilum	Bhunjun *et al.* (2021)
C. tropicicola	Yes	Yes		Dracaenophilum	This study
C. variabile sp. nov.	Yes			Gigasporum	This study
C. watphraense	Yes			Boninense	Bhunjun *et al.* (2021)
C. yunnanense	Yes			Dracaenophilum	Bhunjun *et al.* (2021)
C. yunnanense	Yes			Dracaenophilum	This study