

NOTES ON AUTHORSHIP, TYPE MATERIAL AND CURRENT SYSTEMATIC POSITION OF THE DIPLOPOD TAXA DESCRIBED BY HILDA K. BRADE-BIRKS AND S. GRAHAM BRADE-BIRKS

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ABSTRACT

H.K. Brade-Birks and S.G. Brade-Birks described eight Diplopoda taxa as new to science: two nominal genera and three nominal species in the Family Brachychaeteumatidae (Genera *Jacksoneuma* and *Iacksoneuma*, species *Iacksoneuma bradeae*, *Brachychaeteuma melanops* and *B. quartum*), one nominal species in the Family Blaniulidae (*Proteroiulus pallidus*), and two nominal subspecies in the Family Chordeumatidae (*Chordeumella scutellare brolemanni* and *Chordeumella scutellare bagnalli*). Over many years the fact that there were two Brade-Birks' seems to have become forgotten and some of the authorships quoted for these names is certainly wrong because of this. This is discussed in detail and correct authorship for these names is provided. Similarly the nature and location of type material for these species is largely unknown and details of what is known are given where this has been ascertained. The currently accepted systematic position of these taxa is described.

INTRODUCTION

Hilda K. Brade (1890–1982) and S. Graham Birks (1887–1982) (who took the surname Brade-Birks on marriage, hereafter in the plural as Brade-Birks') were the most important British myriapodologists of the early 20th century. In the period 1916 to 1939 they left us 36 of their "Notes on Myriapoda" which provided very valuable additions to knowledge of the British Diplopoda and Chilopoda, as well as synthesising the literature pertinent to British taxa. In addition, in just over four years from June 1916 to October 1920 they were responsible for eight nominal taxa new to science from British collected material. These taxa have been referred to many times since then but it is clear that some of the details, especially the authorship of the taxa, have not been properly cited. The taxa under discussion are:

1. *Jacksoneuma* (Brachychaeteumatidae)
2. *Iacksoneuma* (Brachychaeteumatidae)
3. *Iacksoneuma bradeae* (Brachychaeteumatidae) [currently *Brachychaeteuma bradeae*]
4. *Brachychaeteuma melanops* (Brachychaeteumatidae)
5. *Brachychaeteuma quartum* (Brachychaeteumatidae) [currently considered a synonym of *B. bradeae*]
6. *Proteroiulus pallidis* (Blaniulidae) [currently *Archiboreoiulus pallidus*]
7. *Chordeumella scutellare brolemanni* (Chordeumatidae) [Currently *Melogona scutellaris*]
8. *Chordeumella scutellare bagnalli* (Chordeumatidae) [Currently *Melogona scutellaris*]

This note discusses the authorship for these taxa, describes what is known of the type material for them and examines their current systematic position. In what follows the Articles (Art.) and Recommendations (Rec.) of the current (4th) edition of the International Code of Zoological Nomenclature (International Commission on Zoological Nomenclature 1999) are used to determine the proper formulation and authorship of these names. Potential type material held by the Natural History Museum London (NHML, formerly British Museum (Natural History)), the Muséum National d'Histoire Naturelle (MNHN) in Paris, and the Manchester Museum (MM) is discussed (see Proudlove and Logunov (2011) for further details of the myriapod holdings in the Manchester Museum). The taxa are treated in descending order of inclusiveness (genera, species, subspecies) and within these groups in chronological order.

GENUS *JACKSONEUMA*

The first new generic name to be published, in July 1917, was *Jacksoneuma* (Brade and Brade-Birks, 1917:117). The generic name was erected in the following text:

“*Jacksoneuma bradeae* nobis Brolemannque. This new genus and species occurs in rockeries and other situations where the soil is fairly soft. It is not uncommon at Darwen, where it is often associated with *Chordeumella scutellare* var. *brolemanni*. A full description of this animal will be published shortly. It may be added that this is probably the animal recorded in our fourth paper [Brade and Birks 1916b:145] under *Brachychaeteuma bagnalli* Verhoeff, with which it has some affinities.”

This was published five months before the description of *Iackstoneuma* in Brade-Birks and Brade-Birks (1917) which was published in December 1917.

The first issue is to be certain that the name is spelled with a capital “J”, and not a capital “I”. Reference to p. 114 line 9 which reads:

“In the body of the paper (J) after an occurrence indicates that we give the record solely on Dr. Jackson’s diagnosis”

provides the solution. There is no confusing the “I” of “In” with the “J” of “(J)” or of “Dr. Jackson’s”, they are easily distinguished. So we can be as certain as possible that the name is spelled with a “J” as it was meant to honour Dr. Jackson, from whom they had learned their myriapodological trade (Brade-Birks, 1974:4-5).

The second issue is to determine whether this is a valid generic name or a *nomen nudum*. This is an important point because if valid it takes date priority over *Iackstoneuma*. In order to be a valid generic name it must conform to Art. 12 of the code which states:

“To be available every new name published before 1931 must satisfy the provisions of Article 11 and must be accompanied by a description of the taxon that it denotes, or by an indication.”

This name does satisfy the provisions of Article 11. We need to decide if the text provided by Brade and Brade-Birks constitutes either a description, a definition or an indication. It seems clear that this short text is neither a description, nor a definition nor an indication in the sense of Art. 12. So the generic name *Jacksoneuma* Brade and Brade-Birks, 1917 is a *nomen nudum*. Neave (1939:804) includes the name but as misspelling of *Iackstoneuma*, as pointed out by Jeekel (1971:68). Strangely, neither Jeekel (1971), nor the corrections to it (Jeekel, 2000), cover this generic name.

GENUS *JACKSONEUMA*

With the nominal taxon *Jacksoneuma* being a *nomen nudum* we can examine the valid generic name *Iackstoneuma* which was erected to contain a new species of millipede found in Whitehall Park, Darwen, Lancashire in 1916.

The various authoritative *Nomenclators* (Neave, 1939; Jeekel, 1971; Sierwald, 2006) give the authorship of this genus as follows:

Neave: *Iackstoneuma* Brade-Birks 1917, (J. Zool. Res. 2: 135 1939)

Jeekel: *Iackstoneuma* H.K. Brade-Birks & S.G. Brade-Birks, 1917 (J. Zool. Res. 2:135). N.

Sierwald: *Iackstoneuma* H.K. Brade-Birks, 1917 J. Zool. Res. 2:135. N.

[The Nomenclator II of Shelley et al (2000) is not relevant here].

The authorship for the generic name *Iackstoneuma* must be H.K. Brade-Birks and S.G. Brade-Birks, 1917 as these are the authors of the paper in which the genus was proposed and no other explicit authorship is provided, suggested or implied. Therefore the genus is accurately:

Iackstoneuma H.K. Brade-Birks and S.G. Brade-Birks, 1917.

Only Jeekel’s Nomenclator provides the correct authorship for this genus.

JACKSONEUMA BRADEAE

Jacksoneuma bradeae was described as a new species in 1917. The title and authorship of the paper is:

“Notes on myriapoda VII. A new member of the order AscospERMOPHORA (*Jacksoneuma bradeae*, gen. et sp. nov.) by Hilda K. Brade-Birks and the Rev. S. Graham Brade-Birks.”

However, at the beginning of the species description (p. 138) the title is given as:

“*Jacksoneuma bradeae*, n. sp. Brölemann and Brade-Birks”

And we are to understand from this that the species is described by Brölemann and (one of the) Brade-Birks’.

It is certainly possible for the nomenclatural act to be performed by person(s) other than the main authors of the publication (Art. 50.1.1) and the authors of this new species description certainly could be “Brölemann and Brade-Birks”, as given. The “Brölemann and Brade-Birks” authorship formulation has been used by subsequent authors, e.g. Blower, 1958, 1985; Jeekel, 1971; Enghoff, 1989; Lee, 2006; Sierwald, 2006). However, under Arts. 50 and 51 of the Code this authorship cannot be correct.

Two additions are necessary to correct the authorship. First, Rec. 51E recommends that it should be explicitly stated that the description of the species *I. bradeae* provided by Brölemann and Brade-Birks is contained within the paper authored by H.K. Brade-Birks and S.G. Brade-Birks giving authorship as:

Jacksoneuma bradeae Brölemann and Brade-Birks, 1917 in H.K. Brade-Birks and S.G. Brade-Birks, 1917

This is a necessary but not sufficient correction as Rec. 51A is clear that ambiguous authorship should be avoided. To achieve this we need to decide which of the Brade-Birks’ is the author of the name in conjunction with Brölemann. If it is only one of them it must be one or the other and we must (ideally) be able to know which one.

It is relatively easy to determine that H.K. Brade-Birks is the author of the name. She drew all of the 20 diagnostic figures (see foot note to Brade-Birks and Brade-Birks 1917: fig 21) and she probably composed the whole text. A footnote on p.135 says:

“For this honour and compliment *I* must here express *my* best thanks. –*H.K.B-B*” (emphasis added)

[this refers to the specific name *bradeae* suggested by Brölemann as the name for the species]. This first person singular response, to a letter from Brölemann, strongly suggests that she wrote the text. If this is the case then the authorship is:

Jacksoneuma bradeae Brölemann and H.K. Brade-Birks, 1917 in H.K. Brade-Birks and S.G. Brade-Birks, 1917

However it is unclear why only one of the two Brade-Birks’ is responsible for the name. Surely they were both responsible?

It is relatively easy to determine that, in fact, both H.K. and S.G. Brade-Birks *were* responsible for the work to describe the new species. Firstly they were responsible together for the genus *Jacksoneuma* only three pages earlier. Secondly the following statement appears near the beginning of the paper on p.135:

“*We* referred specimens of this animal, last year, to *our* eminent friend, Monsieur le Docteur Henry W. Brölemann, of Pau, who, with his customary courtesy and kindness, undertook their partial examination, and suggested the specific name *bradeae* for them. Dr Brölemann also sent *us* drawings of the gonopods of the male and furnished *us* with a description of these organs, leaving the *publication* of a detailed study of *the new species to us.*” (emphasis added).

It seems clear that the “us”, “we” and “our” in this text refer directly to H.K. and S.G. Brade-Birks together, and not to either, or both, of them and Brölemann. This is also supported by the main authorship of the paper. Support is also found in Brade and Brade-Birks (1917) where the authorship of the invalidly proposed name *Jacksoneuma bradeae* is given as:

“*Jacksoneuma bradeae* nobis Brolemannque”

Where the Latin term “nobis” means “us”. It seems abundantly clear that both Brade-Birks’ were involved in this description. [It has been pointed out by a referee of this paper that the plural term “nobis” was sometimes used, incorrectly, as a singular to mean “me”. This may very well be true but we cannot know in what sense the Brade-Birks’ used it. In the absence of any evidence to judge the matter we can at least

assume they were using it correctly as a plural as one of them was using it incorrectly as a singular. The fact that they were clearly a team in all of their other jointly authored papers is a strong pointer that they were working as a team on this paper as well.]

If this is the case, and accepting Brölemann as first author of the description, the authorship would be:

Iackstoneuma bradeae Brolemann, H.K. Brade-Birks and S.G. Brade-Birks, 1917 in H.K. Brade-Birks and S.G. Brade-Birks, 1917

The alternative of:

Iackstoneuma bradeae Brolemann, S.G. Brade-Birks and H.K. Brade-Birks, 1917 in H.K. Brade-Birks and S.G. Brade-Birks, 1917

seems unlikely for the reasons given above.

The final part of this story is to determine the full authorship of the species *bradeae* once it was transferred to the genus *Brachychaeteuma* by Brade-Birks and Brade-Birks (1918a).

Using the formulation of Rec. 51G, to show the authorship of the original combination and the new combination, the authorship is:

Brachychaeteuma bradeae (Brolemann, H.K. Brade-Birks and S.G. Brade-Birks, 1917) H.K. Brade-Birks and S.G. Brade-Birks, 1918

We will probably never know why the Brade-Birks' chose to alter the initial letter of the generic name from a "J" to an "I".

[It may be of interest to note that I was brought up, from birth to leaving for University, 100 yards from the type locality of *Iackstoneuma bradeae* in Whitehall Park, Darwen and no doubt trampled many of the beasts in the thousands of hours I spent there!]

Type material

There are similarly complicated issues with the type material.

The original description is, unusually for the time, very explicit in its description of the type material (p.145):

“*Types*. – Male: Manchester Museum, reg. no. G, 3214 (micro. slide showing anterior gonopods in lateral profile); Brade-Birks Collection, reg. no. 1006 (micro. slide specimen mounted whole).

Female: Brade-Birks Collection, reg. no. 1006 (micro. slide).

Note. – M.M. : G. 3214. Coll. S.G. B-B. 27/i/1916. Prep. Brolemann, mounted Brade-Birks. B-B, 1006: col. And mounted Brade-Birks, xi/1917. The three specimens were all taken in Whitehall Park, Darwen.”

In the absence of an explicit statement that the description was based on a single individual (the holotype) (and avoiding an assumption of holotype: Rec. 73F), these “three specimens” must be considered as syntypes (Art. 73.1, 73.2).

The first mentioned of these syntype specimens (Figs. 1–5) was found within the slide collection of Harry Britten in the Manchester Museum in October 2010.

The label on the slide envelope reads (Fig. 1):

Brachychaeteuma (= *Iackstoneuma*) *bradeae* Brole & Brade-Birks. Male Gonopods. G3214
Whitehall Park, Darwen, Lancashire, 27-1-1916, S.G. Brade-Birks, TYPE.

Details on the slide are as follows (Fig. 2):

“TYPE. *Iackstoneuma braedae* (sic) Brole & Brade B.

G3214. Type specimen of *Iackstoneuma bradeae* Brölemann et Brade-Birks

Male mounted to show anterior gonopods in lateral profile. (Brade-Birks no 984)

Coll Whitehall Park, Darwen 27.1.1916 S.G.B. Prep by Brölemann & Brade-Birks”

The museum Register record for this slide is:

“20/IX/1917 (Coll 27/I/16) *Iackstoneuma bradeae* Male. (Type of genus). [Mounted to show anterior gonopods in lateral profile]. Darwen. Brade-Birks donors. Brölemann and Brade-Birks prep.”

It seems likely, given that they have the same accession number, that the second male and the female are mounted on the same slide. This has not yet been found but further investigation in the Brade-Birks' collection in the Manchester Museum may turn up these syntypes.

The slide label is clear that the animal is mounted to show the gonopods in lateral profile but this seems not to be right. The specimen (Figs. 3 - 5) clearly shows the gonopods in anterior view.



FIGURE 1 (above): Envelope containing Manchester Museum slide, accession number G3214, syntype of *Iackstoneuma bradeae*. Found among the Harry Britten slide collection of myriapoda in the Manchester Museum in October 2010.



FIGURE 2 (right): Manchester Museum slide, accession number G3214, syntype of *Iackstoneuma bradeae*.

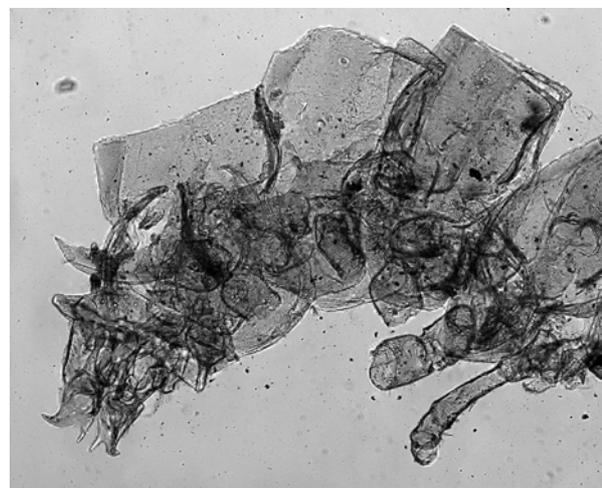


FIGURE 3 (left): Manchester Museum specimen G3214 as seen in an ordinary microscope. Gonopods at left hand end. Photograph by Dmitri Logunov, Manchester Museum.

FIGURE 4 (right): Manchester Museum specimen G3214 as seen in a Zeiss axioskop upright microscope with an axiocam colour CCD camera and axiovision software. A x10/0.5 air fluar objective and a x20 0.75 air plan achromat objective were used to take the images in Figs. 4 and 5. Photograph by Jane Kott, Bioimaging Unit, Faculty of Life Sciences, Manchester University

Information in Sierwald and Reft (2004) suggest that there is type material from Brölemann and Brade-Birks in MNHN and the diplopod collection at MNHN does indeed contain three lots of this species (Jean-Jacques Geoffroy pers. comm.):

1. Brade-Birks/Brölemann no. 7125 (MNHN fiche 748): 3 males, 1 juvenile male, 4 females, 1 juvenile female. Collected 01/11/1916 Whitehall Park, Darwen, Lancashire, UK [Type locality] by Brade-Birks. Material in 1 tube. MNHN database entry contains word “Syntypes” against this lot.
2. Brade-Birks/Brölemann no. 7108 (MNHN fiche 749): 1 female. Collected 27/01/1916 [same date as Manchester syntype], Whitehall Park, Darwen, Lancashire, UK [Type locality] by Brade-Birks. Material in 1 tube.
3. Brade-Birks/Brölemann no. 7108 (MNHN fiche 750): 1 female. Collected 27/01/1916 [same date as Manchester syntype], Whitehall Park, Darwen, Lancashire, UK [Type locality] by Brade-Birks. Material in 1 tube.

There is one possible further lot of this species in MNHN, for which see the discussion below under *B. melanops*.



FIGURE 5: Enlarged view of the gonopods of G3214. Orientation is as in Blower (1986) to facilitate comparison. Photograph as Figure 4.

It seems very unlikely that any of this material is actually from the type series despite one lot being labelled as such. The composition of the lot labelled “syntypes” is wrong, as is the date on which it was collected, and it is contained in a tube, rather than on a slide. The same is true for the other two lots which do not accord with the original description in any way. They are in tubes rather than on a slide, they were collected on a date different to that claimed for the other syntypes in the original description. It seems clear that the remaining two syntypes of *Iacksonneuma bradeae* remain to be found, if they are still extant.

***BRACHYCHAETEUMA MELANOPS* (Fig. 6)**

Authorship

Authors up to, and including, Blower (1985) gave the authorship for this species as Brade-Birks, 1918. This is clearly wrong. The authors of the paper, and of the name, are H. K. Brade-Birks and S. G. Brade-Birks. This is followed by Lee (2006) in his latest checklist, although he does not differentiate the two Brade-Birks by initial to follow Rec. 51A. Authorship is:

Brachychaeteuma melanops H.K. Brade-Birks and S.G. Brade-Birks, 1918.

Type material

It is impossible to determine, from the original description, the nature and quantity of the type material, other than it consists of an unknown number of syntypes of both sexes. Further investigation in the Brade-Birks' collection in the Manchester Museum may turn up these syntypes.

There are two British lots of this species in MNHN, one of which is labelled as syntypes:

Brölemann No. 7421, Brade-Birks no. 1544 (MNHN fiche 1205): 3 females collected 04/1918 at Swanage, Dorset by Brade-Birks. Material in 1 tube. MNHN database records these 3 females as syntypes.

There are several issues with this database entry. First, it was not Brade-Birks but R. Bagnall that collected the material in April 1918 in Swanage (Brade-Birks and Brade-Birks, 1918b). Second, the lot is listed as three females but the original description is quite clearly based on both sexes. It may be that the male(s) used have since been lost.



FIGURE 6: *Brachychaeteuma melanops* in Otter Hole Cave, Chepstow. Photograph by Phil Chapman 1979. Identity confirmed by J. Gordon Blower and Paul Lee.

The second MNHN lot of this species is particularly interesting:

Brölemann No. 7108, Brade-Birks No. 507 (MNHN fiche 1220): 3 females collected 27/01/1916 in Whitehall Park, Darwen, Lancashire by Brade-Birks. Material in 1 tube.

It will be remembered, from the discussion above, that the type specimens of *Iackstoneuma bradeae* were taken in Whitehall Park, Darwen by S.G. Brade-Birks on the same date as these apparent specimens of *B. melanops*. Did S.G. Brade-Birks really pick up two species new to science in the same place on the same day? Sadly, almost certainly not as *B. melanops* is not recorded from that area (Lee, 2006:76-77). In fact it is hardly known north of the Severn-Thames line. So it looks very likely that this is a misidentified, or mislabelled, lot of *B. bradeae* or some other species.

The data for specimens Brölemann No. 7421 are a close enough match to the data in the original description (except for the absence of any males, and the error in the collector) to strongly suggest that these are, in fact, syntypes for this species.

BRACHYCHAETEUMA QUARTUM

Authorship

The authorship of this name is clearly H.K. Brade-Birks and S.G. Brade-Birks.

Brachychaeteuma quartum H.K. Brade-Birks and S.G. Brade-Birks, 1918

Type material

It is impossible to determine, from the original description, the nature or quantity of the type material, other than it consists of an unknown number of female syntypes (males being unknown). Further investigation in the Brade-Birks' collection in the Manchester Museum may turn up these syntypes which are slide mounts with Brade-Birks' accession numbers 1275 and 1276 and tube 1277 (Brade-Birks and Brade-Birks, 1918c). There is no material of this nominal species in MNHN (Jean-Jacques Geoffroy pers. comm.). Blower (1952, 1958) says that: "This species was founded on a single female from Derbyshire". Although the type material has not been seen to confirm this, it can hardly be true if the types are on two slides and in one tube, as explicitly stated by the authors of the name.

Current systematic position

Blower (1952, 1958, 1985) placed this species in the synonymy of *Brachychaeteuma bradeae*. Without access to the original type specimens of both nominal species this cannot be confirmed explicitly. The synonymy was based on the observations of Brade-Birks and Brade-Birks (1920) who found that females found with undoubted males of *B. bradeae*, in Norfolk, were identical in vulval characteristics to those of *B. quartum*. Only a re-assessment of the type material, which has never been done as far as I can ascertain, will answer this question conclusively. However, the fact that no specimens ascribable to this species have turned up since 1918 is supportive of this synonymy.

The full synonymy for this species is:

Brachychaeteuma bradeae (Brolemann, H.K. Brade-Birks and S.G. Brade-Birks, 1917) H.K. Brade-Birks and S.G. Brade-Birks, 1918

Syn. *Brachychaeteuma quartum* H.K. Brade-Birks and S.G. Brade-Birks, 1918

A NOTE ON THE FAMILY PLACEMENT OF THE GENERA *BRACHYCHAETEUMA* AND *IACKSONEUMA*

All authors, bar one, examined for this paper (e.g. Brade-Birks and Brade-Birks, 1918a; Blower, 1952, 1958, 1985; Lee, 2006; Sierwald, 2006) place the genus *Brachychaeteuma*, and its junior subjective synonym *Iackstoneuma*, in the nominotypical Family Brachychaeteumatidae (incorrectly stemmed as Brachychaeteumidae in early authors and Blower (1952, 1958) and on p. 76 of Blower (1985)). Hoffman, uniquely, (1980:137) places the genus in the subfamily Brachychaeteumatinae of the Family Anthroleucosomatidae. The subfamily Brachychaeteumatinae was re-elevated to family status by Shear (2000).

PROTEROIULUS PALLIDUS

Authorship

This taxon is the only one of the eight to be described by S.G. Brade-Birks alone and authorship is:

Proteroiulus pallidus S.G. Brade-Birks, 1920

Brölemann (1921) erected the genus *Archiboreoiulus* and placed *P. pallidus* in this new genus. The authorship following Rec. 51G is:

Archiboreoiulus pallidus (S.G. Brade-Birks, 1920) Brölemann, 1921

This was followed by all authors from Brade-Birks (1922) onward with the exception of Hoffman (1980:105) who placed *Archiboreoiulus* into synonymy of *Boreoiulus* as he considers: "The two "genera" *Archiboreoiulus* and *Archichoneiulus* are outstanding examples of splitting too finely." However this position is not generally recognised and the species is kept in *Archiboreoiulus* by most authors and in the Fauna Europaea database (www.faunaeur.org).

Type material

It is not possible to tell from the, very brief, original description the nature or quantity of the type material. The only information presented is: "Types in the Brade-Birks collection." If still extant these may be in the Brade-Birks' collection in the Manchester Museum.

There is one British lot of this species in MNHN:

Brölemann No. 7731 (MNHN fiche no. 5412). 2 males. Collected 08/06/1920 bean plot, Wye, Field, Wye Kent [Type locality] by S.G. Brade-Birks.

In the original description S.G. Brade-Birks says that he submitted a specimen of this species to Brölemann who told him the species was new and also gave "me some account of its systematic position." It is possible, though probably unprovable, that the specimen in MNHN is the very one on which this opinion was based (of the 2 males one is dissected). [If this is the case then a very quick bit of timing is evident here. The 2 males were collected on 8th June, the paper is dated 21st July and it was published in October].

There is no suggestion in the MNHN database that these specimens are part of the type series. However, if the type series is never found, and it becomes necessary at some point to designate a neotype, these two males would be prime candidates from which to choose the neotype. They are topotypes and comply with all of the rules of Art. 75.3 and Rec. 75A. Only if their condition was too poor would it be necessary to obtain a new specimen for neotypification.

CHORDEUMELLA SCUTELLARE BROLEMANNI

Authorship

This subspecies was erected in the paper by Hilda K. Brade and S. Graham Birks (1916a) so authorship is:

Chordeumella scutellare brolemanni Brade and Birks, 1916

Type material

There is no specific mention of type material in the paper. However, the following statement is present:

"Spirit specimens of *Chordeumella scutellare* var. *brolemanni* as well as prepared slides of the modified appendages will be placed at the disposal of the Manchester Museum authorities shortly."

Additional information is as follows:

Male (Tube 509) Darwen Cemetery, 10/01/1916 (Coll S.G. Brade-Birks)

Female (Tube 526) Darwen Cemetery, April 1916 (Coll. S.G. Brade-Birks)

Both preserved in spirit. So these may perhaps be considered as the type specimens. However, type material is mentioned by Brade and Brade-Birks (1917) who clearly state:

"*Chordeumella scutellare* var. *brolemanni* nobis. We have handed type specimens of the Variety to the Manchester Museum authorities (Reg. No. G.3194)"

The Museum Register entry for G3194 says:

"*Chordeumella scutellare brolemanni*, males and females, many, acquired in May 11, 1917."

And there is no mention of this collection containing types. However, the previous entry, G3193, does contain the word "type" and is almost certainly either a single holotype or one of an unknown number of syntypes for this subspecies. Although the Register entry strongly suggests that this material is in the Manchester Museum it has not been found at the time of writing.

The NHML has one lot of this taxon

BM1918.8.1.23-30, Whitehall Park, Darwen, Lancashire, -/xi.17. Presented by Graham Brade-Birks and Hilda K. Brade-Birks

But this is not type material (Jan Beccaloni pers. comm.).

Current systematic position

Blower (1957) pointed out that the anterior paragonopods and the peltogonopods in chordeumatidans are very variable, and, further, that the two subspecies, *C. s. brolemanni* and *C. s. bagnalli*, are found sympatrically. They are therefore not subspecies in the sense of Mayr (1970) which requires that subspecies “inhabit definite geographic subdivisions of the range of a species”. Blower (1958) considered these taxa as members of the genus *Microchordeuma* but they are now members of the genus *Melogona* with the spelling of the specific name corrected from *scutellare* to *scutellaris* (Lee, 2006). So the final placement is:

Melogona scutellaris (Ribaut, 1913)

[It is worth mentioning here, as advised to me by the referee of the paper, that the species-group name *brolemanni* Brade and Birks, 1916 is a junior secondary near-homonym of *Microchordeuma broelemanni* Verhoeff, 1897, now valid as *Melogona broelemanni* (Verhoeff, 1897)].

CHORDEUMELLA SCUTELLARE BAGNALLI

Authorship

The authorship of this name is the authorship of the paper:

Chordeumella scutellare bagnalli H.K. Brade-Birks and S.G. Brade-Birks, 1918

Type material

In contrast to *C. s. brolemanni*, where no types are specified in the original paper, this subspecies has the following type material:

“Tube 1271, slides 1272, 1273, 1274, and 1349, Brade-Birks collection.”

All males. These have not been found at the time of writing but may be in the collection of the Manchester Museum.

Current systematic position

See discussion under *C. s. brolemanni*.

DISCUSSION

Some of the arguments and discussions in this paper may seem to be very abstruse and a long way from biology. However it is critical to all biologists, whatever their interests and specialities, that zoological nomenclature is accurate and stable. Authorship can be important in tracking down names within the literature and so it is vital that they are quoted correctly wherever possible. At a less critical, though still important, level it is only right that the authors who carried out, the often very meticulous and detailed, work required to determine a species as new and then to describe it as well as possible within the rules of nomenclature, get the credit they deserve. Perhaps more important than either of these is the ability of present and future taxonomists and systematists to find type material if they need to address questions relating to nomenclature, taxonomy and phylogenetic relationships. Anyone who doubts that these topics are not highly complex, not to say contentious, should read Hoffman’s *Classification!* A good discussion of the importance of accuracy in nomenclature is given by Kuhn and Wahl-Jensen (2010).

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