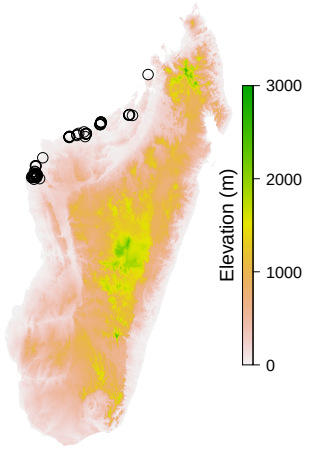
Contents

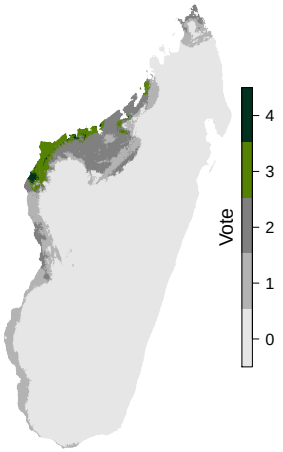
Adansonia digitata L.

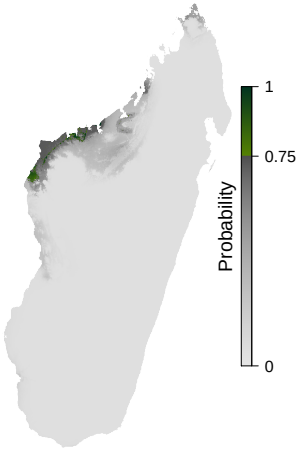
Plantae, Malvaceae, –

Adansonia digitata, commonly known as the African baobab tree, is mostly known for its exceptional height and girth. The trunk tends to be bottle-shaped and can reach an impressive diameter of 10-14m and the tree can reach a height of 25m, the height of a 5 story building. The branches are thick, wide, and stout compared to the trunk, and can be spread evenly across the height of the tree, but are usually limited to the apex. The bark tends to be smooth, ranging in color from reddish brown to grey, with the rare exception of being rough and wrinkly like elephant skin. The flowers of *Adansonia digitata* are white and large, 12 cm across, have 5 petals that are hairy inside and are generally leathery; the sepals are cup-shaped and 5-cleft; the stamens divide into multiple anthers and the styles are long and 7-10 rayed. The flowers rarely have a life span of more than 24 hours and are pollinated by bats, insects, and wind (Ebert et al. 2002, Sidibe and Williams 2002). [. . .] http://eol.org/584789

Current distribution







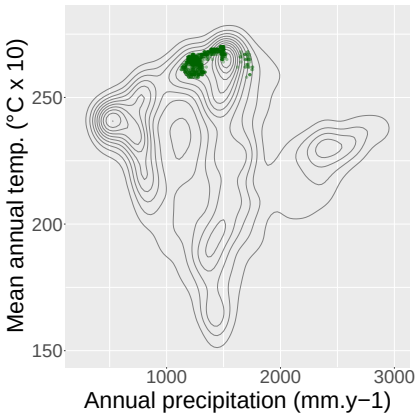
Species distribution area

SDA = 13161 km^2

Model performance

	Value
ROC	1.00
OA	0.98
TSS	0.98
K	0.37
Sen	100.00
Spe	91.85

Climatic niche



Climatic and altitudinal range

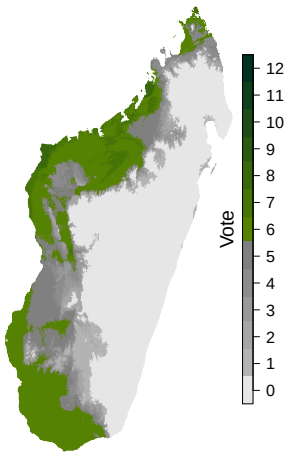
	temp	tseas	prec	cwd	alt
Mean	265	1512	1318	824	36
2.5%	259	951	1162	702	5
97.5%	269	1809	1718	897	112

Variable importance

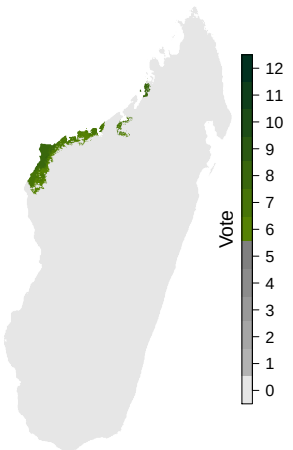
	GLM	GAM	RF	MaxE	mrank	rank
temp	0.62	0.66	0.15	0.12	3.00	3
tseas	0.48	0.67	0.68	0.91	1.75	1
prec	0.16	0.60	0.44	0.46	3.25	4
cwd	0.56	0.84	0.30	0.48	2.00	2

Vulnerability to climate change

Full dispersal



Zero dispersal



Scenarios

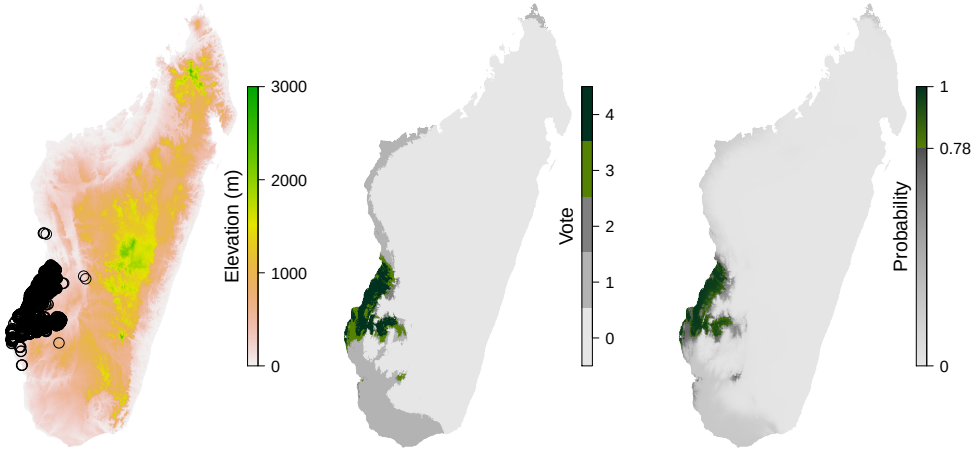
	RCP	Year	Disp	Area	Change
1	45	2050	full	8406	-36
2	45	2050	zero	5778	-56
3	45	2080	full	1908	-86
4	45	2080	zero	745	-94
5	85	2050	full	0	-100
6	85	2050	zero	0	-100
7	85	2080	full	22908	74
8	85	2080	zero	8404	-36

Adansonia grandidieri Baill.

NA, Malvaceae, –

The long-lived Grandidier's baobab is in leaf from October to May, and flowers between May and August (2). The flowers, said to smell of sour watermelon, open just before or soon after dusk, and all the pollen is released during the first night (2). It is pollinated by nocturnal mammals, such as fork-marked lemurs. They move through the canopies, inserting their snouts into the white flowers and licking nectar from the petal bases, resulting in pollen being deposited in the lemur's face (3). Grandidier's baobab bears ripe fruit in November and December (2). Unlike the baobabs of Africa and Australia, it appears that the seeds of the tasty fruit are not dispersed by animals. Lemurs are the only living animals on Madagascar that are capable of acting as seed dispersers, yet this has never been documented (2). In the past however, this could have been very different. [. . .] http://eol.org/5406372

Current distribution



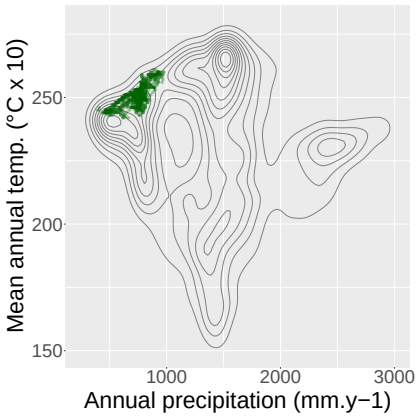
Species distribution area

SDA = 24264 km^2

Model performance

	Value
ROC	1.00
OA	0.97
TSS	0.96
K	0.93
Sen	99.07
Spe	96.09

Climatic niche



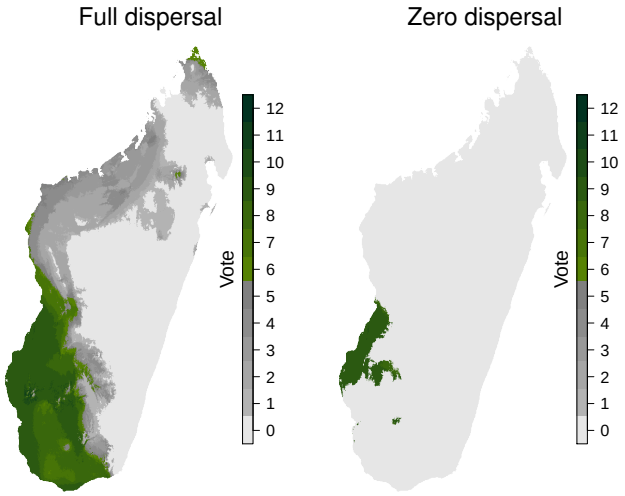
Climatic and altitudinal range

	temp	tseas	prec	cwd	alt
Mean	251	2649	733	769	125
2.5%	244	2348	472	643	4
97.5%	260	2878	932	874	391

Variable importance

	GLM	GAM	RF	MaxE	mrank	rank
temp	0.61	0.64	0.37	0.24	1.75	2
tseas	0.27	0.31	0.22	0.11	3.25	3
prec	0.61	0.69	0.44	0.89	1.25	1
cwd	0.11	0.12	0.32	0.07	3.75	4

Vulnerability to climate change



Scenarios

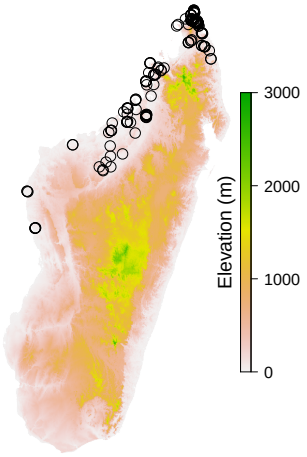
	RCP	Year	Disp	Area	Change
1	45	2050	full	70167	189
2	45	2050	zero	24264	0
3	45	2080	full	78807	225
4	45	2080	zero	24264	0
5	85	2050	full	16966	-30
6	85	2050	zero	255	-99
7	85	2080	full	127537	426
8	85	2080	zero	24264	0

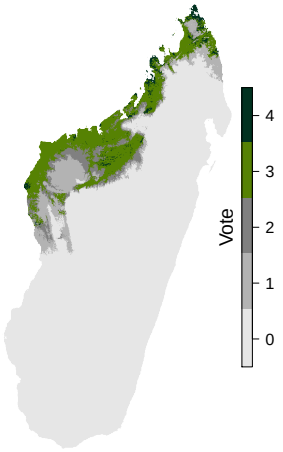
Adansonia madagascariensis Baill.

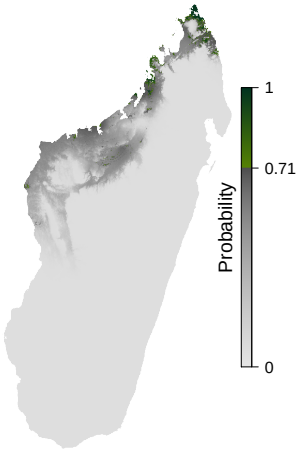
NA, Malvaceae, –

The species extends from Antsiranana to the Sambirano region and perhaps Soalala. Occurrences in the south-east of the country appear to be Adansonia za. [. . .] http://eol.org/5406378

Current distribution







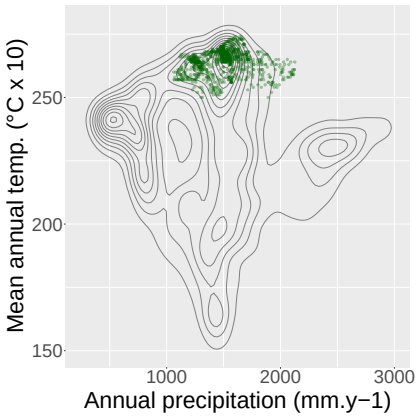
Species distribution area

SDA = 66626 km^2

Model performance

	Value
ROC	0.99
OA	0.89
TSS	0.88
K	0.19
Sen	99.35
Spe	85.15

Climatic niche



Climatic and altitudinal range

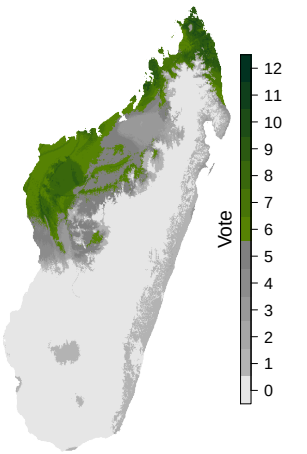
	temp	tseas	prec	cwd	alt
Mean	264	1456	1496	738	75
2.5%	254	1091	1128	383	6
97.5%	272	1879	1993	897	254

Variable importance

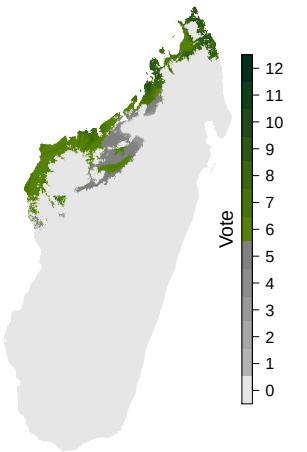
	GLM	GAM	RF	MaxE	mrank	rank
temp	0.85	0.79	0.33	0.32	2.50	3
tseas	0.72	0.82	0.87	0.98	1.25	1
prec	0.14	0.24	0.53	0.42	2.50	3
cwd	0.09	0.10	0.43	0.15	3.75	4

Vulnerability to climate change

Full dispersal



Zero dispersal



Scenarios

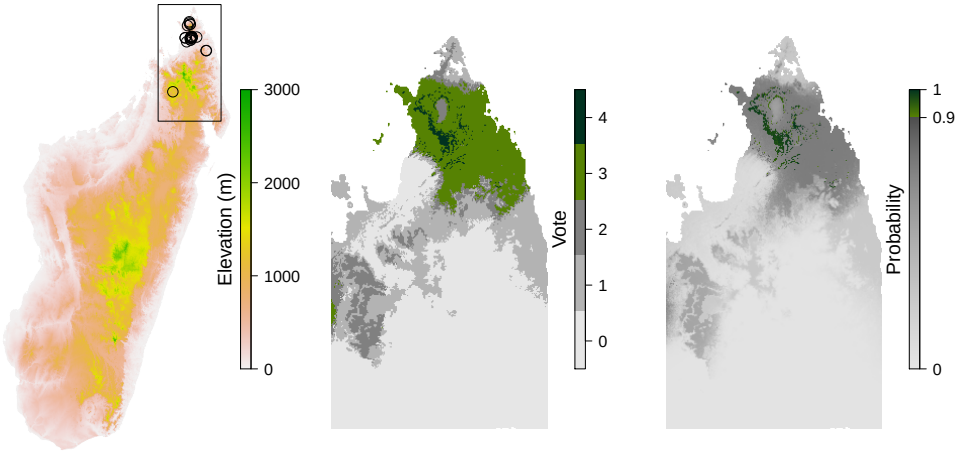
	RCP	Year	Disp	Area	Change
1	45	2050	full	123360	85
2	45	2050	zero	64264	-4
3	45	2080	full	116656	75
4	45	2080	zero	60644	-9
5	85	2050	full	6167	-91
6	85	2050	zero	3989	-94
7	85	2080	full	57002	-14
8	85	2080	zero	23874	-64

Adansonia perrieri Capuron

NA, Malvaceae, –

Confined to the northern tip of Madagascar the species is known from just five sites. [...] http://eol.org/5406381

Current distribution



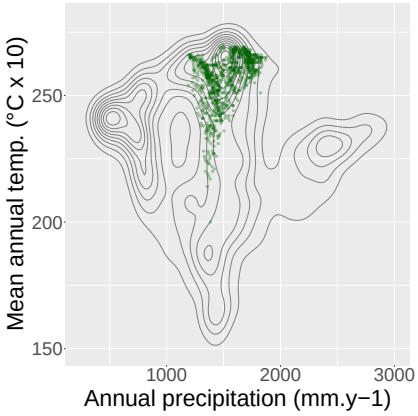
Species distribution area

SDA = 13154 km^2

Model performance

	Value
ROC	1.00
OA	0.98
TSS	0.98
K	0.20
Sen	100.00
Spe	96.78

Climatic niche



Climatic and altitudinal range

	temp	tseas	prec	cwd	alt
Mean	257	1263	1518	559	148
2.5%	231	940	1248	291	7
97.5%	268	1505	1809	783	548

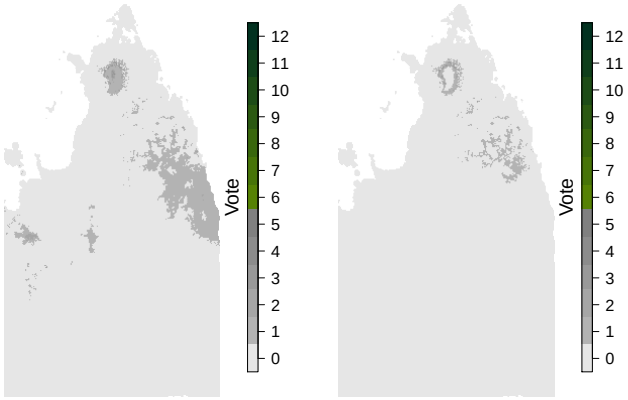
Variable importance

	GLM	GAM	RF	MaxE	mrank	rank
temp	0.44	0.38	0.68	0.31	2.50	2
tseas	0.97	0.97	0.99	0.98	1.00	1
prec	0.35	0.35	0.25	0.28	3.50	4
cwd	0.24	0.62	0.19	0.55	3.00	3

Vulnerability to climate change

Full dispersal

Zero dispersal



Scenarios

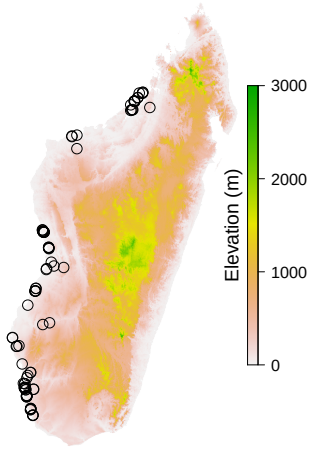
	RCP	Year	Disp	Area	Change
1	45	2050	full	975	-93
2	45	2050	zero	975	-93
3	45	2080	full	2	-100
4	45	2080	zero	2	-100
5	85	2050	full	0	-100
6	85	2050	zero	0	-100
7	85	2080	full	0	-100
8	85	2080	zero	0	-100

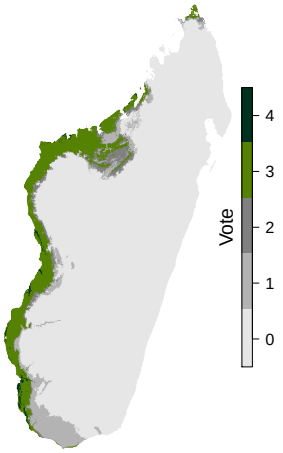
Adansonia rubrostipa Jum. & H. Perrier

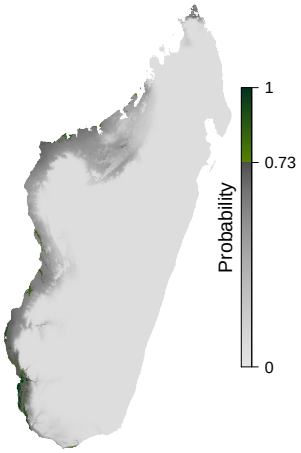
NA, Malvaceae, –

The species extends along the west coast from near Itampolo in the south-west to Soalala in the north-west. [. . .]
http://eol.org/5406370

Current distribution







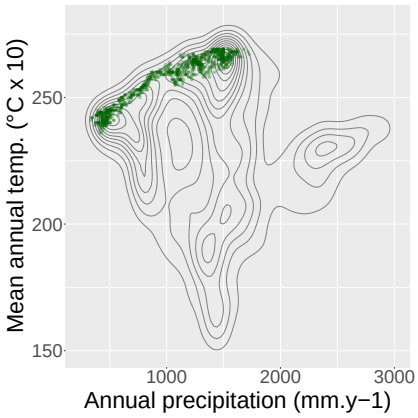
Species distribution area

SDA = 58116 km^2

Model performance

	Value
ROC	0.99
OA	0.90
TSS	0.86
K	0.14
Sen	97.80
Spe	87.54

Climatic niche



Climatic and altitudinal range

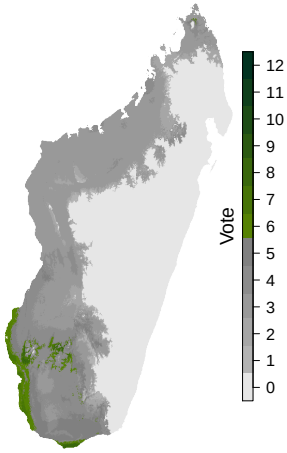
	temp	tseas	prec	cwd	alt
Mean	257	2006	1036	816	62
2.5%	240	1213	408	730	4
97.5%	269	2888	1591	919	180

Variable importance

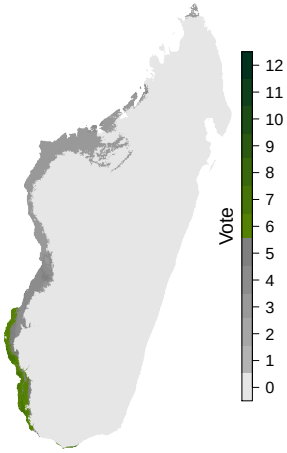
	GLM	GAM	RF	MaxE	mrank	rank
temp	0.47	0.39	0.41	0.00	3.00	4
tseas	0.50	0.36	0.40	0.42	3.00	4
prec	0.36	0.05	0.50	0.71	2.75	2
cwd	0.70	0.92	0.75	0.62	1.25	1

Vulnerability to climate change

Full dispersal



Zero dispersal



Scenarios

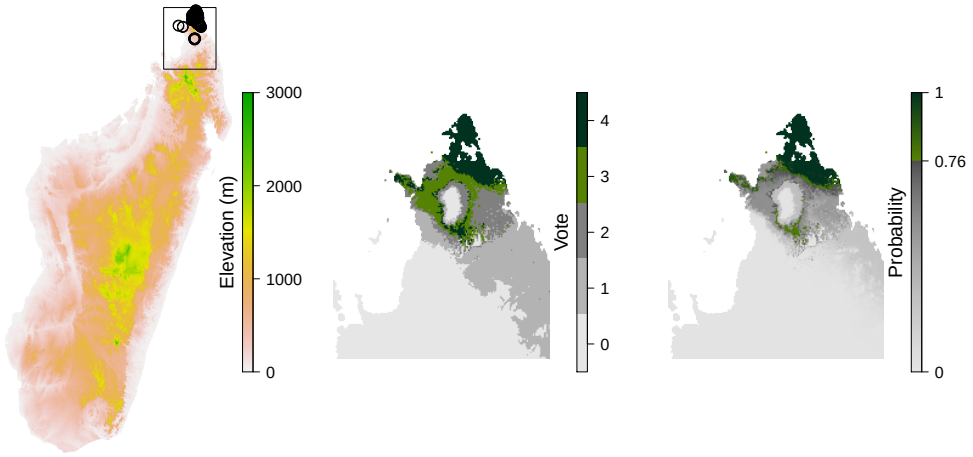
	RCP	Year	Disp	Area	Change
1	45	2050	full	23781	-59
2	45	2050	zero	12433	-79
3	45	2080	full	20369	-65
4	45	2080	zero	11037	-81
5	85	2050	full	4770	-92
6	85	2050	zero	2285	-96
7	85	2080	full	5244	-91
8	85	2080	zero	2239	-96

Adansonia suarezensis H. Perrier

NA, Malvaceae, –

In April, at the end of the wet season, the Suarez baobab drops its leaves in preparation for flowering. The ephemeral flowers open an hour before dusk, from late May through to September and are reproductively receptive for a only single night, usually withering and falling from the branch within 24 hours of opening (2) (4). In addition to being large, pale and strong smelling, the flowers produce copious nectar during the night. While moths, bees and sunbirds have all been observed visiting the flowers, none are large enough to consistently make crucial contact with the stigma whilst accessing the available nectar. Instead, it is the fruit bat, *Eidolon dupraenum*, by virtue of its size, that is the primary pollinator of the Suarez baobab (3) (4). Following flowering, the fruit develop over an extended period, eventually becoming ripe in November. [. . .] http://eol.org/5406388

Current distribution



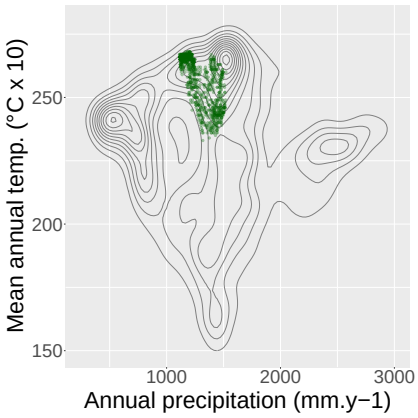
Species distribution area

SDA = 3075 km^2

Model performance

	Value
ROC	1.00
OA	1.00
TSS	1.00
K	0.87
Sen	100.00
Spe	99.23

Climatic niche



Climatic and altitudinal range

	temp	tseas	prec	cwd	alt
Mean	256	1271	1289	641	181
2.5%	238	1221	1120	436	6
97.5%	267	1343	1498	795	437

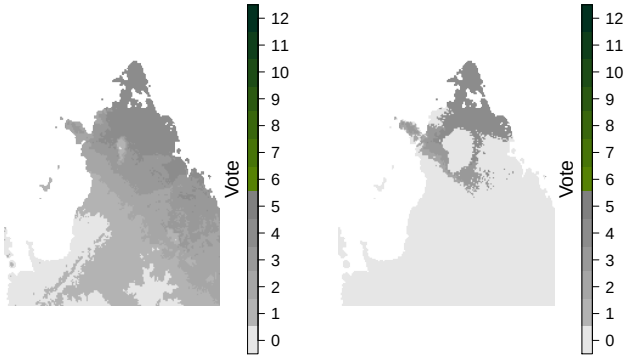
Variable importance

	GLM	GAM	RF	MaxE	mrank	rank
temp	0.33	0.36	0.04	0.43	3.50	4
tseas	1.00	0.99	0.97	0.99	1.00	1
prec	0.49	0.73	0.56	0.80	2.00	2
cwd	0.02	0.43	0.01	0.49	3.50	4

Vulnerability to climate change

Full dispersal

Zero dispersal



Scenarios

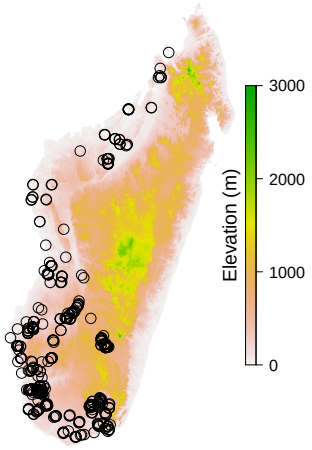
	RCP	Year	Disp	Area	Change
1	45	2050	full	47	-98
2	45	2050	zero	45	-99
3	45	2080	full	94	-97
4	45	2080	zero	94	-97
5	85	2050	full	0	-100
6	85	2050	zero	0	-100
7	85	2080	full	0	-100
8	85	2080	zero	0	-100

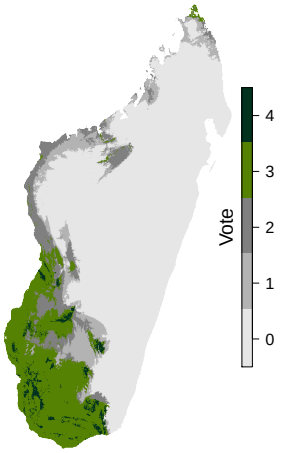
Adansonia za Baill.

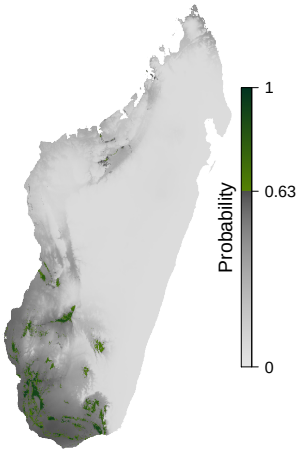
NA, Malvaceae, –

From Andohahela and the Mandrare River in the south-west through southern and western Madagascar to the Boina region and the Sambirano River basin. It is less abundant and restricted to riverine areas in the north-west. [. . .]
http://eol.org/5406365

Current distribution







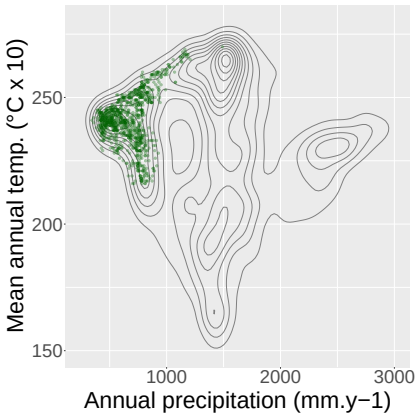
Species distribution area

SDA = 115534 km^2

Model performance

	Value
ROC	0.97
OA	0.82
TSS	0.74
K	0.26
Sen	94.60
Spe	74.06

Climatic niche



Climatic and altitudinal range

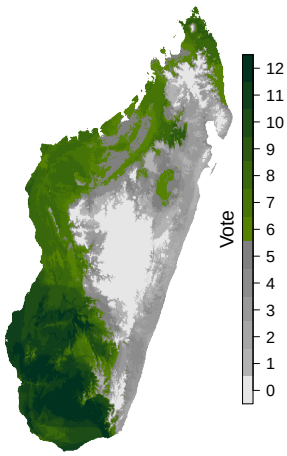
	temp	tseas	prec	cwd	alt
Mean	241	2812	686	691	281
2.5%	219	2193	422	395	7
97.5%	265	3197	1127	905	774

Variable importance

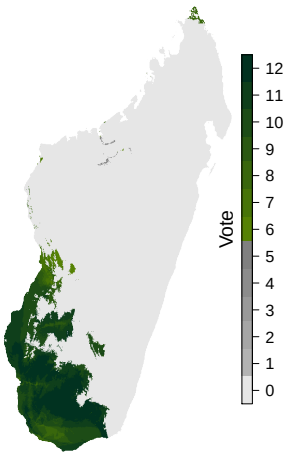
	GLM	GAM	RF	MaxE	mrank	rank
temp	0.47	0.54	0.37	0.00	3.00	4
tseas	0.08	0.32	0.81	0.01	2.75	2
prec	0.82	0.66	0.56	0.90	1.25	1
cwd	0.09	0.17	0.41	0.09	3.00	4

Vulnerability to climate change

Full dispersal



Zero dispersal



Scenarios

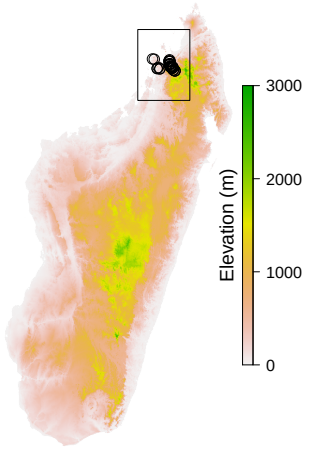
	RCP	Year	Disp	Area	Change
1	45	2050	full	200516	74
2	45	2050	zero	115179	-0
3	45	2080	full	217208	88
4	45	2080	zero	115453	-0
5	85	2050	full	283640	146
6	85	2050	zero	115532	-0
7	85	2080	full	255229	121
8	85	2080	zero	113312	-2

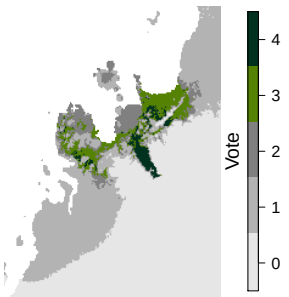
Adansonia za perrieri

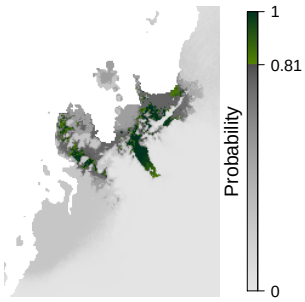
NA, NA, –

The species was not found in the Encyclopedia of Life (EOL). More information on EOL's website at http://eol.org.

Current distribution







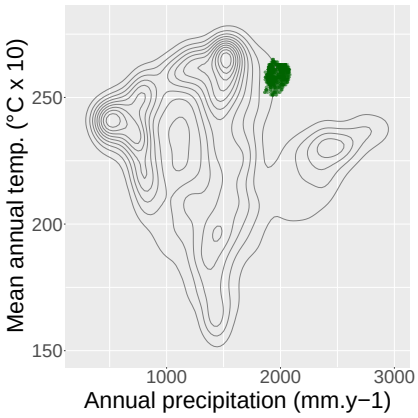
Species distribution area

SDA = 1917 km^2

Model performance

	Value
ROC	1.00
OA	1.00
TSS	1.00
K	0.73
Sen	100.00
Spe	99.44

Climatic niche



Climatic and altitudinal range

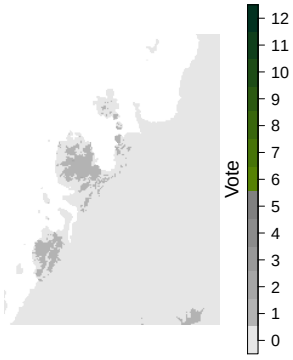
	temp	tseas	prec	cwd	alt
Mean	259	1336	1968	464	73
2.5%	252	1173	1881	400	10
97.5%	264	1460	2071	547	192

Variable importance

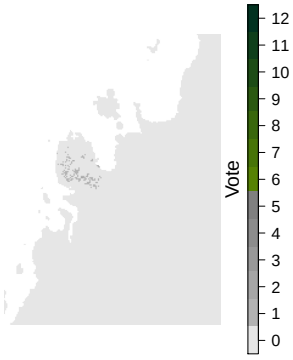
	GLM	GAM	RF	MaxE	mrank	rank
temp	0.88	0.44	0.15	0.20	3.50	4
tseas	0.47	0.94	0.15	0.93	2.25	2
prec	1.00	0.95	0.97	0.37	1.50	1
cwd	0.33	0.61	0.20	0.58	2.75	3

Vulnerability to climate change

Full dispersal



Zero dispersal



Scenarios

	RCP	Year	Disp	Area	Change
1	45	2050	full	3	-100
2	45	2050	zero	0	-100
3	45	2080	full	0	-100
4	45	2080	zero	0	-100
5	85	2050	full	0	-100
6	85	2050	zero	0	-100
7	85	2080	full	0	-100
8	85	2080	zero	0	-100