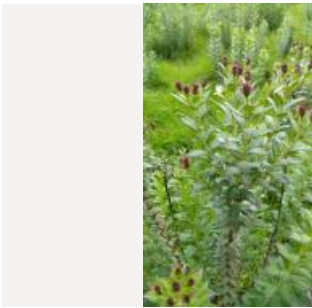
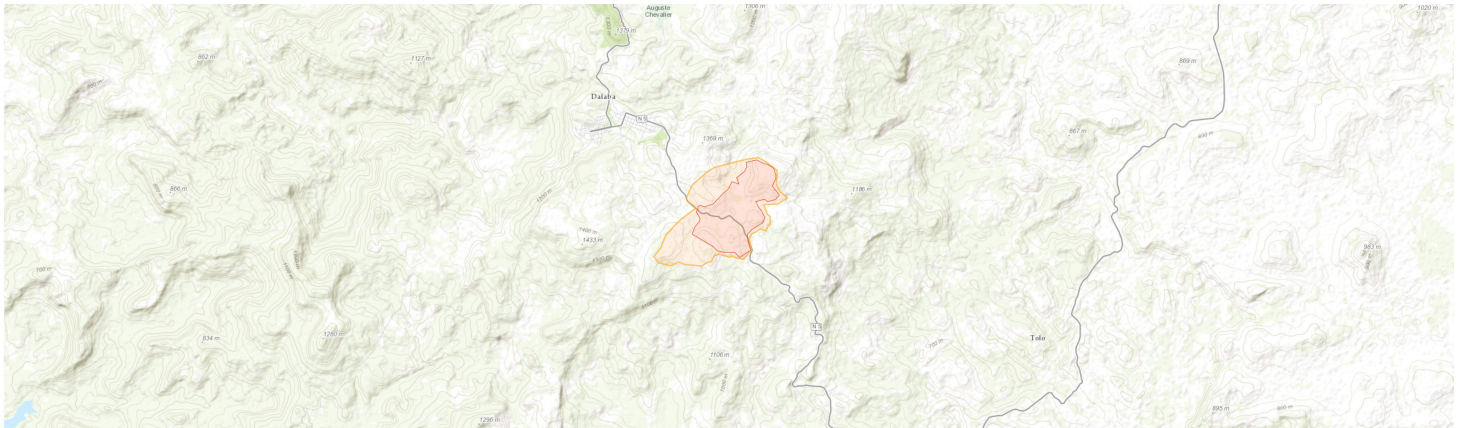


Bowal Tankon and Bowal Touppé Mama

GUITIPA001



Country: **Guinea**

Administrative region: **Dalaba (Prefecture)**

Central co-ordinates: **10.65861 N, -12.21472 E**

Area: **5km²**

Qualifying IPA criteria

A(i), C(iii)

IPA assessment rationale

Bowal Tankon and Bowal Touppé Mama are home to the last known global populations of *Vernonia djalonensis* and *Emilia djalonensis*, endemic species to the Fouta Djallon area of the Guinea highlands. Other historic sites have been searched at Mali and between Timbo and Ditinn, but neither species has been rediscovered in these places. Bowal Tankon is under immediate threat from construction and urbanisation. Based on historical records, three other vulnerable (VU) species are also thought to be present: *Kotschyia lutea*, *Eriocaulon sessile*, *Indigofera megacephala*.

Site description

Bowal Tankon is southern part of the Diaguissa plateau which runs

north east – south west across National Route 5. The plateau is made up of a solid outcrop of iron rich laterite covered by thin soils with some gravel and deeper soils upslope. In the wet season, there is a marsh area on the upper part of the plateau area. Due to it being alongside the road, housing has already sprung up and a new estate area has been marked out and lots assigned. The North West side of the plateau, Bowal Touppé Mama, has a less intact outcrop and has areas which are more gravelly and with deeper soils compared to Bowal Tankon. Both areas have some human influence either from construction, pastoralism or agriculture. The vegetation is typical of the bowal of high altitude and shares affinities with the iron-rich bowal found in the mountains of Guinée Forestière. Areas further north in the Fouta Djallon towards Labé and Pita are not iron rich and therefore have a different composition.

Botanical significance

The Diaguissa plateau is the only known surviving site globally for *Vernonia djalonensis* CR and *Emilia djalonensis* CR(PE). There have been recent field campaigns to verify other populations known from old collections, and to search areas that resemble the Diaguissa plateau on satellite imagery. However, these searches have unfortunately not yielded any new or extant populations. The largest part of the population of *Vernonia djalonensis* is found on the lower slopes of Bowal Tankon with a sparser number found on Bowal Touppé Mama. *Emilia djalonensis* is known from one Chevalier

collection on the Diaguissa plateau of which this is a part. There have been no recent collections of this species. The lower slope of Bowal Tankon is populated with other common bowal species; upslope where there is a temporary marsh in the wet season, there is a large population of *Kotschya micrantha*, one of only 5 sites known in the Fouta Djallon. On Bowal Touppé Mama, a small sparse population of *Mesanthemum tuberosum* (VU) has been recorded. Three other vulnerable species, *Kotchya lutea*, *Eriocaulon sessile* and *Indigofera megacephala* have also been recorded from this area. It is conceivable that they are still present, however it is unlikely that *Kotschya lutea* is still extant here as this species is very distinct and has not been found despite active searching during surveys. It could therefore be locally extinct.

Habitat and geology

Ferrallitic hard pan (impervious). Bowal grassland on a continuous outcrop of concretised iron pan with very thin soils. Different to other bowé in the area as there is very little gravel present.

Conservation issues

Major current threats are from 1) Housing (urbanisation): this area has already been marked out for building plots and most plots have been sold (Pers. Comm. Mayor of Dalaba, July 2017). 2) Chinese gravel crushing plant installed after Nov. 2016. Much of the upper slope of Bowal Tankon has been cleared for installation and there was evidence of rubbish burning outside the plant in July 2017 (Pers. Obs. C. Couch).

Site assessor(s)

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Muhammad Yaya Diallo, Guinee Ecologie

Charlotte Couch, Royal Botanic Gardens Kew

IPA criterion A qualifying species

SPECIES	QUALIFYING SUB-CRITERION	≥ 1% OF GLOBAL POPULATION	≥ 5% OF NATIONAL POPULATION	1 OF 5 BEST SITES NATIONALLY	ENTIRE GLOBAL POPULATION	SOCIO-ECONOMICALLY IMPORTANT	ABUNDANCE AT SITE
<i>Vernonia djalonensis</i> A.Chev.	A(i)	✓	✓	✓	✓	✓	Frequent
<i>Kotschya micrantha</i> (Harms) Hepper	A(i)	✓	✓	✓	–	–	Scarce
<i>Mesanthemum tuberosum</i> Lecomte	A(i)	✓	✓	✓	–	–	Scarce
<i>Emilia djalonensis</i> Lisowski	A(i)	✓	✓	✓	✓	–	Unknown
<i>Eriocaulon sessile</i> Meikle	A(i)	✓	–	–	–	–	Unknown

IPA criterion C qualifying habitats

HABITAT	QUALIFYING SUB-CRITERION	≥ 5% OF NATIONAL RESOURCE	≥ 10% OF NATIONAL RESOURCE	1 OF 5 BEST SITES NATIONALLY	AREAL COVERAGE AT SITE
High Altitude Lateritic Bowal Grasslands	C(iii)	–	–	–	5

General site habitats

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Grassland - Subtropical/Tropical High Altitude Grassland	–	Major

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Residential / urban development	–	Major
Industrial development	–	Minor

Threats

THREAT	SEVERITY	TIMING
Residential & commercial development - Housing & urban areas	High	Ongoing - increasing
Transportation & service corridors - Roads & railroads	Medium	Ongoing - stable

Management type

MANAGEMENT TYPE	DESCRIPTION	YEAR STARTED	YEAR FINISHED
No management plan in place		—	—

Bibliography

Lisowski, S. 2009. Flore (Angiospermes) de la République de Guinée..

Couch, C; Magassouba, S; Rokni, S; Cheek, M. 2018. **Threatened plants species of Guinea-Conakry: A preliminary checklist.** Peerj Preprints

Couch, C. 2016. TIPAs Guinea Darwin Project report: Field expedition to Fouta Djalou.

Couch, C. 2017. TIPAs Guinea Darwin Project report: Field expedition to Fouta Djallon.

Balde, A. 2017. Rapport de terrain projet Darwin dans les préfectures de Mali et Labé (Fouta Djallon) région administrative de Labé..