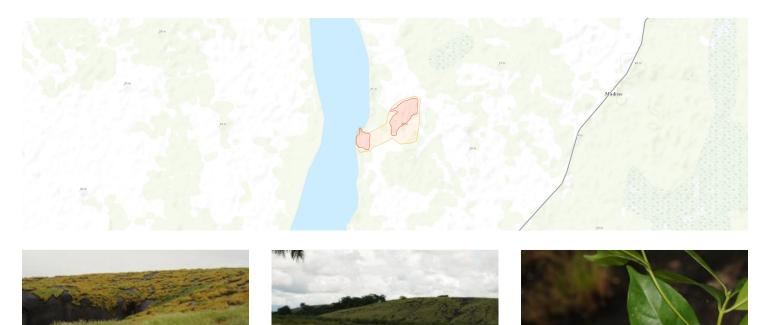
Moofanyi Inselbergs





Tropical Important Plant Areas Explorer

Botanic Gardens Kew

Two granite dome inselbergs partly surrounded by mangrove. The larger inselberg (Moofanyi masculine) has a lowland forest patch on part of it, dominated by trees of Guibourtia copallifera. The larger inselberg has many microhabitats present which are best distinguished during the wet season.

Qualifying IPA criteria

A(i), B(i), C(iii)

Area: 0.5km²

IPA assessment rationale

The Moofanyi inselbergs are one of the best representatives of coastal inselbergs in Guinee Maritime depicting 9 of the 10 microhabitats for West African inselbergs identified by Porembski et al (1997, 2000). The lowland forest patch on the inselberg has three globally important highly threatened species Tarenna hutchinsonii (CR), Marsdenia exellii (EN), Stylochaeton pilosus (EN), with the first two demonstrating high genetic diversity. The inselberg has populations of Raphionacme caerulea (EN), Dilophotriche occidentalis (VU) and Mesanthemum albidum (VU), and numerous near threatened species and is threatened by past and future quarrying activities.

Botanical significance

These are coastal inselbergs with a patch of lowland forest. The large inselberg is one of the tallest in Guinée Maritime. Both the large and small inselbergs have a population of Raphionacme caerulea (EN). The smaller inselberg, inhabited by the local community until recently, is degraded and less diverse in species and microhabitats. The inselberg lowland forest patch has large populations of Tarenna hutchinsonii (CR), Stylochaeton pilosus (EN), and Marsdenia exellii (EN). The Tarenna hutchinsonii population has the highest genetic diversity known in this species. The Marsdenia exellii population is also genetically diverse. Nine out of the ten known African inselberg microhabitats are present, including seepage areas rich in Utricularia spp, Xyris spp. and Eriocaulaceae spp., wet flush vegetation, and Afrotrilepis pilosa mats.

Habitat and geology

Coastal granite-dolerite outcrop amongst recent alluvial deposits.

Site description

Both inselbergs interface with mangroves. There are several microhabitats present on the inselbergs, giving rise to different species assemblages. Flat areas and shallow depressions are dominated by grasses (e.g. Loudetiopsis tristachyoides) and sedges in the wet season with globally threatened small herbs such as Mesanthemum albidum, and Raphionacme caerulea.

Conservation issues

The inselberg was guarried in the past for building materials. More recently about half the inselberg was destroyed to facilitate port building activities by Rio Tinto/Simfer. In 2013, however the most important part of the large inselberg for plant conservation was conserved, yet there are concerns that this may be degraded or lost if Simfer passes management control to another company. Deliberate burning of the inselberg vegetation by the local community occurred in 2018. Previously local people would not have entered the forest patch, as it was sacred, but when they acquired he site Rio Tinto/Simfer arranged to deconsecrate it. Since Simfer is not currently active at the site, there is no presence to act as a deterrent to local people accessing the forest. The current status of the inselbergs and forest patch is not clear. Simfer does not have the right to prevent community access to the area (e.g. people traversing the area to get to fields) and the local authorities are not able to provide adequate policing of the area. As a result, burning of the vegetation and illegal wood cutting have taken place. Grazing and trampling of Conservation Priority Species by cattle has also been observed.

In 2018, Sensitization of the riparian community to the protection of inselbergs took place and

Involvement of technical services (Water and Forests, Environment, OGUIDAP) and NGOs have begun to implement sustainable conservation measures.

Site assessor(s)

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IPA criterion A 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
Raphionacme caerulea E.A.Bruce	A(i)	~	-	-	-	-	Scarce
Tarenna hutchinsonii Bremek.	A(i)	~	~	~	-	-	Frequent
Marsdenia exellii C.E.Norman	A(i)	~	~	~	_	_	Frequent
Stylochaeton pilosus Bogner	A(i)	~	~	~	-	-	Frequent
Dilophotriche occidentalis JacqFél.	A(i)	~	-	-	-	-	Frequent
Mesanthemum albidum Lecomte	A(i)	_	-	-	_	_	Frequent

IPA criterion C qualifying habitats

НАВІТАТ	QUALIFYING SUB-	≥ 5% OF NATIONAL	≥ 10% OF NATIONAL	1 OF 5 BEST SITES	AREAL COVERAGE
	CRITERION	RESOURCE	RESOURCE	NATIONALLY	AT SITE
Granite Inselbergs	C(iii)	_	_		

General site habitats

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Forest - Subtropical/Tropical Moist Lowland Forest	-	Minor
Rocky Areas - Rocky Areas [e.g. inland cliffs, mountain peaks]	-	Major

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Harvesting of wild resources	-	Minor
Extractive industry	-	Major
Agriculture (pastoral)	-	Minor

Threats

THREAT	SEVERITY	TIMING
Energy production & mining - Mining & quarrying	High	Past, likely to return
Agriculture & aquaculture - Livestock farming & ranching - Nomadic grazing	Medium	Ongoing - stable
Biological resource use - Gathering terrestrial plants - Unintentional effects (species being assessed is not the target)	Medium	Ongoing - increasing
Biological resource use - Logging & wood harvesting - Intentional use: large scale (species being assessed is the target) [harvest]	Medium	Ongoing - increasing

Management type

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

Bibliography

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

IUCN 2019. IUCN Red List.

Cheek, M. & Couch, C. 2014. Plant and Microhabitat Field Guide: The Moofanyi inselberg in the Rio Tinto Port area, Guinea (Conakry). Prepared for Rio Tinto by RBG Kew..

Cheek, M. 2012. Botanical Baseline Survey for the Rio Tinto Port Area, Guinea (Conakry): A Preliminary Report of the Moofanyi Inselbergs, 5th-7th May 2012. Report for Rio Tinto/SNC-Lavalin.

Cheek, M., Merklinger, F. & Pollard, B.J. 2012. Botanical Baseline Survey: Coastal inselbergs in Guinea (Conakry). Version 1.1. RBG report to Rio Tinto/SNC-Lavalin..

Porembski, S. 2000. **10.1 West African Inselberg Vegetation.** Ecological Studies, Vol 146, page(s) 177-211

Porembski, S., Barthlott, W, Dörrstock, S. & Biedinger, N. 1994. Vegetation of rock outcrops in Guinea: granite inselbergs, sandstone table mountains and ferricretes – remarks on species numbers and endemism.. Flora, Vol 189, page(s) 315-326

2001. Inselbergs: biotic diversity of isolated rock outcrops in tropical and temperate regions..