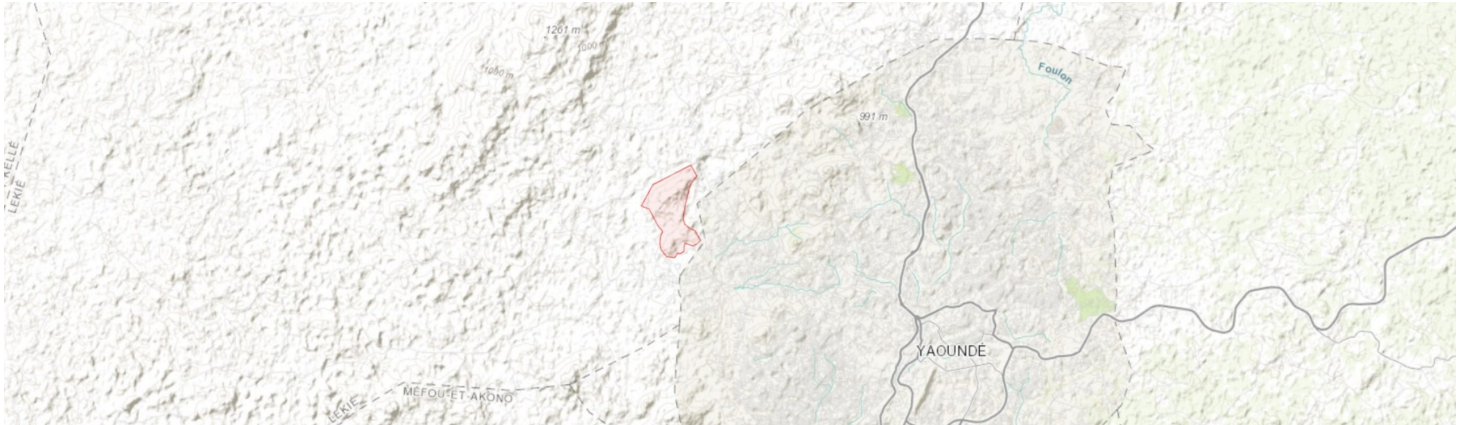


Mount Minloua

Montagne de Mouche (Test version)

CMNTIPA012



Country: **Cameroon**

Administrative region: **Centre (Region)**

Central co-ordinates: **3.88610 N, 11.43490 E**

Area: **4.36km²**

Qualifying IPA criteria

A(i)

IPA assessment rationale

Mount Minloua qualifies as a potential IPA under criterion A(i) due to the presence of several globally threatened species recorded from this site and with few other known locations. In particular, *Scleria sheilae* (CR) is known only from this site, while *Talbotiella breteleri* (CR) is otherwise recorded only from a few equally threatened Yaounde sites.

Site description

Mount Minloua is located on the western side of Yaoundé, northwest of the N'kolbisson district and northeast of the Afeme river and Mefou dam and reservoir. It is part of a chain of c. 1,000 m inselbergs in and around the western part of Yaoundé. The site

includes three summits above 900m connected by ridges. Northeast of the demarcated area, the mountain has been destroyed by quarrying up to around 925 m. It is unclear from available maps what name is given to the peak rising to around 960 m located at dd 3.9038 North, 11.4344 East but this is also included here.

Botanical significance

Many specimens were collected in the Yaoundé area by Zenker and Staudt as far back as the 1890s but unfortunately few of these can be located to precise areas. Subsequent collecting has recorded several rare or important species from the inselbergs on the western side of the city, including rediscovery of many of the earlier collections. The N'kolbisson area has been a particular locus for collecting, partly due to the proximity of the IRAD headquarters and other institutions. Once again, some of these latter collections, particularly a number made by de Wilde and colleagues in the 1960s can not be further located within this region which has experienced development and extensive loss of natural habitat. However, others are pinpointed to Mount Akokndoué, Mount Minloua or one of the other hills where some natural vegetation survives.

Notable amongst the globally threatened species at this site are *Pterorachis zenkeri* (VU), first described from Zenker and Staudt's "Yaoundé station" collections and subsequently recorded here as well as at a few other sites mainly in the Yaoundé area, including the neighbouring inselbergs of Mount Akondoué and Mount Febé

(Onana & Cheek, 2011). *Anisotes zenkeri* (EN) was similarly rediscovered at Mount Minloa and is also known from Mount Eloumden and other unlocated Yaoundé locations, as well as one other site in Central region (Cheek, 2014). *Talbotiella breteleri* (CR) is also endemic to the Yaoundé area, recorded from Mbam Minkom and Mount Febé as well as this site. *Scleria sheilae* (CR; Cheek et al., 2018) is considered locally endemic to Mount Minloa itself, having been recorded nowhere else. *Eragrostis raynaliana* (EN) is known from three collections in the "N'kolbisson" area, one of which is identified as this site, "la colline Minlo", as well as nearby Mount Mbankolo and two other sites outside of Yaoundé (Cheek & Lovell, 2020). Several other threatened species, including *Chlorophytum staudtii* (EN), *Cyphostemma camerounense* (EN), *Momordica camerounensis* (EN) may occur here, having been recorded from N'kolbisson without a precise location. Although not yet on the global Red List, *Tricarpelema africanum* is known from very few sites in Cameroon but is recorded from Mount Minloa and nearby Mbam Minkom.

Habitat and geology

The hills around Yaounde rise from the South Cameroon plain between the Sanaga fault and the north-thrusting Congo craton. They are formed from high grade metamorphic rocks, mainly granulites and migmatites also referred to as embrichite gneiss (Achoundong 1985), formed from sedimentary and igneous protoliths and apparently dating from around 600 mya (Nzenti et al., 1988; Tchouatcha et al., 2018; Ngotue et al., 2012).

Precipitation in Yaoundé is 1,605 mm per annum, falling in a bimodal pattern with a small (March-June) and greater (September-November) wet season interspersed with a drier period (July-August) and a second more severe dry period between December and February when mean monthly rainfall drops below the relatively stable mean monthly temperature (22.8–25.47 °C) (Simo et al 2009; Bissaya et al., 2014; Madiapevo et al., 2015). This is below the level of rainfall normally thought necessary to sustain evergreen tropical forest (Cheek et al., 2011), although the level may be higher on the summits due to orographic precipitation (Noumi, 2014; Simo et al., 2009). The original forest was probably semi-deciduous (Achoundong et al., 1985) but has been heavily degraded through timber and wood extraction and cultivation.

Conservation issues

Rapid and ongoing expansion of Yaoundé threatens the remaining natural vegetation of the western inselbergs through settlement, cultivation, logging and wood extraction (Tiafack & Mbon, 2017). Successive satellite imaging reveals gradual encroachment of buildings and farms up the flanks of these hills, sometimes to the summits.

In addition mountain top quarrying has destroyed the northeastern part of the hill and is likely to expand into the designated site if not prevented.

A large dam and reservoir to the immediate south and west of the

site has flooded lower lying valleys. It is not known what species may have been lost or survived from naturally marshy habitat in this area.

In addition to biodiversity conservation, there are several other good justifications (landslide prevention, tourism, recreation, education and civic pride) for preserving what remains of the natural vegetation of Mount Minloua and other Yaounde inselbergs.

Site assessor(s)

Bruce Murphy, Royal Botanic Gardens, Kew

Xander van der Burgt, Royal Botanic Gardens, Kew

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
<i>Pterorhachis zenkeri</i> Harms	A(i)	✓	✓	✓	—	—	
<i>Anisotes zenkeri</i> (Lindau) C.B. Clarke	A(i)	✓	✓	✓	—	—	
<i>Scleria sheilae</i> J.Raynal	A(i)	✓	✓	✓	✓	—	
<i>Eragrostis raynaliana</i> Lebrun	A(i)	✓	✓	✓	—	—	
<i>Talbotiella bretelei</i> (Aubrév.) Mackinder & Wieringa	A(i)	✓	✓	✓	—	—	

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
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General site habitats

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Forest - Subtropical/Tropical Moist Lowland Forest	—	
Forest - Subtropical/Tropical Moist Montane Forest	—	

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
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Threats

THREAT	SEVERITY	TIMING
Natural system modifications - Dams & water management/use - Large dams	Medium	Ongoing - stable
Geological events - Avalanches/landslides	Medium	Ongoing - stable
Residential & commercial development - Housing & urban areas	High	Ongoing - increasing
Agriculture & aquaculture - Annual & perennial non-timber crops - Shifting agriculture	High	Ongoing - trend unknown

THREAT	SEVERITY	TIMING
Energy production & mining - Mining & quarrying	High	Ongoing - trend unknown
Biological resource use - Logging & wood harvesting	High	Ongoing - trend unknown

Conservation designation

DESIGNATION NAME	PROTECTED AREA	RELATIONSHIP WITH IPA	AREAL OVERLAP
Mbam Minkom-Mt Kala IBA	Important Bird Area	protected/conservation area encompasses IPA	—

Management type

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

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