

# Koukoutamba waterfalls

Cascades de Koukoutamba (Test version)

**GUITIPA010**



Country: **Guinea**

Administrative region: **Tougué (Prefecture)**

Central co-ordinates: **13.26972 N, -11.37972 E**

Area: **27.5km²**

## Qualifying IPA criteria

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

## IPA assessment rationale

The rapids and waterfalls at Koukoutamba are the most species-rich known for Podostemaceae in Guinea with five species. It is the only known location in Guinea for the Critically Endangered (CR) Podostemaceae species *Lebbiea grandiflora* and the only global location for the spectacular new species *Inversodicraea koukoutamba* ined. These species are directly and imminently and imminently threatened with extinction from the planned hydroelectric dam. In addition the globally Endangered (EN) *Stonesia taylorii* and the Critically Endangered (CR) *Barleria asterotricha* are also present and threatened by the project.

## Site description

The Koukoutamba Falls are on the Bafing River upriver from the main road N27 in Tougué Prefecture. It is a fast flowing area of rapids and waterfalls for around 12km below the main falls, the river is flanked by a thin strip of gallery forest dominated by *Syzygium guineense* var. *guineense*.

## Botanical significance

The succession of fast flowing rapids and waterfalls at Koukoutamba on this stretch of the Bafing River is particularly rich in rheophyte species. It is the only known location in Guinea for the Critically Endangered Podostemaceae species *Lebbiea grandiflora* (newly described in 2018) and two other highly threatened species of Podostemaceae.

## Habitat and geology

The Bafing River flows through a valley of sandstone, argillite interlayered with limestone and silica over conglomerate base rock. The unequal erosion is likely to be the cause of the rapids and waterfalls on the river. Narrow strips of gallery forest dominated by *Syzygium guineense* var. *guineense* are found either side of the river with bowl areas behind and seasonal gullies draining into the river.

## Conservation issues

The Koukoutamba falls are threatened by the creation of a hydroelectric dam. Despite the falls being encompassed within the Moyen Bafing National Park, if construction is allowed upstream (outside of the park area) it will significantly alter the hydrology of the river and very likely cause silt deposits exterminating the threatened and in one case globally unique Podostemaceae species.

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## Site assessor(s)

Assessed by:

Charlotte Couch, Royal Botanic Gardens Kew

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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
<i>Lebbiea grandiflora</i> Cheek	A(i)	✓	✓	✓	—	—	Frequent
<i>Inversodicraea harrisii</i> (C.Cusset) Cheek	A(i)	✓	✓	✓	—	—	Frequent
<i>Stonesia taylorii</i> C.Cusset	A(i)	✓	✓	✓	—	—	Frequent
<i>Inversodicraea koukoutamba</i> Cheek	A(i)	✓	✓	✓	✓	—	Abundant
<i>Barleria asterotricha</i> Benoist	A(i)	✓	✓	✓	—	—	Scarce

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
Waterfalls and Rapids	C(iii)	—	✓	✓	12

General site habitats

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Wetlands (inland) - Permanent Rivers, Streams, Creeks [includes waterfalls]	—	Major
Forest - Subtropical/Tropical Moist Lowland Forest	—	Unknown

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
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Threats

THREAT	SEVERITY	TIMING
Climate change & severe weather - Droughts	Unknown	Future - inferred threat
Energy production & mining - Renewable energy	High	Future - planned activity

## 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

IUCN 2019. IUCN Red List.

Cheek, M. & Lebbie, A. 2018. **Lebbiea (Podostemaceae-Podostemoideae), a new, nearly extinct genus with foliose tepals, in Sierra Leone..** PLoS ONE, Vol 13(10)

Direction Nationale de l'Énergie . **PROJET D'AMÉNAGEMENT HYDROÉLECTRIQUE DE KOUKOUTAMBA.**