

TIPA Assessment: Kakiwondi forest patch, Tomboya, Coyah Prefecture.

IPA criteria under which the site qualifies: A (i), B(i), C (iii)

Assessed by: Charlotte Couch, Martin Cheek, Xander van der Burgt (RBG Kew) and Denise Molmou (Herbier National de Guinée)

IPA assessment rationale

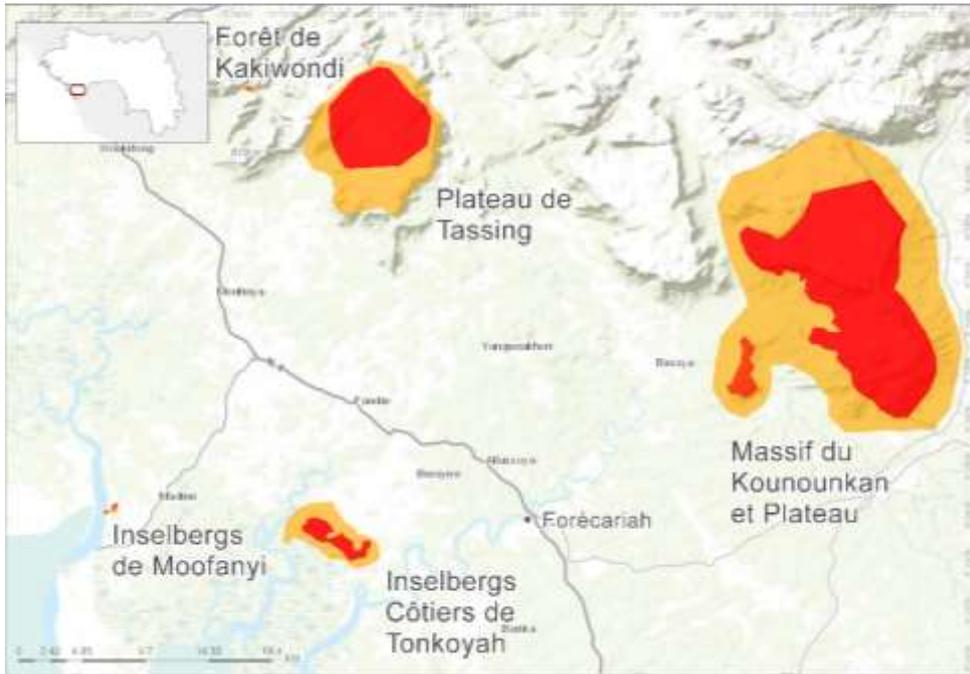
This remnant of lowland forest is a significant habitat for many threatened species and is a very good, possibly the best, representative of the forest patches of the Coyah hills with likely the second highest species diversity so far recorded for this forest type after the Kounoukan Forest in Forécariah Prefecture. The population of *Tarenna hutchinsonii* is the second largest in Guinée Maritime as well as significant populations of *Diospyros feliciana*, *Baphia heudelotiana* (largest population known globally), *Stylochaeton pilosus* and the newly described *Talbotiella cheekii*. The forest patches of Coyah are under threat from cultivation and Kakiwondi is a good representation. Although it is a sacred forest, it has been impacted by the slash and burn practice.

Site overview

Site Name: Kakiwondi	
Country: Guinea	Administrative region: Coyah
Central co-ordinates: 09°43'47"N, 13°17'24"W	Area: 0.1 km ²
Altitude minimum: 170 m	Altitude maximum: 240 m

Site Description

Kakiwondi near the village of Tomboya in central hills of Coyah prefecture is a small sacred forest patch protected by the village. This forest is a remnant of the lowland forest that would have covered this area in the past, and is recognised as one of the national threatened vegetation types. The area is on the side of the Wélé Wélé river valley and quite rocky. The dominant tree, *Guibourtia copallifera*, gives its name to forest – Kaki – from the Susu language). The area is small, only 100m², but significant given the pressures of cultivation in surrounding area.



Map showing the TIPA in relation to the wider Guinea Maritime area



Map showing the proposed area for protection as an TIPA. Core area in red, buffer zone in yellow.

Botanical significance

Kakiwondi is one of the last refuges for some of the rare lowland forest species in the Guinea Maritime region. The region's second largest population of *Tarenna hutchinsonii*, and significant populations of *Diospyros felicianae*, *Baphia heudelotiana* and *Stylochaeton pilosus* and the newly

described *Talbotiella cheekii* are all found in this small forest patch. Of several small remnants of lowland forest in the Coyah hills, is it one of the richest in threatened species. It is likely that additional species will be found in future surveys.

General habitat and geology description

Small lowland forest patch on the side of a sandstone hill with exposed rocks and boulders of dolerite. It is part of the same Ordovician sandstone ridge that goes northeast through Kindia, up to Pita in the Fouta Djallon. The forest patch is partly sloped and partly plateau with the Wélé Wélé River adjacent.

Conservation issues

Nearby cultivation of land on the slopes using slash and burn clearance methods has led to fire invading the forest patch. Some plants of *Tarennia hutchinsonii* were lost in 2016. The path through the forest is used to reach neighbouring villages of Kaporo, Yataraya and Saliya by foot; currently this does not seem to have a detrimental effect.

Protected area status and Management

The forest is protected by the village as a sacred forest, but it is not officially protected.

Threats

Shifting agriculture and slash and burn agriculture.

Threat level: High

Criterion A: Threatened Species

Criterion A taxon present	IPA subcriterion	IUCN redlist assessment	Site contains...			Entire global population (single-site endemic)	Species is of socio-economic importance	*Abundance at site
			≥ 1% of global population	≥ 5% of national population	Is 1 of 5 best sites nationally			
<i>Diospyros feliciana</i> Letouzey & F.White	A(i)	EN	⊙	⊙	⊙			Infrequent
<i>Cryptosepalum tetraphyllum</i> (Hook.f.) Benth.	A(i)	VU	⊙	⊙	⊙			Infrequent
<i>Tessmannia baikieaoides</i> Hutch. & Dalziel	A(i)	VU	⊙	⊙	⊙			Infrequent
<i>Baphia heudelotiana</i> Baill.	A(i)	VU	⊙	⊙	⊙		⊙	Frequent
<i>Keetia susu</i> Cheek	A(i)	VU	⊙	⊙	⊙			Infrequent
<i>Tarenna hutchinsonii</i> Bremek.	A(i)	CR	⊙	⊙	⊙			Infrequent
<i>Talbotiella cheekii</i> Burgt	A(i)	EN	⊙	⊙	⊙			Abundant
<i>Apodiscus chevalieri</i> Hutch.	A(i)	EN	⊙	⊙	⊙			Infrequent

Key: IUCN category: CR Critically Endangered, EN Endangered, VU Vulnerable. Abundance: Abundant, Common, Frequent, Infrequent, Scarce, Unknown

Criterion B: Botanical Richness

B(i) exceptional botanical richness within a defined habitat			B(ii): exceptional number of species of conservation importance - site recording table (from nationally agreed list)		B(iii): exceptional number of useful / culturally valuable species (from nationally agreed list)	
*Habitat code and name	Site is part of the top 10% of the national resource	Site is one of the 5 best sites nationally for that habitat	Site contains ≥ 3% of the species on the national list	Site is one of the 15 richest locations nationally	Site contains ≥ 3% of the species on the national list	Site is one of the 15 richest locations nationally
MaritimeEvergreen Forest	⊙	⊙	○	○	○	○

*Criterion B taxon present [select from taxon look-up table]	Sub-criterion under which species	For B(i) – indicator of habitat	*Abundance at site
<i>Stylochaeton pilosus</i> Bogner	B(i)	Lowland evergreen forest (Guinée Maritime)	Infrequent
<i>Diospyros feliciana</i> Letouzey & F.White	B(i)	Lowland evergreen forest (Guinée Maritime)	Infrequent
<i>Cryptosepalum tetraphyllum</i> (Hook.f.) Benth.	B(i)	Lowland evergreen forest (Guinée Maritime)	Infrequent
<i>Tessmannia baikiaoides</i> Hutch. & Dalziel	B(i)	Lowland evergreen forest (Guinée Maritime)	Infrequent
<i>Baphia heudelotiana</i> Baill.	B(i)	Lowland evergreen forest (Guinée Maritime)	Frequent
<i>Keetia susu</i> Cheek	B(i)	Lowland evergreen forest (Guinée Maritime)	Infrequent
<i>Tarenna hutchinsonii</i> Bremek.	B(i)	Lowland evergreen forest (Guinée Maritime)	Infrequent
<i>Talbotiella cheekii</i> Burgt	B(i)	Lowland evergreen forest (Guinée Maritime)	Abundant
<i>Aulacocalyx divergens</i> (Hutch. & Dalziel) Keay	B(i)	Lowland evergreen forest (Guinée Maritime)	Infrequent
<i>Mostuea hirsuta</i> (T.Anderson ex Benth.) Baill. ex Baker	B(i)	Lowland evergreen forest (Guinée Maritime)	Frequent
<i>Leptactina senegambica</i> Hook.f.	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Polygala multiflora</i> Poir.	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Dorstenia cuspidata</i> var. <i>preussii</i> Hochst.	B(i)	Lowland evergreen forest (Guinée Maritime)	Infrequent
<i>Olax gambecola</i> Baill.	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Oxyanthus racemosus</i> (Schum. & Thonn.) Keay	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Batesanthus purpureus</i> N.E.Br.	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Guibourtia copallifera</i> Benn.	B(i)	Lowland evergreen forest (Guinée Maritime)	Frequent
<i>Ceropegia peulhorum</i> A.Chev.	B(i)	Lowland evergreen forest (Guinée Maritime)	Infrequent
<i>Cryptolepis sanguinolenta</i> (Lindl.) Schltr.	B(i)	Lowland evergreen forest (Guinée Maritime)	Infrequent
<i>Apodiscus chevalieri</i> Hutch.	B(i)	Lowland evergreen forest (Guinée Maritime)	Infrequent
<i>Ancistrorhynchus akeassiae</i> (Aubl.) Harley & J.F.B.Pastore	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Atoxima afzeliana</i> (Oliv.) Stapf	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Brillantaisia lamium</i> (Nees) Benth.	B(i)	Lowland evergreen forest (Guinée Maritime)	Frequent
<i>Coffea ebracteolata</i> (Hiern) Brenan	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Croton nigritanus</i> Scott-Elliot	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Daniellia thurifera</i> Bennett	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Elaeophorbium drupifera</i> (Thonn.) Stapf	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Homalium smythei</i> Hutch. & Dalziel	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Hunteria simii</i> (Stapf) H.Huber	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown

<i>Lasiodiscus chevalieri</i> Hutch.	B(i)	Lowland evergreen forest (Guinée Maritime)	Infrequent
<i>Myrianthus serratus</i> (Trécul) Benth. & Hook.	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Plectranthus bojeri</i> (Benth.) Hedge.	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Rinorea breviracemosa</i> Chipp	B(i)	Lowland evergreen forest (Guinée Maritime)	Common
<i>Rourea coccinea</i> (Thonn. ex Schum.) Benth.	B(i)	Lowland evergreen forest (Guinée Maritime)	Infrequent
<i>Rytigynia umbellulata</i> (Hiern) Robyns	B(i)	Lowland evergreen forest (Guinée Maritime)	Infrequent
<i>Sansevieria senegambica</i> Baker	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Streblus usambarensis</i> (Engl.) C.C.Berg	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Uvaria ovata</i> subsp. <i>afzeliana</i> (DC.) A.DC.	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Uvaria thomasii</i> Sprague & Hutch.	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Vitex ferruginea</i> Schum. & Thonn.	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown
<i>Warneckea fascicularis</i> var. <i>fascicularis</i> (Planch. ex Benth.) Jacq-Fél.	B(i)	Lowland evergreen forest (Guinée Maritime)	Unknown

Key: Abundance: Abundant, Common, Frequent, Infrequent, Scarce, Unknown

Criterion C: Threatened Habitat

*Habitat type	IPA subcriterion	IUCN redlist assessment	Site contains...		Estimated area at site (if known)
			≥ 5% of national resource (for C(i) and C(ii))	≥ 10% of national resource (for C(iii))	
Lowland evergreen forest (Guinée Maritime)	C(iii)		○	⊙	0.1 km ²

Bibliography

IUCN Red List of Threatened Species: www.redlist.org

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

Couch, C; Magassouba, S; Rokni, S; Cheek, M. (2018) Threatened plants species of Guinea-Conakry: A preliminary checklist. PeerJ Preprints. <https://doi.org/10.7287/peerj.preprints.3451v2>

TIPA Field reports by Denise Molmou 2016-2017.

Site in pictures



Entering Kakiwondi forest from the Kaporo side. Photo: © C. Couch, RBG Kew



Wélé Wélé River in the dry season, Kakiwondi forest patch. Photo: ©X. van der Burgt, RBG Kew



Talbotiella cheekii Burgt EN, new species published in 2018. Photo: ©X. van der Burgt, RBG Kew





Baphia heudelotiana Baill. VU. Photo: © M.Cheek, RBG Kew



Fire damage on the slope below Kakiwondi Forest Patch, 2016. Photo: © C.Couch, RBG Kew