



## TIPA ASSESSMENT:

ZIAMA CLASSIFIED FOREST, MACENTA  
PREFECTURE

### ABSTRACT

The Ziama Massif is a rich matrix of lowland and sub-montane forest punctuated by granite inselbergs. This supports a wide range of plant species including global endemic species (*Mikaniopsis camarae* and *Inversodicraea pepehabei*) and 33 range restricted species. There are significant populations of threatened plant species found here. It is one of the largest areas of intact submontane forest in the country and a significant area of lowland rainforest which is rare in West Africa.

Charlotte Couch, Martin Cheek and Pépé Haba

# TIPA Assessment: Ziama Classified Forest, Macenta

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

**Assessed by:** Charlotte Couch, Martin Cheek (RBG Kew) and P  p   Haba (Guine   Biodiversit  )

## IPA assessment rationale

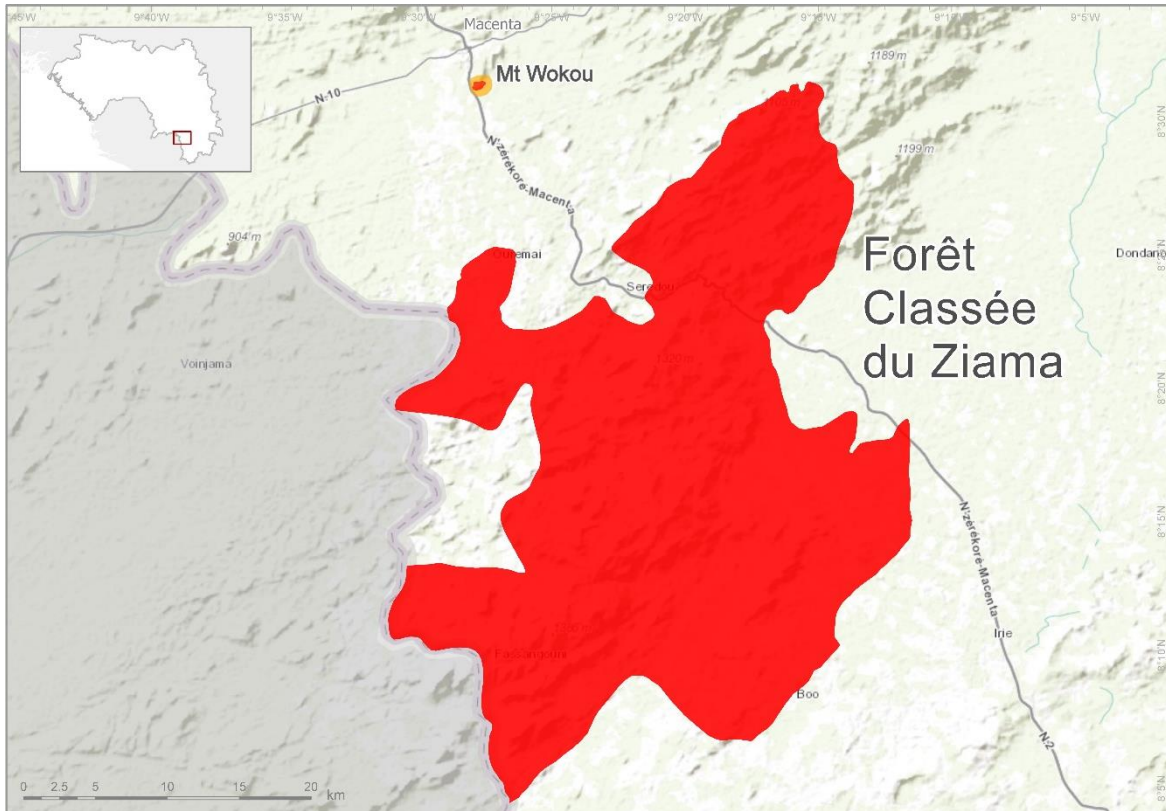
The Ziama mountain range comprises a rich matrix of sub-montane forest punctuated by granite inselbergs, grading into lowland evergreen forest. This supports a wide range of plant species including two global endemic species (*Mikaniopsis camarae* and *Inversodicraea pepehabai*) and 33 range-restricted species. It has one of the largest areas of intact submontane forest in the country and a significant area of lowland rainforest, albeit disturbed. There are significant populations of many threatened plant species found here. The Ziama classified forest has several villages within the southern, lowland forest portion, and there are concerns over forest clearance both recent and during past periods of instability. Although Ziama is already a biosphere reserve there are no specific management actions for plant species.

## Site overview

Site Name: Ziama Classified Forest	
Country: Republic of Guinea	Administrative region: Macenta Prefecture
Central co-ordinates: 08��15'57''N, 09��20'43''W	Area: 1161.7 km <sup>2</sup>
Altitude minimum: 450 m	Altitude maximum: 1250 m

## Site Description

The Ziama classified forest, located in the prefecture of Macenta in Guine   Foresti  re, consists of a mountain range aligned approximately southwest to northeast, with submontane forest and granite inselbergs with grassland. On both sides of the mountain range there are areas of lowland evergreen forest. The area is crossed by rivers with white water, habitat for Podostemaceae species.



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

### Botanical significance

Due to the variation and intactness of the vegetation types in this area, there is an exceptional botanical richness in Ziama Classified Forest. Thirty three rare, threatened and/or endemic plant species have been documented, including *Cassipourea adamii* (EN) in submontane forest, *Tarenna hutchinsonii* (CR) and *Gymnosiphon samoritoureaanus* (EN) in the lowland forest, and *Inversodicraea pepehabai* (EN) an endemic species to the fast flowing rivers.

### General habitat and geology description

Ziama consists of a dolerite/orthogneiss mountain range, mostly covered in lowland and sub-montane forest. The inselbergs have open vegetation with woodland, wooded grassland, grassland, and open rocky areas. The lowland forest areas surrounding the mountain range are mostly on Archean era base rock.

### Conservation issues

In the lowland forest area there are villages enclaved and there have been concerns about forest clearance. Large areas of lowland have been converted into monospecific tree plantations usually of *Terminalia* sp. In the submontane forest there are plantations of tea and *Cinchona*, there are concerns that these may restart production. Ziama is presumably frequently visited by local hunters, which will have reduced the density of many animal species, and this in turn could negatively affect some plant species. Collection of *Piper guineensis* by poachers involves cutting trees down to get to the liana.

### Protected area status and management

The forest was originally classified in 1942 and is a *Reserve integrale*. In addition it was designated a Man and Biosphere Reserve (Massif du Ziama) in 1980. A management plan exists for this area, but

the extent is unknown. According to a Birdlife International Assessment in 2007, it is out of date and not well implemented.

## Threats

Agriculture: clearing for farming and plantations has occurred in the protected area.

Wood cutting and harvesting: wood cutting on a subsistence level. Cutting trees for collection of *Piper guineensis*.

**Threat level: Medium**

## Criterion A: Threatened Species

Criterion A taxon present	IPA sub-criterion	IUCN red list 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>Brachystephanus jaundensis</i> Lindau subsp. <i>nimbae</i> (Heine) I.Darbysh.	A(i)	VU	⊙	⊙	⊙			Infrequent
<i>Bryaspis humularioides</i> Gledhill	A(i)	EN?	⊙	⊙	⊙			Infrequent
<i>Cassia aubrevillei</i> Pellegr.	A(i)	VU	⊙	⊙	⊙			Infrequent
<i>Cassipourea adamii</i> Jacq.-Fél.	A(i)	EN	⊙	⊙	⊙			Infrequent
<i>Cryptosepalum tetraphyllum</i> (Hook. f.) Benth.	A(i)	VU	⊙					Infrequent
<i>Dalbergia adamii</i> Berhaut	A(i)	VU	⊙	⊙	⊙			Infrequent
<i>Dorstenia astyanactis</i> Aké Assi	A(i)	VU	⊙	⊙	⊙			Infrequent
<i>Drypetes afzelii</i> (Pax) Hutch.	A(i)	VU	⊙	⊙	⊙			Unknown
<i>Entandrophragma candollei</i> Harms	A(i)	VU	⊙	⊙	⊙		⊙	Unknown
<i>Entandrophragma cylindricum</i> (Sprague) Sprague	A(i)	VU	⊙	⊙	⊙		⊙	Unknown
<i>Entandrophragma utile</i> (Dawe & Sprague) Sprague	A(i)	VU	⊙	⊙	⊙		⊙	Unknown
<i>Garcinia kola</i> Heckel	A(i)	VU	⊙	⊙	⊙		⊙	Unknown

<i>Genlisea barthlottii</i> Porembski, Eb. Fisch. & Gemmel	A(i)	VU	⊙	⊙	⊙			Infrequent
<i>Gladiolus praecostatus</i> Marais	A(i)	VU	⊙	⊙	⊙			Scarce
<i>Gymnosiphon samoritoueanus</i> Cheek	A(i)	EN	⊙	⊙	⊙			Infrequent
<i>Heterotis sylvestris</i> (Jacq.-Fél.) Jacq.-Fél.	A(i)	EN	⊙	⊙	⊙			Infrequent
<i>Hymenocoleus multinervis</i> Robbr.	A(i)	VU	⊙	⊙	⊙			Unknown
<i>Inversodicraea pepehabei</i> Cheek	A(i)	EN	⊙	⊙	⊙	⊙		Infrequent
<i>Mikaniopsis camarae</i> Lisowski	A(i)	CR	⊙	⊙	⊙	⊙		Infrequent
<i>Milicia regia</i> (A. Chev.) C. C. Berg	A(i)	VU	⊙	⊙	⊙		⊙	Unknown
<i>Monocymbium lanceolatum</i> C. E. Hubb.	A(i)	VU	⊙	⊙				Unknown
<i>Mostuea adamii</i> Sillans	A(i)	EN	⊙	⊙	⊙			Unknown
<i>Nemum bulbostyloides</i> (S. S. Hooper) J. Raynal	A(i)	VU	⊙					Unknown
<i>Neolemonniera clitandrifolia</i> (A. Chev.) Heine	A(i)	EN	⊙	⊙	⊙			Infrequent
<i>Osbeckia praviantha</i> Jacq.-Fél.	A(i)	EN	⊙	⊙	⊙			Unknown
<i>Pauridiantha schnellii</i> N. Hallé	A(i)	VU?	⊙	⊙	⊙			Unknown
<i>Psychotria samoritourei</i> Cheek	A(i)	VU	⊙	⊙	⊙			Unknown
<i>Rinorea djalonensis</i> A. Chev. ex Hutch. & Dalziel	A(i)	EN	⊙	⊙	⊙			Unknown
<i>Salacighia linderi</i> (Loes. ex Harms) Blakelock	A(i)	VU?	⊙	⊙	⊙			Unknown
<i>Tarenna hutchinsonii</i> Bremek.	A(i)	CR	⊙	⊙	⊙			Infrequent
<i>Vepris felicis</i> Breteler	A(i)	CR	⊙	⊙	⊙			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
	○	○	⊙	⊙	○	○

*Criterion B taxon present	Sub-criterion under which species qualifies	For B(i) – indicator of habitat	*Abundance at site
<i>Brachystephanus jaundensis</i> Lindau <i>subsp. nimbae</i> (Heine) I. Darbysh.	B(ii)		Infrequent
<i>Bryaspis humularioides</i> Gledhill	B(ii)		Infrequent
<i>Cassia aubrevillei</i> Pellegr.	B(ii)		Infrequent
<i>Cassipourea adamii</i> Jacq.-Fél.	B(ii)		Infrequent
<i>Cryptosepalum tetraphyllum</i> (Hook. f.) Benth.	B(ii)		Infrequent
<i>Dalbergia adamii</i> Berhaut	B(ii)		Infrequent
<i>Dorstenia astyanactis</i> Aké Assi	B(ii)		Infrequent
<i>Drypetes afzelii</i> (Pax) Hutch.	B(ii)		Unknown
<i>Entandrophragma candollei</i> Harms	B(ii)		Unknown
<i>Entandrophragma cylindricum</i> (Sprague) Sprague	B(ii)		Unknown
<i>Entandrophragma utile</i> (Dawe & Sprague) Sprague	B(ii)		Unknown
<i>Garcinia kola</i> Heckel	B(ii)		Unknown
<i>Genlisea barthlottii</i> Porembski, Eb. Fisch. & Gemmel	B(ii)		Infrequent
<i>Gladiolus praecostatus</i> Marais	B(ii)		Scarce
<i>Gymnosiphon samoritoureaanus</i> Cheek	B(ii)		Infrequent
<i>Heterotis sylvestris</i> (Jacq.-Fél.) Jacq.-Fél.	B(ii)		Infrequent
<i>Inversodicraea pepehabai</i> Cheek	B(ii)		Infrequent
<i>Mikaniopsis camarae</i> Lisowski	B(ii)		Infrequent
<i>Milicia regia</i> (A. Chev.) C. C. Berg	B(ii)		Unknown

<i>Monocymbium lanceolatum</i> C. E. Hubb.	B(ii)		Unknown
<i>Mostuea adamii</i> Sillans	B(ii)		Unknown
<i>Nemum bulbostyloides</i> (S. S. Hooper) J. Raynal	B(ii)		Unknown
<i>Neolemonniera clitandrifolia</i> (A. Chev.) Heine	B(ii)		Infrequent
<i>Osbeckia praviantha</i> Jacq.-Fél.	B(ii)		Unknown
<i>Psychotria samoritourei</i> Cheek	B(ii)		Unknown
<i>Rinorea djalonensis</i> A. Chev. ex Hutch. & Dalziel	B(ii)		Unknown
<i>Tarenna hutchinsonii</i> Bremek.	B(ii)		Infrequent
<i>Vepris felicis</i> Breteler	B(ii)		Infrequent

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 Forest	C(iii)			⊙	
Submontane Forest	C(iii)			⊙	
Inselbergs	C(iii)			⊙	

## Bibliography

IUCN Red List: [www.redlist.org](http://www.redlist.org) accessed March 2018

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UNESCO Man and Biosphere Reserves: <http://www.unesco.org/new/en/natural-sciences/environment/ecological-sciences/biosphere-reserves/africa/guinea/massif-du-zياما/>

Birdlife international: <http://datazone.birdlife.org/site/factsheet/massif-du-zياما-iba-guinea/>

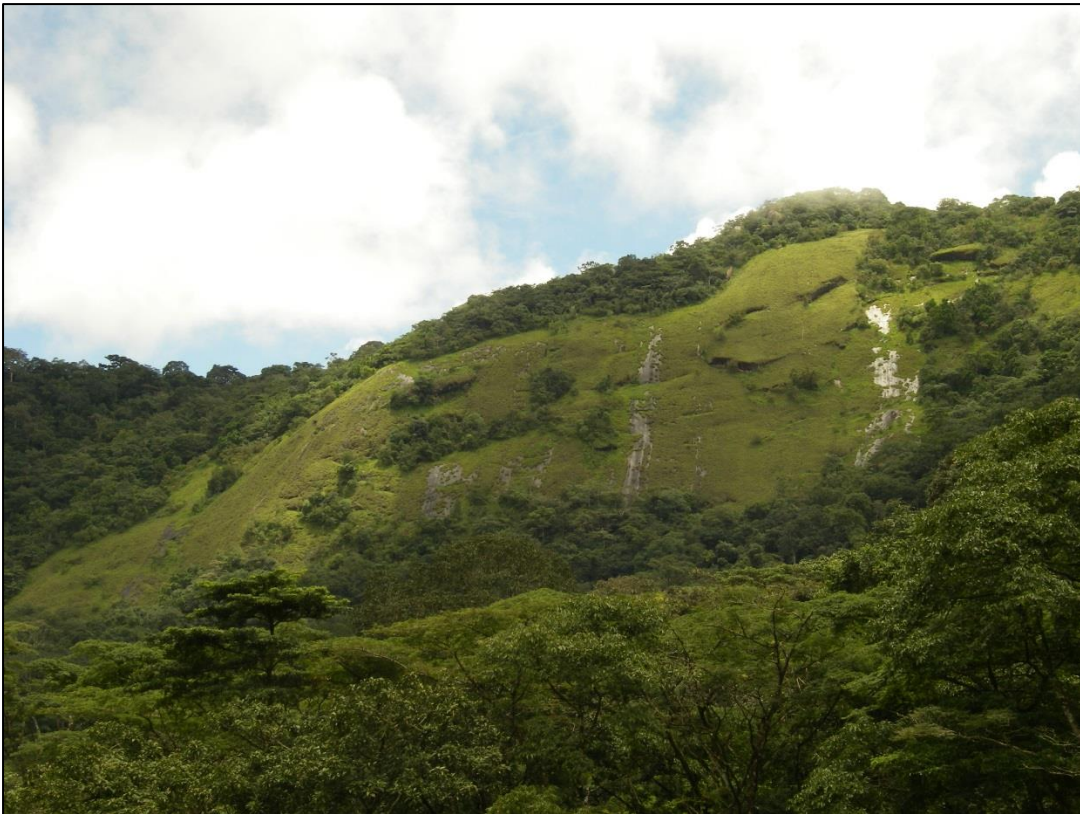
TIPA Field reports: Dec 2016 and Feb 2017 by P  p   Haba, Guin  e Biodiversit  



## Site in pictures



Mt Ziama during the wet season, September. Photo: Xander van der Burgt ©RBG Kew



Mt Ziama showing the side of a granite outcrop, September. Photo: Xander van der Burgt ©RBG Kew





Mt Ziama showing the transition between grassland and forest. Photo: Xander van der Burt ©RBG Kew

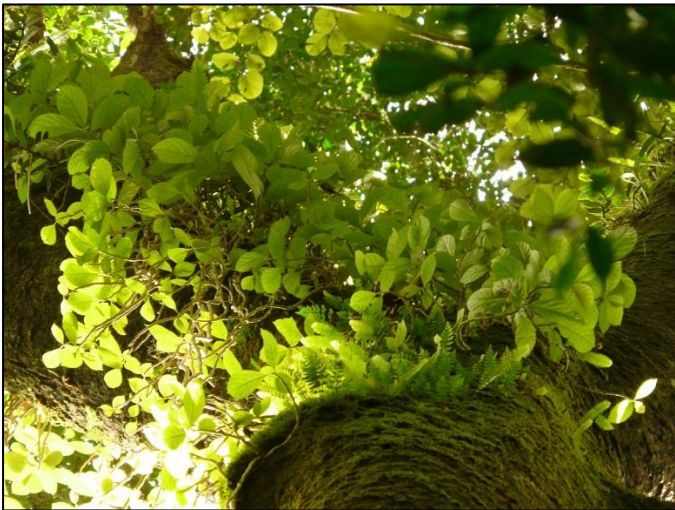


Palm plantation with workers hut, Mt Ziama. Photo: Xander van der Burt ©RBG Kew





*Gymnosiphon samoritoueanus* (Burmanniaceae), EN saprophyte of forest floor. Photo: Xander van der Burgt ©RBG Kew



*Dorstenia astyanactis* (Moraceae): VU epiphyte. Photo: Xander van der Burgt ©RBG Kew