

# Itwara Central Forest Reserve

## UGATIPA8

Country: **Uganda**

Administrative region: **Western (Region)**

Central co-ordinates: **0.79857 N, 30.47115 E**

Area: **86.8km<sup>2</sup>**

### Qualifying IPA criteria

A(i)

### IPA assessment rationale

xxxxx

### Site description

Itwara Central Forest Reserve is located within the Albertine Rift area, on the rift escarpment around 25 km south of Lake Albert, across the districts of Kabarole and Kyenjojo in Western Uganda. The site is known to be important for a number of threatened plant species. Fieldwork was undertaken at this site in 2023 as part of the Uganda TIPAs project and some of the below information is derived from observations and collections made.

### Botanical significance

Eight plant species that are threatened with extinction are known from Itwara CFR. The Endangered species, *Tiliacora latifolia*, is of particular importance as a Ugandan endemic known from only five sites nationally. Two other Endangered species are known from this site, *Eggelingia ligulifolia* and *Vepris eggelingii*, both of which are thought to be threatened at this site by disturbance caused by tree felling (Amani et al. 2022; Fischer et al. 2019). This could have a significant impact on *E. linguifolia* as an epiphytic orchid. This species is only known at this site from one collection made in 1943 and therefore more research is required to better understand the population of *E. linguifolia* at Itwara.

In addition to these Endangered species, five Vulnerable species are known from this IPA. One of these, *Turraeanthus africana*, differs from the other four in that it is widespread across central and western Africa. But as a valuable timber species it has been overexploited and populations have been depleted in parts of its range (Barstow 2020). The Ugandan Albertine Rift represents the easternmost edge of this species' range and as such Itwara is an important site for conserving this species both nationally and globally. Other Vulnerable species of note include *Rhipidoglossum*

*bilobatum*, a second threatened epiphytic orchid species, and *Brachystephanus glaberrimus*, an understory herb or shrub, both of which are cross-border Albertine Rift endemics. The latter species was last collected at Itwara in 1950, but many *Brachystephanus* species display periodic, monocarpic mass-flowering, with life cycles of several years to a decade, and so can be easily overlooked or under-collected if botanical expeditions do not coincide with flowering events. Good habitat for this species remains and so it is likely still extant at this site but under collected due to this reproduction strategy.

*Rytigynia bagshawei* var. *lebrunii* was collected during fieldwork by the Uganda TIPAs project in 2024. This species was previously only known from the Central Africa floral region (D.R. Congo, Rwanda and Burundi), although this species was subsequently collected at Kalinzu during the same fieldwork. Further surveying will likely reveal additional interesting species from this site.

### Habitat and geology

Itwara CFR is dominated by moist evergreen forest, categorised as Parinari Forest by Langdale-Brown et al. (1964). Dominant species include *Olea welwitschii* and *Parinari excelsa* (Howard 1991). In the areas to the south of the site that were surveyed during 2023 fieldwork, common forest taxa included *Trema orientalis*, *Abilizia*, *Celtis* and *Tabernaemontana*, possibly associated with past disturbance and regeneration.

The site has a gently undulating topology and is underlain by sedimentary geology.

### Conservation issues

Itwara is surrounded by tea plantations and it is suspected that the scarcity of land in turn increases pressure on Itwara (CUPTD Workshop, pers. comm. 2023). Threats at this site include charcoal processing, pit sawing and agricultural encroachment (Mugume et al. 2015). In addition, the invasive species *Senna spectabilis* and *Broussonetia papyrifera* have been observed at this site (CUPTD Workshop, pers. comm. 2023).

Large areas of the north-west of the site have been given over to forestry plantation (Google Earth 2023). Satellite imagery and the Langdale-Brown et al. (1964) classification suggest this area was previously a savannah – forest mosaic. The Management Plan 2008-2018 for this site states that such areas should be targeted for industrial forestry (Ministry of Water and Environment 2008). While the known species of conservation importance at this site are all forest species, without ecological impact surveys prior to the

establishment of these forests, it is not clear whether any species of conservation importance were lost through this habitat transformation. In addition, there may be ongoing impacts on ecosystem function and services caused by the establishment of forest here, particularly related to watershed regulation. However, the provision of productive forests in this area likely mitigates against disturbance elsewhere in the reserve, helping to conserve the important species residing there. The management plan also called for restoration of degraded areas of forest and the demarcation of forest stands of high conservation value. This was based mostly on landscape features, such as proximity to rivers and slope inclines, and could be further informed by the distribution of threatened and endemic species within this site.

Alongside this work, Wildlife Conservation Society Uganda partnered with NFA for forest restoration work at the site to help protect forests and the Lake Albert Water Management Zone (WCS 2021).

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### **Site assessor(s)**

Sophie Richards, 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>Grewia ugandensis</i> Sprague	A(i)	–	✓	✓	–	–	Unknown
<i>Turraeanthus africana</i> (Welw. ex C.D.C.) Pellegr.	A(i)	–	–	✓	–	–	Unknown
<i>Tiliacora latifolia</i> Troupin	A(i)	✓	✓	✓	–	–	Unknown
<i>Eggelingia ligulifolia</i> Summerh.	A(i)	–	✓	✓	–	–	Unknown
<i>Rhipidoglossum bilobatum</i> (Summerh.) Szlach. & Olszewski	A(i)	–	–	✓	–	–	Unknown
<i>Vepris eggelingii</i> (Kokwaro) Mziray	A(i)	✓	–	✓	–	–	Unknown
<i>Zanthoxylum mildbraedii</i> (Engl.) P.G. Waterman	A(i)	✓	–	–	–	–	Unknown
<i>Brachystephanus glaberrimus</i> Champl.	A(i)	✓	✓	✓	–	–	Unknown

## 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	–	Major
Artificial - Terrestrial - Arable Land	–	Minor
Artificial - Terrestrial - Plantations	–	Minor

### Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Nature conservation	–	Major
Forestry	–	Major
Agriculture (arable)	–	Minor

## Threats

THREAT	SEVERITY	TIMING
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## Protected areas

PROTECTED AREA NAME	PROTECTED AREA TYPE	RELATIONSHIP WITH IPA	AREAL OVERLAP
Itwara Central Forest Reserve	Forest Reserve (conservation)	protected/conservation area matches IPA	87

## Conservation designation

DESIGNATION NAME	PROTECTED AREA	RELATIONSHIP WITH IPA	AREAL OVERLAP
Itwara Forest Reserve	Key Biodiversity Area	protected/conservation area matches IPA	87

## Management type

MANAGEMENT TYPE	DESCRIPTION	YEAR STARTED	YEAR FINISHED
Site management plan in place		–	–

## Bibliography

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