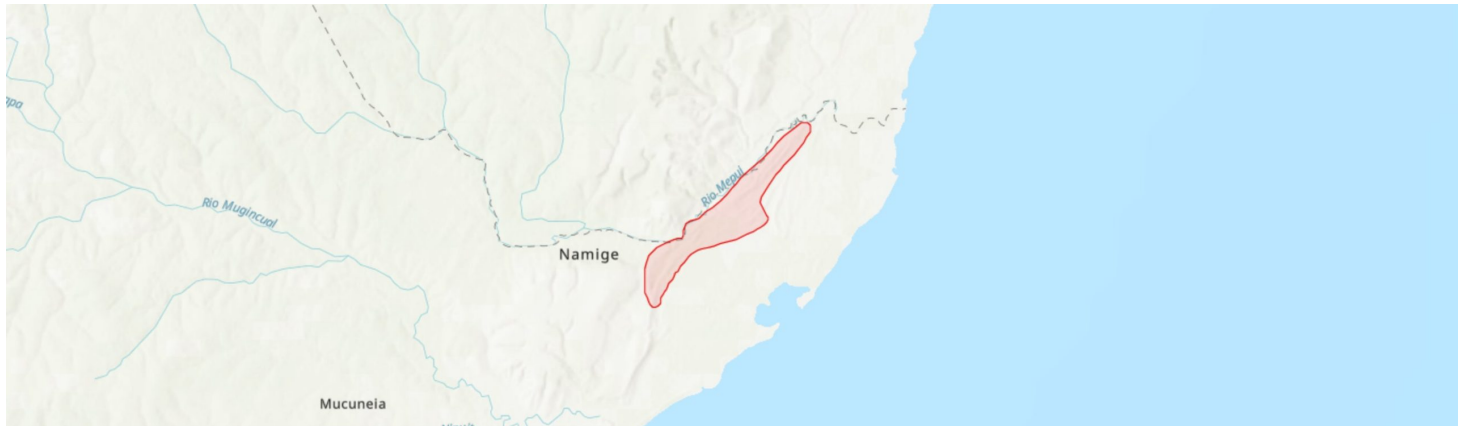


Mogincual

MOZTIPA029



Country: **Mozambique**

Administrative region: **Nampula (Province)**

Central co-ordinates: **-15.49730 N, 40.48840 E**

Area: **21km²**

Qualifying IPA criteria

A(i), C(iii)

IPA assessment rationale

Mogincual qualifies as an Important Plant Area under criterion A(i) in view of its globally important populations of *Icuria dunensis* and *Scorodophloeos torrei*, both of which are assessed as Endangered on the IUCN Red List. It also qualifies under criterion C(iii) as the *Icuria* coastal dry forest is a nationally threatened and range-restricted habitat, and the Mogincual IPA is estimated to contain over 10% of the total area of remaining *Icuria* forest.

Site description

The Mogincual IPA is located northeast of the town of Mogincual in the District of the same name in coastal Nampula Province. The site covers an area of seasonally wet coastal sands with patches of coastal dry forest. This site is a part of the Rovuma Centre of Plant Endemism (Burrows & Timberlake 2011; Darbyshire et al. 2019a).

Botanical significance

The Mogincual IPA is of high botanical importance for holding one of the largest confirmed areas of *Icuria*-dominated coastal dry forest globally. *Icuria dunensis* ('icuri' or 'ncuri') is an endemic species and genus of leguminous tree that forms mono-dominant or co-

dominant stands in small and isolated patches along a ca. 360 km stretch of the Mozambique coastline (Darbyshire et al. 2019b). The area of *Icuria*-dominated forest surveyed to date at Mogincual is approximately 3.25 km² but the total area is potentially larger as some forest patches believed to contain *Icuria* in the northeastern portion of the IPA have not yet been surveyed. It has been identified as one of only three *Icuria* forests assessed to be in "very good condition" using a Forest Ecological Condition Index (A. Massingue, unpubl. data).

Recent survey work in this forest revealed a small but significant population of the Endangered endemic tree species *Scorodophloeos torrei*. At least 10 mature individuals were found here, but a full population survey was not carried out (A. Massingue, pers. obs.). This species is otherwise known from only three subpopulations, two of which are highly threatened (Darbyshire & Rokni 2020), hence Mogincual is a globally important site for this species. Other rare and threatened species are likely to be uncovered at this site following a more complete botanical inventory.

Habitat and geology

Icuria dunensis here forms moderately dense stands and with observed seedling / sapling recruitment. *Icuria* tree density at this site is estimated at 280 per ha, significantly lower than at Matibane Forest Reserve where a density of almost 900 per ha has been estimated (A. Massingue, pers. obs.). As elsewhere within its range, the *Icuria* forests are associated with low-lying sands with a high water table. The forest patches lie within a matrix of more open dune vegetation, and with some intervening depressions that hold surface water in the wet season.

Species diversity within the IPA has not been well documented to date, and it is likely that this site will contain other plant species of conservation interest including Rovuma Centre endemics. The climate is highly seasonal, with rainfall peaking in December to March; the average annual precipitation is ca. 1,050 mm.

Conservation issues

The Mogincual IPA is not currently protected. However, the forest patches are in good condition and do not appear to have been reduced in size by anthropogenic activities over recent decades, as evidenced by historical satellite imagery available on Google Earth Pro (2021). As with most areas of coastal Mozambique, Mogincual District is experiencing a significant and sustained rise in human population, with an increase of 72% recorded between the 1997 and 2017 censuses (Instituto Nacional de Estatística Moçambique) and this may result in increasing pressure on the coastal habitats in the future. Elsewhere within its range, Icuria trees are threatened by stripping of the bark for fishing boat construction and for making ropes (Darbyshire et al. 2019b), but it is not clear if this is the case at Mogincual.

Site assessor(s)

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Alice Massingue, Universidade Eduardo Mondlane

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>Icuria dunensis</i> <i>Wieringa</i>	A(i)	✓	✓	✓	—	—	Frequent
<i>Scorodophloeus torrei</i> Lock	A(i)	✓	✓	✓	—	—	Occasional

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
Rovuma Icuria Coastal Dry Forest	C(iii)	—	—	—	3.25

General site habitats

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Forest - Subtropical/Tropical Dry Forest	—	Major
Shrubland - Subtropical/Tropical Dry Shrubland	—	Major
Marine Coastal/Supratidal - Coastal Sand Dunes	—	Major

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
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Threats

THREAT	SEVERITY	TIMING
Biological resource use - Gathering terrestrial plants	Unknown	Future - inferred threat

Management type

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

Bibliography

Darbyshire, I., Massingue, A.O., Osborne, J., De Sousa, C., Matimele, H.A., Alves, M.T., Burrows, J.E., Chelene, I., Datizua, C., Fijamo, V., Langa, C., Massunde, J., Mucaleque, P.A., Rokni, S. & Siteo, P. 2019. **Icuria dunensis**. **The IUCN Red List of Threatened Species 2019: e.T136532836A136538183**.. The IUCN Red List of Threatened Species

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