Arfak Mountains

Pegunungan Arfak (Test version)

NGUTIPA003

Country: **New Guinea**
Administrative region: **Papua (Province)**
Central co-ordinates: **-1.12959 N, 133.97629 E**

Qualifying IPA criteria

A(iii)

IPA assessment rationale

There are 31 plant species which current data indicates are endemic to this area. The Arfak mountains are a largely intact primary montane rainforest ecosystem, and the rapid elevational change from sea level to over 1000 metres on the eastern side means that there is a gradation of vegetation types within a small area.

Site description

The Arfak mountains is a mountain range on the eastern side of the Bird's Head peninsula in north-west New Guinea which lies between Manokwari and the Anggi Lakes. The highest point is Mount Arfak at 2955 metres asl. On the eastern coast there is a rapid elevational change from sea level to over 1000 metres within about 10 km, which means that there is a gradation between different vegetation types within a relatively small area.

Botanical significance

There are 30 endemic plant species known only from the Arfak mountains, but the region is very under-surveyed due to difficulties of access. The area has become accessible by road only recently, with earlier botanical expeditions involving 2 to 4 days walk from the coast. Most collections have been made on the periphery of mountain range, particularly in the northern side where access is easiest from Manokwari.

Habitat and geology

The Arfak mountains are part of the Vogelkop montane rain forest ecoregion. There is a rapid elevation gain from the coast to high mountains on the eastern side of the range. The Montane forest habitats begin at around 800 to 1000 metres asl, and have forests dominated by Fagaceae, Lauraceae and Myrtaceae, which changes to Nothofagus forests with deep moss, and then Ericaceae-dominated shrubbery at higher elevations.

Conservation issues

The majority of the range is remote and inaccessible, with few roads, which means that there has been low levels of large-scale habitat disturbance such as logging or infrastructure development.

Site assessor(s)

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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
Saurauia spinosa M.Briggs	A(iii)	✓	✓	–	✓	–	Unknown
Marsdenia arfakensis P.I.Forst.	A(iii)	✓	✓	–	✓	–	Unknown
Rhaphidophora pilosa P.C.Boyce	A(iii)	✓	✓	–	✓	–	Unknown
Heptapleurum secundum (Philipson) G.M.Plunkett & Lowry	A(i), A(iii)	✓	✓	–	✓	–	Unknown
Anaphalis arfakensis Mattf.	A(iii)	✓	✓	–	✓	–	Unknown
Papuasicyos arfakensis (W.J.de Wilde & Duyfjes) H.Schaef. & S.S.Renner	A(iii)	✓	✓	–	✓	–	Unknown
Gymnosphaera phlebodes (Lehnert & Coritico) S.Y.Dong	A(iii)	✓	✓	–	✓	–	Unknown
Sericolea arfakensis Gibbs	A(iii)	✓	✓	–	✓	–	Unknown
Rhododendron asperum J.J.Sm.	A(iii)	✓	✓	–	✓	–	Unknown
Rhododendron proliferum Sleumer	A(iii)	✓	✓	–	✓	–	Unknown
Aeschynanthus microtrichus C.B.Clarke	A(iii)	✓	✓	–	✓	–	Unknown
Endiandra arfakensis Kosterm.	A(i), A(iii)	✓	✓	–	✓	–	Unknown
Seringia botak Cheek	A(iii)	✓	✓	–	✓	–	Unknown
Musa arfakiana Argent	A(i), A(iii)	✓	✓	–	✓	–	Unknown
Appendicula rostrata J.J.Sm.	A(iii)	✓	✓	–	✓	–	Unknown
Bulbophyllum bigibbosum J.J.Sm.	A(iii)	✓	✓	–	✓	–	Unknown

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
Bulbophyllum pristis J.J.Sm.	A(iii)	✓	✓	–	✓	–	Unknown
Calanthe reflexilabris J.J.Sm.	A(iii)	✓	✓	–	✓	–	Unknown
Ceratostylis arfakensis J.J.Sm.	A(iii)	✓	✓	–	✓	–	Unknown
Corybas arfakensis Schltr.	A(iii)	✓	✓	–	✓	–	
Dendrobium cuculliferum J.J.Sm.	A(iii)	✓	✓	–	✓	–	
Dendrobium cylindricum J.J.Sm.	A(iii)	✓	✓	–	✓	–	
Pseuderia amblyornidis (Rchb.f.) Ormerod	A(iii)	✓	✓	–	✓	–	
Pteris bambusoides A.Gepp	A(iii)	✓	✓	–	✓	–	
Myrmephytum arfakianum (Becc.) C.R.Huxley & Jebb	A(iii)	✓	✓	–	✓	–	
Guioa amabilis Kaneh. & Hatus.	A(iii), A(iv)	✓	✓	–	✓	–	
Rhysotoechia momiensis Kaneh. & Hatus.	A(i), A(iii)	✓	✓	–	✓	–	
Alpinia domatifera Valeton	A(iii)	✓	✓	–	✓	–	
Riedelia arfakensis Valeton	A(iii)	✓	✓	–	✓	–	

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

General site habitats

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Forest - Subtropical/Tropical Moist Montane Forest	–	Major

GENERAL SITE HABITAT	PERCENT COVERAGE	IMPORTANCE
Forest - Subtropical/Tropical Moist Lowland Forest	–	Minor

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Nature conservation	–	Major

Threats

THREAT	SEVERITY	TIMING

Conservation designation

DESIGNATION NAME	PROTECTED AREA	RELATIONSHIP WITH IPA	AREAL OVERLAP
Arfak	Key Biodiversity Area	protected/conservation area overlaps with IPA	–