

Belitung Island

Belitung (Test version)

SUMTIPA002



Country: **Sumatera**

Administrative region: **Bangka Belitung (Province)**

Central co-ordinates: **-2.86083 N, 107.90036 E**

Qualifying IPA criteria

A(i)

IPA assessment rationale

Belitung Island is an important habitat for globally threatened plants, one Critically Endangered and one Vulnerable. It is also the habitat for one narrow endemic species, *Homalomena hypsiantha*. Some species are targeted for poaching, like *Nepenthes* spp. and the endemic *Homalomena hypsiantha*. Culturally important occurs as there are two species used in the Belitung people's customary food named gangan, i.e. *Dillenia suffruticosa* and *Trema orientale*.

Site description

Belitung is an island dominated by lowland with many areas consisting of vegetation growing on podzols, and also the most

important ecosystem in Indonesia, the lowland heath forest. Belitung has the highest point at 500 metres asl in Mount Tajam, and Belitung consists of undulating terrains in many parts. In this area, the heath forest can be found in many parts of the island. Belitung is threatened by some important factors, including urban and rural developments and tin mining happening in many parts of the island. The landscape is not protected by the government but has been designated as a Belitung UNESCO Global Geopark.

Botanical significance

Belitung harbour nearly the entire global population of the globally threatened tree *Hopea bilitonensis*. There is also a species endemic to the island: *Homalomena hypsiantha*. Besides that, there is also a highly valued and globally threatened tree, *Eusideroxylon zwageri*, spread in many parts of the island. Belitung is less rich than the forests of the larger islands like Sumatra or Borneo. However, this island is botanically important due to the presence of kerangas, or heath vegetation growing on quartz sand and podzolic soils, having a unique floristic composition such as the dominance of myrtle families, abundant occurrence of pitcher plants (*Nepenthes*), and unusual lowland vegetations dominated by *Ericaceae* species – *Vaccinium bancanum* and *Vaccinium bracteatum*.

Habitat and geology

Belitung is categorised as lowland tropical rainforest, and within the occurrence of Sundaland Heath Forest. The mixed forest area is characterised by the occurrence of large trees like *Eusideroxylon*, *Hopea*, and *Ixonanthes reticulata*. The forest on poor-nutrient soils is dominated by the myrtle family. In more open places, grassland and sedges are becoming predominant, mixed with small trees like *Baeckea frutescens* and several *Syzygium* species. On more inundated land, the habitat consists of mangrove and gelam formation (*Melaleuca cajuputi*). The Triassic granitic formation in Belitung Island originated around 230 to 220 mya (mean: 220 mya; Cobbing et al. 1986, Zhang et al. 2023). Before the last glacial maximum, the island was connected by land with all regions of Sundaland.

Conservation issues

None of the areas in Belitung has been assigned as a nationally protected area by the government. A degree of protection comes from the recently established Belitung Geopark, covering the majority of the island. The island is threatened by residential and commercial development, mining activities, urban and rural development, like transportation and service corridors, as well as recreational activities in many places, and also the biological resource uses in the form of logging and wood harvest, as well as illegal plant poaching. Despite minor, illegal plant collecting also happened for ornamental plants like *Nepenthes* and aroids, including the endemic *Homalomena hypsiantha*. Last, Belitung is home to many interesting animals, including the endemic Belitung tarsier (*Tarsius bancanus saltator*) (Yustian 2006), Belitung caecilian (*Ichthyophis billitonensis*) (Kusumah et al. 2023), and the fish *Gymnochanda verae* (Tan & Lim 2011).

Site assessor(s)

Wendy Mustaqim, Universitas Samudra, Indonesia

Laura Jennings, Royal Botanic Garden Kew

Liam Trethowan, Royal Botanic Gardens, Kew

Date of first assessment:

2nd Jun 2025

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>Hopea bilitonensis</i> <i>P.S.Ashton</i>	A(i)	✓	✓	✓	—	—	Abundant
<i>Homalomena hypsiantha</i> <i>P.C.Boyce & S.Y.Wong</i>	A(iv)	✓	✓	✓	✓	—	Unknown
<i>Eusideroxylon zwageri</i> Teijsm. & Binn.	A(i)	✓	—	—	—	—	Frequent

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 Dry Forest	—	Major
Forest - Subtropical/Tropical Moist Lowland Forest	—	Major
Forest - Subtropical/Tropical Moist Montane Forest	—	Minor
Shrubland - Subtropical/Tropical Dry Shrubland	—	Minor
Wetlands (inland) - Permanent Rivers, Streams, Creeks [includes waterfalls]	—	Major
Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands [generally over 8 ha]	—	Minor

Land use types

LAND USE TYPE	PERCENT COVERAGE	IMPORTANCE
Tourism / Recreation	—	
Harvesting of wild resources	—	
Agriculture (arable)	—	

Threats

THREAT	SEVERITY	TIMING
Residential & commercial development - Housing & urban areas	High	Ongoing - stable
Residential & commercial development - Commercial & industrial areas	Medium	Ongoing - trend unknown
Residential & commercial development - Tourism & recreation areas	Low	Ongoing - stable
Energy production & mining - Mining & quarrying	High	Ongoing - stable
Transportation & service corridors - Roads & railroads	Low	Ongoing - trend unknown
Biological resource use - Gathering terrestrial plants - Intentional use (species being assessed is the target)	Low	Ongoing - trend unknown
Biological resource use - Logging & wood harvesting - Intentional use: subsistence/small scale (species being assessed is the target) [harvest]	Low	Ongoing - stable
Human intrusions & disturbance - Recreational activities	Low	Ongoing - trend unknown

Conservation designation

DESIGNATION NAME	PROTECTED AREA	RELATIONSHIP WITH IPA	AREAL OVERLAP
Belitong Geopark	UNESCO Geopark	protected/conservation area matches IPA	—

Bibliography

Boyce P.C. and Wong S.Y. 2012. **Studies on Homalomeneae (Araceae) of Sumatera I: Homalomena hypsiantha, a distinctive new species of the Chamaecladon Supergroup.** Webbia, Vol 67, page(s) 147-150

Cobbing E.J., Mallick D.I.J., Pitfield P.E.J. and Teoh L.H. 1986. **The granites of the Southeast Asian Tin Belt.** Journal of the Geological Society, Vol 143(3), page(s) 537–550

Kusumah W., Hasan V. and Samitra D. 2023. **Rediscovery of the Billiton Caecilian, Ichthyophis billitonensis Taylor, 1965, on Belitung Island, Indonesia, after more than five decades..** Herpetology Notes, Vol 16, page(s) 95-97

Natalia D. 2025. **Heath forest and its biological diversity.**

Sulistyaningsih Y.C., Dorly, Djuita N.R., Ariyanti N.S., Akmal H., Putra H.F., Fakhurrozi Y. and Mustaqim W.A. . **A Field Guide to the Potential Plants of Belitung Islands.**

Tan H.H. and Lim K.K.P. 2006. **A new species of glass-perch from Belitung Island, Indonesia (Teleostei: Ambassidae: Gymnochanda).** Gymnochanda verae Tan & Lim, 2011.. Zootaxa, Vol 3085, page(s) 55-62

Yustian I. 2006. **Population density and the conservation status of belitung’s tarsier Tarsius bancanus saltator on Belitung Island, Indonesia.**

Zhang Y., Yu X., Wang Y., Qian W., Gan C., Ghani A.A., Yu Y. and Xu C. 2023. **Reconstructing the East Palaeo-Tethyan assemblage boundary in west Indonesia: constraints from Triassic granitoids in the Bangka and Belitung islands..** Geological Society, London, Special Publications, Vol 531, page(s) 265-286