Zingiber flagelliforme

Theilade, Ida; Mood, J.; Olander, S.B.

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Plantae	Tracheophyta	Liliopsida	Zingiberales	Zingiberaceae

Taxon Name: *Zingiber flagelliforme* Mood & Theilade

Assessment Information

Red List Category & Criteria: Endangered B2ab(iii) [ver 3.1](#)

Year Published: 2019

Date Assessed: March 5, 2019

Justification:

This species is endemic to Sabah (Malaysia) on Borneo and known from two collections; Mood 530 SAN! and Mood 17 (Theilade and Mood 1999, ZRC 2019, WCSP 2019). The species is considered rare (Theilade and Mood 1999) and the area of occupancy (AOO) is small (8 km²) (Theilade and Mood 1999, ZRC 2019). The land in Danum valley is relatively intact while the habitat in Kampung Ulu Dusun in Sandakan District has been converted (GFW 2019). *Zingiber flagelliforme* is considered Endangered (Theilade and Mood 1999).

Geographic Range

Range Description:

This species is endemic to Sabah (Malaysia) on Borneo where it is known from two collections, giving an area of occupancy (AOO) of 8 km² (Theilade and Mood 1999, ZRC 2019, WCSP 2019). The type was collected by a trail in Danum Valley and the second collection (Mood 17) was made in Ulu Dusun, Sandakan.

Country Occurrence:

Native: Malaysia (Sabah)

Distribution Map

Zingiber flagelliforme

Range

- Extant (resident)

Compiled by:
ZRC

The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.

Population

The population size is unknown, but the species is considered rare (Theilade and Mood 1999).

Current Population Trend: Unknown

Habitat and Ecology (see Appendix for additional information)

This herbaceous perennial has leafy shoots taller than 2 m (Theilade and Mood 1999). Collections have been made in primary forest at low elevations (200-220 m asl) (ZRC 2019). The holotype (Mood 530 SAN!) was made on sandstone, and the other collection (Mood 17) in a cacao plantation (Theilade and Mood 1999).

Systems: Terrestrial

Use and Trade

No available use or trade information.

Threats (see Appendix for additional information)

The forests of Borneo are under continuous threat of being logged and the land converted to e.g. plantations (WWF 2019). The land in Danum valley is relatively intact while it has been converted in Kampung Ulu Dusun, Sandakan District (GFW 2019). One collection of this species was found growing in a cacao plantation (Theilade and Mood 1999), suggesting a level of tolerance of habitat disturbance.

Conservation Actions (see Appendix for additional information)

This species has been recorded by BGCI (2019) to be grown in one *ex situ* site. It is known to be cultivated at the Orchid Centre, Tenom Agricultural Park (Theilade and Mood 1999). It is known from Danum Valley Protection Forest Reserve in which individuals should be under a level of protection (Protected Planet 2019, ZRC 2019).

Credits

Assessor(s): Theilade, I., Mood, J. & Olander, S.B.

Reviewer(s): Newman, M.F.

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External Resources

For [Images and External Links to Additional Information](#), please see the Red List website.

Appendix

Habitats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.6. Forest - Subtropical/Tropical Moist Lowland	Resident	Suitable	-

Plant Growth Forms

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Plant Growth Forms
Forb or Herb

Threats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Threat	Timing	Scope	Severity	Impact Score
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.1. Shifting agriculture	Ongoing	Unknown	Unknown	Unknown
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance		
2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.3. Scale Unknown/Unrecorded	Ongoing	Unknown	Unknown	Unknown
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.3. Logging & wood harvesting -> 5.3.3. Unintentional effects: (subsistence/small scale) [harvest]	Ongoing	Unknown	Unknown	Unknown
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance		

Conservation Actions in Place

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Conservation Actions in Place
In-Place Land/Water Protection and Management
Occur in at least one PA: Yes

Conservation Actions Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Conservation Actions Needed
1. Land/water protection -> 1.1. Site/area protection
2. Land/water management -> 2.1. Site/area management

Research Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Research Needed
1. Research -> 1.2. Population size, distribution & trends
1. Research -> 1.5. Threats
3. Monitoring -> 3.1. Population trends
3. Monitoring -> 3.4. Habitat trends

Additional Data Fields

Distribution
Estimated area of occupancy (AOO) (km ²): 8
Number of Locations: 2
Lower elevation limit (m): 200
Upper elevation limit (m): 220
Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: Yes

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