Zingiber flammeum

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Plantae	Tracheophyta	Liliopsida	Zingiberales	Zingiberaceae

Taxon Name: *Zingiber flammeum* Theilade & Mood

Assessment Information

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

Year Published: 2019

Date Assessed: March 15, 2019

Justification:

This species is endemic to Sabah (Malaysia) on Borneo (Lamb *et al.* 2013, ZRC 2019) and known from two localities; Paling-Paling and the Crocker Range (Lamb *et al.* 2013, Theilade and Mood 1997). The area of occupancy (AOO) may be underestimated, but is likely to be within the range of Endangered under B2 (<500 km²). The habitat is under threat (J. Mood pers. comm. 2019) and the type was collected near Tenom, where the majority of habitat has been converted. *Zingiber flammeum* is therefore considered Endangered.

Geographic Range

Range Description:

This species is endemic to Sabah (Malaysia) on Borneo (Lamb *et al.* 2013, Theilade and Mood 1997, ZRC 2019) where it is known from two localities; Paling-Paling (Type collection Mood 178) and the Crocker Range (Lamb *et al.* 2013, Theilade and Mood 1997). Adding a general data point for the Crocker Range, gives an area of occupancy (AOO) of 8 km². The species is considered relatively widespread (J. Mood pers. comm. 2019), making it likely that the AOO is underestimated. It will, however, be within the range of Endangered under B2 (<500 km²).

Country Occurrence:

Native: Malaysia (Sabah)

Distribution Map

Zingiber flammeum

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 species is considered relatively widespread in the localities where it is found. Habitat degradation suggests a negative population trend.

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

This species has leafy shoots of up to 0.75 m, and is found in hilly forests at low altitudes (300-500 m asl) (Lamb *et al.* 2013, Theilade and Mood 1997).

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 (WWF 2019), and habitat at lower altitudes is especially at risk. Paling-Paling is not in any protected area which has been recorded by Protected Planet (2019). There is both protected and unprotected habitat in and around the Crocker Range (GFW 2019, Protected Planet 2019).

Conservation Actions (see Appendix for additional information)

This species has been recorded by BGCI (2019) to be grown at two *ex situ* sites. Depending on where in the Crocker Range this species is found, individuals may be present in a protected area (Crocker Range National Park).

Credits

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

Reviewer(s): Newman, M.F.

Bibliography

BGCI (Botanic Gardens Conservation International). 2019. PlantSearch online database. Richmond, UK Available at: www.bgci.org/plant_search.php. (Accessed: 2019).

GFW. 2019. Global Forest Watch. Available at: <http://www.globalforestwatch.org/>.

IUCN. 2019. The IUCN Red List of Threatened Species. Version 2019-3. Available at: www.iucnredlist.org. (Accessed: 10 December 2019).

Lamb, A., Gobilik, J., Ardiyani, M. and Poulsen, A.D. 2013. *A Guide to Gingers of Borneo*. Natural History Publications (Borneo), Kota Kinabalu.

Protected Planet. 2019. Protected Planet: The World Database on Protected Areas (WDPA). Cambridge, UK Available at: www.protectedplanet.net. (Accessed: 2019).

Theilade, I. and Mood, J. 1997. Two new species of *Zingiber* (Zingiberaceae) from Sabah, Borneo. *Sandakania* 9: 24.

WWF (World Wildlife Fund). 2019. Threats to Borneo Forests. Available at: http://www.panda.org/knowledge_hub/where_we_work/borneo_forests/borneo_deforestation/.

ZRC. 2019. Zingiberaceae Resource Centre. Available at: <http://padme.rbge.org.uk/ZRC/welcome>.

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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: Unknown

Conservation Actions Needed

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

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

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): 8-500
Number of Locations: 2
Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: Yes

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