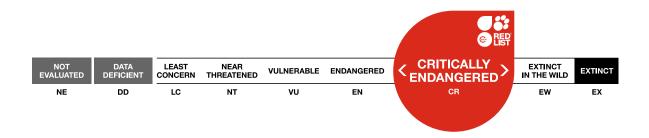


The IUCN Red List of Threatened Species™ ISSN 2307-8235 (online) IUCN 2023: T31200A149812631 Scope(s): Global Language: English

Syzygium palghatense, Sevappunjaval

Assessment by: Amitha Bachan, K.H. & Devika, M.A.



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Taxonomy

Kingdom	Phylum	Class	Order	Family
Plantae	Tracheophyta	Magnoliopsida	Myrtales	Myrtaceae

Scientific Name: Syzygium palghatense Gamble

Synonym(s):

• Eugenia beddomei Duthie

Common Name(s):

• Malayalam: Sevappunjaval

Taxonomic Source(s):

WCVP. 2022. World Checklist of Vascular Plants (WCVP), version 2.0. Facilitated by the Royal Botanic Gardens, Kew. Available at: http://wcvp.science.kew.org/. (Accessed: 2022).

Taxonomic Notes:

Gamble, in 1918, named the species as *Syzygium palghatense* based on the herbarium specimen collected by Beddome (1872; K! 254) which was described earlier as *Eugenia beddomei* by Duthie in 1878. The species was rediscovered after a lapse of 140 years with a first time description of the mature fruits (Sujanapal and Sasidharan 2002).

Assessment Information

Red List Category & Criteria:	Critically Endangered B1ab(iii)+2ab(iii); D <u>ver 3.1</u>	
Year Published:	2023	
Date Assessed:	April 13, 2022	

Justification:

Syzygium palghatense is a small to medium evergreen tree up to 15 m high reported only from a single location in the Anamalai part of southern Western Ghats. This species was thought to be extinct and rediscovered around the type locality after a span of 140 years. Only three mature individuals were reported in an altitude ranging from 1,100 to 1,524 m in the boundary of Parambikulam Tiger Reserve in Kerala. The extent of occurrence (EOO) and area of occupancy (AOO) is 4 km². The fruiting is extremely low and the area is still prone to forest fire. Site specific monitoring and restoration is essential for the conservation of the species. Hence the species is assessed here as Critically Endangered (CR).

Previously Published Red List Assessments

<u> 1998 – Critically Endangered (CR)</u>

1998 – Endangered (E)

Geographic Range

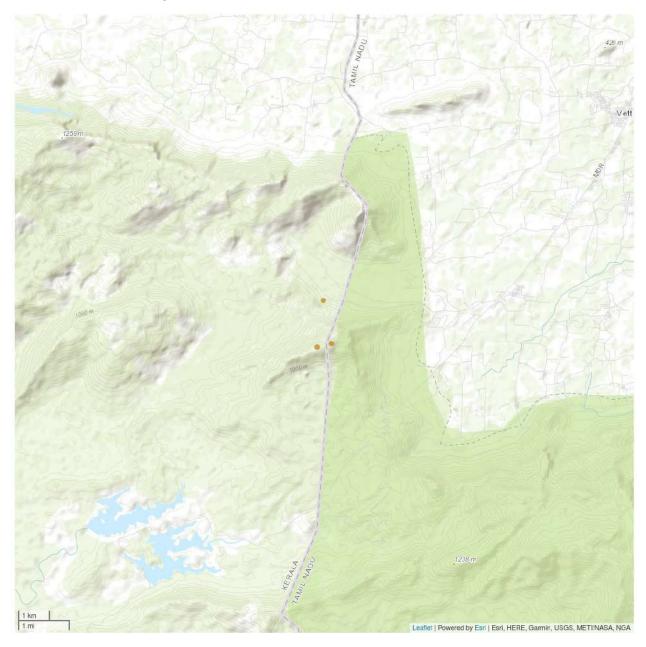
Range Description:

The species is endemic to the Anamalai part of Western Ghats and recorded only from a single location at Pandaravarai peak bordering Nelliyampathy and Parambikulam Tiger Reserve in Kerala.

Country Occurrence:

Native, Extant (resident): India

Distribution Map



Legend EXTANT (RESIDENT)





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

Population

Syzygium palghatense is rediscovered in 2002 from the type locality after a span of 140 years. There are only four collection records from the same locality so far, and the number of mature trees reported is only three. Fruit setting is extremely low and only two saplings are reported so far (Sasidharan 2002). **Current Population Trend:** Unknown

Habitat and Ecology (see Appendix for additional information)

Syzygium palghatense is an evergreen tree up to 15 m high reported from tropical evergreen submontane forest of Pandaravarai peak in the Palakkad hills of Kerala part of southern Western Ghats. Only three mature individuals have been reported so far from the location in an altitude ranging from 1,100 to 1,524 m. The flowering and fruiting season is January to June, the fruit setting is extremely low and only two saplings have been observed within 1 km² area (Sujanapal and Sasidharan 2002).

Systems: Terrestrial

Use and Trade (see Appendix for additional information)

This species is reported with only three mature individuals and no use and trade information available.

Threats (see Appendix for additional information)

Syzygium palghatense is endemic to a single location in the southern Western Ghats. There are only three mature individuals reported so far and the area has been subjected to timber extraction in the past. It is part of old teak plantations and exposed to forest fire even though it is in a protected area.

Conservation Actions (see Appendix for additional information)

The species is reported with only three mature individuals from a single location in the Anamalai part of Southern Western Ghats. The location is within the boundary of Parambikulam Tiger Reserve but the area has been subjected to heavy timber extraction and a commercial timber plantation. The small natural forest patch is prone to the impacts from the old timber plantation and forest fires.

Credits

Assessor(s): Amitha Bachan, K.H. & Devika, M.A.

Reviewer(s): Hills, R.

Bibliography

IUCN. 2001. *IUCN Red List Categories and Criteria: Version 3.1.* Species Survival Commission. IUCN, Gland, Switzerland and Cambridge, UK.

IUCN. 2023. The IUCN Red List of Threatened Species. Version 2023-1. Available at: <u>www.iucnredlist.org</u>. (Accessed: 11 December 2023).

Sasidharan, N. 2002. Floristic Studies in Parambikulam Wildlife Sanctuary . Kerala Forest Research Institute, Peechi, Thrissur.

Sujanapal, P. and Sasidharan, N. 2002. Relocation of *Syzygium palghatense* Gamble (Myrtaceae) and description of its hitherto unknown fruits. *Rheedea* 12(2): 189-191.

Citation

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External Resources

For <u>Supplementary Material</u>, and for <u>Images and External Links to Additional Information</u>, please see the Red List website.

Appendix

Habitats

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

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.9. Forest - Subtropical/Tropical Moist Montane	Resident	Suitable	No

Plant and Fungal growth forms

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

Plant and Fungal growth forms	
TL. Tree - large	

Threats

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

Threat	Timing	Scope	Severity
2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.2. Agro-industry plantations	Ongoing	Majority (50-90%)	Rapid declines
7. Natural system modifications -> 7.1. Fire & fire suppression -> 7.1.1. Increase in fire frequency/intensity	Ongoing	Majority (50-90%)	Rapid declines

Conservation Actions in Place

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

Conservation Action in Place
In-place land/water protection
Occurs in at least one protected area: Yes

Conservation Actions Needed

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

Conservation Action Needed	Notes
2. Land/water management -> 2.1. Site/area management	-
2. Land/water management -> 2.3. Habitat & natural process restoration	-
3. Species management -> 3.2. Species recovery	-

Research Needed

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

Research Needed	Notes
1. Research -> 1.5. Threats	-
3. Monitoring -> 3.1. Population trends	-

Additional Data Fields

Distribution		
Estimated area of occupancy (AOO) (km ²): 4		
Estimated extent of occurrence (EOO) (km ²): 4		
Number of Locations: 1		
Lower elevation limit (m): 1,100		
Upper elevation limit (m): 1,524		
Population		
Number of mature individuals: 3		
No. of subpopulations: 1		
No. of individuals in largest subpopulation: 3		
Habitats and Ecology		
Continuing decline in area, extent and/or quality of habitat: Yes		
Generation Length (years): 50		

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