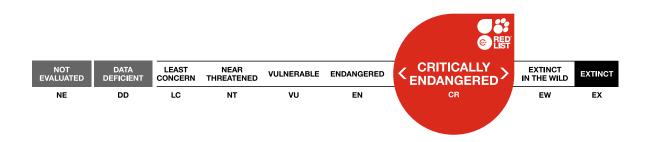


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# Syzygium periyarense

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### Taxonomy

Kingdom	Phylum	Class	Order	Family
Plantae	Tracheophyta	Magnoliopsida	Myrtales	Myrtaceae

Scientific Name: Syzygium periyarense Augustine & Sasidh.

#### Taxonomic Source(s):

Board of Trustees, RBG Kew. 2021. Plants of the World Online Portal. Richmond, UK. Available at: http://www.plantsoftheworldonline.org.

#### **Identification Information:**

*Syzygium periyarens*e is a small evergreen trees up to 15 m high with greyish-white bark, branchlets terete. Leaves simple, opposite, lamina 11-15 x 7-9 cm. Characterised from other species with flat leaf margins, 7-14 pairs of lateral nerves. Petiole 7-15 mm long and pedicel 4 mm long. Petals 13 x 13 mm and calyx tube 12 x 12 mm long. Stamens numerous, 11 -18 mm long, inflexed in bud. Fruit a berry.

### **Assessment Information**

Red List Category & Criteria:	Critically Endangered D ver 3.1		
Year Published:	2023		
Date Assessed:	September 5, 2022		

#### Justification:

*Syzygium periyarense* is a small evergreen tree up to 15 m high, discovered from evergreen forest of Periyar tiger reserve at an elevation of 1,300 m. The species is restricted to a single population of seven mature individuals in the collection locality at Sunderamala. The species was found occasionally along stream sides, and there are no further collection records since its discovery. The intensified rainfall pattern and landslide in the landscape could be a potential threat to the species, even though located in a protected area. There is no species management or monitoring plan in-place due to its remoteness. The species is only known from a few individuals and it is assessed as Critically Endangered.

### **Geographic Range**

#### **Range Description:**

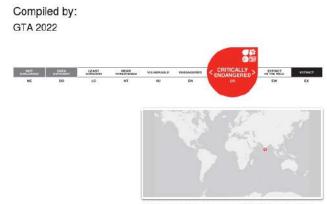
The species is endemic to the Periyar landscape in the southern Western Ghats, India.

#### Country Occurrence: Native, Extant (resident): India (Kerala)

# **Distribution Map**



Legend EXTANT (RESIDENT)





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

### Population

*Syzygium periyarense* was collected from a remote forest hill in the Periyar tiger reserve during its discovery (Sasidharan and Augustine 1999). There are no more collection records from the Western Ghats region. Its population is restricted to seven individuals in the type locality, Sunderamala, at an elevation of 1,300 m. Further population estimation was not possible to carry out because of the remoteness of the location. There is a possibility of extinction in future due to intensified rain and landslide in the landscape even though the species is within the protected area.

Current Population Trend: Unknown

### Habitat and Ecology (see Appendix for additional information)

*Syzygium periyarense* is located only from the evergreen forest of Sunderamala in Periyar tiger reserve at an elevation of 1,300 m. It is a small evergreen tree up to 15 m high occasionally found along the banks of streams associated with *Syzygium hemisphericum, Gordonia obtusa, Ternstroemia japonica* (Sasidharan and Augustine 1999).

Systems: Terrestrial

### Use and Trade (see Appendix for additional information)

There is no use and trade information for this species since it is a very restricted tree species known from one locality.

### **Threats** (see Appendix for additional information)

The species is known to occur in one location with seven individuals. The increased rain intensity and resulting landslides in the landscape can be a potential threat for the species even though it is located in a protected area.

### **Conservation Actions** (see Appendix for additional information)

The species is found in a protected area. There is no species management or monitoring plan in-place due to its remoteness.

### Credits

Assessor(s):	Amitha Bachan, K.H., Sasidharan, N. & Devika, M.A.
Reviewer(s):	Beech, E.

# 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. and Augustine, J. 1999. A new species of *Syzygium* Gaertn. (Myrtaceae) from Southern Western Ghats, India. *Rheedea* 9(2): 155-158.

# 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	Yes

# Plant and Fungal growth forms

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

Plant and Fungal growth forms	
TS. Tree - small	

### Threats

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

Threat	Timing	Scope	Severity
10. Geological events -> 10.3. Avalanches/landslides	Future	-	Rapid declines

# **Conservation Actions in Place**

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

Conservation Action in Place
In-place research and monitoring
Action Recovery Plan: No
Systematic monitoring scheme: No
In-place land/water protection
Percentage of population protected by PAs: 91-100
Area based regional management plan: No
Occurs in at least one protected area: Yes
Invasive species control or prevention: No

# **Conservation Actions Needed**

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

Conservation Action Needed	Notes
1. Land/water protection -> 1.1. Site/area protection	-
2. Land/water management -> 2.1. Site/area management	-
3. Species management -> 3.2. Species recovery	-
3. Species management -> 3.4. Ex-situ conservation -> 3.4.2. Genome resource bank	-

### **Research Needed**

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

Research Needed	Notes
1. Research -> 1.2. Population size, distribution & trends	-
1. Research -> 1.3. Life history & ecology	-
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 <sup>2</sup> ): 4
Estimated extent of occurrence (EOO) (km <sup>2</sup> ): 4
Number of Locations: 1
Lower elevation limit (m): 1,250
Upper elevation limit (m): 1,350
Population
Number of mature individuals: 7
No. of subpopulations: 1
No. of individuals in largest subpopulation: 7
Habitats and Ecology
Generation Length (years): 20

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