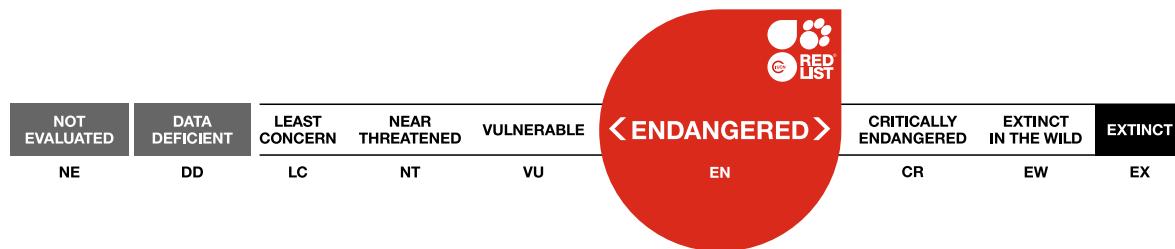




## *Elaeocarpus recurvatus*, Naikotta

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



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## Taxonomy

Kingdom	Phylum	Class	Order	Family
Plantae	Tracheophyta	Magnoliopsida	Oxalidales	Elaeocarpaceae

**Scientific Name:** *Elaeocarpus recurvatus* Corner

**Synonym(s):**

- *Elaeocarpus ferrugineus* Bedd.
- *Monocera ferruginea* Wight

**Common Name(s):**

- Malayalam: Naikotta

**Taxonomic Source(s):**

POWO. 2023. Plants of the World Online. Facilitated by the Royal Botanic Gardens, Kew. Available at: <http://powo.science.kew.org/>. (Accessed: 2023).

**Identification Information:**

Leaves alternate, clustered at the tip of branchlets. Lamina recurved with yellow golden pubescence. Fruit small, ovoid, dark green.

## Assessment Information

**Red List Category & Criteria:** Endangered A2c [ver 3.1](#)

**Year Published:** 2024

**Date Assessed:** July 16, 2023

**Justification:**

This is a medium-sized canopy tree of the high elevation shola forest of the southern Western Ghats chiefly restricted to Munnar and Nilgiri landscapes. The population is less than 4,000 within 12 subpopulations, of which five are within protected areas. The area of occupancy is 104 km<sup>2</sup> and extent of occurrence is 7,211 km<sup>2</sup>. It is estimated that 66% of the habitat is converted for tea and wattle plantations. The population is suspected to have decline by a similar extent over three generations (50–70%). The fragmented nature of habitat, fire incidence and commercial plantation activities are the ongoing threats. Hence, the species assessed as Endangered (EN).

**Previously Published Red List Assessments**

[1998 – Vulnerable \(VU\)](#)

1998 – Rare (R)

## Geographic Range

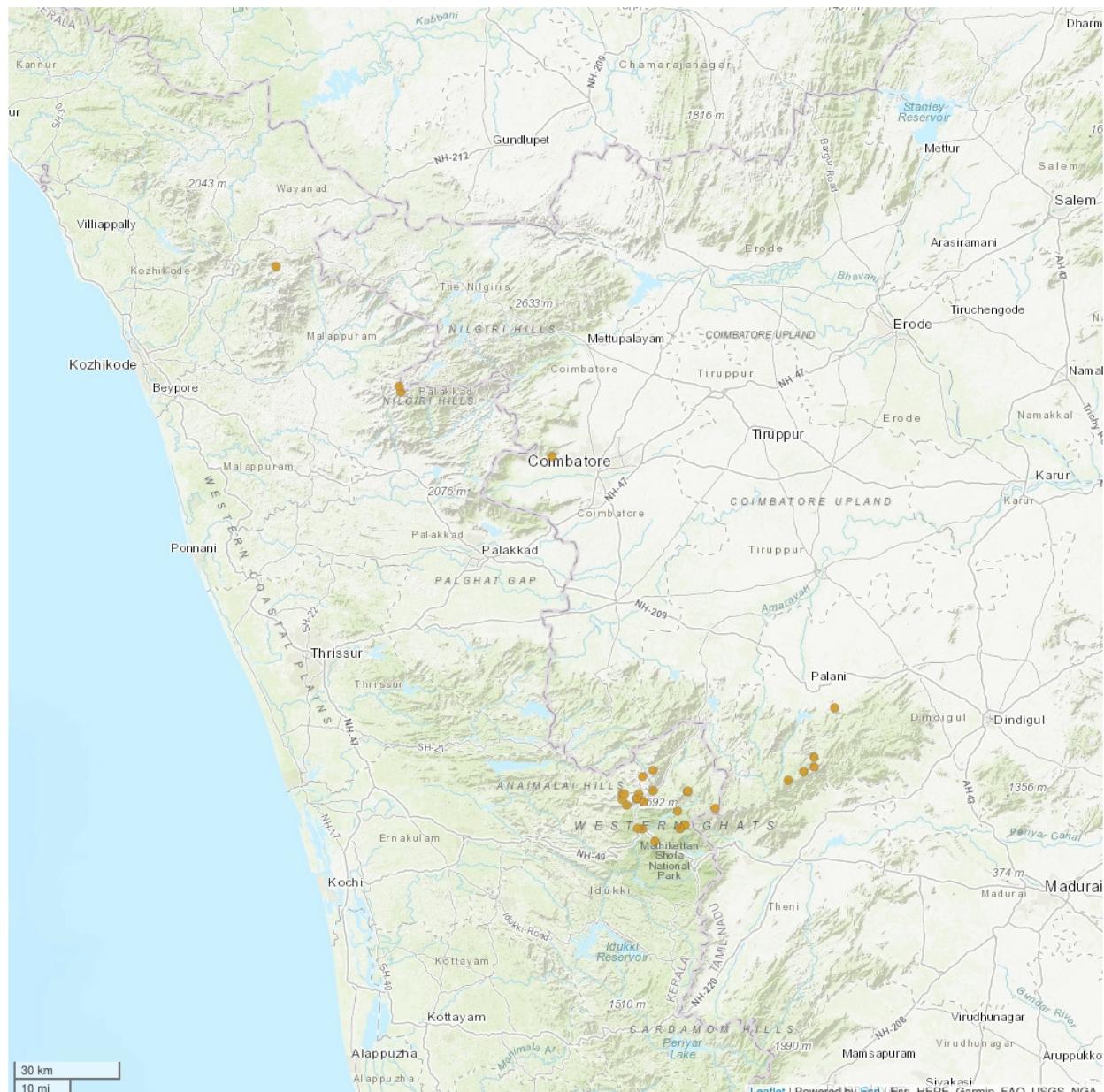
**Range Description:**

The species is native to the southern Western Ghats of India.

**Country Occurrence:**

**Native, Extant (resident):** India (Kerala, Tamil Nadu)

# Distribution Map



## Legend

■ EXTANT (RESIDENT)

## Compiled by:

Devika M.A. & Amitha Bachan KH 2023



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 of *Elaeocarpus recurvatus* is restricted to 12 subpopulations within very high elevation shola forests of Munnar and Nilgiri landscape. The estimated population size is less than 4,000 mature individuals, with 500 in the largest subpopulation, with an abundance of 5 per ha. The habitat has been fragmented and 66% converted for tea and wattle plantation in the past. It is suspected that the population has declined by a similar extent (50–70%). There is likely to be a stable population within the Anamudi Shola national park, whereas burning of the grass lands is affecting the extent of shola and population of the species within other protected areas (Devika and Bachan 2023).

**Current Population Trend:** Decreasing

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

*Elaeocarpus recurvatus* is an evergreen tree which grows up to 15 m high in the montane shola regions in between an elevation of 1,700–2,550 m. The species is a canopy tree of the stunted montane evergreen shola forest formation associated with *Rhododendron arboreum*, *Syzygium sahyadricum*, *Syzygium densiflorum* and *Litsea spp.* Flowering and fruiting occurs during February–May.

**Systems:** Terrestrial

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

There is no use and trade information for this species.

## Threats (see Appendix for additional information)

The habitat of the species is converted for commercial tea and wattle plantations, causing a 66% reduction in the habitat and 50–70% reduction in population. Five out of the 12 subpopulations are within protected areas. There is likely to be a stable population in the Anamudi shola national park, whereas fragmentation and fire incidents are a continuing threat to the species within other protected areas. Commercial tea, wattle and eucalyptus plantation activity are ongoing in most of the habitat.

## Conservation Actions (see Appendix for additional information)

Five out of the 12 subpopulations are within protected areas including a stable population seen in the Anamudi Shola national park. A niche specific conservation and restoration plan has been prepared (Devika and Bachan 2023). There are no site specific actions and restoration in place.

## Credits

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

**Reviewer(s):** Barstow, M.

## Bibliography

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Nayar, M.P. and Sastry, A.R.K. (eds) 1990. *Red Data Book of Indian Plants*. Vol. 3. Botanical Survey of India, Calcutta.

Prasannan, P., Jeyaram, Y., Pandian, A., Raju, R. and Sekar, S. 2020. A review on taxonomy, phytochemistry, pharmacology, threats and conservation of *Elaeocarpus* L. (Elaeocarpaceae). *The Botanical Review* 86: 298–328.

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## External Resources

For [Supplementary Material](#), and 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 -> 1.9. 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
1. Residential & commercial development -> 1.2. Commercial & industrial areas	Ongoing	Minority (<50%)	Slow, significant declines
1. Residential & commercial development -> 1.3. Tourism & recreation areas	Ongoing	Minority (<50%)	Causing/could cause fluctuations
2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.2. Agro-industry plantations	Ongoing	Majority (50-90%)	Slow, significant declines
7. Natural system modifications -> 7.1. Fire & fire suppression -> 7.1.1. Increase in fire frequency/intensity	Ongoing	Minority (<50%)	Slow, significant 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: Yes
Systematic monitoring scheme: No
In-place land/water protection
Percentage of population protected by PAs: 51-60
Area based regional management plan: No
Occurs in at least one protected area: Yes

<b>Conservation Action in Place</b>
In-place species management
Subject to ex-situ conservation: No

## Conservation Actions Needed

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

<b>Conservation Action Needed</b>	<b>Notes</b>
1. Land/water protection -> 1.1. Site/area protection	-
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>)

<b>Research Needed</b>	<b>Notes</b>
2. Conservation Planning -> 2.2. Area-based Management Plan	-
3. Monitoring -> 3.3. Trade trends	-

## Additional Data Fields

<b>Distribution</b>
Estimated area of occupancy (AOO) (km <sup>2</sup> ): 104
Estimated extent of occurrence (EOO) (km <sup>2</sup> ): 7211
Number of Locations: 12
Lower elevation limit (m): 1,700
Upper elevation limit (m): 2,550
<b>Population</b>
Number of mature individuals: 4,000
No. of subpopulations: 12
All individuals in one subpopulation: No
No. of individuals in largest subpopulation: 500
<b>Habitats and Ecology</b>
Continuing decline in area, extent and/or quality of habitat: Yes
Generation Length (years): 25

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