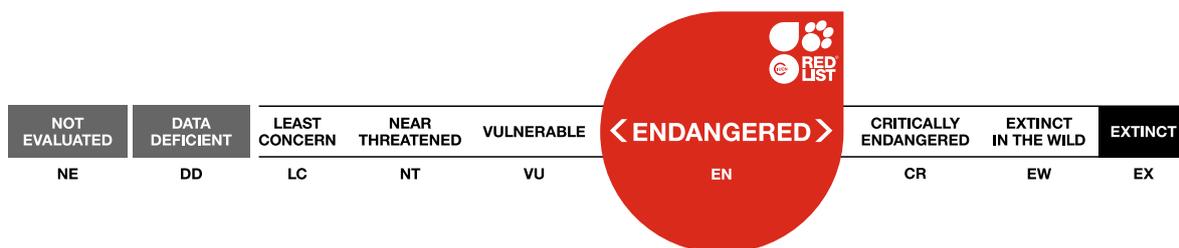




## *Syzygium rama-varmae*, Kattuchampa

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



View on [www.iucnredlist.org](http://www.iucnredlist.org)

**Citation:** Devika, M.A. & Amitha Bachan, K.H. 2023. *Syzygium rama-varmae*. *The IUCN Red List of Threatened Species* 2023: e.T175221A1419729. <https://dx.doi.org/10.2305/IUCN.UK.2023-1.RLTS.T175221A1419729.en>

**Copyright:** © 2023 International Union for Conservation of Nature and Natural Resources

Reproduction of this publication for educational or other non-commercial purposes is authorized without prior written permission from the copyright holder provided the source is fully acknowledged.

Reproduction of this publication for resale, reposting or other commercial purposes is prohibited without prior written permission from the copyright holder. For further details see [Terms of Use](#).

The IUCN Red List of Threatened Species™ is produced and managed by the [IUCN Global Species Programme](#), the [IUCN Species Survival Commission \(SSC\)](#) and [The IUCN Red List Partnership](#). The IUCN Red List Partners are: [ABQ BioPark](#); [Arizona State University](#); [BirdLife International](#); [Botanic Gardens Conservation International](#); [Conservation International](#); [Missouri Botanical Garden](#); [NatureServe](#); [Re:wild](#); [Royal Botanic Gardens, Kew](#); [Sapienza University of Rome](#); [Texas A&M University](#); and [Zoological Society of London](#).

If you see any errors or have any questions or suggestions on what is shown in this document, please provide us with [feedback](#) so that we can correct or extend the information provided.

## Taxonomy

Kingdom	Phylum	Class	Order	Family
Plantae	Tracheophyta	Magnoliopsida	Myrtales	Myrtaceae

**Scientific Name:** *Syzygium rama-varmae* (Bourd.) Chithra

### Synonym(s):

- *Eugenia rama-varmae* Bourd.
- *Jambosa rama-varmae* (Bourd.) Gamble

### Common Name(s):

- Malayalam: Kattuchampa
- Tamil: Mani Kiluki

### Taxonomic Source(s):

Sankara Rao, K., Raja K Swamy, Deepak Kumar, Arun Singh R. and K. Gopalakrishna Bhat. 2019. Flora of Peninsular India. Available at: [http://peninsula.ces.iisc.ac.in/plants.php?name=Syzygium rama-varmae](http://peninsula.ces.iisc.ac.in/plants.php?name=Syzygium%20rama-varmae).

### Taxonomic Notes:

Bourdillon named the species as *Eugenia rama-varmae* during 1904 based on his collection from Chemungi hills (1895) and later Gamble (1919) renamed as *Jambosa rama-varma*. Later Chithra (1983) placed it as *Syzygium rama-varmae* (Bourd.) Chithra. The collections of Henry 1979 and Shareef (2001-2002) extended its distribution to Kanyakumari Wildlife Sanctuary and Munnar hills of Idukki district respectively. The species is locally termed as Manikiluki since the dried fruits sounds like a bead inside a box (rattle).

### Identification Information:

*Syzygium rama-varmae* is a small evergreen tree up to 15 m high. Bark greyish brown. Leaves elliptic to elliptic oblong with acuminate apex, 13.5–25.2 x 4.8–11 cm, acumen up to 3 cm long, flowers solitary 4–5 cm across. Fruits greenish pink globose. Flowering and fruiting January-June.

## Assessment Information

**Red List Category & Criteria:** Endangered B1ab(iii,v)+2ab(iii,v); C2a(i) [ver 3.1](#)

**Year Published:** 2023

**Date Assessed:** September 8, 2022

### Justification:

*Syzygium rama-varmae* is a small evergreen tree up to 15 m high distributed in seven locations in the tropical submontane evergreen forest of Munnar, Agasthyamalai and Kanyakumari hills of southern Western Ghats. The species occupies in a narrow altitudinal range of 1,100–1,500 m elevation in its habitat associated with characteristic tree associations of the representing vegetation, usually along submontane streams and swamps. More than 50% of its population had been subjected to heavy degradation due to tea, *Eucalyptus* and wattle plantations and dams. It is inferred that there has been a

total population reduction of at least 40% over three generations. Habitat fragmentation, forest fire and consumption for firewood are the major threats. The entire population is only 400 individuals, with the largest subpopulation with only 115 mature individuals. The area of occupancy (AOO) is 32 km<sup>2</sup> and the extent of occurrence (EOO) is 2,757 km<sup>2</sup>. Site specific species monitoring and recovery plans along with local awareness is recommended. Hence, the species assessed here as Endangered.

## Geographic Range

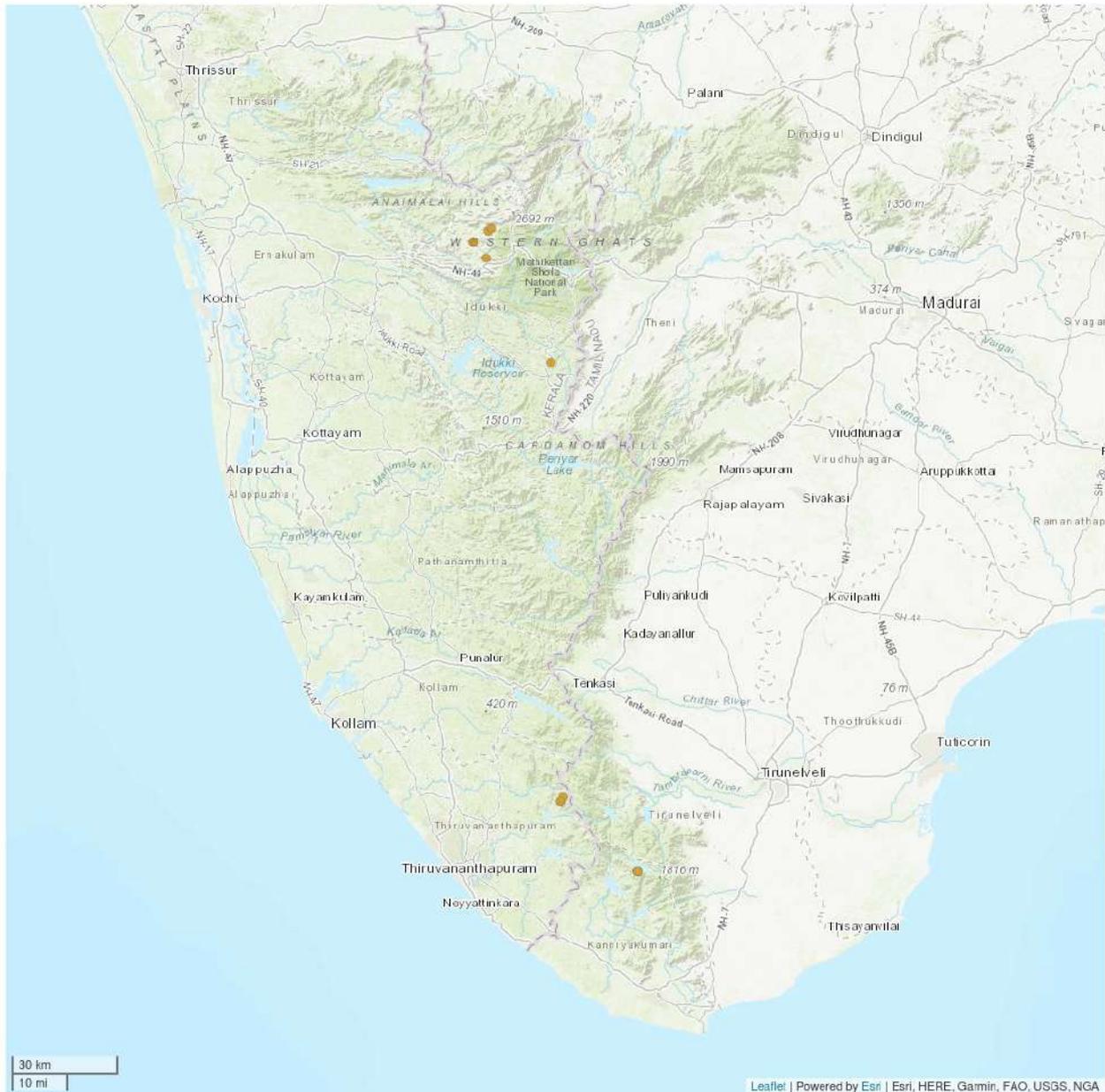
### Range Description:

The species is endemic to three ecoregions in the southern Western Ghats, India.

### Country Occurrence:

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

# Distribution Map



## Legend

■ EXTANT (RESIDENT)

## Compiled by:

GTA 2022



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 rama-varmae* has nearly 400 mature individuals in seven subpopulations within the Agasthyamalai hills of Thiruvananthapuram district and Kallar - Munnar hills of Idukki district in Kerala and Muthukuzhivayal hills of Kanyakumari district Tamil Nadu. Four subpopulations in the hills of Munnar are highly fragmented and are outside protected areas, hence there is decrease in population. The largest subpopulation has 115 mature individuals.

**Current Population Trend:** Decreasing

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

*Syzygium rama-varmae* is a small evergreen tree up to 15 m high seen on the montane evergreen vegetation (1,100–1,500 m) along seven hill tops in the Munnar, Agasthyamalai, Kanyakumari ecoregions of the Southern Western Ghats. The tree is located along streams or swamps in the hill tops associated with *Antidesma montanum*, *Cullenia exarillata*, *Palaquium ellipticum*, *Litsea bourdillonii*, *Mesua ferrea*, *Syzygium gardneri* and *Garcinia pushpangadaniana* (Irwin 2006, Shareef *et al.* 2013).

**Systems:** Terrestrial

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

It is a small tree with a maximum recorded girth of 172 cm and an average of less than 100 cm. There is no use and trade information, however it could be used for firewood by the local community.

## Threats (see Appendix for additional information)

*Syzygium rama-varmae* is distributed along submontane evergreen hilltops in the Munnar, Agasthyamalai and Kanyakumari ecoregions. Forest of these hilltops had been subjected to large scale conversion for tea plantations during the colonial regime and softwood plantations later and are still continuing. More than 50% of the population is in the Idukki district, which is subjected to the continuing threat of fragmentation and degradation due to forest fire and firewood extraction.

## Conservation Actions (see Appendix for additional information)

The species occurs in two protected areas, Agasthyamalai and Kanyakumari Wildlife Sanctuary, where it is represented with its three out of the seven subpopulations. The other four subpopulations are within the hills of Munnar region and need more conservation actions.

## Credits

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

**Reviewer(s):** Beech, E.

## Bibliography

- Bourdillon, T.F. 1904. *Eugenia rama-varma* Bourd. *Indian Forester* 30(147): 2.
- Bourdillon, T.F. 1908. *Forest Trees of Travancore*. Government Press, Trivandrum.
- Brandis, D. 1906. *Indian Trees*. London.
- Chithra, V. 1983. *Flora of Tamil Nadu, India*. Botanical Survey of India, Coimbatore.
- Gopalan, R. and Henry, A.N. 2000. *Endemic Plants of India. CAMP for the strict endemics of Agasthiyamalai Hills, SW Ghats*. Bishen Singh Mahendra Pal Singh, Dehra Dun.
- Irwin, S.J. 2006. *Biology, Population and Mapping of Selected Endemic and Threatened Trees of Western Ghats of Kanyakumari District, Tamil Nadu*. University of Madras.
- 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: [www.iucnredlist.org](http://www.iucnredlist.org). (Accessed: 11 December 2023).
- Rao, R. 1914. *Flowering Plants of Travancore*. Government Press, Trivandrum.
- Shareef, S.M., Santhosh Kumar, E.S. and Krishnaraj, M.V. 2013. *Syzygium rama-varma* (Myrtaceae) from southern Western Ghats, India. *TAPROBANICA* 05(02): 148–150.

## Citation

Devika, M.A. & Amitha Bachan, K.H. 2023. *Syzygium rama-varmae*. *The IUCN Red List of Threatened Species* 2023: e.T175221A1419729. <https://dx.doi.org/10.2305/IUCN.UK.2023-1.RLTS.T175221A1419729.en>

## Disclaimer

To make use of this information, please check the [Terms of Use](#).

## 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 -> 1.8. Forest - Subtropical/Tropical Swamp	Resident	Suitable	Yes
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%)	Slow, significant declines
2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.2. Agro-industry plantations	Ongoing	Minority (<50%)	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: No
Systematic monitoring scheme: No
In-place land/water protection
Percentage of population protected by PAs: 41-50
Area based regional management plan: No

<b>Conservation Action in Place</b>
Occurs in at least one protected area: Yes
Invasive species control or prevention: No
In-place species management
Harvest management plan: No
Successfully reintroduced or introduced benignly: No
Subject to ex-situ conservation: No
In-place education
Subject to recent education and awareness programmes: No
Included in international legislation: No
Subject to any international management / trade controls: 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	-
1. Land/water protection -> 1.2. Resource & habitat protection	-
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	-
2. Conservation Planning -> 2.1. Species Action/Recovery Plan	-
2. Conservation Planning -> 2.2. Area-based Management Plan	-
3. Monitoring -> 3.4. Habitat trends	-

## Additional Data Fields

<b>Distribution</b>
Estimated area of occupancy (AOO) (km <sup>2</sup> ): 32

<b>Distribution</b>
Estimated extent of occurrence (EOO) (km <sup>2</sup> ): 2757
Number of Locations: 7
Lower elevation limit (m): 1,100
Upper elevation limit (m): 1,500
<b>Population</b>
Number of mature individuals: 400
Continuing decline of mature individuals: Yes
Population severely fragmented: Yes
No. of subpopulations: 7
All individuals in one subpopulation: No
No. of individuals in largest subpopulation: 115
<b>Habitats and Ecology</b>
Continuing decline in area, extent and/or quality of habitat: Yes
Generation Length (years): 20

## The IUCN Red List Partnership



The IUCN Red List of Threatened Species™ is produced and managed by the [IUCN Global Species Programme](#), the [IUCN Species Survival Commission \(SSC\)](#) and [The IUCN Red List Partnership](#).

The IUCN Red List Partners are: [ABQ BioPark](#); [Arizona State University](#); [BirdLife International](#); [Botanic Gardens Conservation International](#); [Conservation International](#); [Missouri Botanical Garden](#); [NatureServe](#); [Re:wild](#); [Royal Botanic Gardens, Kew](#); [Sapienza University of Rome](#); [Texas A&M University](#); and [Zoological Society of London](#).