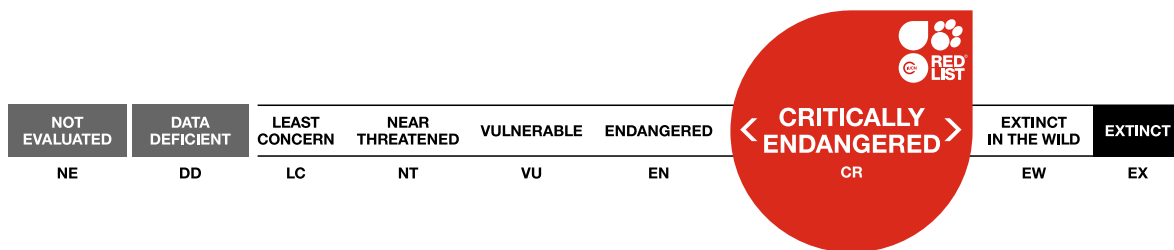




Diospyros crumenata, Karimbudan

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



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Citation: Amitha Bachan, K.H. & Devika, M.A. 2023. *Diospyros crumenata*. *The IUCN Red List of Threatened Species* 2023: e.T30864A2798277. <https://dx.doi.org/10.2305/IUCN.UK.2023-1.RLTS.T30864A2798277.en>

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Plantae	Tracheophyta	Magnoliopsida	Ericales	Ebenaceae

Scientific Name: *Diospyros crumenata* Thwaites

Common Name(s):

- Malayalam: Karimbudan, Karimaram

Taxonomic Source(s):

Board of Trustees, RBG Kew. 2020. Plants of the World Online. Richmond, UK Available at: <http://www.plantsoftheworldonline.org>. (Accessed: 1 July 2020).

Assessment Information

Red List Category & Criteria: Critically Endangered C2a(i) [ver 3.1](#)

Year Published: 2023

Date Assessed: January 7, 2022

Justification:

Diospyros crumenata is a 25 m high, large evergreen tree species endemic to low elevation evergreen forest of southern Western Ghats in India and Sri Lanka (six locations). The species has a narrow range of bioclimatic and habitat suitability (125 m to 600 m in elevation). Studies indicate drastic land-use change in its potential habitats with a decline in the population (Devika and Amitha Bachan 2021). The estimated extent of occurrence (EOO) of the species is 98,446 km². The area of occupancy (AOO) is 28 km². The minimum estimated population size is 200 individuals, with 40 mature individuals in the largest subpopulation. The locations are severely fragmented and the species require seed dispersal agents such as smaller mammals and larger frugivore birds like the great hornbill for seed germination (Devika and Amitha Bachan 2021). Most of the locations occur in areas that have been subjected to habitat loss from monoculture forest plantations, dams, agriculture expansion and the species is facing decline in population. Hence, it is assessed Endangered (EN) with criteria C2a(i).

Previously Published Red List Assessments

[1998 – Endangered \(EN\)](#)

1998 – Indeterminate (I)

Geographic Range

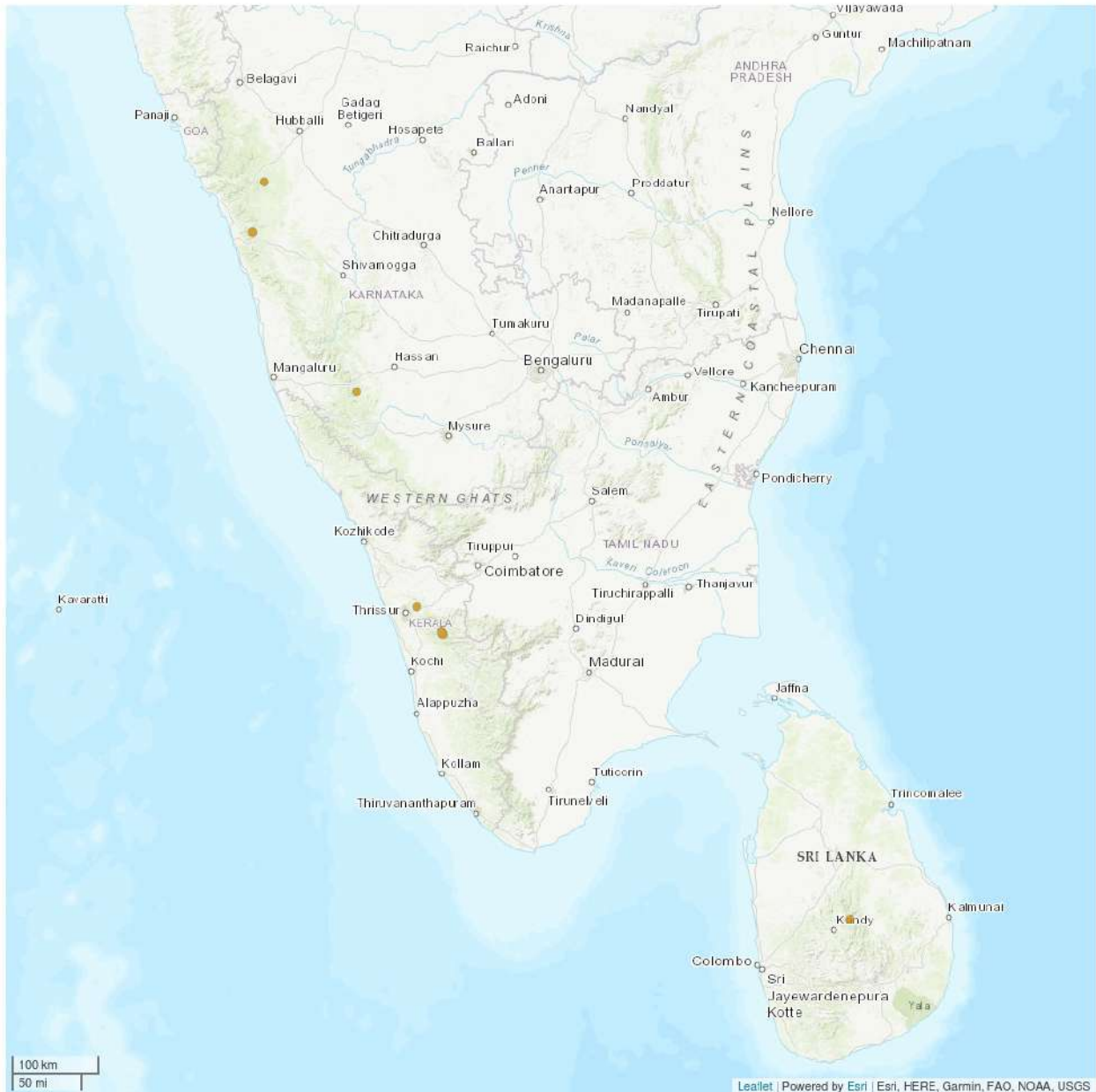
Range Description:

This species occurs in the southern Western Ghats (India) and Sri Lanka.

Country Occurrence:

Native, Extant (resident): India; Sri Lanka

Distribution Map

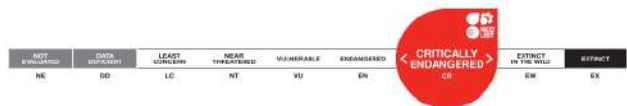


Legend

■ 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

The estimated population size is 200–420 individuals in all the six subpopulations with a density of 0.1 and abundance of 1.5 (Devika and Amitha Bachan 2021).

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

Diospyros crumenata is a large tree that occurs in low elevation evergreen forests, at 100–600 m elevation.

Systems: Terrestrial

Use and Trade

Fruits are used by the Kadar indigenous community in Vazhachal region (Amitha Bachan 2010).

Threats (see Appendix for additional information)

The main threat for the species are habitat conversion to forest plantations, agriculture and dams.

Conservation Actions (see Appendix for additional information)

No specific conservation actions are currently undertaken.

Credits

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

Reviewer(s): Hills, R.

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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 -> 1.6. Forest - Subtropical/Tropical Moist Lowland	Resident	Suitable	Yes

Plant and Fungal growth forms

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

Plant and Fungal growth forms
TL. Tree - large

Use and Trade

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

End Use	Local	National	International
1. Food - human	Yes	No	No
2. Food - animal	Yes	No	No

Threats

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

Threat	Timing	Scope	Severity
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.1. Shifting agriculture	Ongoing	Majority (50-90%)	Rapid declines
2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.2. Agro-industry plantations	Ongoing	Majority (50-90%)	Rapid declines
7. Natural system modifications -> 7.2. Dams & water management/use -> 7.2.10. Large dams	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 -> 2.3. Habitat & natural process restoration	-

Research Needed

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

Research Needed	Notes
2. Conservation Planning -> 2.1. Species Action/Recovery Plan	-

Additional Data Fields

Distribution
Estimated area of occupancy (AOO) (km ²): 28
Continuing decline in area of occupancy (AOO): Yes
Extreme fluctuations in area of occupancy (AOO): No
Estimated extent of occurrence (EOO) (km ²): 98446.714
Continuing decline in extent of occurrence (EOO): Yes
Extreme fluctuations in extent of occurrence (EOO): No
Number of Locations: 6
Continuing decline in number of locations: Yes
Extreme fluctuations in the number of locations: No
Lower elevation limit (m): 125
Upper elevation limit (m): 609
Population
Number of mature individuals: 200-420
Continuing decline of mature individuals: Yes
Extreme fluctuations: Unknown
Population severely fragmented: Yes
No. of subpopulations: 6
Continuing decline in subpopulations: Yes
All individuals in one subpopulation: Yes
No. of individuals in largest subpopulation: 40

Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: Yes

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