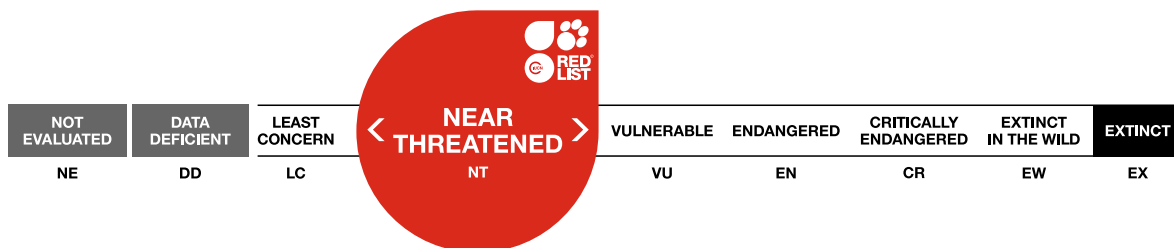


Emblyna acreensis

Assessment by: Borges, P.A.V. & Cardoso, P.



View on www.iucnredlist.org

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Araneae	Dictynidae

Scientific Name: *Emblyna acoreensis* Wunderlich, 1992

Synonym(s):

- *Dictyna acoreensis* (Wunderlich, 1992)

Taxonomic Source(s):

Platnick, N.I. 2014. The World Spider Catalog, Version 14.5. P. Merrett & H.D. Cameron (eds). American Museum of Natural History. Available at: <http://research.amnh.org/iz/spiders/catalog/index.html>. (Accessed: 31 March 2014).

Assessment Information

Red List Category & Criteria: Near Threatened B1b(i,ii,iii,iv,v)+2b(i,ii,iii,iv,v) [ver 3.1](#)

Year Published: 2021

Date Assessed: June 17, 2017

Justification:

Emblyna acoreensis is a spider species mostly restricted to the lower elevations of the western (Corvo and Flores) and central islands of the Azorean archipelago (Faial, Pico, S. Jorge, Graciosa and Terceira) (Borges *et al.* 2010). It has a relatively small Area of Occupancy (AOO = 296-1,384 km²) and a globally small Extent of Occurrence (EOO = ca 20,261-21,611 km²), but it is found at >20 locations. It is relatively abundant in Azorean endemic Ericaceae shrubs and in low elevation orchards, and occurs in three Natural Forest Reserves. Based on Ferreira *et al.* (2016) the habitat will decline as a consequence of climate change (increasing number of droughts, and habitat shifting and alteration). Ongoing, current threats are thought to be leading to declines, and the species is assessed as Near Threatened (NT).

Geographic Range

Range Description:

Emblyna acoreensis is restricted mostly to lower elevations, present in the western (Corvo and Flores) and central islands of the Azorean archipelago (Faial, Pico, S. Jorge, Graciosa and Terceira) (Azores, Portugal) (Borges *et al.* 2010). Within these seven islands, it is known from only three Natural Forest Reserves: Cabeço do Fogo (Natural Park of Faial); Mistério da Prainha, and Caiado (Natural Park of Pico). The Extent of Occurrence (EOO) is 20,261-21,611 km² and the estimated Area of Occupancy (AOO) is 296-1,384 km².

Country Occurrence:

Native, Extant (resident): Portugal (Azores)

Distribution Map

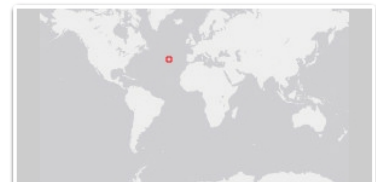


Legend

- EXTANT (RESIDENT)
- POSSIBLY EXTANT (RESIDENT)

Compiled by:

Azorean Biodiversity Group 2018



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



Population

This can be considered a relatively abundant endemic Azorean spider species, but mostly abundant at low elevation exotic forest, and rarer in orchards. A good adaptation to the human-made habitats is assumed, but current and future decreasing population densities due to pesticide pollution and continuing land-use changes at lower elevations as a consequence of using *Pittosporum undulaum* forest patches for making wood pellets for fuel, and the creation of cornfields for dairy cattle feeding.

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

The species occurs mainly in low elevations in exotic forests and orchards, but is also found in the native forests of three islands at mid altitude (Faial, Pico and Terceira), mostly associated with the canopies of *Erica azorica* and *Morella faya*. It is active during the day and night, and builds a messy-looking web with zig-zag lines. The spider is frequently found in the same samples as another Dictyinidae, such as the species *Nigma puella* and the Clubionid spider *Clubiona decora*.

Systems: Terrestrial

Threats (see Appendix for additional information)

In the past, the species has probably strongly declined due to changes in habitat size and quality (Triantis *et al.* 2010). However, the species seems to have survived in a few native forests of Terceira, Pico and Faial, as well as in low elevation human-modified habitats (orchards). The main current threats are the dynamics of the land-use change at low elevations in the Azores, particularly residential and commercial development, for housing and tourism development, as well as agricultural activity. Also important is the impact of pesticides in orchards. Based on Ferreira *et al.* (2016), the habitat will further decline as a consequence of climate change (increasing number of droughts, and habitat shifting and alteration).

Conservation Actions (see Appendix for additional information)

The species is not protected by regional law, but its habitat is in some regionally protected areas (Natural Parks of Faial, Pico and Terceira). Degraded habitats should be restored and a strategy needs to be developed to address the current threats from touristic activities and pesticides, and the future threat from climate change. Formal education and awareness are needed to decrease the use of pesticides; while further research is needed into its ecology and life history in order to find the impacts of current and future impacts of agriculture activities and obtain adequate information on population size, distribution and trends. It is also necessary to develop a monitoring plan for the wider invertebrate community in its habitat in order to contribute to a potential future species recovery plan. Monitoring every ten years using the BALA protocol will inform about habitat quality (see e.g. Gaspar *et al.* 2011).

Credits

Assessor(s): Borges, P.A.V. & Cardoso, P.

Reviewer(s): Russell, N.

Contributor(s): Lamelas-López, L.

Authority/Authorities: IUCN SSC Spider and Scorpion Specialist Group

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Citation

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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 -> 1.4. Forest - Temperate	Resident	Suitable	Yes
3. Shrubland -> 3.4. Shrubland - Temperate	Resident	Marginal	-
14. Artificial/Terrestrial -> 14.3. Artificial/Terrestrial - Plantations	Resident	Suitable	-

Threats

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

Threat	Timing	Scope	Severity	Impact Score
1. Residential & commercial development -> 1.1. Housing & urban areas	Ongoing	Minority (50%)	Rapid declines	Medium impact: 6
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects 2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance		
1. Residential & commercial development -> 1.3. Tourism & recreation areas	Ongoing	Majority (50-90%)	Very rapid declines	High impact: 8
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 2. Species Stresses -> 2.1. Species mortality		
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.2. Small-holder farming	Ongoing	Minority (50%)	Very rapid declines	Medium impact: 7
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 2. Species Stresses -> 2.1. Species mortality		
9. Pollution -> 9.3. Agricultural & forestry effluents -> 9.3.3. Herbicides and pesticides	Ongoing	Majority (50-90%)	Rapid declines	Medium impact: 7
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects 2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance		
10. Geological events -> 10.1. Volcanoes	Future	Minority (50%)	Very rapid declines	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 2. Species Stresses -> 2.1. Species mortality		
11. Climate change & severe weather -> 11.1. Habitat shifting & alteration	Future	Whole (>90%)	Rapid declines	Medium impact: 6
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects 2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance		

11. Climate change & severe weather -> 11.2. Droughts	Future	Majority (50-90%)	Rapid declines	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects 2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance		

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: Yes
In-place land/water protection
Conservation sites identified: Yes, over part of range
Percentage of population protected by PAs: 11-20
Area based regional management plan: No
Occurs in at least one protected area: Yes
Invasive species control or prevention: Unknown
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
1. Land/water protection -> 1.2. Resource & habitat protection
4. Education & awareness -> 4.1. Formal education
4. Education & awareness -> 4.3. Awareness & communications

Conservation Action Needed

5. Law & policy -> 5.4. Compliance and enforcement -> 5.4.3. Sub-national level

Research Needed

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

Research Needed

1. Research -> 1.2. Population size, distribution & trends

1. Research -> 1.3. Life history & ecology

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

3. Monitoring -> 3.1. Population trends

3. Monitoring -> 3.4. Habitat trends

Additional Data Fields

Distribution

Estimated area of occupancy (AOO) (km²): 296-1384

Continuing decline in area of occupancy (AOO): Yes

Extreme fluctuations in area of occupancy (AOO): Unknown

Estimated extent of occurrence (EOO) (km²): 20261-21611

Continuing decline in extent of occurrence (EOO): No

Extreme fluctuations in extent of occurrence (EOO): No

Number of Locations: 22

Continuing decline in number of locations: Yes

Extreme fluctuations in the number of locations: No

Lower elevation limit (m): 0

Upper elevation limit (m): 797

Population

Continuing decline of mature individuals: Yes

Population severely fragmented: No

Continuing decline in subpopulations: No

Extreme fluctuations in subpopulations: Unknown

Habitats and Ecology

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

Habitats and Ecology
Generation Length (years): 1

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