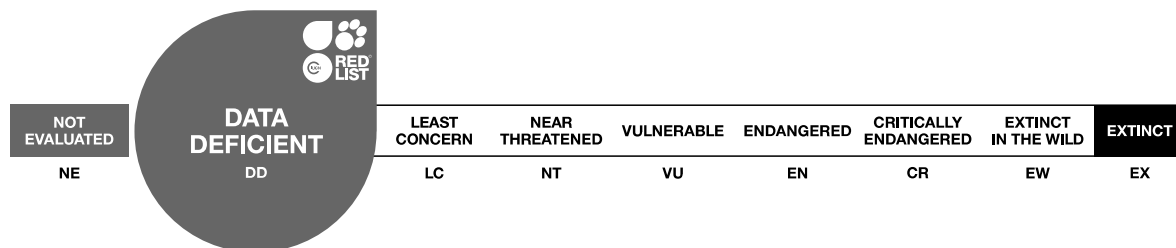


Mycobates tridentatus

Assessment by: Nunes, R. & Borges, P.A.V.



View on www.iucnredlist.org

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Arachnida	Oribatida	Punctoribatidae

Scientific Name: *Mycobates tridentatus* Weigmann 1976

Assessment Information

Red List Category & Criteria: Data Deficient [ver 3.1](#)

Year Published: 2021

Date Assessed: April 1, 2018

Justification:

Mycobates tridentatus is an endemic species of the Azores (Portugal), known from the islands of Faial and S. Miguel. From the available data, it potentially has a very small Extent of Occurrence (121 km²) and Area of Occupancy (12 km²), but these are likely to be underestimates, as this species probably has a wider distribution through the soil component of the islands. It can be assumed that this species is affected by human activities and invasive plant species that degrade natural habitats. Future climatic changes and increased risk of droughts will also affect this species. The present situation of this species needs to be further assessed and further research is needed into its population, distribution, threats, ecology and life history; while conservation of natural habitats and invasive species control could potentially aid this species' conservation. Based upon the incomplete knowledge regarding this species' population, distribution, threats and ecology, it is not possible to accurately estimate the extinction risk of the species and it could theoretically fall into any category. Therefore, this species is assessed as Data Deficient (DD).

Geographic Range

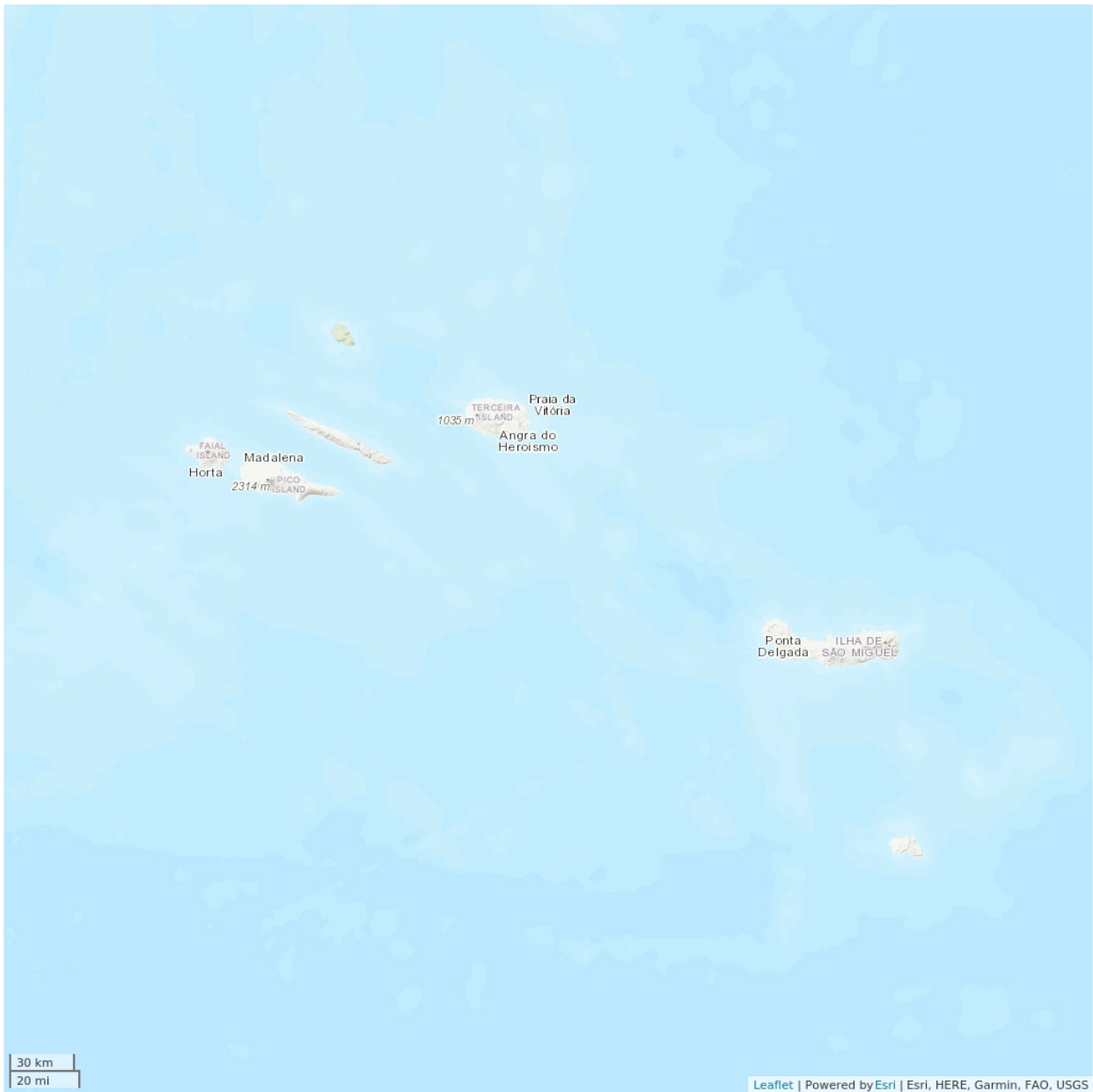
Range Description:

Mycobates tridentatus is an Azorean-endemic oribatid mite species known from Faial and S. Miguel islands (Azores, Portugal) (Borges *et al.* 2010). It is known from two Natural Forest Reserves; Caldeira do Faial and Cabeço do Fogo (Faial), and Pico da Vara (S. Miguel). From the available data, the Extent of Occurrence (EOO) would be ca. 121 km² and the Area of Occupancy (AOO) would be 12 km².

Country Occurrence:

Native, Extant (resident): Portugal (Azores)

Distribution Map

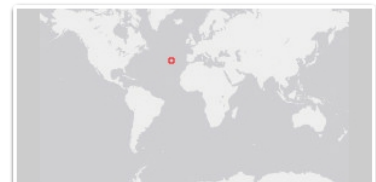
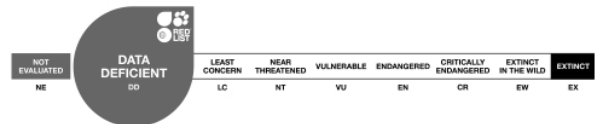


Legend

■ 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

No current population size estimates exist for this species. As an oribatid mite, this species is likely to be common and widespread in the soil habitat.

Current Population Trend: Unknown

Habitat and Ecology (see Appendix for additional information)

The ecology and traits of this species are unknown. Oribatid mites are associated with organic matter in most terrestrial ecosystems, being found throughout the soil profile, in surface litter, on grasses, shrubs or in the bark and leaves of trees, among other habitats. Oribatida are also one of the most numerically dominant arthropod groups in the organic horizons of most soils (Behan-Pelletier 1999). Specimens from Faial were collected on mosses in the trunks of *Juniperus brevifolia*.

Systems: Terrestrial

Threats (see Appendix for additional information)

A lack of information regarding the present range of this species precludes an assessment of potential threats. Nevertheless, it can be assumed that this species will be affected by future habitat declines as a consequence of climate change (Ferreira *et al.*, 2016) and increased droughts. This species was found in areas of native vegetation. It can, therefore, be supposed that factors that degrade overall habitat quality, like timber production or invasive plants might also affect this species.

Conservation Actions (see Appendix for additional information)

The species is not protected by regional law, but part of its habitat is in regionally protected areas (Natural Parks of Faial and S. Miguel). Besides climate change and increased risk of droughts, land-use changes and invasive species are likely the main current and future threats faced. As such, conservation of native habitats and invasive species control could potentially aid this species' conservation. Further research is needed into its population, distribution, threats, ecology and life history; and it is necessary to develop a monitoring plan for the invertebrate community in order to contribute to the conservation of this species.

Credits

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

Reviewer(s): Russell, N.

Authority/Authorities: IUCN SSC Spider and Scorpion Specialist Group

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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

Threats

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

Threat	Timing	Scope	Severity	Impact Score
2. Agriculture & aquaculture -> 2.2. Wood & pulp plantations -> 2.2.1. Small-holder plantations	Ongoing	Minority (50%)	Slow, significant declines	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation		
8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.1. Unspecified species	Ongoing	Minority (50%)	Slow, significant declines	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects		
11. Climate change & severe weather -> 11.1. Habitat shifting & alteration	Future	Majority (50-90%)	Slow, significant declines	Low impact: 4
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects		
11. Climate change & severe weather -> 11.2. Droughts	Future	Majority (50-90%)	Slow, significant declines	Low impact: 4
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 1. Ecosystem stresses -> 1.3. Indirect ecosystem effects		

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
Conservation sites identified: No
Occurs in at least one protected area: Yes

Conservation Actions Needed

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

Conservation Action Needed
2. Land/water management -> 2.1. Site/area management
2. Land/water management -> 2.2. Invasive/problematic species control
5. Law & policy -> 5.1. Legislation -> 5.1.3. 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
1. Research -> 1.5. Threats
2. Conservation Planning -> 2.2. Area-based Management Plan
3. Monitoring -> 3.1. Population trends
3. Monitoring -> 3.4. Habitat trends

Additional Data Fields

Distribution
Continuing decline in area of occupancy (AOO): Unknown
Extreme fluctuations in area of occupancy (AOO): Unknown
Continuing decline in extent of occurrence (EOO): Unknown
Extreme fluctuations in extent of occurrence (EOO): Unknown
Continuing decline in number of locations: Unknown
Extreme fluctuations in the number of locations: Unknown
Lower elevation limit (m): 600
Upper elevation limit (m): 900
Population
Continuing decline of mature individuals: Unknown
Extreme fluctuations: Unknown
Population severely fragmented: Unknown

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

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