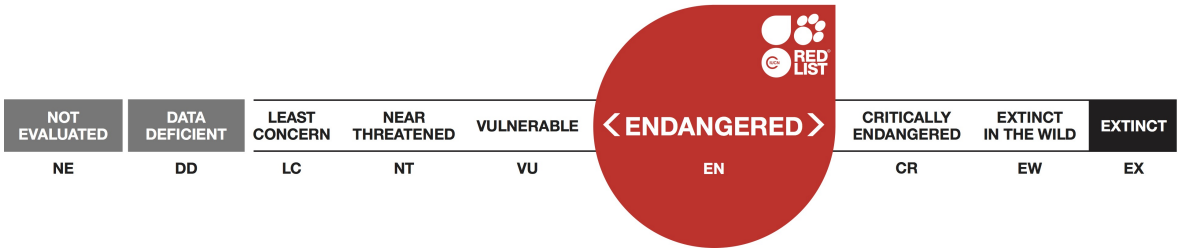
The IUCN Red List of Threatened Species™
ISSN 2307-8235 (online)
IUCN 2008: T70381370A70381417
Scope: Global
Language: English

Ramalina confertula

Assessment by: Aptroot, A. & Thor, G.



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Citation: Aptroot, A. & Thor, G. 2018. *Ramalina confertula*. The IUCN Red List of Threatened Species 2018: e.T70381370A70381417. http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T70381370A70381417.en

Taxonomy

Kingdom	Phylum	Class	Order	Family
Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Ramalinaceae

Taxon Name: *Ramalina confertula* Krog & Østh.

Identification Information:

A macrolichen that is recognizeable also to non-specialists.
Thallus saxicolous, opaque, pale green-grey, up to I cm high, forming dense. compacted, irregularly spreading colonies without a distinct. delimited holdfast. Laciniae fragile. simple or sparingly branched, up to I mm broad. fistulose, at first more or less terete, but soon flattening as the lower tissue layers split open almost to the base. exposing the medulla. Apices often revolute. Soredia absent. Cortex indistinct, chondroid tissue of uneven thickness, medulla dense. Apothecia and pycnidia not seen. TLC: divaricatic acid & usnic acid (+/-).

Assessment Information

Red List Category & Criteria: Endangered D ver 3.1

Year Published: 2018

Date Assessed: August 31, 2017

Justification:

This macrolichen belongs to a genus with (for fungi) surprisingly many species with narrow distributions. This species is only known from two volcanoes on the small island of Porto Santo.
Described in 1980 and never found anywhere else, but always observed by lichenologists visiting the type locality. Criterion A: There is not enough information to assess against this criterion.
Criterion B: There is not enough information to assess against this criterion.
Criterion C: There is not enough information to assess against this criterion.
Criterion D: There are less than 250 individuals estimated, this has been calculated using the definition that 1 individual = 1 m² (see Guideline drafts for fungal red-listing 20140415), fulfilling criteria of D1; AOO is less than 20 km² and number of locations is 1.

Geographic Range

Range Description:

Only on the small island of Porto Santo, and there only on two volcanoes, viz. Pico de Facho and terra Chã.
Growing together with other endemic macrolichens, such as *Anzia centrifuga*, *Ramalina erosa*, *R. jamesii*, *R. nematodes* and *R. timdaliana*.

Country Occurrence:

Native: Portugal (Madeira)

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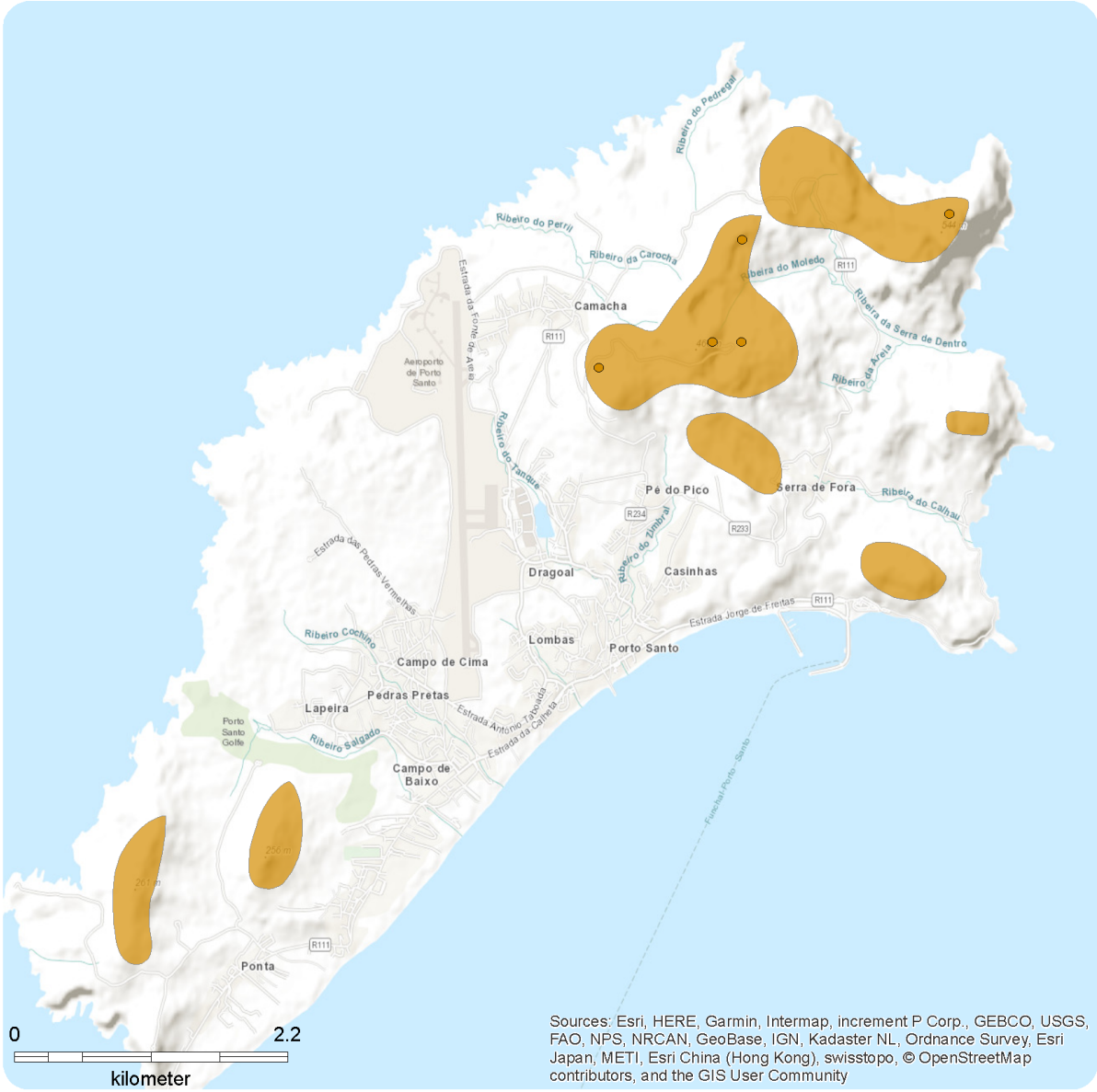
Distribution Map

Ramalina confertula



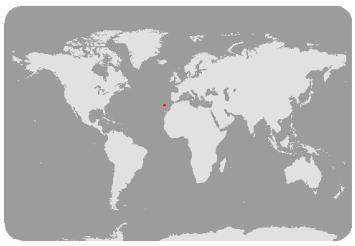
Range

- Extant (resident)
- Extant (resident)

Compiled by:

Andre Aptroot, 2018

NE DD LC NT VU **EN** ENDANGERED CR EW EX



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

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Population

Only on the rock of the summit on two volcanoes, area of occupancy has been estimated as less than 20 km², and the area actually inhabited by this species is probably less than a 100 m². About 200 specimens were seen during an assessment in May 2015 (Sparrius et al.2017), but only 10% of the suitable habitat on Porto Santo could be investigated (much of it is on steep cliffs).

Current Population Trend: Stable

Habitat and Ecology (see Appendix for additional information)

On exposed lava rock at the summit of an old cone at 515 m altitude, and at a another lava cone facing the sea at 375 m altitude.

Systems: Terrestrial

Threats (see Appendix for additional information)

Direct threats included increased climbing of the summit by tourists will deteriorate the populations and further collecting by lichenologists or naturalists, which should be forbidden.

Indirect threats include climate change, which may change this unique habitat, and even with subtle changes, the chances are high that the species goes extinct soon. It will in any case not be able to successfully colonise another locality, not on its own, and possibly also not with human help, as the conditions are apparently critical.

Conservation Actions (see Appendix for additional information)

Tourism to the summit of the Pico de Facho should be strictly regulated, either by forbidding access altogether (which will be impossible to control) or rather by opening a small trail and putting an information shield in place alerting the tourist on the unique lichens present, and the harm done to them by trampling.

The known locality at Terra-Chã is along a trail and is susceptible to accidental removing. However, the existence of further localities, in places that are difficult to reach, is likely.

The species should feature on a leaflet with protected plants.

Credits

Assessor(s): Aptroot, A. & Thor, G.

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http://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T70381370A70381417.en

Bibliography

Aptroot, A. and Schumm, F. 2008. Key to Ramalina species known from Atlantic islands, with two new species from the Azores. *Sauteria* 15: 21-57.

IUCN. 2018. The IUCN Red List of Threatened Species. Version 2018-2. Available at: www.iucnredlist.org. (Accessed: 15 November 2018).

Krog, H. and Oesthagen, H. 1980. Two new Ramalina species from Porto Santo, the Madeira Islands. *Norwegian journal of Botany* 27: 185-188.

Sérusiaux, E. 1989. Liste Rouge des macrolichen dans la Communauté Europeenne. Département de Botanique, Liège.

Sparrius, L.B. et al. 2017. Estimating the population size of the endemic lichens Anzia centrifuga (Parmeliaceae) and Ramalina species (Ramalinaceae) on Porto Santo (Madeira archipelago). *The Bryologist* 119 (in press).

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Disclaimer

External Resources

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?
0. Root -> 6. Rocky areas (eg. inland cliffs, mountain peaks)	-	Suitable	-

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

Threat	Timing	Scope	Severity	Impact Score
1. Residential & commercial development -> 1.3. Tourism & recreation areas	Ongoing	Minority (50%)	Slow, significant declines	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality 2. Species Stresses -> 2.2. Species disturbance		
11. Climate change & severe weather -> 11.1. Habitat shifting & alteration	Ongoing	Minority (50%)	Causing/could cause fluctuations	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		
6. Human intrusions & disturbance -> 6.1. Recreational activities	Ongoing	Minority (50%)	Slow, significant declines	Low impact: 5
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		

Conservation Actions in Place
(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Actions in Place
In-Place Research, Monitoring and Planning
Action Recovery plan: No
In-Place Land/Water Protection and Management
Conservation sites identified: Yes, over part of range

Conservation Actions Needed
(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Actions Needed
1. Land/water protection -> 1.2. Resource & habitat protection

Conservation Actions Needed
2. Land/water management -> 2.1. Site/area management
4. Education & awareness -> 4.3. Awareness & communications
5. Law & policy -> 5.2. Policies and regulations

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
1. Research -> 1.6. Actions
2. Conservation Planning -> 2.2. Area-based Management Plan
3. Monitoring -> 3.1. Population trends

Additional Data Fields

Distribution
Estimated area of occupancy (AOO) (km^2): 19
Number of Locations: 1
Lower elevation limit (m): 375
Upper elevation limit (m): 515
Population
Number of mature individuals: 249

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: Arizona State University; BirdLife International; Botanic Gardens Conservation International; Conservation International; NatureServe; Royal Botanic Gardens, Kew; Sapienza University of Rome; Texas A&M University; and Zoological Society of London.