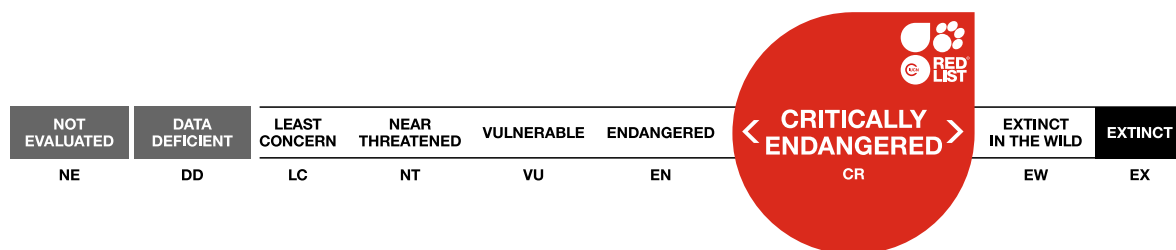


Ramalina portosantana

Amendment version

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



View on www.iucnredlist.org

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Ramalinaceae

Scientific Name: *Ramalina portosantana* Krog

Identification Information:

Thallus saxicolous, ascending, becoming subpendulous on steep rock faces, rigid, up to 6 cm long, with a number of branches from a holdfast up to 5 mm wide. Branches greyish yellow, sometimes partly pale brown, solid, simple or sparingly branched, subterete or more or less complanate, 1-2 mm wide, tapering gradually towards blunt apices, surface rugulose, with shiny corticate areas interspersed with low, irregularly reticulate ridges which here and there develop pseudocyphellae. Cortex up to 80 µm thick, of thick-walled, mainly anticlinal hyphae. Chondroid tissue well-developed, occasionally adjoining the cortex but mostly forming numerous strands embedded in a dense medulla. Soredia absent. Apothecia not seen. Pycnidia mostly with black ostioles.

Chemistry (TLC): Salazinic acid, usnic acid (trace).

Assessment Information

Red List Category & Criteria: Critically Endangered B1ab(iii)+2ab(iii) [ver 3.1](#)

Year Published: 2020

Date Assessed: August 31, 2017

Justification:

This macrolichen occurs only on one volcano on a small island. It was described in 1990 by H. Krog and has never been found anywhere else, but is always found by lichenologists visiting its only site. With a severely restricted range and continuing decline in habitat quality at its single location, it is assessed as Critically Endangered B1ab(i,ii,iii)+2ab(i,ii,iii).

Previously Published Red List Assessments

2019 – Critically Endangered (CR)

<https://dx.doi.org/10.2305/IUCN.UK.2019-3.RLTS.T70380974A70380980.en>

Geographic Range

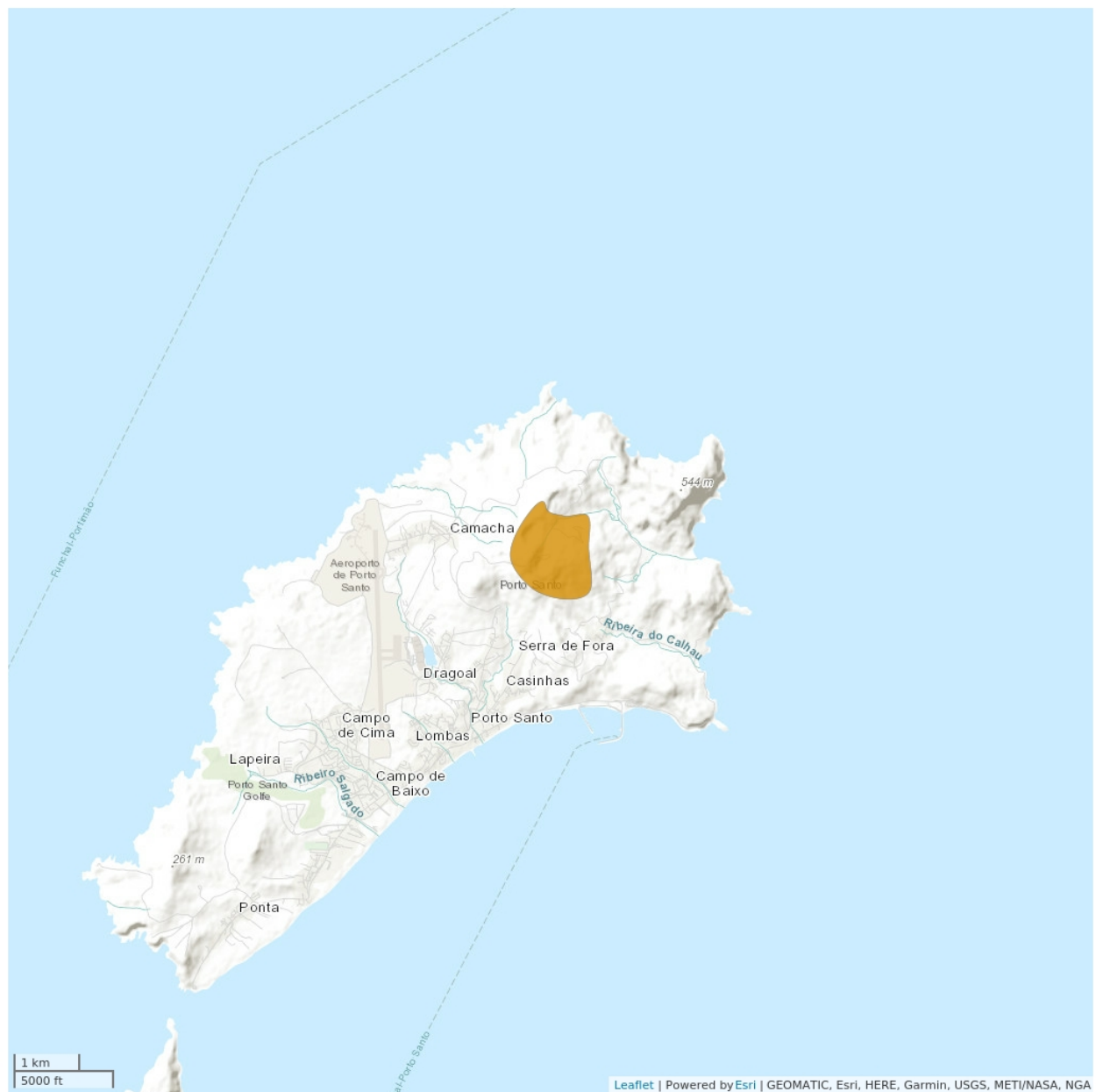
Range Description:

Confined to exposed lava rock on and near the summit of the Pico do Facho on Porto Santo, the area of occupancy of this species is 2 km², although the area that it actually occupies is estimated to be significantly less than this.

Country Occurrence:

Native, Extant (resident): Portugal; Portugal (Madeira)

Distribution Map

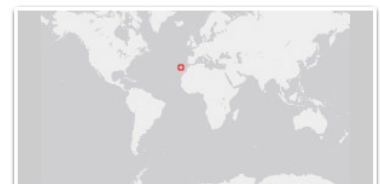
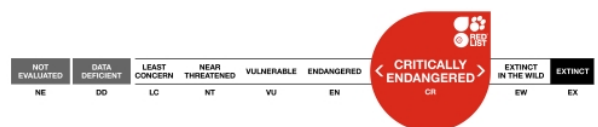


Legend

■ EXTANT (RESIDENT)

Compiled by:

IUCN 2019



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 total population is estimated as 500-1000 individuals (Sparrius *et al.* 2017).

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

On exposed lava rock on and near the summit of the Pico do Facho volcano on Porto Santo.

Systems: Terrestrial

Threats (see Appendix for additional information)

This species is threatened by a number of direct and indirect threats. The direct threats facing this species include increased climbing of the summit by tourists which will deteriorate the populations. A further direct threat is collecting by lichenologists or naturalists, which should be forbidden. A future increase in wildfires could also threaten this species (Sparrius *et al.* 2017).

The indirect threats facing this species 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 possible 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 impossible to control) or rather by opening a small trail and putting an information shield in place alerting tourists to the unique lichens present, and the harm done to them by trampling.

The species should feature on a leaflet with protected plants.

Credits

Assessor(s):	Aptroot, A. & Thor, G.
Reviewer(s):	Scheidegger, C.
Contributor(s):	Weerakoon, G. & Perez-Ortega, S
Facilitator(s) and Compiler(s):	Allen, J.

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Sparrius, L.B., Aptroot, A., Sipman, H.J.M., Pérez-Vargas, I., Matos, P., Gerlach, A. and Vervoort, M. 2017. Estimating the population size of the endemic lichens *Anzia centrifuga* (Parmeliaceae) and *Ramalina* species (Ramalinaceae) on Porto Santo (Madeira archipelago). *The Bryologist* 119.

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

Plant Growth Forms

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

Plant Growth Form
LC. Lichen
L. Lithophyte

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%)	Causing/could cause fluctuations	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		
6. Human intrusions & disturbance -> 6.1. Recreational activities	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		
7. Natural system modifications -> 7.1. Fire & fire suppression -> 7.1.1. Increase in fire frequency/intensity	Future	-	-	No/negligible impact: 1
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation 2. Species Stresses -> 2.1. Species mortality		
7. Natural system modifications -> 7.3. Other ecosystem modifications	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 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 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

Conservation Action in Place
Action Recovery Plan: No
In-place land/water protection
Conservation sites identified: Yes, over part of range

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 -> 2.3. Habitat & natural process restoration
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 -> 1.1. Taxonomy
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 -> 2.1. Species Action/Recovery Plan
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): 4
Continuing decline in area of occupancy (AOO): No
Extreme fluctuations in area of occupancy (AOO): No
Estimated extent of occurrence (EOO) (km ²): 4
Continuing decline in extent of occurrence (EOO): No

Distribution
Extreme fluctuations in extent of occurrence (EOO): No
Number of Locations: 1
Continuing decline in number of locations: No
Extreme fluctuations in the number of locations: No
Lower elevation limit (m): 250
Upper elevation limit (m): 600
Population
Number of mature individuals: 500-1,000
Extreme fluctuations: No
Population severely fragmented: No
No. of subpopulations: 1
Continuing decline in subpopulations: No
Extreme fluctuations in subpopulations: No
All individuals in one subpopulation: Yes
Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: Yes
Movement patterns: Not a Migrant
Congregatory: Congregatory (year-round)

Amendment

Amendment reason: Wildfires have been added as an additional threat, and the spelling of H. Krog has been corrected in the Rationale.

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