

Xanthoparmelia beccae

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Parmeliaceae

Taxon Name: *Xanthoparmelia beccae* Aptroot

Identification Information:

This species is unmistakable and recognizable for all naturalists.

Thallus fruticose, much dissected into very fine, somewhat tubular, often branched lobes of c. 0.3 mm wide; upper surface yellowish-green; lower surface black; isidiate with isidia of the same width as the lobes; medulla P+ red; KOH+ yellow/orange (not >red); apothecia unknown.

Assessment Information

Red List Category & Criteria: Vulnerable B2ab(iii,iv,v); D1+2 [ver 3.1](#)

Year Published: 2018

Date Assessed: August 25, 2017

Justification:

This species grows only on gravelly places on the mid-elevations of the mountains on St Helena. It is subject to accidental extinction by trampling, collecting, road development, and locally over-grazing. Collections should be regulated, also for scientific research.

Criterion A: may apply: the largest known location, 1 of 4 known to date, is on the track of a scheduled road which is being built in 2017; there are certainly more than 4 locations though: some localities have not yet been discovered.

Criterion B: does not apply.

Criterion C: does not apply.

Criterion D: According to the known number of populations (4) and the estimated number (c. 10) we estimate the number of individuals <1000.

The actual AOO is very likely <20km². this combined with the threat posed by the construction of a road over one of the largest known localities for this species means that it could be pushed into Critically Endangered, or even Extinct in a very short time space of time.

Geographic Range

Range Description:

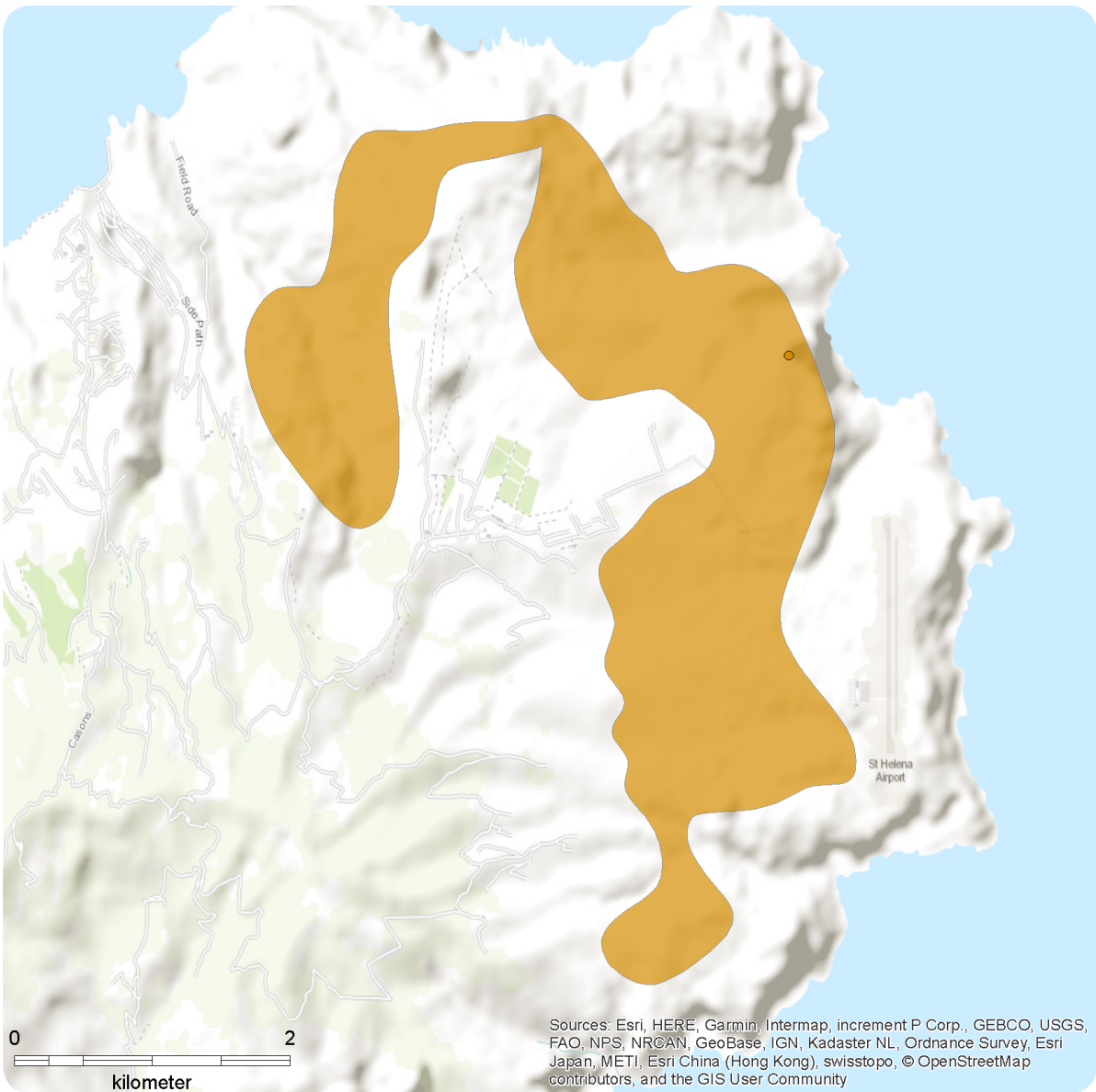
Occurs at mid elevations (400 to 480 m) of mountains on St Helena; known from four localities on the northern and eastern parts of the island.

Country Occurrence:

Native: Saint Helena, Ascension and Tristan da Cunha (Saint Helena (main island))

Distribution Map

Xanthoparmelia beccae



- Range
- Extant (resident)
 - Extant (resident)

Compiled by:
Sparrius et al. 2017

NE DD LC NT **< VU >** EN CR EW EX

VULNERABLE



Population

The known population consists of at most a few dozen square meters in four stands; it is assumed that two to three times as many locations may exist. This species is asexual, so this has low genetic diversity and well as low plasticity. Hence populations may have problems to cope potential changes in local conditions.

Current Population Trend: Decreasing

Habitat and Ecology (see Appendix for additional information)

Grows on gravelly rocky soil in temperate shrubland, lying almost loose but does not get moved around.

Systems: Terrestrial

Threats (see Appendix for additional information)

The largest known locality is at a place that is being developed to build a road for the new airport. It can be assumed lost.

It is subject to accidental extinction by trampling, collecting, road development, and localised over-grazing.

Conservation Actions (see Appendix for additional information)

The population on the track of the road that is being built could be removed to a safe place nearby. This has actually been suggested, and it may or may not be carried out. It should be forbidden to collect this species.

In order to assess the population, some areas of St Helena that have not yet been investigated for lichens should be visited by a specialist.

Credits

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Bibliography

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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?
3. Shrubland -> 3.4. Shrubland - Temperate	Resident	Suitable	Yes

Threats

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

Threat	Timing	Scope	Severity	Impact Score
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.2. Small-holder grazing, ranching or farming	Ongoing	Minority (50%)	Rapid declines	Medium impact: 6
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion 2. Species Stresses -> 2.1. Species mortality		
4. Transportation & service corridors -> 4.1. Roads & railroads	Ongoing	Minority (50%)	Rapid declines	Medium impact: 6
	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		
5. Biological resource use -> 5.2. Gathering terrestrial plants -> 5.2.1. Intentional use (species is the target)	Ongoing	Minority (50%)	Slow, significant declines	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 -> 1.1. Ecosystem conversion 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 Actions in Place
In-Place Land/Water Protection and Management
Occur in at least one PA: No

Conservation Actions Needed

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

Conservation Actions Needed
3. Species management -> 3.4. Ex-situ conservation -> 3.4.1. Captive breeding/artificial propagation
5. Law & policy -> 5.1. Legislation -> 5.1.2. National level

Research Needed

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

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

Additional Data Fields

Distribution
Estimated area of occupancy (AOO) (km ²): 20
Number of Locations: 10
Continuing decline in number of locations: Yes
Lower elevation limit (m): 400
Upper elevation limit (m): 480
Population
Number of mature individuals: 800-999
Continuing decline of mature individuals: Yes
Extreme fluctuations: No
Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: Yes
Generation Length (years): 10

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