The IUCN Red List of Threatened Species™
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Silene auriculifolia

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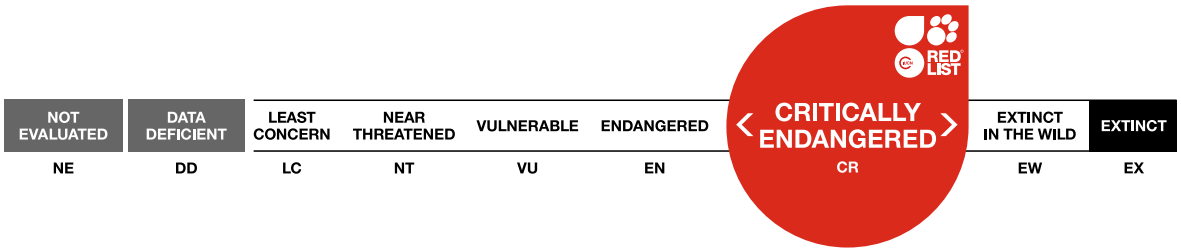

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Plantae	Tracheophyta	Magnoliopsida	Caryophyllales	Caryophyllaceae

Scientific Name: *Silene auriculifolia* Pomel

Synonym(s):

- *Silene mollissima* (L.) Pers. subsp. *auriculifolia* (Pomel) Maire

Taxonomic Source(s):

Board of Trustees, RBG Kew. 2019. Plants of the World Online Portal. Richmond, UK Available at: http://www.plantsoftheworldonline.org.

Taxonomic Notes:

This species has been recorded from Málaga in southern Spain. According to Jeamonond (1984) the identification of the herbarium specimens was problematic; he supposed that it could to be a hybrid specimen (*Silene tomentosa* x *Silene andryalifolia*) or another morphotype of *Silene andryalifolia* or *Silene auriculifolia* or some other taxon. For this reason we consider *Silene auriculifaulia* to be endemic to Algeria pending confirmation of the identity of the record from southern Spain.

Assessment Information

Red List Category & Criteria: Critically Endangered B1ab(iv,v)+2ab(iv,v); C2a(i,ii); D ver 3.1

Year Published: 2020

Date Assessed: December 29, 2019

Justification:

This species is endemic to a very restricted area of the coastal submaritime cliffs from Djebel Murdjadjou to Djebel Santa Cruz massif close to the city of Oran, Algeria, and from another locality (Djebel Krichtel) now presumed extinct.

The species is classified as Critically Endangered (CR: B1ab(iv,v)+2ab(iv,v); C2a(i,ii); D) because of its very low population (less than 50 mature individuals) that is presumed to be still declining. At this stage, very few and minor threats are known, such as the easy accessibility of the site and its difficulty to regenerate. The principal cause of the population decline stays problematic. There is an urgent need for monitoring and conservation of the remaining individuals, including *ex situ* seed banking.

Geographic Range

Range Description:

This species is endemic to the littoral cliffs of Djebel Murdjadjou, a massif close to the city of Oran in northwestern Algeria.

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The historical data (Pomel 1874, Battandier and Trabut 1888, Maire 1963, Quézel and Santa 1963) displayed its rarity in its natural area, but also it was largely distributed from Djebel Murdjadjou to the nearby Djebel Santa Cruz massif (Jeanmonod 1984). A further locality was reported at Djebel Krichtel near Oran (Daumas *et al.* 1952); the species was seen there again by Jeanmonod in 1984 but it was not found during the recent fieldwork that informed this present assessment. Currently, the littoral cliffs of Djebel Krichtel are being transformed into a water games park.

The species was recorded from Málaga in southern Spain in 1904 (Castroviejo 1990). However, the identity of that record requires conformation and the species is here considered to be endemic to Algeria.

Country Occurrence:

Native, Extant (resident): Algeria

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Distribution Map

Legend

EXTANT (RESIDENT)

Compiled by:

SSC Mediterranean Plant SG 2020

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

Prospecting trips organised to search for this species were carried out during the spring period (March to July) from 2017 to 2019. The first two individuals were observed on April 20th, 2019 while climbing Djebel Murdjadjou. The other individuals were observed on the same massif on June 30th, 2019 using binoculars. Six individuals were counted in total. No juvenile individuals were observed.

Current Population Trend: Unknown

Habitat and Ecology (see Appendix for additional information)

This species grows between hollows of rocks on the calcareous cliffs with northeast orientation. The maximum lifetime of this species is not known, but the remaining tufts seem to be over than several decades old. the surrounding vegetation is dominated by *Pinus halepensis*, *Chamaerops humilis, Daphne gnidium...* etc, but the cliffs themselves are characterised by various rupicolous taxa (*Campanula mollis*, *Silene pseudoatocion*, *Caralluma munbyana*).

Systems: Terrestrial

Use and Trade (see Appendix for additional information)

This species is not known to be used

Threats (see Appendix for additional information)

The presence of this species in a touristic area represents the major threat observed so far.

There is also the potential that the species may face reproductive difficulties, which could lead to its disappearance in the next few decades. Therefore, there is an urgent need for monitoring and conservation of the remaining individuals and *in situ* reinforcement.

Conservation Actions (see Appendix for additional information)

This species is not protected by any Algerian law and it is not included in any protected area. No specific conservation actions are in place. The species has not previously been assessed for the IUCN Red List. *In situ* conservation is urgently required because of its poor reproduction. This situation can make a future threat, so *ex situ* seed banking is needed too for a potential reintroduction.

Credits

Assessor(s): Mesbah, M., Bekdouche, F., Laidi, K., Sahnoune, M. & Véla, E.

Reviewer(s): Allen, D.J.

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Disclaimer

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
SS. Shrub - small

Threats

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

Threat	Timing	Scope	Severity	Impact Score
6. Human intrusions & disturbance -> 6.1. Recreational activities	Ongoing	Unknown	Unknown	Unknown
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
12. Other options -> 12.1. Other threat	Future	Unknown	Unknown	Unknown
	Stresses:	2. Species Stresses -> 2.3. Indirect species 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
In-place land/water protection
Conservation sites identified: No
Percentage of population protected by PAs: 0
Invasive species control or prevention: No
In-place species management
Harvest management plan: No
Successfully reintroduced or introduced benignly: No
In-place education
Subject to recent education and awareness programmes: No
Included in international legislation: No

Conservation Actions Needed

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

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Conservation Action Needed
3. Species management -> 3.2. Species recovery
3. Species management -> 3.4. Ex-situ conservation -> 3.4.1. Captive breeding/artificial propagation
3. Species management -> 3.4. Ex-situ conservation -> 3.4.2. Genome resource bank
4. Education & awareness -> 4.3. Awareness & communications
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 -> 1.3. 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
3. Monitoring -> 3.4. Habitat trends

Additional Data Fields

Distribution
Estimated area of occupancy (AOO) (km^2): 4
Continuing decline in area of occupancy (AOO): Unknown
Extreme fluctuations in area of occupancy (AOO): No
Estimated extent of occurrence (EOO) (km^2): 0
Continuing decline in extent of occurrence (EOO): Unknown
Extreme fluctuations in extent of occurrence (EOO): No
Number of Locations: 1
Continuing decline in number of locations: Yes
Extreme fluctuations in the number of locations: No
Lower elevation limit (m): 410
Upper elevation limit (m): 420

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Population
Number of mature individuals: 6
Continuing decline of mature individuals: Yes
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
No. of individuals in largest subpopulation: 6
Habitats and Ecology
Continuing decline in area, extent and/or quality of habitat: No
Generation Length (years): 30-40

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.