

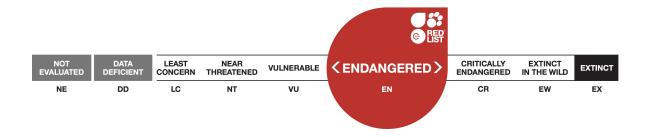
IUCN 2019: T72458759A72458763 Scope: Global & Mediterranean

Language: English



## Silene sessionis

Assessment by: Mesbah, M., Bekdouche, F., Véla, E. & Sahnoune, M.



View on www.iucnredlist.org

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### **Taxonomy**

Kingdom	Phylum	Class	Order	Family
Plantae	Tracheophyta	Magnoliopsida	Caryophyllales	Caryophyllaceae

**Taxon Name:** Silene sessionis Batt.

#### **Taxonomic Source(s):**

Marhold, K. 2011. Caryophyllaceae. In: Euro+Med Plantbase - the information resource for Euro-Mediterranean plant diversity. Berlin Available at: http://ww2.bgbm.org/EuroPlusMed/.

### **Assessment Information**

**Red List Category & Criteria:** Endangered D ver 3.1

Year Published: 2019

**Date Assessed:** September 11, 2018

#### **Justification:**

This species is endemic to a very restricted area of coastal sea cliffs on the Yemma Gouraya Massif near the city of Bejaia, Algeria. The species is assessed as Endangered (EN: D) because of its naturally very low population (fewer than 100 mature individuals). At this stage, very few and minor threats are known, such as climbing activities, garbage pollution, invasive species and possible climatic changes in the future. Conservation actions such as awareness-raising would be helpful. Research needs are important because the species is biologically really little known.

# **Geographic Range**

#### **Range Description:**

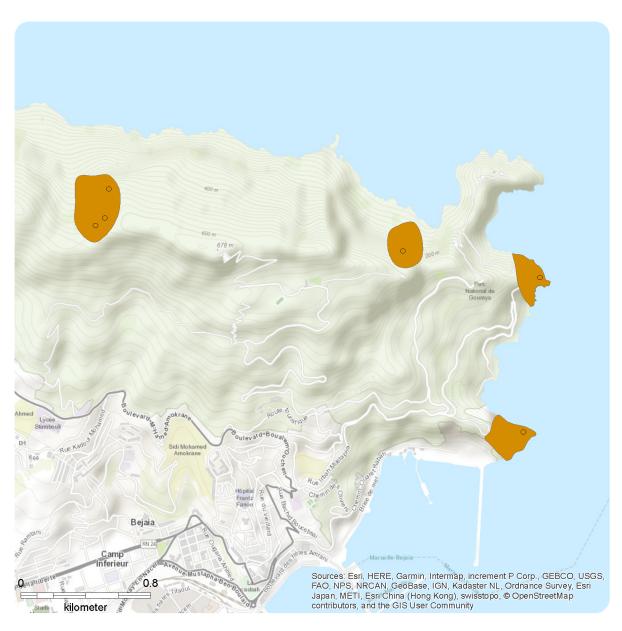
The species is endemic to the calcareous cliffs of the Yemma Gouraya Massif near the city of Bejaia, Algeria. To the historical localities from Cap Bouak to Cap Carbon (Battandier 1915, Quézel and Santa 1962, Maire 1963) we recently added few newly discovered sites near the top of Yemma Gouraya Massif at Yemma Yamna (Mesbah *et al.* 2017).

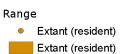
#### **Country Occurrence:**

Native: Algeria

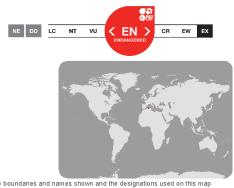
# **Distribution Map**

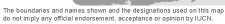
Silene sessionis





Compiled by: IUCN







## **Population**

An exhaustive inventory was carried out in the field from April to November 2017 (Mesbah *et al.* 2017) without climbing on the cliff but using binoculars. 106 individuals were counted in total, including approximately 10-25 non-mature juveniles. Subpopulations cannot be delimited because we do not know the pollinator insects and their flight area. In fact, we do not know if the species is outcrossing at all (even outcrossing is not demonstrated).

**Current Population Trend: Stable** 

### Habitat and Ecology (see Appendix for additional information)

This is a long-lived, pluricarpic and chasmophytic perennial plant. We do not know the maximum lifespan of the species, but the oldest specimens are obviously several decades old. It grows exclusively on shaded calcareous cliffs exposed to the north, very occasionally exposed to the morning or evening sun during the summer. The surrounding vegetation is dominated by the Mediterranean sclerophyllous Olea europaea, Ceratonia siliqua, Pistacia lentiscus, etc. But the cliffs themselves are characterised by the presence of diverse rupicolous taxa, most of them also stenoendemic (Hypochaeris saldensis, Bupleurum plantagineum, Cheiranthus cheiri subsp. inexpectans, Sanguisorba ancistroides var. battandieri), and few of them are haloresistant (e.g., Asteriscus maritimus) at the Salines and Cap Noir locations.

Systems: Terrestrial

#### **Use and Trade**

The species is not known to be used.

### Threats (see Appendix for additional information)

The main emerging threat seems to be the development of climbing activities within the National Park. Nevertheless, at this stage, cliffs hosting endemic and protected plants are avoided. The Cap Bouak locality is polluted by garbage and solid waste thrown from the top of the cliff, because of the presence of an inhabited area. The impacts of ongoing and future climatic change are not known. Nevertheless, the species grows in a naturally buffered environment with a particularly stable microclimate and has probably resisted the last ice age and the Holocene warming.

Forest fires are not currently considered as a threat because: 1) the cliffs are generally not covered by a continuous combustible vegetation, and 2) the few individuals that grow very close to the surrounding combustible vegetation are presumed to be resprouting after fire, as with many chamephytic Mediterranean chasmophytes.

## **Conservation Actions** (see Appendix for additional information)

The species is legally protected by the Algerian law (Executive Decree, 4 January 2012). All known locations are situated within the central and eastern sectors of the Gouraya National Park (Parc National De Gouraya). No specific conservation actions are in place. *Ex situ* conservation actions are not immediately needed but could be useful in case of a future major threat. Training for technical staff and awareness for climbers are recommended.

The species was assessed in 1997 as 'E' (Endangered) under an earlier version of the IUCN Red List categories and criteria (Walter and Gillett 1998).

## **Credits**

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

Reviewer(s): Allen, D.J.

Contributor(s): Mahmoudi, S.

## **Bibliography**

Battandier, J.A. 1914. Note sur quelques plantes récoltées pendant la Session extraordinaire et sur un nouveau genre de Composées du Sahara austro-occidental. *Bulletin de la Société botanique de France* 61: 356-358.

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#### Citation

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#### **External Resources**

For <u>Images and External Links to Additional Information</u>, <u>please see the Red List website</u>.

# **Appendix**

### **Habitats**

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

Habitat	Season	Suitability	Major Importance?
3. Shrubland -> 3.8. Shrubland - Mediterranean-type Shrubby Vegetation	Resident	Marginal	-
0. Root -> 6. Rocky areas (eg. inland cliffs, mountain peaks)	Resident	Suitable	Yes

### **Plant Growth Forms**

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

Plant Growth Forms	
Shrub - small	

### **Threats**

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

Threat	Timing	Scope	Severity	Impact Score
11. Climate change & severe weather -> 11.5. Other impacts	er Future	Unknown	Unknown	Unknown
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
6. Human intrusions & disturbance -> 6.1. Recreational activities	Future	Majority (50- 90%)	Slow, significant declines	Low impact: 4
	Stresses:	<ol> <li>Ecosystem stresses -&gt; 1.2. Ecosystem degradation</li> <li>Species Stresses -&gt; 2.1. Species mortality</li> </ol>		
9. Pollution -> 9.4. Garbage & solid waste	Ongoing	Minority (50%)	No decline	Low impact: 4
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		J
		<ol><li>Species Stress</li></ol>	ses -> 2.2. Species dis	turbance

# **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
Systematic monitoring scheme: No
In-Place Land/Water Protection and Management
Conservation sites identified: No

Conservation Actions in Place
Occur in at least one PA: Yes
Percentage of population protected by PAs (0-100): 100
Area based regional management plan: Yes
Invasive species control or prevention: No
In-Place Species Management
Harvest management plan: No
Successfully reintroduced or introduced beningly: No
Subject to ex-situ conservation: No
In-Place Education
Subject to recent education and awareness programmes: No

### **Conservation Actions Needed**

Included in international legislation: No

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

Subject to any international management/trade controls: No

#### **Conservation Actions 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 -> 4.2. Training
- 4. Education & awareness -> 4.3. Awareness & communications

### **Research Needed**

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

#### **Research Needed**

- 1. Research -> 1.3. Life history & ecology
- 2. Conservation Planning -> 2.2. Area-based Management Plan
- 3. Monitoring -> 3.1. Population trends

#### **Additional Data Fields**

Distribution

Estimated area of occupancy (AOO) (km²): 12

Continuing decline in area of occupancy (AOO): No

Extreme fluctuations in area of occupancy (AOO): No

Estimated extent of occurrence (EOO) (km²): 2

Continuing decline in extent of occurrence (EOO): No

Extreme fluctuations in extent of occurrence (EOO): No

Number of Locations: 6

Continuing decline in number of locations: No

Extreme fluctuations in the number of locations: No

Lower elevation limit (m): 34

Upper elevation limit (m): 536

**Population** 

Number of mature individuals: 80-95

Continuing decline of mature individuals: No

Extreme fluctuations: No

Population severely fragmented: No

All individuals in one subpopulation: Yes

**Habitats and Ecology** 

Continuing decline in area, extent and/or quality of habitat: No

Generation Length (years): 25-30

# The IUCN Red List Partnership



The IUCN Red List of Threatened Species<sup>™</sup> is produced and managed by the <u>IUCN Global Species</u>

<u>Programme</u>, the <u>IUCN Species Survival Commission</u> (SSC) and <u>The IUCN Red List Partnership</u>.

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