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Language: English

Desmazeria pignattii, Pignatti's Fern Grass

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Plantae	Tracheophyta	Liliopsida	Poales	Poaceae

Taxon Name: Desmazeria pignattii Brullo & Pavone

Common Name(s):

• English: Pignatti's Fern Grass

Taxonomic Source(s):

Valdés, B. and Scholz, H.; with contributions from Raab-Straube, E. von and Parolly, G. 2009. Poaceae (pro parte majore). Euro+Med Plantbase – the information resource for Euro-Mediterranean plant diversity. Available at: http://ww2.bgbm.org/EuroPlusMed/. (Accessed: 11th March 2010).

Taxonomic Notes:

This species is considered a synonym of *Desmazeria sicula* (Jacq.) Dumort. by WCSP (2016), however supported by Peruzzi *et al.* (2014, 2015).

Assessment Information

Red List Category & Criteria: Near Threatened <u>ver 3.1</u>

Year Published: 2018

Date Assessed: December 16, 2015

Justification:

This species is restricted to four known localities on Sicily and to the Maltese Archipelago, where it is relatively widespread in small populations at several coastal localities. The area of occupancy (AOO) is estimated at 52 km² and the extent of occurrence (EOO) at 3,640 km². The population trend is considered to be stable over its whole range, however subpopulations and suitable habitat can be impacted by tourism and development of coastal areas. The species is recorded from several Natura 2000 sites and from a National Park on Malta.

The species is assessed as Near Threatened under Criterion B as the species has very restricted EOO and AOO and however it is estimated that there are 15-20 locations. Although at present there is no evidence of population decline or changes in habitat quality or extent, known populations on Malta at least are generally small and considered vulnerable to decline or loss as a result of habitat conversion or degradation. Monitoring of population and habitat trends recommended.

Geographic Range

Range Description:

This is a central Mediterranean plant that is endemic to Sicily and the Maltese Islands. In Sicily, it is reported from four localities, whilst in Malta it is widespread in several localities in coastal areas

(Lanfranco 1989, Sciberras and Lalov 2007, Mifsud 2011, Sciberras *et al.* 2012) in arid coastal areas. The area of occupancy is estimated to be 52 km² and the extent of occurrence at 3,640 km².

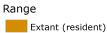
Country Occurrence:

Native: Italy (Sicilia); Malta

Distribution Map

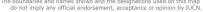
Desmazeria pignattii





Compiled by: IUCN Mediterranean Red List







Population

There is no information available on population demography, however populations are overall assumed to be stable although liable to declines at the subpopulation level. It is considered uncommon on Malta, where it is found in small populations of < 200 individuals (S. Mifsud pers. comm. 2016), however it is a small annual grass that is easily overlooked.

Current Population Trend: Stable

Habitat and Ecology (see Appendix for additional information)

This is an herbaceous annual plant (therophyte) with a short life cycle, occurring in shallow arid coastal areas, it can support slightly saline conditions, such as sea spray. On Malta it is mainly confined to low-lying arid, barely vegetated rocky coastal habitats, usually in pockets and shallow basins of karst limestone

Systems: Terrestrial

Use and Trade

The species is not utilised.

Threats (see Appendix for additional information)

Populations of this species are considered stable over it whole range, but subpopulations are vulnerable to impacts from tourism and the development of coastal areas.

Conservation Actions (see Appendix for additional information)

Assessed as Vulnerable by Conti *et al.* (1997) and maintained as VU by Raimondo *et al.* (2011) in Italy, the species has recently been reassessed for Italy as NT (unpublished assessment, Italian Botanical Society, 2014). Lanfranco (1989) noted in the *Red Data Book for the Maltese Islands* that the species has a restricted distribution in the Mediterranean although it had not been formally assessed for Malta.

The species is recorded from two Natura 2000 sites on Malta (MT0000001 Ghajn Barrani Area and MT0000017 Kemmuna u I-Gzejjer ta' Madwarha) and from three Natura 2000 sites on Sicily (ITA080001 Foce del Fiume Irminio, ITA080007 Spiaggia Maganuco and ITA080004 Punta Braccetto, Contrada Cammarana). It is also within the recently created II-Park Nazzjonali tal-Inwadar (National Park) on Malta.

Credits

Assessor(s): Orsenigo, S., Peruzzi, L., Troia, A. & Mifsud, S.

Reviewer(s): Allen, D.J.

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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?
0. Root -> 6. Rocky areas (eg. inland cliffs, mountain peaks)	Resident	Suitable	Yes
13. Marine Coastal/Supratidal -> 13.1. Marine Coastal/Supratidal - Sea Cliffs and Rocky Offshore Islands	Resident	Suitable	Yes

Threats

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

Threat	Timing	Scope	Severity	Impact Score
Residential & commercial development -> 1.3. Tourism & recreation areas	Ongoing	Unknown	Unknown	Unknown
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion		
1. Ecosystem stresses -> 1		stresses -> 1.2. Ecosy	stem degradation	
		2. Species Stresses -> 2.1. Species mortality		
6. Human intrusions & disturbance -> 6.1. Recreational activities	Ongoing	Unknown	Unknown	Unknown
	Stresses: 1. Ecosystem stresses -> 1.2. Ecosystem degradation		stem degradation	
		2. Species Stre	esses -> 2.1. Species	mortality

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: Yes	

Research Needed

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

L	Research Needed	
3	3. Monitoring -> 3.1. Population trends	
3	3. Monitoring -> 3.4. Habitat trends	

Additional Data Fields

Distribution

Estimated area of occupancy (AOO) (km²): 52

Continuing decline in area of occupancy (AOO): No

Estimated extent of occurrence (EOO) (km²): 3640

Continuing decline in extent of occurrence (EOO): No

Number of Locations: 15-20

Lower elevation limit (m): 2

Upper elevation limit (m): 50

Population

Continuing decline of mature individuals: No

Population severely fragmented: No

Habitats and Ecology

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

The IUCN Red List Partnership



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

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