

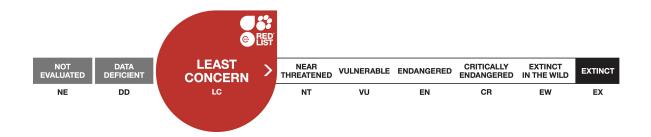
IUCN 2008: T13146983A18614100 Scope: Global & Mediterranean

Language: English



# Narcissus dubius, Narcisse Douteux

Assessment by: Véla, E., Carapeto, A., Pinto Cruz, C., García Murillo, P.G., Ríos Ruiz, S. & Fraga i Arquimbau, P.



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Citation: Véla, E., Carapeto, A., Pinto Cruz, C., García Murillo, P.G., Ríos Ruiz, S. & Fraga i Arquimbau, P. 2018. Narcissus dubius. The IUCN Red List of Threatened Species 2018: e.T13146983A18614100. http://dx.doi.org/10.2305/IUCN.UK.2018-1.RLTS.T13146983A18614100.en

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## **Taxonomy**

Kingdom	Phylum	Class	Order	Family
Plantae	Tracheophyta	Liliopsida	Asparagales	Amaryllidaceae

Taxon Name: Narcissus dubius Gouan

#### Synonym(s):

• Hermione dubia (Gouan) Haw.

#### Common Name(s):

• French: Narcisse Douteux

• Spanish: Junquillo

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

Euro+Med. 2014. Euro+Med Plantbase. Berlin-Dahlem Available at:

http://ww2.bgbm.org/EuroPlusMed/query.asp. (Accessed: 25 March 2014).

#### **Taxonomic Notes:**

This species presents hybridization with *Narcissus assoanus*, named *N. x pujolii*, in the southern areas of its distribution range, e.g. in the Region of Murcia, Spain (S. Ríos Ruiz pers. comm. 2015).

### **Assessment Information**

Red List Category & Criteria: Least Concern ver 3.1

Year Published: 2018

Date Assessed: January 14, 2015

#### Justification:

This species is endemic to southern France and eastern Spain. It is assessed as Least Concern because it has a widespread distribution, occurs in several protected areas throughout its range and its population is not expected to significantly decline in the near future. Further studies on the genetic structure of its population and trends in population size at global level are needed.

# **Geographic Range**

#### Range Description:

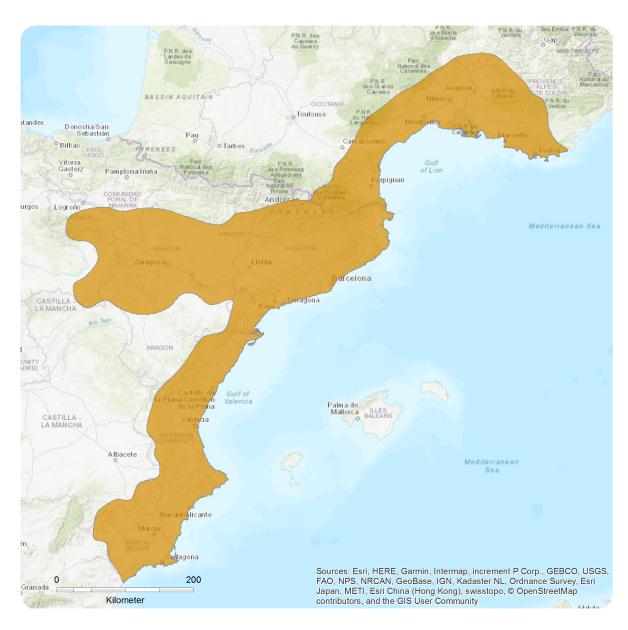
This is Mediterranean species endemic to southern France and eastern Spain. In Spain it occurs mainly near littoral areas, ranging from Girona Province to the Region of Murcia (Aedo 2013), with a few isolated subpopulations along the Ebro River Valley, in the area of Litera, Monegros and the Middle Ebro. Occasionally, it is also found in the Aragonese and Catalonian Pre-Pyrenees and the Region of Castilla-La Mancha (Casas *et al.* 2010). In France it occurs near coastal areas in the south of the country, ranging from the Region of Provence-Alpes-Cotê-de-Azur to the Region of Languedoc-Roussillon (Association Tela Botanica 2014).

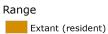
## **Country Occurrence:**

Native: France (France (mainland)); Spain (Spain (mainland))

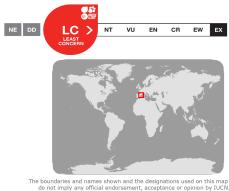
# **Distribution Map**

#### Narcissus dubius





#### Compiled by: IUCN Mediterranean Red List





## **Population**

Although population sizes and their genetic structure are still unknown, this species appears to be common in some parts of its geographic range, especially in areas such as Valencia Autonomous region in Spain, which concentrates most of the records for this plant (Anthos 2014). In Spain, this species appears to be less common in the regions of Murcia, Aragon, Catalonia and Castilla-La Mancha, although several subpopulations with hundreds of individuals are known (D. Guzmán Otano and J. Juan Vicedo pers. obs. 2014). In France the species appears to be frequent in the regions of Provence and Languedoc-Roussilon, with more than 59 records, corresponding to 50 localities, reported (Véla 2002, Association Tela Botanica 2014).

The current population trend is unknown, although some subpopulations may have gone locally extinct, especially near the coast of Valencia in Spain, due to significant urban development in the last decades.

**Current Population Trend:** Unknown

# Habitat and Ecology (see Appendix for additional information)

This plant is a bulbous geophyte with one to seven white flowers that bloom in late winter and early spring. It occurs on Mediterranean shrubland (garrigue), perennial mesophytic grasslands of *Stipa tenacissima*, and rocks and cliff faces on alkaline and rocky soils generally originated from limestone (Aedo 2013, Casas *et al.* 2010). This species presents mainly a coastal distribution, with some isolated subpopulations up to La Rioja, along the catchment of the Ebro River in Spain.

**Systems:** Terrestrial

#### **Use and Trade**

Due to its ornamental interest, this species is cultivated and international bulb trading has been reported, although the value and quantity is unknown. There is a potential for harvest of wild bulbs, although no information is available at present about the impact of that practice.

Also, the increasing interest in the galanthamine-related alkaloid content of *Narcissus* species for pharmaceutical purposes (Berkov *et al.* 2014), may increase bulb harvesting in wild populations in the future.

## Threats (see Appendix for additional information)

The main threat to this species is urban and touristic development, especially in areas near the coastline. Land use changes and the abandonment of traditional land management practices, in particular livestock grazing, are reducing the abundance of this species due to the transformation of grasslands into scrubland and forest (Casas *et al.* 2010). The intensification of agricultural areas in certain parts of its distribution range (e.g. in the Region of Aragon) may represent a local threat (D. Guzmán Otano and J. Juan Vicedo pers. comm. 2014). In Alicante, the introduced *Opuntia* spp. is a competitor for the space (S. Ríos Ruiz pers. comm. 2015).

The increasing interest in the galanthamine-related alkaloid content of the Amaryllidaceae species for pharmaceutical purposes (Berkov et al. 2014) may represent a threat in the near future, since there is

no possibility of industrial synthesis of these bioactive substances and only natural sources can be exploited, which may led to bulb harvesting in wild populations.

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

This species occurs in several protected areas throughout its distribution range, including natural parks and Natura 2000 sites (IUCN and UNEP-WCMC 2017). The plant is strictly protected by regional legislation in Catalonia through Decreto 172/2008 (DOGC 2008) and is considered a taxon of special interest taxon in the Region of Murcia through Decreto 50/2003 (BORM 2003). Ex situ conservation actions include seed conservation in the Torretes Botanical Garden Genebank and other Institutions, and plant growing in living collections in the Torretes Botanical Garden (D. Guzmán Otano and J. Juan Vicedo pers. comm. 2014).

In France, the plant is protected against collection from the wild (INPN-MNHN 2003-2017).

Further research regarding population size and trends, and genetic structure, is needed.

### **Credits**

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Contributor(s): Guzmán Otano, D., Juan Vicedo, J. & Alcázar Montañez, E.

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#### Citation

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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 -> 3.8. Shrubland - Mediterranean-type Shrubby Vegetation	Resident	Suitable	Yes
4. Grassland -> 4.4. Grassland - Temperate	Resident	Suitable	Yes
0. Root -> 6. Rocky areas (eg. inland cliffs, mountain peaks)	Resident	Suitable	No

## **Threats**

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

Threat	Timing	Scope	Severity	Impact Score	
1. Residential & commercial development -> 1.1. Housing & urban areas	Ongoing	Unknown	Unknown	Unknown	
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion			
	1. Ecosystem stresses -> 1.2. Ecosy			stem degradation	
1. Residential & commercial development -> 1.3. Tourism & recreation areas	Ongoing	Unknown	Unknown	Unknown	
	Stresses:	1. Ecosystem stresses -> 1.1. Ecosystem conversion			
		1. Ecosystem stresses -> 1.2. Ecosystem degradation			
2. Agriculture & aquaculture -> 2.1. Annual & perennial non-timber crops -> 2.1.4. Scale Unknown/Unrecorded	Ongoing	Unknown	Unknown	Unknown	
	Stresses:	<ol> <li>Ecosystem stresses -&gt; 1.1. Ecosystem conversion</li> <li>Ecosystem stresses -&gt; 1.2. Ecosystem degradation</li> </ol>			
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.4. Scale Unknown/Unrecorded	Ongoing	Unknown	Unknown	Unknown	
	Stresses:	1. Ecosystem s	1. Ecosystem stresses -> 1.1. Ecosystem conversion		
		1. Ecosystem stresses -> 1.2. Ecosystem degradation			
5. Biological resource use -> 5.2. Gathering terrestrial plants -> 5.2.1. Intentional use (species is the target)	Future	Unknown	Unknown	Unknown	
	Stresses:	2. Species Stresses -> 2.1. Species mortality			
7. Natural system modifications -> 7.3. Other ecosystem modifications	Ongoing	Unknown	Unknown	Unknown	
	Stresses:	•	<ol> <li>Ecosystem stresses -&gt; 1.1. Ecosystem conversion</li> <li>Ecosystem stresses -&gt; 1.2. Ecosystem degradation</li> </ol>		
8. Invasive and other problematic species, genes & diseases -> 8.1. Invasive non-native/alien species/diseases -> 8.1.1. Unspecified species	Ongoing	Unknown	Unknown	Unknown	
	Stresses:	2. Species Stre 2.3.2. Compet	esses -> 2.3. Indirect	species effects ->	

### **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

In-Place Species Management

Subject to ex-situ conservation: Yes

## **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) (km2): 736

Estimated extent of occurrence (EOO) (km2): 267154

Lower elevation limit (m): 0

Upper elevation limit (m): 1350

#### **Population**

Continuing decline of mature individuals: Unknown

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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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