

# Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

0.1 Member State	IT
0.2.1 Species code	1634
0.2.2 Species name	<b>Limonium insulare</b>
0.2.3 Alternative species scientific name	N/A
0.2.4 Common name	N/A

## 1. National Level

### 1.1 Maps

1.1.1 Distribution Map	Yes
1.1.1a Sensitive species	No
1.1.2 Method used - map	Estimate based on partial data with some extrapolation and/or modelling (2)
1.1.3 Year or period	2012
1.1.4 Additional map	No
1.1.5 Range map	Yes

## 2. Biogeographical Or Marine Level

### 2.1 Biogeographical Region

### 2.2 Published sources

#### Mediterranean (MED)

The present species assessment (fields 0.1-2.9) has been compiled by Stefania Ercole and Valeria Giacanelli (Institute for Environmental Protection and Research - ISPRA). Information, unpublished data and experts' judgments have been provided by: Gianni Bacchetta (University of Cagliari) and Giuseppe Fenu (University of Cagliari).

ABELI T., MONTAGNANI C., 2011 – *Limonium insulare*. In: IUCN 2011, IUCN Red List of Threatened Species. Version 2011.2. <[www.iucnredlist.org](http://www.iucnredlist.org)>. Downloaded on 21 May 2012.

ARRIGONI P.V., DIANA S., 1990 – Le piante endemiche della Sardegna: 192-197. Boll. Soc. Sarda Sci. Nat., 27: 259-282.

ARRIGONI P.V., DIANA S., 1999 – Karyology, chorology and bioecology of the genus *Limonium* (plumbaginaceae) in Sardinia. Plant Biosyst., 133(1): 63-71.

BACCHETTA G., 2001 – *Limonium insulare* Arrigoni et Diana. In: PIGNATTI S., MENEGONI P., GIACANELLI V. (eds.), Liste rosse e blu della flora italiana. ANPA. Roma.

BACCHETTA G., FARRIS E., PONTECORVO C. 2012 - A new method to set conservation priorities in biodiversity hotspots. Plant Biosystems, 146(3): 638-648.

BACCHETTA G., FENU G., MATTANA E., 2012 - The checklist of the exclusive vascular flora of Sardinia and its priority settings for conservation. Anales del Jardin Botanico de Madrid 69(1): 81-89.

BEGUINOT A., LANDI M., 1931 – L'endemismo nelle minori isole italiane e suo significato biogeografico. Arch. Bot. (Forlì), 7: 56-57.

BILZ M., KELL S.P., MAXTED N., LANSDOWN R.V., 2011 – European Red List of Vascular Plants. Luxembourg: publications office european union.

BIONDI E., DIANA S., FARRIS E., FILIGHEDDU R.S., 2001 – L'ordine Limonieta Br.-Bl. Et O. Bolòs 1958 in Sardegna. Fitosociologia, 38(2): 37-44.

CONTI F., ABBATE G., ALESSANDRINI A., BLASI C., (Eds.) 2005 – An annotated Checklist of the Italian Vascular Flora. Palombi Editori, Roma.

CONTI F., MANZI A., PEDROTTI F., 1992 - Libro Rosso delle Piante d'Italia. WWF Italia. Roma. 637 pp.

# Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

CONTI F., MANZI A., PEDROTTI F., 1997 - Liste Rosse Regionali delle Piante d'Italia. WWF Italia. Società Botanica Italiana. Università di Camerino. Camerino. 139 pp.

FENU G., MATTANA E., 2011. Conservation studies on threatened endemic plants of the Mediterranean area: a literature overview for Sardinia. *Fitosociologia* 48(1) suppl. 1: 5-12.

FOIS M., FENU G., COGONI D., MASCIA F., BACCHETTA G., 2012. *Limonium insulare* (Bég. Et Landi) Arrigoni et Diana. *Inf. Bot. Ital.* 44(2): 443-445.

MAYER A., 1995 – Comparative study of the coastal vegetation of Sardinia (Italy) and Crete (Greece) with respect to the effects of human influence. *Libri Bot.*, 15: 1-264.

ROSSI G., MONTAGNANI C., GARGANO D., PERUZZI L., ABELI T., RAVERA S., COGONI A., FENU G., MAGRINI S., GENNAI M., FOGGI B., WAGENSOMMER R.P., VENTURELLA G., BLASI C., RAIMONDO F.M., ORSENIGO S. (Eds.), 2013 - Lista Rossa della Flora Italiana. 1. Policy Species e altre specie minacciate. Comitato Italiano IUCN; Ministero dell'Ambiente e della Tutela del Territorio e del Mare.

SCOPPOLA A., SPAMPINATO G. (eds.), 2005 - Atlante delle specie a rischio di estinzione. Versione 1.0. CD-Rom enclosed to the volume: SCOPPOLA A., BLASI C. (eds.), Stato delle conoscenze sulla flora vascolare d'Italia. Palombi Editori. Roma.

SOCIETÀ BOTANICA ITALIANA, 2012. Valutazione nazionale della categoria di rischio di estinzione per specie vegetali di pregio e di interesse conservazionistico. Ministero dell'Ambiente e della Tutela del Territorio e del Mare, Società Botanica Italiana (dati inediti).

## 2.3 Range

2.3.1 Surface area - Range (km <sup>2</sup> )	800
2.3.2 Method - Range surface area	Estimate based on partial data with some extrapolation and/or modelling (2)
2.3.3 Short-term trend period	2001-2012
2.3.4 Short-term trend direction	stable (0)
2.3.5 Short-term trend magnitude	min max
2.3.6 Long-term trend period	
2.3.7 Long-term trend direction	N/A
2.3.8 Long-term trend magnitude	min max
2.3.9 Favourable reference range	area (km <sup>2</sup> ) operator approximately equal to (≈) unknown No method Expert judgment
2.3.10 Reason for change	Use of different method

## 2.4 Population

2.4.1 Population size (individuals or agreed exception)	Unit N/A min max
2.4.2 Population size (other than individuals)	Unit number of localities (localities) min 10 max 10
2.4.3 Additional information	Definition of locality localities= sites where the presence of the species is confirmed Conversion method Problems no data available for the number of individuals

# Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

2.4.4 Year or period	2012
2.4.5 Method – population size	Estimate based on partial data with some extrapolation and/or modelling (2)
2.4.6 Short-term trend period	2001-2012
2.4.7 Short term trend direction	decrease (-)
2.4.8 Short-term trend magnitude	min max confidence interval
2.4.9 Short-term trend method	Estimate based on partial data with some extrapolation and/or modelling (2)
2.4.10 Long-term trend period	
2.4.11 Long term trend direction	N/A
2.4.12 Long-term trend magnitude	min max confidence interval
2.4.13 Long-term trend method	N/A
2.4.14 Favourable reference population	number operator approximately equal to (≈) unknown No method Expert judgment
2.4.15 Reason for change	Use of different method

## 2.5 Habitat for the Species

2.5.1 Surface area - Habitat (km <sup>2</sup> )	
2.5.2 Year or period	
2.5.3 Method used - habitat	Absent data (0)
2.5.4 a) Quality of habitat	Moderate
2.5.4 b) Quality of habitat - method	Expert based
2.5.5 Short term trend period	2001-2012
2.5.6 Short term trend direction	decrease (-)
2.5.7 Long-term trend period	
2.5.8 Long term trend direction	N/A
2.5.9 Area of suitable habitat (km <sup>2</sup> )	
2.5.10 Reason for change	

## 2.6 Main Pressures

Pressure	ranking	pollution qualifier(s)
Outdoor sports and leisure activities, recreational activities (G01)	high importance (H)	N/A
Urbanised areas, human habitation (E01)	high importance (H)	N/A
Tramplng, overuse (G05.01)	medium importance (M)	N/A
garbage and solid waste (H05.01)	medium importance (M)	N/A
invasive non-native species (I01)	medium importance (M)	N/A
Landfill, land reclamation and drying out, general (J02.01)	medium importance (M)	N/A
diffuse pollution to surface waters due to household sewage and waste waters (H01.08)	medium importance (M)	N/A

2.6.1 Method used – pressures	mainly based on expert judgement and other data (2)
-------------------------------	---

## 2.7 Main Threats

Threat	ranking	pollution qualifier(s)
Outdoor sports and leisure activities, recreational activities (G01)	high importance (H)	N/A
Urbanised areas, human habitation (E01)	high importance (H)	N/A

# Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

invasive non-native species (I01)	medium importance (M)	N/A
Landfill, land reclamation and drying out, general (J02.01)	medium importance (M)	N/A
diffuse pollution to surface waters due to household sewage and waste waters (H01.08)	medium importance (M)	N/A

2.7.1 Method used – threats expert opinion (1)

## 2.8 Complementary Information

2.8.1 Justification of % thresholds for trends

2.8.2 Other relevant Information

1) Italian Red List (2013): EN. Assessment criteria: B1ab(i,ii,iii,v) + 2ab(i,ii, iii,v)  
Published in:  
FOIS M., FENU G., COGONI D., MASCIA F., BACCHETTA G., 2012. Limonium insulare (Bég. Et Landi) Arrigoni et Diana. Inf. Bot. Ital. 44(2): 443-445.  
ROSSI G., MONTAGNANI C., GARGANO D., PERUZZI L., ABELI T., RAVERA S., COGONI A., FENU G., MAGRINI S., GENNAI M., FOGGI B., WAGENSOMMER R.P., VENTURELLA G., BLASI C., RAIMONDO F.M., ORSENIGO S. (Eds.), 2013 - Lista Rossa della Flora Italiana. 1. Policy Species e altre specie minacciate. Comitato Italiano IUCN; Ministero dell'Ambiente e della Tutela del Territorio e del Mare.

2) Global red list: EN B2ab(iii)  
Published in: ABELI T., MONTAGNANI C., 2011 – Limonium insulare. In: IUCN 2011, IUCN Red List of Threatened Species. Version 2011.2.  
<www.iucnredlist.org>

2.8.3 Trans-boundary assessment

## 2.9 Conclusions (assessment of conservation status at end of reporting period)

2.9.1 Range	assessment Favourable (FV) qualifiers N/A
2.9.2. Population	assessment Inadequate (U1) qualifiers declining (-)
2.9.3. Habitat	assessment Inadequate (U1) qualifiers declining (-)
2.9.4. Future prospects	assessment Inadequate (U1) qualifiers declining (-)
2.9.5 Overall assessment of Conservation Status	Inadequate (U1)
2.9.5 Overall trend in Conservation Status	declining (-)

## 3. Natura 2000 coverage and conservation measures - Annex II species

### 3.1 Population

3.1.1 Population Size	Unit N/A min max
3.1.2 Method used	Absent data (0)
3.1.3 Trend of population size within	N/A

### 3.2 Conversation Measures

# Report on the main results of the surveillance under article 11 for annex II, IV and V species (Annex B)

3.2.1 Measure	3.2.2 Type	3.2.3 Ranking	3.2.4 Location	3.2.5 Broad Evaluation
No measure known/ impossible to carry out specific measures (1.3)		( )		

**Species name: Limonium insulare (1634)**

Field label	Note	User
1.1.1 Distribution Map	<p>SOCIETÀ BOTANICA ITALIANA, 2012. Valutazione nazionale della categoria di rischio di estinzione per specie vegetali di pregio e di interesse conservazionistico. Ministero dell'Ambiente e della Tutela del Territorio e del Mare, Società Botanica Italiana (dati inediti).</p> <p>FOIS M., FENU G., COGONI D., MASCIA F., BACCHETTA G., 2012. Limonium insulare (Bég. Et et Landi) Arrigoni et Diana. Inform. Bot. Ital. 44(2): 443-445.</p> <p>Regione Autonoma della Sardegna - Assessorato Difesa Ambiente, 2012 - Servizio di monitoraggio dello stato di conservazione degli habitat e delle specie di importanza comunitaria presenti nei siti della Rete Natura 2000 in Sardegna – Linea 4. Redazione del Rapporto sullo stato di conservazione degli habitat e delle specie.</p>	ISPRA_F LORA

**Species name: Limonium insulare (1634) Region code: MED**

Field label	Note	User
2.5.6 Short term trend direction	<p>Le osservazioni e la natura delle minacce evidenziano un progressivo degrado, soprattutto nelle aree intensamente sfruttate a fini turistici. Le aree lagunari in cui la specie è presente, sono interessate da interventi di bonifica e scarico di acque reflue non autorizzate che stanno riducendo la qualità degli habitat in cui si rinviene la specie.</p> <p>Fonte: FOIS M., FENU G., COGONI D., MASCIA F., BACCHETTA G., 2012. Limonium insulare (Bég. Et Landi) Arrigoni et Diana. Inf. Bot. Ital. 44(2): 443-445.</p>	ISPRA_F LORA
2.4.7 Short term trend direction	<p>La popolazione di L. insulare si presenta frammentata, con diverse stazioni spesso di piccole dimensioni (...). È ragionevole ipotizzare una scomparsa delle stesse con una riduzione sensibile della superficie occupata. In particolare la stazione di Cussorgia (calasetta) è prossima all'estinzione, come evidenziato da recenti monitoraggi.</p> <p>Fonte: FOIS M., FENU G., COGONI D., MASCIA F., BACCHETTA G., 2012. Limonium insulare (Bég. Et Landi) Arrigoni et Diana. Inf. Bot. Ital. 44(2): 443-445.</p>	ISPRA_F LORA