

# 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	4066
0.2.2 Species name	<b>Asplenium adulterinum</b>
0.2.3 Alternative species scientific name	New taxonomy: <i>Asplenium adulterinum</i> Milde subsp. <i>adulterinum</i> , <i>Asplenium adulterinum</i> Milde subsp. <i>presolanense</i>
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

#### Alpine (ALP)

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). Distribution data for the following Nature 2000 sites have been inserted by the Ministry of Environment (source: Italian Nature 2000 database): IT1160058, IT1110032.

AESCHIMANN D., LAUBER K., MOSER D.M., THEURILLAT J.-P., 2004 - Flora alpina. 3 voll. Zanichelli. Bologna.

BERNARDELLO R., 2002 - Notule Pteridologiche Italiane: 9-14. 9. *Asplenium adulterinum* Milde subsp. *adulterinum*. In: MARCHETTI D. (ed.), Notule Pteridologiche Italiane. I (1-31). Ann. Mus. Civ. Rovereto, Sez.: Arch., St., Sc. Nat., 16 (2000): 376-378.

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

FERRARINI E., CIAMPOLINI F., PICHI SERMOLLI R.E.G., MARCHETTI D., 1986 - Iconographia Palynologica Pteridophytorum Italiae. Webbia, 40 (1): 1-202.

MARCHETTI D., 2004 - Le Pteridofite d'Italia. Ann. Mus. Civ. Rovereto, Sez.: Arch., St., Sc. Nat., 19 (2003): 71-231.

MARCHETTI D., SOSTER M., 1992 - Note su tre felci nuove per la Valsesia (Piemonte) e rare per l'Italia: *Asplenium trichomanes* L. subsp. *pachyrachis* (Christ) Lovis et Reichst., *Asplenium adulterinum* Milde subsp. *adulterinum* e *Dryopteris remota* (A. Braun) Druce. Boll. Mus. Regionale Sci. Nat. Torino, 10 (1): 113-124.

MOKRY F., RASBACH H., REICHSTEIN T., 1986 - *Asplenium adulterinum* Milde subsp. *presolanense* subsp. nova (Aspleniaceae, Pteridophyta). Bot. Helv., 96 (1): 7-18.

NARDI E., 1972 - *Asplenium adulterinum* Milde in Italia. Webbia, 26 (2): 463-490.

NARDI E., 1973 - Ad floram Italicam notulae taxonomicae et geobotanicae. 9. *Asplenium adulterinum* Milde nei pressi di Stresa (Lago Maggiore). Webbia, 28

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(1): 37-47.

PIGNATTI S., 1982 - Flora d'Italia, voll. 1-3. Edagricole, Bologna.

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. ROTTI G., 1994 - Nuovi areali di *Asplenium adulterinum* Milde con speciale riferimento alla Valsesia ed alla Valle Strona di Campello Monti. Not. C.A.I. Varallo, 8 (2): 48-64.

ROTTI G., 1995 - Nuovi areali di *Asplenium adulterinum* Milde con speciale riferimento alla Valsesia ed alla valle Strona di Campello Monti (II parte). Not. C.A.I. Varallo, 9 (1): 47-63.

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).

SOSTER M., 2001 - Identikit delle Felci d'Italia. Guida al riconoscimento delle Pteridofite italiane. Valsesia Editrice. 304 pp.

## 2.3 Range

2.3.1 Surface area - Range (km <sup>2</sup> )	6600
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	increase (+)
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	Improved knowledge/more accurate dataUse 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 map 10x10 km grid cells (grids10x10) min 30 max 30
2.4.3 Additional information	Definition of locality Conversion method Problems no data available for the number of individuals
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

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2.4.7 Short term trend direction	unknown (x)		
2.4.8 Short-term trend magnitude	min	max	confidence interval
2.4.9 Short-term trend method	Absent data (0)		
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	Improved knowledge/more accurate data 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	Good
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	stable (0)
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)
Changes in abiotic conditions (M01)	medium importance (M)	N/A
2.6.1 Method used – pressures	based only on expert judgements (1)	

## 2.7 Main Threats

Threat	ranking	pollution qualifier(s)
temperature changes (e.g. rise of temperature & extremes) (M01.01)	medium importance (M)	N/A
pillaging of floristic stations (F04.01)	medium importance (M)	N/A
mountaineering & rock climbing (G01.04.01)	medium importance (M)	N/A
paths, tracks, cycling tracks (D01.01)	medium importance (M)	N/A

2.7.1 Method used – threats	expert opinion (1)
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## 2.8 Complementary Information

2.8.1 Justification of % thresholds for trends

2.8.2 Other relevant Information

1) New taxonomy: *Asplenium adulterinum* Milde subsp. *adulterinum* (CON REG & ALP REG), *Asplenium adulterinum* Milde subsp. *presolanense* (ALP REG, Endemic of Lombardia).  
Source: CONTI F., ABBATE G., ALESSANDRINI A., BLASI C., (Eds.) 2005 - An annotated Checklist of the Italian Vascular Flora. Palombi Editori, Roma.

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2) Italian Red List (2013):

-Asplenium adulterinum Milde sensu lato, LC

-Asplenium adulterinum Milde subsp. adulterinum, LC

-Asplenium adulterinum Milde subsp. presolanense, CR. Assessment criteria: B2ab(v)

Source: 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.

## 2.8.3 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 Favourable (FV) qualifiers N/A
2.9.3. Habitat	assessment Favourable (FV) qualifiers N/A
2.9.4. Future prospects	assessment Unknown (XX) qualifiers N/A
2.9.5 Overall assessment of Conservation Status	Favourable (FV)
2.9.5 Overall trend in Conservation Status	N/A

## 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

3.2.1 Measure	3.2.2 Type	3.2.3 Ranking	3.2.4 Location	3.2.5 Broad Evaluation
Establish protected areas/sites (6.1)	Legal Administrative	high importance (H)	Inside	Maintain
Legal protection of habitats and species (6.3)	Legal Administrative	high importance (H)	Both	Maintain Unknown

## 2. Biogeographical Or Marine Level

2.1 Biogeographical Region

**Continental (CON)**

2.2 Published sources

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).

AESCHIMANN D., LAUBER K., MOSER D.M., THEURILLAT J.-P., 2004 - Flora alpina.

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BERNARDELLO R., 2002 - Notule Pteridologiche Italiane: 9-14. 9. *Asplenium adulterinum* Milde subsp. *adulterinum*. In: MARCHETTI D. (ed.), Notule Pteridologiche Italiane. I (1-31). Ann. Mus. Civ. Rovereto, Sez.: Arch., St., Sc. Nat., 16 (2000): 376-378.

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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.

FERRARINI E., CIAMPOLINI F., PICHI SERMOLLI R.E.G., MARCHETTI D., 1986 - Iconographia Palynologica Pteridophytorum Italiae. Webbia, 40 (1): 1-202.

MARCHETTI D., 2004 - Le Pteridofite d'Italia. Ann. Mus. Civ. Rovereto, Sez.: Arch., St., Sc. Nat., 19 (2003): 71-231.

MARCHETTI D., SOSTER M., 1992 - Note su tre felci nuove per la Valsesia (Piemonte) e rare per l'Italia: *Asplenium trichomanes* L. subsp. *pachyrachis* (Christ) Lovis et Reichst., *Asplenium adulterinum* Milde subsp. *adulterinum* e *Dryopteris remota* (A. Braun) Druce. Boll. Mus. Regionale Sci. Nat. Torino, 10 (1): 113-124.

MOKRY F., RASBACH H., REICHSTEIN T., 1986 - *Asplenium adulterinum* Milde subsp. *presolanense* subsp. nova (Aspleniaceae, Pteridophyta). Bot. Helv., 96 (1): 7-18.

NARDI E., 1972 - *Asplenium adulterinum* Milde in Italia. Webbia, 26 (2): 463-490.

NARDI E., 1973 - Ad floram Italicae notulae taxonomicae et geobotanicae. 9. *Asplenium adulterinum* Milde nei pressi di Stresa (Lago Maggiore). Webbia, 28 (1): 37-47.

PIGNATTI S., 1982 - Flora d'Italia, voll. 1-3. Edagricole, Bologna.

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.

ROTTI G., 1994 - Nuovi areali di *Asplenium adulterinum* Milde con speciale riferimento alla Valsesia ed alla Valle Strona di Campello Monti. Not. C.A.I. Varallo, 8 (2): 48-64.

ROTTI G., 1995 - Nuovi areali di *Asplenium adulterinum* Milde con speciale riferimento alla Valsesia ed alla valle Strona di Campello Monti (II parte). Not. C.A.I. Varallo, 9 (1): 47-63.

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).

SOSTER M., 2001 - Identikit delle Felci d'Italia. Guida al riconoscimento delle Pteridofite italiane. Valsesia Editrice. 304 pp.

### 2.3 Range

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2.3.1 Surface area - Range (km <sup>2</sup> )	2000
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 map 10x10 km grid cells (grids10x10) min 8 max 8
2.4.3 Additional information	Definition of locality Conversion method Problems no data available for the number of individuals
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	stable (0)
2.4.8 Short-term trend magnitude	min max confidence interval
2.4.9 Short-term trend method	Estimate based on expert opinion with no or minimal sampling (1)
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	Improved knowledge/more accurate data 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	Good
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	stable (0)

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2.5.7 Long-term trend period
2.5.8 Long term trend direction
2.5.9 Area of suitable habitat (km <sup>2</sup> )
2.5.10 Reason for change

N/A

## 2.6 Main Pressures

Pressure	ranking	pollution qualifier(s)
reduction or loss of specific habitat features (J03.01)	medium importance (M)	N/A
anthropogenic reduction of habitat connectivity (J03.02)	medium importance (M)	N/A
removal of stone walls and embankments (A10.02)	medium importance (M)	N/A
skiing complex (G02.02)	medium importance (M)	N/A
pillaging of floristic stations (F04.01)	low importance (L)	N/A

2.6.1 Method used – pressures based only on expert judgements (1)

## 2.7 Main Threats

Threat	ranking	pollution qualifier(s)
removal of stone walls and embankments (A10.02)	medium importance (M)	N/A
pillaging of floristic stations (F04.01)	medium importance (M)	N/A
temperature changes (e.g. rise of temperature & extremes) (M01.01)	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) New taxonomy: *Asplenium adulterinum* Milde subsp. *adulterinum* (CON REG & ALP REG), *Asplenium adulterinum* Milde subsp. *presolanense* (ALP REG, Endemic of Lombardia).  
Source: CONTI F., ABBATE G., ALESSANDRINI A., BLASI C., (Eds.) 2005 - An annotated Checklist of the Italian Vascular Flora. Palombi Editori, Roma.

2) Italian Red List (2013):  
-*Asplenium adulterinum* Milde sensu lato, LC  
-*Asplenium adulterinum* Milde subsp. *adulterinum*, LC  
-*Asplenium adulterinum* Milde subsp. *presolanense*, CR. Assessment criteria: B2ab(v)  
Source: 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.

2.8.3 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 Favourable (FV) qualifiers N/A

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2.9.3. Habitat	assessment Favourable (FV) qualifiers N/A
2.9.4. Future prospects	assessment Unknown (XX) qualifiers N/A
2.9.5 Overall assessment of Conservation Status	Favourable (FV)
2.9.5 Overall trend in Conservation Status	N/A

## 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

3.2.1 Measure	3.2.2 Type	3.2.3 Ranking	3.2.4 Location	3.2.5 Broad Evaluation
Legal protection of habitats and species (6.3)	Legal	high importance (H)	Both	Unknown



**Species name: *Asplenium adulterinum* (4066)**

Field label	Note	User
1.1.1 Distribution Map	<p>Data sources:</p> <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>REGIONI VALLE D'AOSTA, PIEMONTE, LOMBARDIA, LIGURIA, EMILIA ROMAGNA (Raccolta dati per articolo 17, 2012).</p> <p>Distribution data for the following Nature 2000 sites have been inserted by the Ministry of Environment (source: Italian Nature 2000 database): IT1160058, IT1110032.</p>	ISPRA_F LORA