



Trichomanes speciosum

Annex	II, IV
Priority	No
Species group	Vascular plants
Regions	Atlantic, Continental, Macaronesian, Mediterranean

The Killarney fern (*Trichomanes speciosum*) is species of western European range, it is a Macaronesian – European endemic. The sporophyte has extremely patchy occurrence, the gametophytic generation can be found independently of the sporophyte and seems to be more widespread. Although primarily a species of the UK, Ireland, Brittany and the Atlantic Islands (Canaries, Madeira, Azores, Cape Verde Islands), the Killarney fern is also found in Europe at scattered locations in some other parts of Europe, easternwards to the Czech Republic, Poland and Italy. Species requires highly specific microclimate high in humidity and therefore grows in dark crevices and gullies in deep and narrow wooded valleys in areas of high rainfall. It is dependent upon a constantly flowing water source. Some populations grow in man-made wells or mine-shafts. The species occurs in the Annex I habitats 8220, 8310, 91E0, 9120, and 9180. The IUCN European Red List classifies the species as Least Concern (LC).

The conservation status is "Favourable" in Continental region, "Unfavourable Inadequate" in Atlantic and Mediterranean regions and "Unknown" in Macaronesian region. While situation of species is good and stable in Continental and improving in Atlantic regions, it becomes "Unfavourable Inadequate" or "Unknown" in Mediterranean and Macaronesian regions.

The threat factors are linked with its very specialized ecology and habitat preferences and very slow growth. The species is threatened mostly by reduction or loss of specific habitat features, modifying structures of inland water courses and other human induced changes in hydraulic conditions, large scale water deviation, droughts and less precipitation, forestry practices like clearance or thinning of tree layer, succession, burning down.

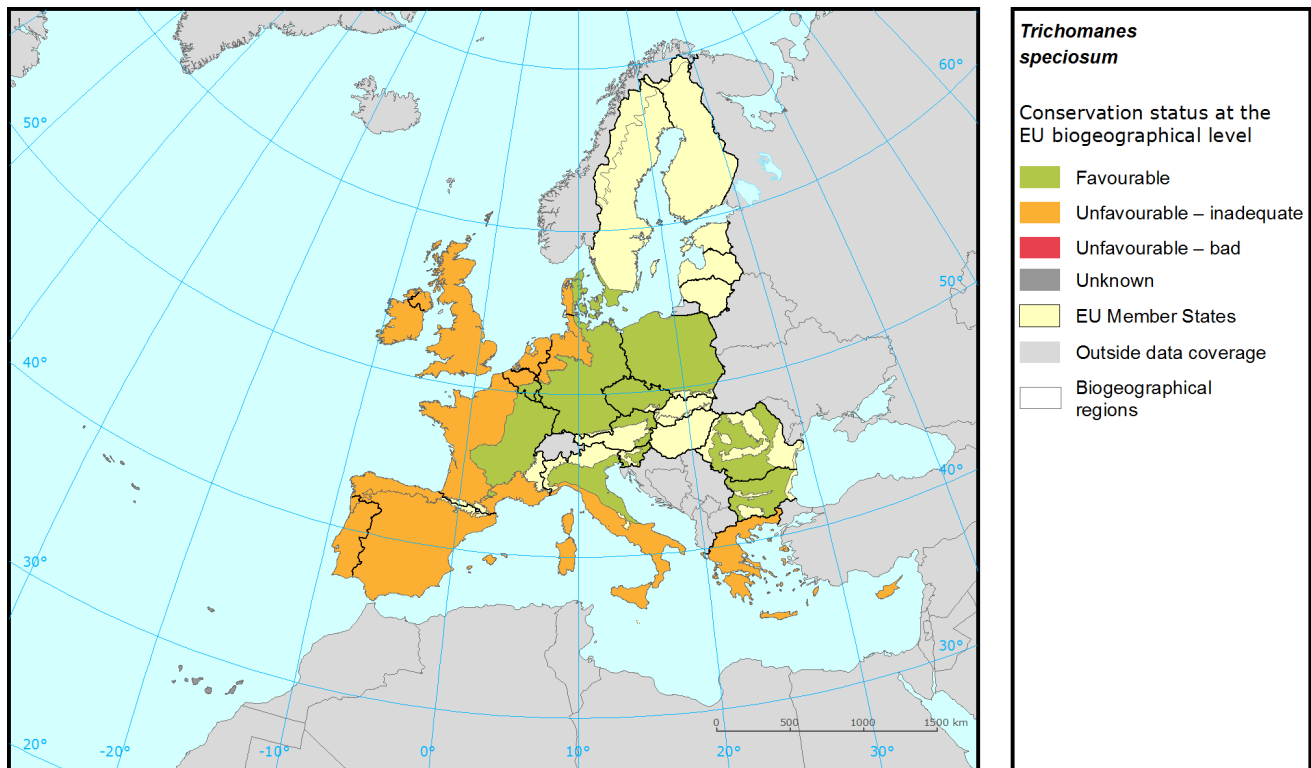
In Atlantic region the change between 2001-06 and 2007-12 report are genuine. Changes in overall conservation status between 2001-06 and 2007-12 report are mostly caused by different methodical approach and better data rather than real change in conservation status in Macaronesian and Mediterranean region. No changes in overall conservation status between 2001-06 and 2007-12 reports in Continental region.

Better data required from France and Spain.

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Report under the Article 17 of the Habitats Directive

Assessment of conservation status at the European biogeographical level



Region	Conservation status (CS) of parameters				Current CS	Trend in CS	% in region	Previous CS	Reason for change
	Range	Population	Habitat	Future prospects					
ATL	FV	FV	FV	U1	U1	=	52	U2	Genuine
CON	FV	FV	FV	FV	FV	=	40	FV	
MAC	XX	XX	FV	XX	XX	=	7	U1	Not genuine
MED	U1	FV	XX	XX	U1	=	1	XX	Not genuine

See the endnote for more informationⁱ

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Assessment of conservation status at the Member State level



Trichomanes speciosum

Distribution and conservation status at the Member State level

- | | |
|---|--|
|  Favourable |  EU Member States |
|  Unfavourable – inadequate |  Outside data coverage |
|  Unfavourable – bad |  Biogeographical region |
|  Unknown | |

The map shows both Conservation Status and distribution using a 10 km x 10 km grid. Conservation status is assessed at biogeographical level. Therefore the representation in each grid cell is only illustrative.

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MS	Region	Conservation status of parameters				Current CS	Trend in CS	% in region	Previous CS	Reason for change
		Range	Population	Habitat	Future prospects					
ES	ATL	FV	FV	FV	XX	FV		15.0	XX	Changed method
FR	ATL	FV	U1	U1	U1	U1	=	23.8	U2	Genuine
IE	ATL	FV	FV	FV	FV	FV		11.6	FV	
PT	ATL	U1	U1	U1	XX	U1	x	0.3	U2	Changed method
UK	ATL	FV	FV	FV	FV	FV		49.3	FV	
BE	CON	FV	FV	FV	FV	FV		4.5	XX	
CZ	CON	FV	FV	FV	FV	FV		9.3	FV	
DE	CON	FV	FV	FV	FV	FV		61.3	FV	
FR	CON	FV	FV	FV	FV	FV		20.1	XX	Better data
LU	CON	FV	FV	FV	XX	FV		4.5	FV	
PL	CON	U2	U2	U2	U2	U2	-	0.4	U2	Genuine
ES	MAC	XX	XX	FV	XX	XX		27.5	U1+	Changed method
PT	MAC	FV	FV	FV	FV	FV		72.5	FV	
ES	MED	FV	FV	XX	XX	XX		50.0	XX	
FR	MED	FV	FV	XX	FV	FV		37.5		Better data
IT	MED	U1	U1	FV	U2	U2	-	12.5	U1	Changed method

Knowing that not all changes in conservation status between the reporting periods were genuine, Member States were asked to give the reasons for changes in conservation status. Bulgaria and Romania only joined the EU in 2007 and Greece did not report for 2007-12 so no reason is given for change for these countries. Greek data shown above is from 2001-06.

Main pressures and threats reported by Member States

Member States were asked to report the 20 most important threats and pressures using an agreed hierarchical list which can be found on the [Article 17 Reference Portal](#). Pressures are activities which are currently having an impact on the species and threats are activities expected to have an impact in the near future. Pressures and threats were ranked in three classes 'high, medium and low importance'; the tables below only show threats and pressures classed as 'high', for some species there were less than ten threats or pressures reported as highly important.

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Ten most frequently reported 'highly important' pressures

Code	Activity	Frequency
B02	Forest and plantation management & use	20
J02	Changes in water bodies conditions	20
A04	Grazing by livestock	10
E03	Discharges (household/industrial)	10
F04	Taking and collection of terrestrial plants	10
J01	Fire and fire suppression	10
J03	Other changes to ecosystems	10
L08	Flooding (natural processes)	10

Ten most frequently reported 'highly important' threats

Code	Activity	Frequency
B02	Forest and plantation management & use	20
J02	Changes in water bodies conditions	20
A04	Grazing by livestock	10
E03	Discharges (household/industrial)	10
F04	Taking and collection of terrestrial plants	10
J01	Fire and fire suppression	10
K02	Vegetation succession/Biocenotic evolution	10
M01	Abiotic changes (climate change)	10

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Proportion of population covered by the Natura 2000 network

For species listed in the Annex II of the Directive Member States were asked to report the population size within the Natura 2000 network. The percentage of species population covered by the network was estimated by comparing the population size within the network and the total population size in the biogeographical/marine region.

Percentage of coverage by Natura 2000 sites in biogeographical/marine region

	ATL	CON	MAC	MED
BE		65		
CZ		80		
DE		51		
ES	100		100	30
FR	x	x		30
IE	86			
IT				x
LU		x		
PL		100		
PT	x		73	
UK	13			

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Most frequently reported conservation measures

For species listed in the Annex II of the Directive Member States were asked to report up to 20 conservation measures being implemented for this species using an agreed list which can be found on the Article 17 Reference Portal. Member States were further requested to highlight up to five most important ('highly important') measures; the table below only shows measures classed as 'high', for many species there were less than ten measures reported as highly important.

Ten most frequently reported 'highly important' conservation measures

Code	Measure	Frequency
6.3	Legal protection of habitats and species	42
6.1	Establish protected areas/sites	13
7.4	Specific single species or species group management measures	13
7.1	Regulation/ Management of hunting and taking	8
3.0	Other forestry-related measures	4
3.1	Restoring/improving forest habitats	4
3.2	Adapt forest management	4
4.0	Other wetland-related measures	4
6.0	Other spatial measures	4
7.0	Other species management measures	4

This information is derived from the Member State national reports submitted to the European Commission under Article 17 of the Habitats Directive in 2013 and covering the period 2007-2012. More detailed information, including the MS reports, is available at:

<http://bd.eionet.europa.eu/article17/reports2012/species/summary/?group=Vascular+plants&period=3&subject=Trichomanes+speciosum>

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i Assessment of conservation status at the European biogeographical level: Current Conservation Status (Current CS) shows the status for the reporting period 2007-2012, Previous Conservation Status (Previous CS) for the reporting period 2000-2006. Reason for change in conservation status between the reporting periods indicates whether the changes in the status were genuine or not genuine. Previous Conservation Status was not assessed for Steppic, Black Sea and Marine Black Sea regions. For these regions the Previous status is therefore considered as 'unknown'. The percentage of the species population occurring within the biogeographical/marine region (% in region) is calculated based on the area of GIS distribution.

ii Percentage of coverage by Natura 2000 sites in biogeographical/marine region: In some cases the population size within the Natura 2000 network has been estimated using a different methodology to the estimate of overall population size and this can lead to percentage covers greater than 100%. In such case the value has been given as 100% and highlighted with an asterisk (*). The value 'x' indicates that the Member State has not reported the species population and/or the coverage by Natura 2000. No information is available for Greece. The values are only provided for regions, in which the occurrence of the species has been reported by the Member States.