



## Woodwardia radicans

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|                      |                                       |
|----------------------|---------------------------------------|
| <b>Annex</b>         | II, IV                                |
| <b>Priority</b>      | No                                    |
| <b>Species group</b> | Vascular plants                       |
| <b>Regions</b>       | Atlantic, Macaronesian, Mediterranean |

The fern *Woodwardia radicans* has fragmented distribution range across south Europe. Main distributional centre are the Atlantic Islands of the Azores, Madeira and Canaries, but it grows also in mainland of Portugal and Spain, in Corse, Italy and Crete, usually only several remnant populations in individual countries. The species is distributed also in northern Africa, Asia, North and Central America. This species grows in humid habitats - its roots must be submerged in water or moist soil. Alluvial forests, in ravines, dense scrubs, around lakes. Grows also in plant communities, belonging to habitat (92A0) "Salix alba and Populus alba galleries". The species is listed in the IUCN European Redlist as Near Threatened (NT).

The conservation status in Macaronesian region is "Favourable" (and stable) while in Atlantic and Mediterranean region is "Unfavourable Inadequate" (improving in Atlantic and deteriorating in Mediterranean region).

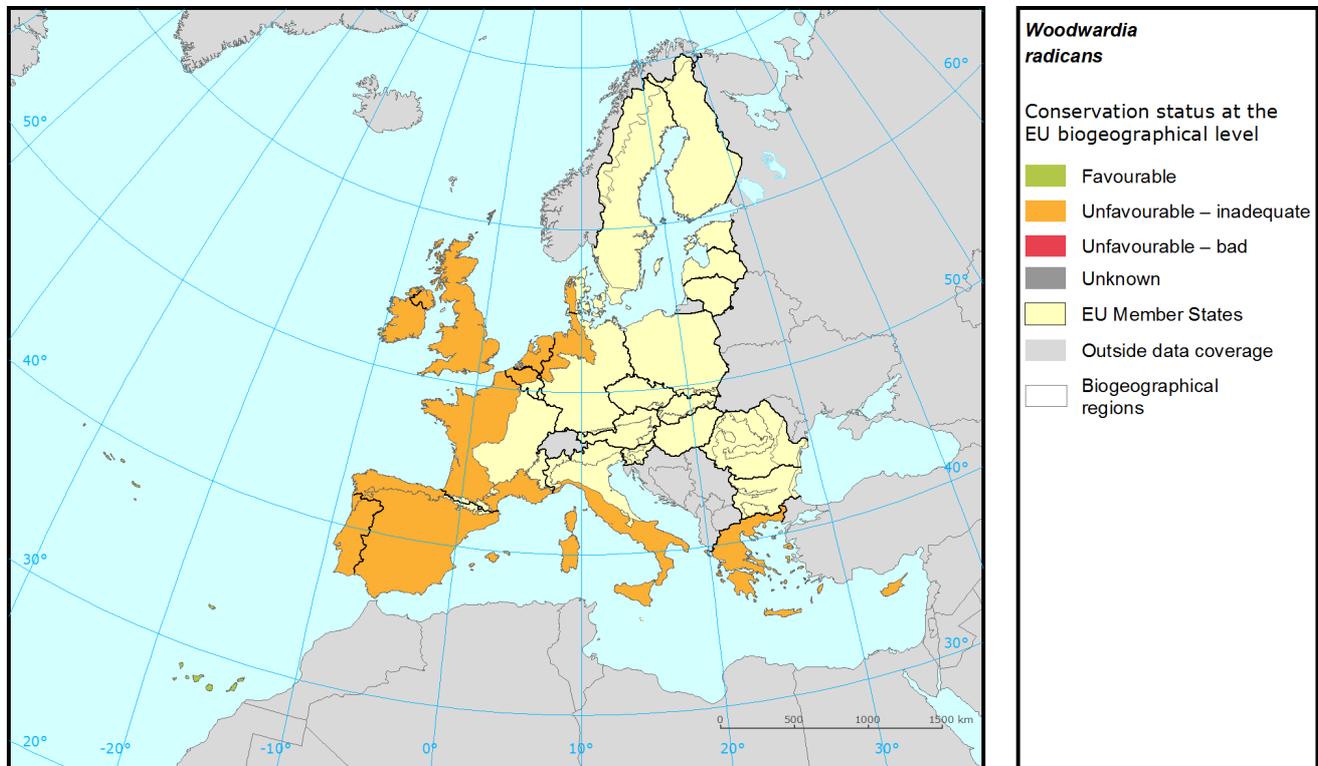
The species is threatened mostly by drainage, water regulation, re-afforestation, road construction, agricultural development.

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 Atlantic and Macaronesian region. No changes in overall conservation status between 2001-06 and 2007-12 reports in Mediterranean region.

Better data required from Greece, Portugal and Spain.

Species: *Woodwardia radicans*  
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## 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    | <span style="color: orange;">U1</span> | <span style="color: orange;">U1</span> | <span style="color: grey;">XX</span>   | <span style="color: green;">FV</span> | <span style="color: orange;">U1</span> | +           | 48          | <span style="color: grey;">XX</span>   | Not genuine       |
| MAC    | <span style="color: green;">FV</span>  | <span style="color: green;">FV</span>  | <span style="color: green;">FV</span>  | <span style="color: green;">FV</span> | <span style="color: green;">FV</span>  | =           | 41          | <span style="color: orange;">U1</span> | Not genuine       |
| MED    | <span style="color: orange;">U1</span> | <span style="color: orange;">U1</span> | <span style="color: orange;">U1</span> | <span style="color: grey;">XX</span>  | <span style="color: orange;">U1</span> | -           | 11          | <span style="color: orange;">U1</span> |                   |

See the endnote for more information<sup>i</sup>

# Species: *Woodwardia radicans*

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## Assessment of conservation status at the Member State level



### *Woodwardia radicans*

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    | U1                                | U1         | XX      | FV               | U1         | +           | 96.9        | XX          | Changed method    |
| PT ATL    | XX                                | XX         | FV      | FV               | XX         |             | 3.1         | U1          | Changed method    |
| ES MAC    | FV                                | FV         | FV      | XX               | FV         |             | 26.2        | U1+         | Changed method    |
| PT MAC    | FV                                | FV         | FV      | FV               | FV         |             | 73.8        | FV          |                   |
| FR MED    | FV                                | FV         | FV      | XX               | FV         |             | 8.7         | U1          | Better data       |
| GR MED    | XX                                | XX         | XX      | XX               | XX         |             | 4.3         | XX          |                   |
| IT MED    | U1                                | U1         | U1      | U1               | U1         | -           | 73.9        | FV          | Better data       |
| PT MED    | XX                                | U1         | U1      | XX               | U1         | x           | 13.0        | U1          |                   |

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.

### Ten most frequently reported 'highly important' pressures

| Code | Activity                               | Frequency |
|------|--|-----------|
| B02  | Forest and plantation management & use | 20        |
| I01  | Invasive alien species                 | 20        |
| J02  | Changes in water bodies conditions     | 20        |
| K04  | Interspecific floral relations         | 20        |
| L05  | Collapse of terrain, landslide         | 20        |

### Ten most frequently reported 'highly important' threats

| Code | Activity                               | Frequency |
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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 | MAC | MED |
|-----------|-----|-----|-----|
| <b>ES</b> | 100 | 100 |     |
| <b>FR</b> |     |     | 80  |
| <b>IT</b> |     |     | x   |
| <b>PT</b> | x   | 0   | x   |

See the endnotes for more information<sup>ii</sup>

## 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                     | 21        |
| 6.1  | Establish protected areas/sites                              | 14        |
| 7.1  | Regulation/ Management of hunting and taking                 | 14        |
| 7.4  | Specific single species or species group management measures | 14        |
| 2.0  | Other agriculture-related measures                           | 7         |
| 3.1  | Restoring/improving forest habitats                          | 7         |
| 3.2  | Adapt forest management                                      | 7         |
| 4.0  | Other wetland-related measures                               | 7         |
| 6.0  | Other spatial measures                                       | 7         |

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=Woodwardia+radicans>

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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.