**Rhododendron, Rhododendron ponticum**

### Overview

**Short description of Rhododendron ponticum, Rhododendron**

This evergreen shrub is densely branched growing to 5m. Flowers, borne in racemes of 10-15, are violet to purple. Pollination by insects results in the production of numerous small seeds within a woody capsule.

**Description of Rhododendron ponticum, Rhododendron status in GB**

Introduced in 1763, this invasive shrub is now widespread on acid soils throughout GB, especially in the west.

**Habitat summary: Rhododendron ponticum, Rhododendron**

Strictly confined to acid soils, its habitats include moorland, woods, screes, rocky banks, derelict gardens and streamsides. It is no longer extending its broad geographical range, and is being controlled at some sites but is still spreading at many others.

### Overview table

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<thead>
<tr>
<th>Environment:</th>
<th>Terrestrial</th>
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<tbody>
<tr>
<td>Species status:</td>
<td>Non-Native</td>
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<tr>
<td>Native range:</td>
<td>Caucasus, Bulgaria, Spain, Lebanon, Portugal, Turkey</td>
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<td>Functional type:</td>
<td>Land plant</td>
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<td>Status in England:</td>
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<td>Status in Scotland:</td>
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<td>Location of first record:</td>
<td>v.c.54</td>
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<td>Date of first record:</td>
<td>1894</td>
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### Invasion history: Rhododendron ponticum, Rhododendron

**Origin**

British plants originate from the Iberian Peninsula, but have also been significantly introgressed by the American species *Rhododendron catawbiense* and *R. maximum*.

**First Record**

The first record from the wild was in 1894.

**Pathway and Method**

Introduced for ornamental horticulture, and subsequently planted both for its own merit and as a stock for grafting.

**Species Status**
Highly invasive in Ireland and well established in western France.

Ecology & Habitat: *Rhododendron ponticum*, *Rhododendron*

**Dispersal Mechanisms**
The small seeds are dispersed up to 100 m by wind and water under favourable open conditions, but often less far in closed canopy forest.

**Reproduction**
Flowers are pollinated by bees, hoverflies and butterflies. Each flower head can produce between three thousand and seven thousand seeds, so that a large bush can produce several million seeds per year. Seeds require light for germination. Stem layering occurs where there are mature bushes with limited support for their stems, especially at the edges of established stands.

**Known Predators/Herbivores**
Potentially toxic chemicals, particularly 'free' phenols, and diterpenes, occur in significant quantities in the tissues of rhododendron, such that foliage is unpalatable to vertebrates and few insects feed on the plant.

**Resistant Stages**
Seeds in the soil can remain viable for several years.

**Habitat Occupied in GB**
Moorland, woods, screes, rocky banks, derelict gardens and streamside.

**Distribution: Rhododendron ponticum, Rhododendron**

**Native Range**
A disjunct distribution. *R. ponticum* ssp. *baeticum* is found in south-west Spain and southern Portugal, whereas ssp. *ponticum* is found in Turkey, Lebanon, Bulgaria and the Caucasus.

**Known Introduced Range**
Naturalised in the United Kingdom, Ireland, Belgium, France and Netherlands. Present in Austria.

**Trend**
There is increasing invasion in continental Europe.

**Impacts: Rhododendron ponticum, Rhododendron**

**Environmental Impact**
Once rhododendron has invaded an area, few native plants survive. In woodlands, only those trees which manage to grow above the level of the rhododendron canopy will persist. When such trees die, they cannot be replaced because seedlings cannot become established under the lightless canopy. At this point, the rhododendron completely dominates the area. Stands accumulate thick litter layers.

**Health and Social Impact**
Anecdotal information suggests that honey from rhododendron is toxic to humans. This is known as 'Honey intoxication' and results in relatively short-lived intestinal and cardiac problems but is rarely fatal. The severity of symptoms depends on the amount of contaminated honey consumed.

**Economic Impact**
It is a problem in commercial forests and it invades moorlands managed for gamebirds. A potentially major impact is its effect on oaks, beeches and nursery stock through the disease organisms *Phytophthora ramorum* and *P. kernoviae*, which are harboured by rhododendron.

**References & Links:** *Rhododendron ponticum*, *Rhododendron*

**Identification**
Refer to the NNSIP identification guide
Biology, ecology, spread, vectors


Management and impact


General