Rhododendron ponticum

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<th>Taxon</th>
<th>Family / Order / Phylum</th>
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<td>Rhododendron ponticum L.</td>
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**COMMON NAMES (English only)**
Rhododendron

**SYNONYMS**
- *Rhododendron speciosum* (Willd.) Sweet.
- *Rhododendron lancifolium* Moench.

**SHORT DESCRIPTION**
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.

**BIOLOGY/ECOLOGY**

**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. Vegetative reproduction is limited, ends of branches may root if in contact with soil but such growth is usually only found at forest edges.

**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, spores etc.)**
Seeds in the soil can remain viable for several years.

**HABITAT**

**Native (EUNIS code)**
G1: Mixed deciduous forest

**Habitat occupied in invaded range (EUNIS code)**
G1: Mixed deciduous forest, F4: Temperate heaths, D1: Raised and blanket bogs

**Habitat requirements**
Tolerant of a wide range of temperatures but intolerant to drought. It grows best in uniformly damp climates. Seedlings have difficulty becoming established in areas where there is already continuous ground cover from native plants. Establishment is best in disturbed areas where the native vegetation has been in some way disrupted, providing an opening in the plant cover.

**DISTRIBUTION**

**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.

**MAP (European distribution)**

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**INTRODUCTION PATHWAY**
It was introduced and widely planted as an ornamental in large landscaped gardens by Victorian *Rhododendron* enthusiasts and subsequently taken up in smaller gardens. It is still available from nurseries.

**IMPACT**

- **Ecosystem 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 considered a problem in commercial forests and moorlands managed for gamebirds.

**MANAGEMENT**

- **Prevention**
  Avoid planting as an ornamental.

- **Mechanical**
  Plants sprout vigorously after cutting. Mechanical clearance involves a tracked swing shovel with a rotary flail mounted on a moving hydraulic arm. In sensitive conservation areas, such techniques may well not be
appropriate. Such mechanical devices often leave a thick layer of smashed rhododendron on the ground that may have to be removed using manual labour.

**Chemical**

The leaves are waxy and herbicide treatment must include a chemical additive to help break this surface down. Usually spraying is ineffective. Glyphosate injection into root stumps should be combined with mechanical clearing.

**Biological**

Unknown.

**REFERENCES**


**OTHER REFERENCES**


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