

Comparison of two chemicals used to control rhododendron *Rhododendron ponticum* at Blackhill, Dorset, England

Liley D.

Footprint Ecology, Court House, Binnegar Lane, East Stoke, Wareham, Dorset BH20 6AJ, UK

SUMMARY

Two different herbicides were used to treat young rhododendron *Rhododendron ponticum* plants on an area of heathland in southern England in June. Three months later, of 157 plants sprayed with Glyphagen (Roundup), all but 11 had died (93% kill rate), while of 161 plants sprayed with Garlon with additions of Mixture B (a wetting agent), all but five had died (97% kill rate).

BACKGROUND

Invasive, alien plant species can be very difficult to remove from semi-natural habitats. The Himalayan native *Rhododendron ponticum* grows vigorously on acidic heath soils and where present, can dominate heathland sites in the UK. It shades out heathland species, is eaten by very few grazing animals or insects and no plants are able to persist beneath its dense canopy.

There are a variety of techniques which have been used to control *Rhododendron*, including cutting and burning (and sometimes extracting the roots), and herbicide treatment. A field trial of two different herbicide chemicals used to treat *Rhododendron* on a heathland in southern England is described here.

ACTION

Location: The herbicide treatment trials were undertaken at Blackhill Site of Special Scientific Interest (National Grid ref: SY 835941) in Dorset, southern England.

Herbicide treatments: In the summer of 1993, two plots, each of approximately 0.05 ha and containing young *Rhododendron* plants was selected. Each of the plots was divided in half.

One half of each plot was sprayed with Glyphagen (Roundup) at a dose rate of 2.6%, with the addition of mixture B (a wetting agent). The other half of each plot was sprayed with Garlon 4 at a rate of 2.6%.

Spraying was carried out at the end of the *Rhododendron* flowering season (in June). There was no rain for six hours before or after the spraying.

CONSEQUENCES

Effectiveness of herbicide treatments: The plots were checked three months after spraying, in September 1993. The *Rhododendron* sprayed with Garlon 4 showed leaves partially withered and orange green in colour when dead. Those sprayed with the Glyphagen (Roundup) were completely withered when dead. In total, 157 plants were sprayed with Roundup and all but 11 had died (93% kill rate), 161 plants were sprayed with Garlon and all but five had died (97% kill rate).

Conclusions: Both herbicides trialled (Garlon 4 and Glyphagen), when applied in June, appeared highly effective in controlling young *Rhododendron* plants at Blackhill.

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