

Propagation of Threatened Australian Plants with Horticultural Potential

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INTRODUCTION

The Australian flora is unique, with 80% of species being endemic. We have the opportunity to maintain and develop this flora but this chance may be lost. There are already 76 species of Australian plants that are extinct and another 952 which are known to be threatened. This represents about 5% of all the species of vascular plants in Australia. Education of the public is the key to preserving this valuable resource.

WHY HAS THIS HAPPENED?

Essentially it is the loss of, or changes to the natural habitat of a species. If the habitat of a native plant is destroyed, or even slightly changed in some way that is incompatible with its basic requirements, it may become extinct from the area (ANCA, 1992). There are many factors which have contributed to the loss of habitat, these include agricultural and urban expansion, changes in the frequency and intensity of fires, competition from weeds, and the grazing of introduced animals.

While many threatened species are relatively secure in National parks and reserves, a large percentage are found only in strips of unmaintained land like road verges, beside railway lines, and in cemeteries. These small patches of land are called remnant vegetation and are particularly vulnerable to disturbance.

SO WHAT ARE THREATENED PLANTS?

There are two categories—ENDANGERED and VULNERABLE (Leigh et al., 1981).

Endangered (273 species). These are species which are in serious risk of extinction from their natural habitat over the next 10 to 20 years if present land use and other causal factors continue to operate.

Vulnerable (679 species). These plants are not presently endangered but may be at risk over a longer period if present rate of depletion continues, or species which largely occur on sites likely to experience changes in land use which could threaten the survival of the species in the wild.

In addition there are 2189 poorly known species. There is insufficient information about these species to categorise them. However, approximately 1700 of these are found in the Western Australian wheat belt and many are almost certainly at risk.

For this paper 10 species of plants have been selected which are threatened in their native habitats. These plants have horticultural potential and have been grown at the Australian National Botanic Gardens.

ENDANGERED

Grevillea iaspicula, Wee Jasper spider.

Habitat: Open woodland, New South Wales—Southern Tablelands, Wee Jasper.

Threats: Goats and sheep.

Cultivation/description: Shrub of approximately 1.5 m, leaves bright green, flowers cream and red pendant clusters, prolific spring/autumn, suitable for use as a feature or for screening.

Propagation: cuttings throughout the year, 4000 ppm IBA.

Grevillea wilkinsonii.

Habitat: Open woodland, New South Wales, Tumut.

Threats: Sheep, goats, weeds.

Cultivation/description: A spreading shrub to 2 m, leaves light green, flowers pale pink clusters.

Propagation: Cuttings, 4000 ppm IBA.

Swainsona recta, small purple pea.

Habitat: Woodland and open forest, Southern New South Wales, ACT.

Threats: Urban development; this plant is known to be growing on a few sites, the main site being along a railway line.

Cultivation/Description: Slender erect perennial herb, stems to 35 cm bearing 10 to 21 purple pea flowers, September to December, dies back after flowering.

Propagation: Seed.

Rutidosia leptorrhynchoides, button wrinklewort.

Habitat: Grasslands, Southern New South Wales, ACT, Victoria.

Threats: Urban development.

Cultivation/description: Slender perennial herb, 25 to 35 cm tall branching mainly from the base, leaves narrow green to 2.5 cm long, yellow button flowers 2 cm in diameter are borne at the ends of erect stems, October-April, Suitable for most garden situations.

Propagation: Seed.

Epacris hamiltonii.

Habitat: Rocky forest slopes, New South Wales, Blue Mountains.

Threats: Fire.

Cultivation/description: Small shrub to 1 m, leaves ovate light green, slightly hairy, redden in winter, flowers bell shaped and white in spring.

Propagation: Cuttings, 500 IBA/500 NAA.

Zieria prostrata.

Habitat: Low coastal heath, north coast New South Wales.

Threats: Weeds, trail bikes, recreational vehicles.

Cultivation/description: Dense prostrate shrub, 100 mm high by 1 m wide, leaves glossy dark green and strongly fragrant, flowers star shaped, light pink in winter/spring.

Propagation: Cuttings 1000 IBA/250 NAA.

VULNERABLE

Correa baeuerlenii, chef's hat correa.

Habitat: Sclerophyll forest, south coast New South Wales.

Threats: Agricultural development.

Cultivation/description: Medium rounded shrub to 2 m, glossy dark green lanceolate leaves, green bell-shaped flowers with a unique calyx which looks like a chef's hat, autumn-winter, responds well to pruning and attracts birds.

Propagation: Cuttings, 2000 ppm IBA year round.

Microstrobos fitzgeraldii, dwarf pine.

Habitat: Spray zone around waterfalls and rocky ledges on sandstone, New South Wales, Blue Mountains.

Threats: Polluted water courses, fire.

Cultivation/description: Low spreading shrub to 50 cm, leaves light green, gymnosperm suitable for wet site or around a water feature.

Propagation: Cuttings 500 IBA/500 NAA throughout the year.

Eremophila serpens.

Habitat: Mallee eucalypt scrub, southwest WA.

Threats: Road maintenance, weed invasion.

Cultivation/description: Prostrate to 1 m, dark green leaves, flowers green and red with prominent stamens, intermittent throughout the year, suitable for rock garden or well-drained site.

Propagation: Cuttings, 500 IBA/500 NAA throughout the year.

Ricinocarpos gloria-medii, glory of the centre.

Habitat: Deep gullies or well-shaded areas of south facing slopes on quartzite or sandstone, NT, Macdonnell Ranges.

Threats: Repeated fires.

Cultivation/description: Medium shrub to 2 m, leaves slender to 6 cm, light grey, flowers are white, 5 petalled, either male or female, autumn/winter, this plant is hardy in Canberra and is suitable for a rock garden or other well-drained site.

Propagation: Cuttings, 4000 ppm IBA, autumn.

CONCLUSION

As concerned individuals and propagators we must take steps to ensure the continued existence of all Australian plant species. Our responsibility to future generations is to make sure that all of our natural resources are conserved. We can do this by becoming a part of the plant conservation movement, familiarising ourselves with the plants that grow in our regions, and by growing threatened Australian plants.

LITERATURE CITED

ANCA. 1992. Remnant vegetation in Australia.

Leigh, J.H., J.D. Briggs, and W. Hartley. 1981. Rare or threatened Australian plants. Commonwealth of Australia.