Russell lupin

Lupinus polyphyllus

www.weedbusters.org.nz

Family
Fabaceae (pea)

Where is it originally from?
North America

What does it look like?
Perennial herb (<1+ m) with erect, hairy stems that branch from the base. Clusters of 8-15 leaflets (3-13 x 1-3 cm) that are usually hairless above and silky below. Produces an erect flowerhead spike (15-60 cm long) bearing many slightly scented, pea-like blue, purple, orange, yellow, pink or white flowers (12-20 mm, Sep-Feb) are followed by straight seed pods (3-5 cm) containing mottled dark brown seeds are covered in dense, soft hairs.

Photo: Carolyn Lewis

Are there any similar species?
Cccasionally weedy semi-woody annual *Lupinus angustifolius* (blue lupin) has blue flowers (Aug-Apr). *L. arboreus* and hybrid *L. arboreus x polyphyllus*, a shrub with yellow flowers with blue or purple streaks, are also similar.

Why is it weedy?
Grows and matures quickly, produces many, well dispersed, long-lived seed. Tolerates wind, warm to cold, damage and grazing (not readily eaten), flooding and drought, poor soils, low fertility (fixes nitrogen), fire. Intolerant of moderate shade. Rapidly invades shingly braided river systems and provides hiding places for predators of the (often endangered) birds that would usually nest safely on these bare islands. The dense infestations also interfere with waterflow along these rivers, changing the ecosystem for the birds that live there. It produces large amounts of seed that are spread mainly by water, and also by humans distributing them along roadsides.

Photo: Trevor James

How does it spread?
Explosive pods, water and soil movement. Intentional sowing in conservation areas because perceived as being attractive to tourists.

What damage does it do?
Forms dense, self-replacing stands, prevents native plants establishing. Increased soil nitrogen may induce change in species composition in plant communities from low fertility species to weed species. Causes sand and gravel to build up, altering shape of rivers and contributing to flooding and erosion. Increased cover prevents some birds (eg. dotterels, wrybills) nesting, and increases predation by cats, mustelids, etc fo those bird species that do.

Photo: Trevor James

Which habitats is it likely to invade?
Disturbed lowland to subalpine shrubland, short tussockland, bare land, riverbeds, wetlands.

What can I do to get rid of it?
Control probably only necessary in low-growing plant communities and necessary in specialised stony habitats.
1. Hand pull or dig small plants (all year round). Leave on site to rot down.
2. Cut stump application (all year round): triclopyr 600 g/L (100ml/L) or metsulfuron-methyl 600 g/kg (1g/L) or glyphosate (200ml/L)
3. Spray (active growing period): clopyralid (35ml/10L) or triclopyr 600 g/L (15ml/10L).

CAUTION: When using any herbicide or pesticide, PLEASE READ THE LABEL THOROUGHLY to ensure that all instructions and directions for the purchase, use and storage of the product, are followed and adhered to.

What can I do to stop it coming back?
Seeds in ground germinate in bared areas. Sites with strong tall regeneration of native species can usually be left for falling light levels to eliminate. This process can be assisted by slashing lupins and/or interplanting with natives.