

Tree lupin

Lupinus arboreus

Family

Fabaceae (pea)

Where is it originally from?

California

What does it look like?

Short-lived, perennial shrub (<2-3 m tall) with deep taproot and tough, branching stems that are densely silky-hairy when young and become soft-woody as they mature. Grey-green leaves are hairless on top, silky underneath, and divided into 5-11 leaflets (15-40 x 3-10 mm) spreading out finger-like from one point. Pale yellow (rarely bluish or white) sweetly scented pea-like flowers (15-18 mm long, Oct-May) are followed by stout, softly hairy seed pods (40-80 mm long) that are firmly attached to the plant and split explosively to disperse mottled, dark-brown seeds (4-6 mm long).

Are there any similar species?

Blue lupin (*Lupinus angustifolius*) is a semi-woody annual with blue flowers (Aug-Apr) and is occasionally weedy. *L. polyphyllus* is also similar. Hybrid *L. arboreus* x *polyphyllus* has larger and more leaflets, flowers are yellow with blue or purple streaks and it is rarely weedy.

Why is it weedy?

Grows and matures quickly, producing many long-lived seeds. Taller than competing coastal species, so can form a canopy. Tolerates wind, salt, hot to cold temperatures, damage and grazing (not readily eaten), drought, low fertility (fixes nitrogen), and fire but is intolerant of moderate shade and waterlogged soils.

How does it spread?

Seeds are spread by explosive pods, water and soil movement. Sown for sand consolidation and erosion control and as a nursery crop. Common seed sources are riverbeds and plantation forests.

What damage does it do?

Lowers light levels in open habitats, causing subsequent invasion by weedy shrubs, vines, wilding pines, etc. Increased soil nitrogen may induce changes in the species making up the plant communities from low fertility species to exotic grass or other weed species. Causes sand and gravel to build up, altering the shape of coastlines or rivers and causing erosion elsewhere. Increased cover prevents some birds (eg dotterels, wrybills) nesting and increases predation of birds that do by cats and mustelids.

Which habitats is it likely to invade?

Short tussockland, bare land, riverbeds, coastal, sandy and well-drained areas.

What can I do to get rid of it?

Control probably only necessary in low-growing plant communities, eg coastal dunes.

1. Slash tall plants close to ground (all year round). Leave on site to rot down.
2. Hand pull or dig small plants (all year round). Leave on site to rot down.
3. Cut down and paint stumps (all year round): glyphosate (200ml/L) or metsulfuron-methyl 600g/kg (1g/L) or triclopyr 600 EC (100ml/L) or triclopyr 120g/L (500ml/L) or picloram gel.
4. Spray (active growing period): clopyralid (50ml/10L) or triclopyr 600 EC (15ml/10L) or triclopyr 120g/L (75ml/10L).

What can I do to stop it coming back?

Cut stumps occasionally resprout. Persistent seedbank. Recent fungal attack has lowered this plants vigour. Sites with strong tall regeneration can usually be left for falling light levels to eliminate. This process can be assisted by slashing and/or interplanting.



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Photo: Carolyn Lewis



Photo: Carolyn Lewis



Photo: Trevor James