

Pinus radiata

COMMON NAMES

Monterey pine, radiata pine

FAMILY

Pinaceae

AUTHORITY

Pinus radiata D.Don

FLORA CATEGORY

Vascular – Exotic

STRUCTURAL CLASS

Trees & Shrubs - Gymnosperms

NVS CODE

PINRAD

CONSERVATION STATUS

Not applicable

HABITAT

Terrestrial. A plant of coastal and lowland habitats (Timmins & MacKenzie 1995). A plant of low fertility sites (Timmins & MacKenzie 1995). The plant occurs in scrub and forest margin, shrubland, short tussockland, sand dunes, cliffs and bluff communities (Timmins & MacKenzie 1995).

WETLAND PLANT INDICATOR STATUS RATING

FACU: Facultative Upland

Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).

DETAILED DESCRIPTION

Medium to large tree (40–60 m in cultivation). **Needles** are slender, about 15 cm long, deep or dark green and held in bunches of 3. **Male cones** are clustered at ends of new shoots in spring, light-brown to pinkish. **Female cones** are 12 × 8 cm, brown, in clusters of up to 6 and backwards pointing.

SIMILAR TAXA

Dark green, relatively short (15 cm) stout (1.2–2 mm thick) needles in clusters of 3, rigid and spreading in different directions. New shoots usually brown. large persistent egg-shaped branch cones without spikes, held in clusters of 1–6.

FLOWER COLOURS

No flowers

LIFE CYCLE

Perennial. Seeds germinate in Spring; wind dispersed (Timmins & MacKenzie 1995). Seed is produced annually and is known to remain viable at 4 years (*ibid.*).

YEAR NATURALISED

1904

ORIGIN

Coastal California, N. America



Pinus radiata. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.



Pinus radiata. Photographer: John Smith-Dodsworth, Licence: CC BY-NC.

REASON FOR INTRODUCTION

Forestry

TOLERANCES

The plant is tolerant to drought and intolerant to shade and frost (Timmins & MacKenzie 1995). Physical damage and grazing result in regrowth if green foliage remains intact (Timmins & MacKenzie 1995). Responds readily after fire, if a seed source is adjacent (Timmins & MacKenzie 1995). Requires very low to medium soil fertility (Atkinson 1997).

ENVIRONMENTAL WEED (2024)

This plant is named in a list of 386 environmental weeds in New Zealand 2024 prepared by DOC. 759 candidate species were considered for inclusion on this new comprehensive list of environmental weeds in New Zealand. The species considered were drawn from published lists of weed species, lists of plants that must be reported or managed by law if observed, existing national and regional programmes and agreements for pest management, and species already managed by the Department of Conservation (DOC). Candidate species were then assessed to see if they were fully naturalised and whether they have more than minor impacts in natural ecosystems. Read the full report [here](#).

EXTRA INFORMATION

The National Wilding Conifer Control Programme team at Biosecurity New Zealand, a branch of Ministry for Primary Industries, has produced this wilding conifer [quick ID guide](#).

REFERENCES AND FURTHER READING

Atkinson IAE. 1997. Problem weeds on New Zealand islands. *Science for Conservation 45*. Department of Conservation, Wellington, NZ. 58 p.

Timmins SM, Mackenzie IW. 1995. Weeds in New Zealand Protected Natural Areas database. *Department of Conservation Technical Series 8*. Department of Conservation, Wellington, NZ. 282 p.

MORE INFORMATION

<https://www.nzpcn.org.nz/flora/species/pinus-radiata/>

PDF DATE

17 September 2024