Pinus pinaster

COMMON NAMES
cluster pine

BIOSTATUS
Exotic

CONSERVATION STATUS
Not applicable

CATEGORY
Vascular

STRUCTURAL CLASS
Trees & Shrubs - Gymnosperms

FLOWER COLOURS
No flowers

DETAILED DESCRIPTION
Medium-sized to large tree with rather open crown, the stout trunk becoming bare of branches for most of length. **Bark** thick, deeply fissured and forming small irregular plates with smooth dark red or reddish-brown surfaces. **Shoots** deep brown or brownish, shining, glabrous, with remains of leaf bases prominent. **Buds** cylindric-oblong, sometimes very large (> 4 × 1.5 cm), not resinous; scales dark reddish, reflexed, with margins strongly white-fimbriate. **Leaves** 2 per fascicle, 6–17 cm × 2 mm, appearing narrower due to incurved margins, dull green, rigid, pungent; resin canals median; sheath 5–10 mm long in older leaves. **Male strobili** < 1.5 cm long, ellipsoid or broad-ellipsoid. **Conelets** sessile, prominent and broad-ellipsoid; scales obtuse, acute or mucronate. **Mature cones** often persistent for several years, sessile or subsessile, 7–15 × 4–6cm when closed, usually cylindric-ovoid, sometimes ovoid, generally symmetric; apophyses rhomboid, keeled, shining brown; umbo prickly. **Seed wing** asymmetric, to 2.5 cm long. (Webb et. al., 1988)

SIMILAR TAXA
Very distinctive bark forming reddish-brown plates on mature trees. Stout needles in pairs, persistent large cones with a broad spike.

HABITAT
Terrestrial. A plant of coastal and lowland habitats (Timmins & MacKenzie 1995). The plant grows in sites of low fertility (Timmins & MacKenzie 1995). A plant of shrubland, tussockland, cliff, bluff and coastal communities (Timmins & MacKenzie 1995).

GENUS
Pinus

FAMILY
Pinaceae

AUTHORITY
Pinus pinaster Aiton

YEAR NATURALISED
1830

ORIGIN
Mediterranean

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

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REASON FOR INTRODUCTION
Forestry

TOLERANCES
The plant is tolerant to drought, partial shade and frost and intolerant to poor drainage (Timmins & MacKenzie 1995). The plant is intolerant to dense shade (Timmins & MacKenzie 1995). Physical damage and grazing result in regrowth unless all the green foliage is removed (Timmins & MacKenzie 1995). Regeneration occurs after fire if there is an adjacent seed source (Timmins & MacKenzie 1995). Requires low soil fertility (Atkinson 1997).

LIFE CYCLE AND DISPERSAL
Perennial. 11,000–15,000 seeds/kg of cones (Timmins & MacKenzie 1995). Seeds will survive 10–20 years in storage under 10% moisture content at 5°C (Timmins & MacKenzie 1995). Seeds ”short-lived” in seed bank (Atkinson 1997). Seed is dispersed by wind (Timmins & MacKenzie 1995).

WETLAND PLANT INDICATOR STATUS RATING
FACU: Facultative Upland
Occasionally is a hydrophyte but usually occurs in uplands (non-wetlands).

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.

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.

NVS CODE
PINPIN

REFERENCES AND FURTHER READING
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.
Webb CJ, Sykes WR, Garnock-Jones PJ. 1988. Flora of New Zealand, Volume IV. Naturalised Pteridophytes, Gymnosperms, Dicotyledons. Botany Division, Department of Scientific and Industrial Research, Christchurch, NZ. 1365 p.

MORE INFORMATION
https://www.nzpcn.org.nz/flora/species/pinus-pinaster/

PDF DATE
27 May 2026