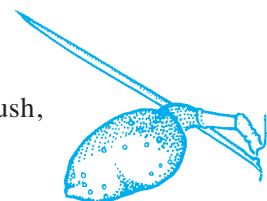


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- Habitat:** Chiefly in gully scrubs and near creeks on rocky sites, at moderate elevations.
- Habit:** Semi-deciduous, open woody spreading shrub to 3 m high. Bright green heart-shaped, soft, toothed leaves to 15 cm long.
- Site Preference:** Protected position in moist, well-drained soil and semi-shade. Tolerates poor drainage and seasonal waterlogging to 10 cm deep, and full sun. Tolerates extended dry periods but not permanently dry soil. Tolerates moderate frost.
- Flowering:** Cream to white. Often profuse and fragrant, in loose clusters along stems.
- Seed Collection:** Late Nov to late Dec. Monitor closely as seeds shed 3-14 days after maturity. Seeds remain viable for at least 2 years.
- Propagation:** From seed or cuttings. Seeds germinate readily in 2-4 weeks, and can be direct seeded into pots (2 seeds per pot). Strikes readily from cuttings.
- Regeneration:** Regenerates readily in disturbed areas.
- VALUES:**
- Land Protection:** Useful for stabilising soils along creeks where it occurs naturally.
- Koori:** String made from bark.
- Ornamental:** Not highly ornamental, but attractive when flowering profusely. Fragrant floral perfume can permeate large areas. Can be planted under established trees. Prune tips to encourage bushiness and prevent straggleness. Cultivated plants may be short-lived.
- Other:** Good quality warp yarn produced from bark in 19th century.

Hakea leucoptera — Needlewood

(syn. *H. leucocephala* plus several others)

Also: Needle Hakea, Silver Needlewood, Silver Needle Bush, Pin Bush, Booldoobah (Koori name from Hay area).



- Family:** Proteaceae — Protea family.
- Name Origin:** *leucoptera* — from Greek *leucos*, white and *pteron*, wing, referring to ashy-white seed wings (although they may be brownish-grey). Common name refers to leaves which have very sharp points.
- OCCURRENCE:**
- Regional:** Noted south-west of the Olympic Highway, in the areas: Simmons Creek-North west Culcairn; Burrumbuttock-West Hume; Long Plain-West Hume and Urana-Rand-Corowa.
- Australia:** Mainland states and territories.
- Habitat:** Coarse-textured soils. Individual trees or dense thickets of shrubby plants.

- Habit:** Bushy shrub to about 2 m high or small tree to about 5 m high. Open-branched crown, straight, rigid branches and rigid cylindrical leaves 2-9 cm long.
- Similar Species:** Distinguish from Hooked Needlewood (*H. tephrosperma*) by its silvery leaves with *straight* points and glabrous flowers.
- Site Preference:** Tolerates relatively heavy soil and partial shade. Hardy and moderately frost tolerant.
- Characteristics:** Long-lived.
- Flowering:** Creamy white, late spring-summer. Sometimes profuse.
- Seed Collection:** Throughout year, as seeds generally retained.
- Propagation:** From fresh seed (\pm 300 viable seeds per gram) which generally germinate in 3-6 weeks. Suitable for direct seeding into pots (2 seeds per pot) or into field.
- Regeneration:** Root suckers.
- VALUES:**
- Fuel:** Easily split.
- Timber:** Timber reddish-brown, close-grained, hard and tough, with small oak-like appearance. Used in small turnery work, and takes good polish. Smoking pipes were made from roots.
- Wildlife:** Good habitat. Flowers are a nectar source for native birds and insects. Foliage good nesting sites for small birds.
- Koori:** Roots a source of water. Roots dug up and one end placed in slow fire, forcing water out other end.
- Ornamental:** Ornamental. Decorative woody fruit. Plant in full sun. Adaptable in cultivation.
- Other:** Light producer of fair quality honey.

Hakea microcarpa — Small-fruited Hakea

(syn. *H. patula*, *H. bifrons*, *H. glabriflora*) **Also:** Small-fruit Hakea

Family: Proteaceae — Protea family.

Name Origin: *Hakea* — after Baron Christian L. von Hake, 18-19th century German patron of botany. *microcarpa* — from Greek *micro*, small, and *carpos*, fruit, referring to small fruit.

OCCURRENCE:

Regional: Noted only in Munderoo district. Possibly also in surrounding areas in similar country.

Australia: Qld, NSW, Vic, Tas.

