



Photo by Greening Australia

Linum marginale



Photo by Greening Australia

Synonyms: None

Common names: Native Flax, Wild Flax

Family: Linaceae

Similar species: *Linum usitatissimum* (Linseed)

Conservation status:
Not listed as there are no known threats.

Description

Linum marginale is an erect slender herb, usually 10 to 60 cm high, and sometimes up to 1 m.

Roots: thick tuberous rootstock.

Stems: mostly unbranched, hairless.

Leaves: narrow, tapering to a soft point, alternate, sessile, 5-20 mm long, usually less than 2 mm wide, often bluish, smooth, scattered.

Distribution



Map from Australia's Virtual Herbarium: <http://avh.chah.org.au/>



Photo by F. Kavouta Manasse (ANBG)

Ecology

Habit	Perennial herb, but often not behaving as such as few plants persist beyond one year.
Growth period	After flowering, the plant dies back to the rootstock and reshoots with the return of regular rain. As a perennial this plant can become dormant until conditions are suitable for new growth.
Life expectancy	Unknown.
Habitat	Grasslands, woodlands, open forests, grassy wetlands. Often found in swampy areas, amongst rocks or drainage lines and other low-lying areas. Relatively uncommon species, usually occurring as scattered plants or in small colonies.
Site tolerance	Full sun or part shade.
Soil tolerance	Found on a wide range of soils: heavy and clay soils, sandy soils. Prefers moist well-drained soils.
Drought tolerance	Tolerant.
Frost tolerance	Hardy.
Fire tolerance	Tolerant: the plant resprouts at ground level after fire.
Grazing tolerance	Unknown.
Pests	Flax rust (<i>Melampsora lini</i>), birds.

Reproduction

Flowers

Sometimes very few per plant. Bright or pale blue, occasionally white, sometimes with deeper blue veins, 1.5-2 cm diameter, in loose clusters at the top of the stalks, with 5 rounded petals 8-12 mm long.

Flowering occurs most of the year, peaking from spring through to early autumn.

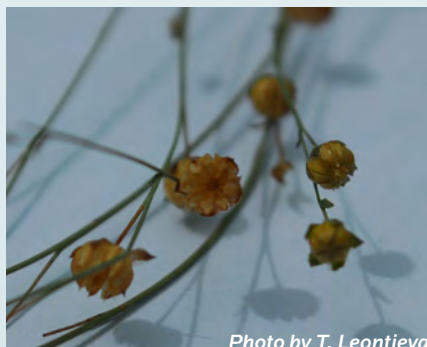
The flowers are pollinated by insects.

Fruit: capsules

Five-celled, round, papery, 5 mm broad capsule. The capsules turn tan brown at maturity. They contain 2 seeds per cell.

Seeds

Flat, smooth, to 3 mm long, light brown. The seeds turn shiny golden-brown when mature. They produce mucilaginous gel when wet, which is very sticky and will adhere to soil.



Germination requirements

Leaching may hasten germination but pre-treatment is not essential.

The seeds have a high germination rate. The seeds germinate in 3 to 4 weeks at 20 °C.



Genetic seed viability

Possible chromosomal differences are unknown for *Linum marginale* at present.

How to grow the species in a Seed Production Area (SPA)

Seed collection and storage

Most fruit mature in late spring, although some can be found up until autumn on late-flowering plants.

Hand-pick capsules when they are tan-brown. To fully remove seeds, the capsules may need to be rubbed against a fine wire screen. Clean seed using sieves.

The results of the germinability tests done at the National Seed Bank were highly variable; this could be due to storage conditions. However, it appears that seeds retain viability and germinability for a number of years as 30% of 23-year-old seeds germinated. The seeds should be dried down to 5-6% seed moisture content and then be stored in a freezer for no more than 5 to 7 years to ensure the best viability and germinability rates.

Propagation

L. marginale is propagated from seed. Sow seed in autumn in potting mix and cover the seeds with potting mix or vermiculite.

The plants need to be planted with good spacing to allow air circulation, which reduces rust. The plant spacing should be 20 cm if planted in single rows (50 cm to 1 m between rows) and 30 to 40 cm if planted in potting mix trays.

The species is moderately suitable for direct seeding as it is hard to source large enough quantities of seed.



Photo by T. Leontjeva

Growth at the SPA

Water the plants from early spring to the end of summer.

To encourage growth, the plants can be fertilised with slow release fertiliser and seaweed fertiliser in spring. Seaweed fertiliser can also be combined with a water-soluble fertiliser and applied during establishment.

Prune back the stems to 20 cm high after seeding is finished.



Photo by Greening Australia

Uses

- **Horticulture:** *L. marginale* is suitable for cottage gardens, rockeries and planting under established trees. It will self-seed readily in ideal conditions.
- **Bush tucker:** the seeds were eaten raw or cooked. They are said to have very little flavour.
- *Linum marginale* has been suspected of cyanide (HCN) poisoning in stock but there are no instances of poisoning in the field nor recorded in literature.
- **Fibre:** Indigenous people used the very strong fibre from the stem to make cord and twine for fishing nets. It was stripped and beaten for string.

References

Cunningham, G.M., Mulham, W.E., Milthorpe, P.L., Leigh, J.H. (1981). *Plants of Western New South Wales*. D. West: NSW Government Printing Office.

Wrigley, J., Fagg, M. (1988). *Australian Native Plants – propagation, cultivation and use in landscaping*. William Collins, Sydney.

Internet links

Australian National Botanic Gardens: <http://www.anbg.gov.au/apu/plants/linumarg.html>

Greening Australia Florabank Factsheet: http://www.greeningaustralia.org.au/uploads/Our%20Resources%20-%20pdfs/florabank-fact-sheets-2011/Linum_marginale.pdf

Native Garden: <http://native-garden.blogspot.com.au/2011/11/common-name-native-flax-latin-linum.html>

Plant For A Future: <http://www.pfaf.org/user/Plant.aspx?LatinName=Linum+marginale>

PlantNET – National Herbarium of New South Wales: <http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Linum~marginale>

