



photo: D. Bruce

Indigofera australis



Indigofera is a genus of about 700 species of which about 30 are found in Australia. The most commonly encountered species is *Indigofera australis* [8].

I. australis is an open erect spreading shrub to 2.5 m high with long slender stiff stems [12]. Common names are: Austral indigo [8], Australian Indigo [9] or Hill indigo [13].

The name *Indigofera* is derived from Neo-Latin for “bearing Indigo”. Indigo is a purple dye originally obtained from some *Indigofera* species. The specific epithet *australis* comes from Latin, meaning southern, referring to the geographical distribution of the species [8].

Population map: www.ala.org.au/explore/species-maps/

Natural Populations

Indigofera australis occurs in Qld, NSW, Vic, Tas and SA [7]. It is widespread in open forests and woodlands [7, 8, 13], particularly in hilly areas. It grows in a range of well-drained acid soil types in semi-shaded situations [4, 12]. It tolerates moderately heavy frost and extended wet periods.

Flowering and Seeds

Flowering occurs in late winter and spring [8]. The flowers are pea-shaped, pink or purple in colour (occasionally white, which is cultivated as a garden plant [6]) and about 12 mm across [8].

The fruits are thin pods that become firm and are red-brown at maturity. Each pod contains up to 10 grey-brown seeds [1].

Collect the seed in middle November to early February [12]. As with most native peas, the seed drops very soon after maturity. Monitor fruits closely, bag maturing fruits or place groundsheets under plants to catch the seed (although ants also harvest the seeds) [1]. Ensure collection by securing nylon stockings or paper bags to fruiting branches after flowering [4, 12].

Alternatively, the pods can be harvested close to maturity (when they turn brown) and fully dried in a warm area [1]. A glasshouse or plastic igloo are ideal environments for final drying of pods [5]. The seed can be stored for long periods [1].

Cultivation and Uses

Plants usually produce plenty of seeds and propagation from seed is relatively easy following treatment to break the physical dormancy provided by the impervious seed coat. Treatment can be carried out by abrasion or by the use of boiling water [8]. The use of hot water is recommended, as it is potentially less damaging to the seed [2].

After treatment with hot water (just off the boil), allow to soak for a few hours [1]. The seed should be dried before sowing [2]. Germination should occur in 3-4 weeks [2, 4].

I. australis is suitable for direct seeding when sufficient seed is available [1]. Sow seed from late winter to early spring [5]. Cuttings are also successful where flower colour needs to be reproduced [13].

After fire, regeneration from seed is prolific [4, 12] but it can also regrow and sucker from rootstocks and lateral roots [9].

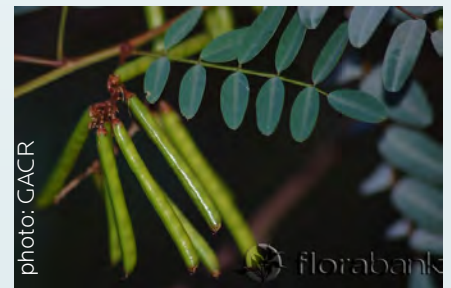
Although a common shrub in the field, this species is not frequently grown in horticulture. It is frost hardy [13] and it will withstand extended dry conditions once established, although adequate watering improves appearance [8]. It is a useful low-level cover in windbreaks [4, 12]. As a legume it improves soil fertility by 'fixing' nitrogen through the *Rhizobium* nodules on the roots [4, 9, 12].

I. australis provides important wildlife habitat. The flowers are a pollen and nectar source for many native insects, including bees and wasps and the leaves are food for caterpillars [4, 12]. The flowers are also visited by honey bees [9].

The species is palatable and grazed severely by livestock [4], although some sources suspect it is cattle poison [13]. Everist (1974) noted that it has been suspected of

being toxic while flowering and of poisoning cattle [14]. He indicated that the plant contains cyanide but it is not certain that this has been responsible for poisonings. Everist concluded that there is little danger of poisoning under normal paddock conditions when adequate alternative pasture is available, since reported cases of poisoning are so rare for such a widespread and abundant species. The stems are occasionally stripped of their bark by rabbits [6].

Indigenous uses include adding crushed leaves to water to kill or stun fish and eels [11]; also roots were hammered and placed in salt or fresh water to poison fish [12]. The leaves and stems produce a yellow-fawn dye with alum as a mordant [4, 12].



To source seeds or plants:
www.grassywoodlands.org.au

References

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- [3] Walker, K., Burrows, G., and McMahon, L. (2001). *Bidgee Bush, An identification guide to common native plants species of the South Western Slopes of New South Wales*. Greening Australia, South West Slopes.
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- [5] Bonney, N. (2003). *What Seed Is That? A field guide to the identification, collection and germination of native seed in South Australia*. Tantanoola, SA: Neville Bonney.
- [6] Cunningham, G.M., Mulham, W.E., Milthorpe, P.L. and Leigh, J.H. (1981). *Plants of Western New South Wales*. D. West: NSW Government Printing Office.
- [14] Everist, S.L. (1974). *Poisonous Plants of Australia*. Angus and Roberston. Sydney.

Internet links

- [7] PlantNET National Herbarium of New South Wales: <http://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=s&name=Indigofera-australis>
- [8] Australian Society for Growing Australian Plants Fact Sheet: <http://asgap.org.au/i-aus.html>
- [9] The Royal Botanic Gardens and Domain Trust: http://www.rbgsyd.nsw.gov.au/science/Evolutionary_Ecology_Research/Ecology_of_Cumberland_Plain_Woodland/woodland_plants/indigofera-australis
- [10] FloraBase Western Australian Herbarium: <http://florabase.calm.wa.gov.au/browse/profile/3970>
- [11] Australian National Botanic Gardens website: <http://www.anbg.gov.au/aborig.s.e.aust/indigofera-australis.html>
- [12] Charles Sturt University's Virtual Herbarium: <http://www.csu.edu.au/faculty/science/herbarium/sws/species/indigofera-australis.html>
- [13] Australian National Botanic Gardens & Australian National Herbarium, Harden Species List: <http://www.anbg.gov.au/greening-grainbelt/harden-species-list.xls>