



1. Habit in flower. 2. Zig-zagging stems and flower buds. 3. Close-up of globular flower clusters. 4. Prominent central vein and raised margins.



## Zigzag wattle (*Acacia macradenia*)

Introduced

Native

Not Declared

Zigzag wattle is a very attractive plant native to large parts of inland Queensland. Because of its spectacular floral display in winter, this species has been widely cultivated in other parts of Australia as a garden ornamental. It is also erroneously planted in revegetation projects in south-eastern Queensland as a “native” plant. It is now spreading from these plantings and becoming a weed of bushland in many parts of coastal Queensland.

### Distribution

Zig-zag wattle is native to large parts of inland Queensland, from the north-western parts of the Darling Downs district to north-east of Hughenden. However, it is mainly found from the Clermont area in central Queensland south to near Surat and Chinchilla.

It was first recorded becoming naturalised in the understorey of a dry eucalypt forest at Mount Crosby in 1978. Further records appeared near Cooktown in northern Queensland, from the Maryborough area, and from the greater Brisbane area in 2003 and 2004. It has since been reported from other parts of south-eastern Queensland, including the Gold Coast, Sunshine Coast and Ipswich areas.

### Description

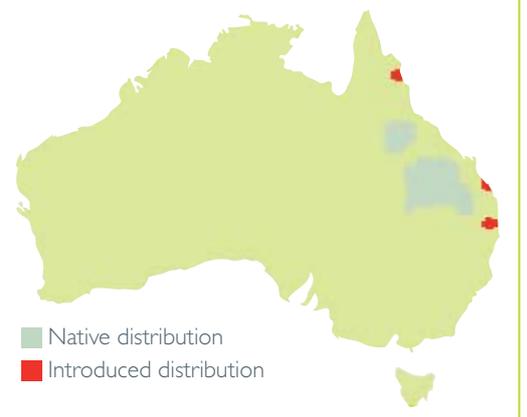
A shrub or small spreading tree that grows 3-6 m tall. The younger branchlets are generally drooping in nature with a distinctive zig-zagging appearance. Its leaves are actually modified leaf stalks, called phyllodes, which take on the function of a regular leaf. These hairless dark green phyllodes (8-25 cm long and 8-25 mm wide) are tapered at both ends and vary from relatively straight to noticeably curved. They have a single prominent central vein running lengthwise and their margins are also raised and prominent. Young leaves and stems are often reddish in colour.

### Quick Facts

- > A large shrub with zig-zagging younger stems.
- > Leathery ‘leaves’ that have a prominent central vein and raised margins.
- > Masses of small bright yellow globular flower clusters in winter.
- > Long and slender pods containing several hard black seeds.

### Habitat

In its natural habitat, Zig-zag wattle grows on stony or sandy soils in the understorey of open woodlands, often near creeks or on hillsides. In eastern Queensland it has become naturalised along roadsides, in suburban parks and bushland, and in open eucalypt woodlands.





1. Mature fruit. 2. Infestation in bushland near J C Slaughter Falls at Mount Coot-tha.

## Description (cont'd...)

The bright yellow flowers are arranged in globular clusters about 10 mm across. These flowers have relatively inconspicuous petals and sepals and numerous conspicuous stamens that give them a fluffy appearance. The globular flower clusters are borne on short stalks 3-6 mm long, and 8-25 of them are alternately arranged along short flowering branches (2-8 cm long). Flowering occurs during a short period in winter and early spring (i.e. from late June to September) and is usually very prolific and spectacular. The fruit is a very elongated pod (up to 8 cm long and 5 mm wide) that is slightly to moderately constricted between each of the seeds. These hairless pods are initially green in colour with a leathery appearance, but turn dark brown as they mature in late spring. The blackish seeds are oblong in shape (about 4 mm long and 2.5 mm wide) and have a small fleshy aril attached to one end.

## Reproduction and Dispersal

Zig-zag wattle produces numerous hard seeds, that are probably long-lived like those of other acacias. Its seeds are spread short distances by animals (e.g. birds and ants) and they may also be dispersed in dumped garden waste and contaminated soil. However, this species is most commonly spread as a result of its use in re-vegetation and amenity plantings.

## Why is it an Emerging Threat?

This species is erroneously planted along highways, in amenity areas, and in re-vegetation plantings in eastern Queensland as a "native" plant. However, it is not native to this part of the state and has spread from such plantings, particularly in the Greater Brisbane and Gold Coast areas. For example, it has recently been observed growing in parks and conservation reserves in parts of Ipswich and western Brisbane (e.g. at Redbank, Mount Crosby, St. Lucia and Mount Coot-tha). Many other wattles have already become very serious environmental weeds in other parts of Australia (e.g. Cootamundra wattle). Like these other species, Zigzag wattle has the potential to invade bushland areas and replace the naturally-occurring wattles.

## Control Methods

The control of this species is not currently required by law, however it is an emerging environmental weed it should be removed from sensitive bushland and conservation areas outside its native range.

Small plants can be pulled out by hand, while larger saplings and trees may need to be treated with herbicides using either the cut-stump or basal bark methods. No chemicals are currently registered for its control in Australia, but in Queensland control environmental weeds such as Zig-zag wattle is allowed via the APVMA off-label permit number PER 11463 (<http://permits.apvma.gov.au/PER11463.PDF>). Unless otherwise stated in this permit, the use of the product must be in accordance with instructions on its label. Within other state boundaries, it is recommended that all managers consult any relevant permits or government legislation applicable to their region.

## Look A-likes

The zig-zagging stems of this species are very distinctive, hence it is rarely confused with the other wattles (i.e. *Acacia* spp.) that are present in Queensland.

*The control methods referred to in Weed Watch™ should be used in accordance with the restrictions (federal and state legislation and local government laws) directly or indirectly related to each control method. These restrictions may prevent the utilisation of one or more of the methods referred to, depending on individual circumstances. While every care is taken to ensure the accuracy of this information, Technigro does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.*

*This information has been developed with the assistance of Dr Sheldon Navie. Photographs are also courtesy of Dr Sheldon Navie © Technigro Australia Pty Ltd 2011*