



1. Shrubby habit of Ming asparagus fern. 2. Needle-like leaves and mature fruit. 3. Dense clusters of small white flowers. 4. Close-up of immature fruit.



Ming asparagus fern (*Asparagus retrofractus*)

Introduced

Not Declared

Ming asparagus fern is a shrub from southern Africa that is also known as pom pom asparagus or zig-zag asparagus. This garden ornamental has recently become established in bushland in south-eastern Queensland, and has the potential to become a serious environmental weed like several of the other weedy asparagus species.

Distribution

Ming asparagus fern has been recorded from the Moreton and Wide Bay districts in south-eastern Queensland. The first herbarium record was from the understorey of a disturbed sheoak-eucalypt woodland on Coochiemudlo Island in 2001. Since then, it has been collected from Greenslopes and St Lucia in Brisbane, and the margins of a dry rainforest near Gympie. It has also been observed growing in bushland at Ashgrove, Rochedale, Riverhills and Mount Coot-tha in the last couple of years.

Description

A shrubby plant usually growing 1-2 m tall, but occasionally reaching up to 3 m in height. The older branches are light grey or whitish in colour and bear small spines or thorns. The leaves are reduced to tiny scales, and what appear to be the leaves are actually small stem segments which function as leaves (i.e. cladodes). Large numbers of these needle-like 'leaves' (8.5-25 mm long and less than 1 mm wide) are produced in clusters along the stems that resemble pom-poms. They are hairless, usually slightly curved, and have pointed tips.

The small white or cream flowers are arranged in dense clusters and are produced in large numbers for a short period in summer. Each flower is about 5 mm across and is borne on a stalk 6.5-9 mm long. They have six petals and six stamens, usually with white filaments and yellow anthers. The rounded berries (6-10 mm across) are initially green in colour, but turn black as they mature.

Quick Facts

- > A shrubby plant usually growing 1-2 m tall
- > Older stems are light grey and bear small spines
- > Needle-like leaves produced in clusters of 20-30 along the stems
- > Rounded berries that turn from green to black as they mature

Habitat

Ming asparagus fern is a potential weed of riparian vegetation, forest margins, open woodlands, urban bushland, coastal environs, roadsides, disturbed sites and waste areas. It is most commonly found in the understorey of drier forests.





1. Infestation in dry eucalypt woodland at Mount Coot-tha. 2. Older branch bearing small thorns.

Reproduction and Dispersal

This species reproduces by seed, which are mainly spread by birds and other animals that eat the fruit. Plants eventually form large clumps, and may re-grow from underground rootstocks when damaged. Rootstocks and seeds may also be spread in dumped garden waste.

Why is it an Emerging Threat?

Ming asparagus fern is often cultivated as a garden ornamental, and like other asparagus ferns (*Asparagus spp.*) it is spread into nearby bushland areas by birds and other animals that eat its fruit. This species prefers semi-shaded situations, and in recent years it has begun to appear in urban bushland and along waterways in south-eastern Queensland. However, a more disturbing infestation was recently recorded in bushland at Mount Coot-tha. This infestation consisted of dozens of large plants scattered throughout about 20 hectares of dry eucalypt forest.

Control Methods

Young plants or small colonies of Ming asparagus fern may be physically removed, but care should be taken collect and remove all material as pieces of rootstock that are left in the ground will resprout. Gloves should also be worn and care taken to avoid the sharp thorns on the stems.

However, this control method may cause significant soil disturbance and chemical control may be more suitable for larger plants. While there is no information available on the chemical control of Ming asparagus fern, herbicides and application methods that are effective on Ground asparagus fern may also have similar results with this species. For example, basal bark or cut stump applications of Starane (i.e. fluroxypyr) may be effective (Note: This product should not be used along waterways, on coastal dunes or near the root zone of some trees).

There are currently no products registered for the control of this species in Australia. However, in Queensland, products containing fluroxypyr, glyphosate, metsulfuron, picloram and triclopyr can be used to control woody environmental weeds such as Ming asparagus fern via the APVMA off-label permit number PER 11463 (<http://permits.apvma.gov.au/PER11463.PDF>). Please read this permit carefully and, unless otherwise stated in this permit, the use of any product must be in accordance with the instructions on its label. Within other state boundaries, it is recommended that any relevant permits or government legislation applicable to that region be consulted.

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

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Look a-likes

Some of the other asparagus ferns, such as Ground asparagus fern (*Asparagus aethiopicus* 'Sprengeri') and Sickletom (*Asparagus falcatus*) may be confused with Ming asparagus fern. However, Ground asparagus fern has spreading or scrambling stems and its fruit turn red when mature. Sickletom may be shrubby in habit, but its leaves are quite large and flattened (3-7 cm long and 2-5 mm wide).



Top. Spreading habit of Ground asparagus fern.

Bottom. Larger flattened leaves of Sickletom.