

# Peacock fern

*Selaginella willdenovii*



A native of South-East Asia, peacock fern is a relative of the ferns and was introduced to Queensland as an ornamental for its beautiful foliage.

It thrives in shady, moist conditions where it can form dense thickets extending into the forest canopy (in areas near gardens from which it escapes).

## Declaration details

Peacock fern is a not declared plant under the *Land Protection (Pest and Stock Route Management) Act 2002*; however, plants that are not declared under state legislation may have control requirements imposed by local governments.

## Description and general information

Peacock fern is a robust, evergreen, perennial spike moss with rhizome, stems often climbing up to 6 m.

Rhizophores (specialised stem parts that form roots) are produced along the nodes of the rhizome. Light brown stems supported by stiff stilt roots branch from the base.

Numerous, scale-like spreading fronds are blue-green or bronze-green with a metallic hue. Fronds are arranged in ranks up the stem.

## Control

### Manual control

Because of the extensive rhizome system, peacock fern is difficult to control manually. However, the plant can be carefully dug out. Make sure you remove all fragments of the rhizome system. This requires persistent effort and very regular monitoring of the site and removal of any new growth and its rhizome.

All plant pieces should be put into strong bags and removed from bushland to prevent reshooting.

### Chemical control

Little is known of the best chemical controls for peacock fern.

There is no herbicide currently registered for control of this species in Queensland; however, an off-label use permit (Permit No. PER11463) allows the use of various herbicides for the control of environmental weeds in non-agricultural areas, bushland, forests, wetlands, and coastal and adjacent areas.

See Table 1 for treatment options allowed by the permit.



Queensland Government

It is important to note that specific research on the use of herbicides to control peacock fern has not been undertaken to date. Therefore, the treatment options outlined in Table 1 are suggestions only, based on registered controls for similar weeds in non-agricultural areas and the specifications of PER11463. As such, their effectiveness cannot be guaranteed.

Prior to using the chemicals listed under PER11463 you must read or have read to you and understand the conditions of the permit. To obtain a copy of this permit contact your local council weed inspector or visit [www.apvma.gov.au](http://www.apvma.gov.au)

It is a requirement of the permit that all persons using products covered by this off-label permit comply with the details and conditions listed in the permit. Permit number PER11463 expires on 30 June 2014. While the permit may be extended beyond this date, there is no guarantee that it will, so contact your local council weed inspector for the latest information after the expiry date.

## Follow up

Monitor treated areas regularly for any new seedlings or regrowth.

## Further information

Further information is available from your local government office, or by contacting Biosecurity Queensland (call 13 25 23 or visit our website at [www.deedi.qld.gov.au](http://www.deedi.qld.gov.au)).

**Table 1. Herbicides registered for the control of peacock fern**

Method	Herbicide	Rate	Registration status	Comments
Spot spray	2,4-D (300 g/L) + picloram (75 g/L)	1 L per 100 L water plus wetting agent	APVMA permit PER11463 Permit expires 30/06/2014	Read permit carefully prior to use
Spot spray	Glyphosate (360 g/L)	1 L per 100 L water	APVMA permit PER11463 Permit expires 30/06/2014	Read permit carefully prior to use
Spot spray	Metsulfuron-methyl (600 g/kg)	10 g per 100 L water plus wetting agent	APVMA permit PER11463 Permit expires 30/06/2014	Read permit carefully prior to use

Read the label carefully before use. Always use the herbicide in accordance with the directions on the label.

Source: PER11463

Fact sheets are available from Department of Employment, Economic Development and Innovation (DEEDI) service centres and our Business Information Centre (telephone 13 25 23). Check our website at [www.deedi.qld.gov.au](http://www.deedi.qld.gov.au) to ensure you have the latest version of this fact sheet. The control methods referred to in this fact sheet 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 use 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, DEEDI does not invite reliance upon it, nor accept responsibility for any loss or damage caused by actions based on it.