Invasive plant

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).

Legal requirements

Peacock fern is not a prohibited or restricted invasive plant under the *Biosecurity Act 2014*. However, by law, everyone has a general biosecurity obligation (GBO) to take reasonable and practical steps to minimise the risks associated with invasive plants under their control.

Local governments must have a biosecurity plan that covers invasive plants in their area. This plan may include actions to be taken on certain species. Some of these actions may be required under local laws. Contact your local government for more information.

Description

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.

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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.

Herbicide control

There are no herbicide products specifically registered for the control of peacock fern in Queensland. However, a permit held by the Department of Agriculture and Fisheries allows people generally to use some herbicide products to control peacock fern as an environmental weed in various situations.

See Table 1 for the treatment options in situations allowed by the permit.

Prior to using the herbicides listed under this permit (PER11463) you must read or have read to you and understand the conditions of the permit. To obtain a copy of this permit visit apvma.gov.au.

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 on 13 25 23 or visit biosecurity.qld.gov.au.

Table 1. Herbicides for the control of peacock fern

Situation	Herbicide	Rate	Registration details
Non-agricultural areas, domestic and public service areas, commercial and industrial areas, bushland/native forests, roadsides, rights-of-way, vacant lots, wastelands, wetlands, dunal and coastal areas	2,4-D 300 g/L + picloram 75 g/L (e.g. Tordon 75-D)	1 L per 100 L water plus wetting agent	APVMA permit PER11463 Permit expires 30/06/2023
	Glyphosate 360 g/L (e.g. Glyphosate 360) and other formulations	1 L per 100 L water For other formulations consult the permit	
	Metsulfuron-methyl 600 g/kg (e.g. Associate)	10 g per 100 L water plus wetting agent	

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

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