

THISTLES *Scotch, Illyrian & nodding* (*Onopordum acanthium*, *O. illyricum* & *Carduus nutans*)

Why are these thistles weeds?

- Invades grassland, grassy woodlands and road verges
- Invades pasture, is unpalatable to stock and therefore reduces carrying capacity. Stock camps are often heavily infested
- Restricts stock movement
- The rosettes smother the surrounding vegetation
- Dense infestations restrict human and vehicle access
- Will invade forests if there is enough water present in the soil to enable the thistles to compete with the trees
- Seed is long lived in the soil, remaining viable for up to eight years

Description

Scotch, Illyrian and nodding thistles:

Plant: begins as a rosette, develops into a single or multi-stemmed biennial herb, height varies from 30cm to 2m according to conditions and species

Leaves: the rosette leaves are deeply lobed, long spines cover the leaf margins and stems, Scotch thistle has a distinctive covering of dense white woolly hairs making it silvery in appearance

Seeds: Scotch and Illyrian – 4mm long, greyish brown, rectangular.

Nodding – light greying brown, oblong, to 3mm long

Flowers: clusters of numerous small, purple (sometimes pink) flowers, surrounded by multiple spiny bracts (modified leaves, usually smaller than a true leaf) form cylindrical flower heads at the branch ends in spring and summer

Differentiating features:

There is often confusion between these thistles. Scotch thistle is more commonly known and hence the other species tend to be labelled as Scotch incorrectly. Illyrian differs to Scotch as it is less silvery and the flowers are enclosed in more bracts. Nodding thistle is distinctive as the flowerheads are bent over at right angles to the stem and the rosette leaves are thinner and more deeply lobed (right to the central vein).

Dispersal via

- Wind blown seed
- In contaminated soils and agricultural seed
- On animal coats
- In vehicles and machinery



Weed: Scotch thistle



Weed: Illyrian thistle

Bracts point backwards after flowering



Weed: nodding thistle



Weed: Scotch thistle



Weed: Illyrian thistle



Weed: nodding thistle
Note the deeply lobed leaves

Fact sheets are available from the Molonglo Conservation Group website. Visit www.molonglo.org.au or call 62992119 for more information about getting involved in your living environment.

Information used to compile this fact sheet was kindly provided by the Southern Tablelands and South Coast Noxious Plants Committee: www.southeastweeds.org.au

Status

Scotch, Illyrian and nodding thistles are listed as class 4 noxious weeds in all council areas within the Molonglo Catchment. The growth and spread of the plant must be controlled in accordance with local management plans published by each local council. In the ACT, nodding thistle is a class 2 Pest Plant which must be suppressed. Scotch and Illyrian thistles are class 3 Pest Plants which must be contained.

Look-alikes

Native plants can often be confused with weed species. The following information aims to assist you with accurate identification to prevent the loss of our declining natives. If you are unsure what species you are dealing with, take advantage of the identification services on offer from your local weeds officer (either at your local council or the ACT's Parks, Conservation and Lands) before carrying out any controls.

There are a number of other similar plants, some of which are natives and should not be removed and some of which are also weeds. **Blue devil** is a similar native species but can be differentiated by its blue flowers and the lack of spines on its grey-green or silvery leaves. Two similar weeds that should be controlled are **Mexican poppy** (*Argemone ochroleuca*) and **wild teazel** (*Dipsacus fullonum*).

C. Manly © Australian National Botanic Garden



Native: blue devil

Department of Agricultural and Food, WA



Weed: Mexican poppy

Control methods

For advice on what time of year to implement the following management options, see the Molonglo Catchment Weed Control Calendar.

Prevent the spread of seed onto your property by ensuring vehicles, feed and animals are free of the seed. Coordinate management with your neighbours to help prevent spread via wind. Hand dig small infestations, ensuring it is done deeply enough to prevent the plant from regrowing. This is easiest during rosette stage. If the plant is mature, hold it down to the ground with one foot to get the spiny leaves away from your hands while digging. Spot or boom spray larger infestations. Seek advice on chemical application from your Council Weeds Officer or local 'bush friendly' nursery. Always use chemicals as directed on the label.

Plants can be slashed before flowering to prevent seed set however they will regrow from the base and therefore is not a long term solution. As seed can remain viable for up to eight years in the soil, persistence is crucial in your control methods, as is prevention of seeding.

Don't overgraze. This will promote thistle growth as the surrounding vegetation becomes depleted providing the thistles with less competition. Goats and donkeys can help reduce seed-set by eating the flowers of nodding thistle.

A range of biological controls have been released and have had varied levels of success. Contact the Molonglo Catchment Coordinator for information on how to access these biological controls.