



Department of Primary Industries

Black knapweed

Centaurea x moncktonii

PROHIBITED MATTER: If you see this plant report it. Call the NSW Biosecurity Helpline 1800 680 244



Close ups of flower heads and slender branched stems. (Photo: Claire Lock Courtesy Biosecurity Queensland)

- Also known as: meadow knapweed
- This plant must not be sold anywhere in NSW

Profile

How does this weed affect you?

Black knapweed invades pastures, crops and natural areas. It:

- outcompetes pasture plants
- is not usually eaten by stock
- produces chemicals that suppress other plants

- is difficult to control.

What does it look like?

Black knapweed is a slender, upright, branched perennial herb that grows to 1 m tall. It looks like a thistle but doesn't have spines on the leaves or flowers.

Leaves:

There are two types of leaves.

Leaves in a clump (rosette) at the base of the plant are:

- green
- oval-shaped or lobed
- up to 25 cm long
- soft and finely hairy to velvety.

Leaves along the flower stem are:

- green
- about 3 cm long
- stalkless
- alternate along the stem.

Flowers are:

- 15 mm in diameter with pink to purple petals
- on the tips of stems, which thicken just below the flower
- surrounded by rows of scales (bracts) below the petals. The bracts are:
 - dark-brown to golden-brown
 - have fine, comb-like edges
 - make the flowerhead look a bit like a little pine cone.

Stems are:

- rough
- hairy
- ribbed.

Similar looking plants

Black knapweed (and other knapweeds) look like thistles. Unlike thistles, knapweeds don't have sharp spines on the leaves. Call the biosecurity hotline if you see any spineless thistles with pink-purple flowers in NSW.

Similar looking plants include:

- Creeping knapweed (*Rhaponticum repens*), which can have deeply lobed leaves but does not have a dark-brown or black tip on the scales (bracts).
- Spotted knapweed (*Centaurea stoebe* subsp. *micranthos*) which usually has deeply lobed leaves and scales (bracts) with a dark-brown or black tip.
- Larkdaisy (*Centratherum punctatum*), which has serrated edges on its leaves.
- Cornflowers (*Centaurea cyanus*), which is a garden plant with few rosette leaves, but many stem leaves.

Where is it found?

Black knapweed has been found in Tenterfield, in the NSW Northern Tablelands.

There are over 500 species of knapweeds, most originating in Europe. Many *Centaurea* species are prohibited imports into Australia. Black knapweed is grown in gardens in the UK and North America.

What type of environment does it grow in?

Black knapweed grows in most soil types. It grows best in:

- disturbed sites (e.g. overgrazed or cultivated paddocks, roadsides, creek lines)

- moist soils
- areas when annual rainfall is >750 mm.

How does it spread?

It has occasionally been sold as an ornamental species in NSW.

By seed

Plants can produce from 1,000 to 18,000 seeds each year. Seeds germinate in autumn and overwinter as rosettes. Seeds stick to animals and clothing. They are also spread by water, wind, vehicles and in contaminated soil. Grazing animals may also spread seed in manure.

By plant parts

Black knapweed can grow from root fragments which are spread by machinery or in soil or water.

References

PlantNET (The NSW Plant Information Network System). Royal Botanic Gardens and Domain Trust, Sydney. Retrieved 6 February 2023 from <https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=gn&name=Centaurea>

Richardson, F. J., Richardson, R. G., & Shepherd, R. C. H. (2011). *Weeds of the south-east: an identification guide for Australia* (No. Ed. 3). CSIRO.

Roche, C. T., & Ben Jr, F. (1991). Meadow knapweed invasion in the Pacific Northwest, USA, and British Columbia, Canada. *Northwest science.*, 65(1).

More information

- Black knapweed model by Rachel Klyve (www.rachelklyve.com) (<https://sketchfab.com/models/5fe08f99a4d747e5b9f138192c4aa091/embed>)
- PlantNET NSW FloraOnline, *Centaurea x moncktonii*, Royal Botanical Gardens and Domain Trust. (<https://plantnet.rbgsyd.nsw.gov.au/cgi-bin/NSWfl.pl?page=nswfl&lvl=sp&name=Centaurea~x+moncktonii>)

Control

Please do not attempt to treat or dispose of this weed yourself. Report this plant if you see it anywhere in NSW by calling the helpline listed at the top of this page immediately.

NSW DPIRD, Agriculture and Biosecurity will lead an initial response for the treatment and disposal of the plant to stop it from spreading.

Checking

Check roadsides, paddocks, crops and areas close to waterways. Check feedout areas if you have brought hay or feed onto your property. Check regularly especially after rain.

Herbicide options

WARNING - ALWAYS READ THE LABEL

Users of agricultural or veterinary chemical products must always read the label and any permit, before using the product, and strictly comply with the directions on the label and the conditions of any permit. Users are not absolved from compliance with the directions on the label or the conditions of the permit by reason of any statement made or not made in this information. To view permits or product labels go to the Australian Pesticides and Veterinary Medicines Authority website www.apvma.gov.au

See Using herbicides (<http://www.dpi.nsw.gov.au/biosecurity/weeds/weed-control>) for more information.

Glyphosate 360 g/L (Various products)

Rate: 10 mL per 1 L of water

Comments: Spray actively growing plants from September to May. Cover all of the foliage. A follow up treatment may be necessary.

Withholding period: Nil.

Herbicide group: 9 (previously group M), Inhibition of 5-enolpyruvyl shikimate-3 phosphate synthase (EPSP inhibition)

Resistance risk: Moderate

Picloram 44.7 g/L + Aminopyralid 4.47 g/L (Vigilant II ®)

Rate: Undiluted

Comments: Use leaf wiping application technique. Apply to at least 50% of the leaves of the rosette plant by wiping the applicator along the middle of each leaf. For use in non-crop areas, including native vegetation, conservation areas, gullies, reserves and parks.

Withholding period: Nil.

Herbicide group: 4 (previously group I), Disruptors of plant cell growth (Auxin mimics)

Resistance risk: Moderate

Biosecurity duty

The content provided here is for information purposes only and is taken from the *Biosecurity Act 2015* and its subordinate legislation, and the Regional Strategic Weed Management Plans (published by each Local Land Services region in NSW). It describes the state and regional priorities for weeds in New South Wales, Australia.

Area	Duty
All of NSW	<p>General Biosecurity Duty</p> <p><i>All pest plants are regulated with a general biosecurity duty to prevent, eliminate or minimise any biosecurity risk they may pose. Any person who deals with any plant, who knows (or ought to know) of any biosecurity risk, has a duty to ensure the risk is prevented, eliminated or minimised, so far as is reasonably practicable.</i></p>
All of NSW	<p>Prohibited Matter</p> <p><i>A person who deals with prohibited matter or a carrier of prohibited matter is guilty of an offence. A person who becomes aware of or suspects the presence of prohibited matter must immediately notify the Department of Primary Industries</i></p>



Black knapweed seedlings (Photo: J. J. Dellow)



Circular cluster (rosette) of larger leaves at the base of the plant, with boots for scale reference. (Photo: Claire Lock, Courtesy Eco Logical Australia)



Black knapweed plants growing in roadside vegetation. (Photo: Philip Blackmore NSW DPI)



Close ups of purple flower and dark scaly bracts. (Photo: Claire Lock, Courtesy Eco Logical Australia)



Plants have rosettes of larger leaves at their base. (Photo: Claire Lock, Courtesy Eco Logical Australia)



Purple flowers and slender branched stems of purple knapweed. (Photo: Philip Blackmore NSW DPI)



Black knapweed rosette with hairy leaves (Photo: Elissa van Oosterhout)



Young black knapweed plant (Photo: Elissa van Oosterhout)



Close up of hairy leaves on black knapweed plant
(Photo: Elissa van Oosterhout)

Reviewed 2024