

Black Knapweed

Centaurea nigra (Aka lesser knapweed, common knapweed, hardheads)

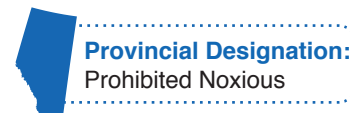


Photo: Joseph M. Ditomaso, University of California - Davis, Bugwood.org



Photo: www.wildaboutbritain.co.uk

Overview:

Black knapweed, like most knapweeds, is native to the Mediterranean but widely naturalized throughout Europe. This perennial member of the Aster family was introduced to North America in the 1900s for ornamental purposes and is still widely available in the horticultural trade. Black knapweed is also an invasive species of Australia.

Black knapweed is a tap-rooted perennial which reproduces by seed primarily, although some lateral sprouting of new stems does occur.¹ In its first year of growth it produces a rosette only and re-grows from the root crown in successive years. It flowers throughout the summer. Black knapweed is a prolific seed producer and seeds generally fall near the parent plant.¹

Black knapweed can easily be confused with spotted knapweed, but the main distinguishing characteristic is the black bracts around the flower bases.

Habitat:

Black knapweed tolerates a wide range of environmental conditions but does best on well-drained soils which receive summer rainfalls⁴ and nearly full sun – moist eco-sites in dry grasslands and open forest.

Identification:

Stems: Are single to a few, erect or ascending, open branched near the ends, and grow to 30-150 cm. Stems can be nearly hairless and rough to fairly covered with fine, cobwebby, white hairs.² Stems are somewhat thickened directly below flower base.⁵

Leaves: Basal and lower stem leaf blades are lance-shaped and 5-25 cm long. Leaves have petioles (leaf stems) and margins are smooth or shallowly dentate to irregularly pinnately lobed. Leaves decrease in size higher on stems, are sessile (without petioles) and entire or dentate

Flowers: Are borne singly at the ends of stems and branchlets and composed of 40-100 purple (occasionally white), tubular florets. Involucre (flower base) are oval

to globe-shaped, 15-18 mm in diameter and covered with stiff bracts.² Bracts are black/brown in the center and have long black fringes, giving a black appearance to the seed heads.⁴ Seeds are tan, 2.5-3 mm, and finely hairy with a pappus (sometimes deciduous) of small blackish bristles.²

Prevention:

Black knapweed establishes and dominates in disturbed sites. It has allelopathic qualities which inhibit the growth of other plants. Seeds can be spread through soil, hay and by cured plants becoming stuck in machinery/vehicles.

Control:

Grazing: Black knapweed is generally not palatable to grazers. Invasive plants should never be considered as forage.

Mechanical: Small patches of plants can be hand pulled until the seed bank is exhausted.¹ Larger infestations can be mowed/mulched before seed production or cured plants can be burned.⁴ Black knapweed is a

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prolific seed producer and knapweed seed is generally long lived, therefore for control measures to be successful they will need to be repeated seasonally for many years.

Chemical: Currently no selective herbicides are registered for use on black knapweed. Always check product labels to ensure the herbicide is registered for use on the target plant in Canada by the Pest Management Regulatory Agency. Always read and follow label directions. Consult your local Agricultural Fieldman or Certified Pesticide Dispenser for more information.

Biological: None researched to date.



Photo: Cindy Roche, Bugwood.org



Photo: Bruce Ackley, the ohio State University, Bugwood.org



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REFERENCES

- 1 Spotted knapweed and Black knapweed. Invasive Species in Garry Oak Ecosystems in British Columbia. www.goert.ca
- 2 Centaurea nigra in Flora of North America. www.efloras.org
- 3 Bighead Knapweed. King County Noxious weed control Program Weed Alert. www.kingcounty.gov/weeds
- 4 Black knapweed. A Guide to Weeds in British Columbia. www.weedsbc.ca
- 5 Knapweed. NSW Dept. of Primary Industries. www.dpi.nsw.gov.au/weeds