



Brown knapweed

Centaurea jacea L. (aka common knapweed, hardheads, brown-ray knapweed)



Cindy Roche, Bugwood.org



Photo: www.luontoportti.com

Overview:

Brown knapweed is a perennial herb of the Aster family, native to Europe, which was likely introduced to North America as an ornamental plant. It is a tap-rooted perennial which reproduces by seed. In its first year of growth it produces a rosette of leaves and flowering stems re-grow from a woody root crown in successive years. It flowers from July to October.¹

Brown knapweed is very similar to a number of other knapweed species but each has unique bract characteristics which will be the determining factor in identification.

Habitat:

Brown knapweed prefers moister and cooler conditions than other knapweeds - moister eco-sites of grasslands and open forests. It can grow in sandy to loamy to clay soils, well drained and nutrient poor soils⁴ and tolerates partial shade.¹

Identification:

Stems: Are single to a few, erect or ascending, open branched in the upper stem, and grow to 30-150 cm tall. Stems can be nearly hairless and rough, to fairly covered with fine, cobwebby, white hairs.² Stems are ridged and sometimes purple striped.¹

Leaves: Basal and lower stem leaves are broadly lance shaped or elliptic and 5-25 cm long with petioles (leaf stems). Leaf margins are smooth to shallowly dentate to irregularly pinnately lobed. Leaves decrease in size on upper stems, are sessile (no petiole) the blades linear or lance shaped, and margins entire or dentate.²

Flowers: Are borne singly at the ends of stems and composed of 400-100+ florets which are rose-purple (rarely white).² Flower heads are about 2.5 cm diameter and high.³ Flower bases are covered by overlapping bracts with dark brown centers.¹ Bracts are wider at the tips with broad, thin papery margins which appear more or less irregularly torn. Seeds are tan, 2.5-3 mm long with a few lengthwise ridges or lines and tiny scales in place of a pappus.³

Prevention:

Brown knapweed seeds can be dispersed in soil or by plants caught in vehicles. It is also widely available in the horticultural trade, so do not purchase or grow as an ornamental plant.

Control:

Grazing: Unknown. Invasive plants should never be considered as forage.

Mechanical: Small infestations can be hand pulled or dug up. The root crown must be removed to prevent re-sprouting. Mowing is in-effective as it results in plants which re-flower just below the cutting height.¹ Once a seed bank has developed seasonal control efforts will be required for many years.

Chemical: Currently no selective herbicides are registered for use on brown 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

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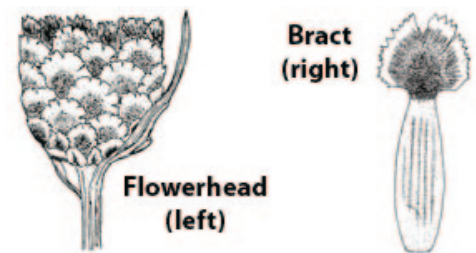
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Agricultural Fieldman or Certified Pesticide Dispenser for more information.

Biological: The seed-feeding fly *Urophora jaceana* has been released in British Columbia but populations have not established.⁵



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REFERENCES

- 1 Brown Knapweed. Weed of the Week. USDA Forest Service. www.invasive.org/weedcd/pdfs/wow/brown-knapweed.pdf
- 2 *Centaurea jacea* in Flora of North America. www.efloras.org
- 3 Identification of Knapweeds and Starthistles in the Pacific Northwest. PNW 432. Pacific Northwest Extension.
- 4 *Centaurea jacea*. Plants for a Future Database. www.pfaf.org
- 5 *Urophora jaceana*. B.C. Ministry of Forest, Lands and Natural Resource Operations. www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/forestry/agents/urophora_jaceana.pdf