



European Hawkweed

Hieracium sabaudum



King County, Washington



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Overview:

European hawkweed is a member of the Aster Family and native to Europe. It is a fibrous rooted, perennial herb with a milky latex in the stems and leaves. European hawkweed reproduces by seed and primarily vegetatively by long, leafy stolons and also by rhizomes.¹ Seeds are produced by apomixis - asexually - as non-native hawkweeds are polyploids (n=9), as opposed to the native diploid hawkweeds. Occasional sexual reproduction occurs, facilitating out-crossing and hybridization.¹

Hawkweeds develop a low rosette of basal leaves before producing a flowering stem. Dandelion-like flowers are borne at the ends of stems and when mature produce a dandelion-like puffball of seeds which are wind dispersed. European hawkweed booms mid to late summer.²

Non-native hawkweeds exhibit many characteristics of an invasive plant: high seed production and germination rates, asexual seed production, wind-dispersed seed, vegetative reproduction via rhizomes, stolons,

and root fragments, and rapid growth.¹ A few invasive hawkweed species are popular ornamentals. All of these characteristics facilitate rapid colonization and monopolizing of resources. An undetected patch of hawkweed has great potential to become an un-eradicable infestation.

Habitat:

Hawkweeds prefer well drained, coarse textured soils, moderately low in organic matter, in mesic habitats.¹

Identification:

Stems: Are erect and strong, and the lower stem is densely covered with bulbous-based, long simple hairs. Multiple stems. Plants grow 40-130 cm tall.¹

Leaves: Are oblong and narrowly tapered to a long petiole. Leaf margins are toothed and the margins flat (not rolled). Lower leaf surfaces bear hairs similar to the stems, the upper surfaces may bear the same hairs or be hairless. Basal leaves are absent or fall

off during flowering. Stems leaves are many (-+50), clustered at the base and become reduced in size going up the stem. Leaf size ranges from 2-18 cm long and 1-4cm wide.²

Flowers: Plants produce 3-12 yellow flower heads in open, flat-topped clusters at the ends of stems.¹ Involucral bracts lance-shaped and graduated, and are covered with glandular as well as long, simple hairs.² Flower stems bear non-glandular and stellate hairs. Fruits are achenes 2.5-3.5 mm long with a pappus tan to off-white.²

Prevention:

Learning to recognize hawkweeds from the many yellow-flowered members of the Aster Family is key to prevention. Hairs are an important characteristic of non-native hawkweeds and also in distinguishing between species. Rhizomes and stolons facilitate rapid colonization of a patch of ground. Long term management of hawkweeds requires maintaining healthy forbs and grasses - fertilization of desirable vegetation can result in out-competition of hawkweeds. Re-seed disturbance in areas susceptible to hawk-

continued next page

European Hawkweed (Continued)

weed invasion.

Control:

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

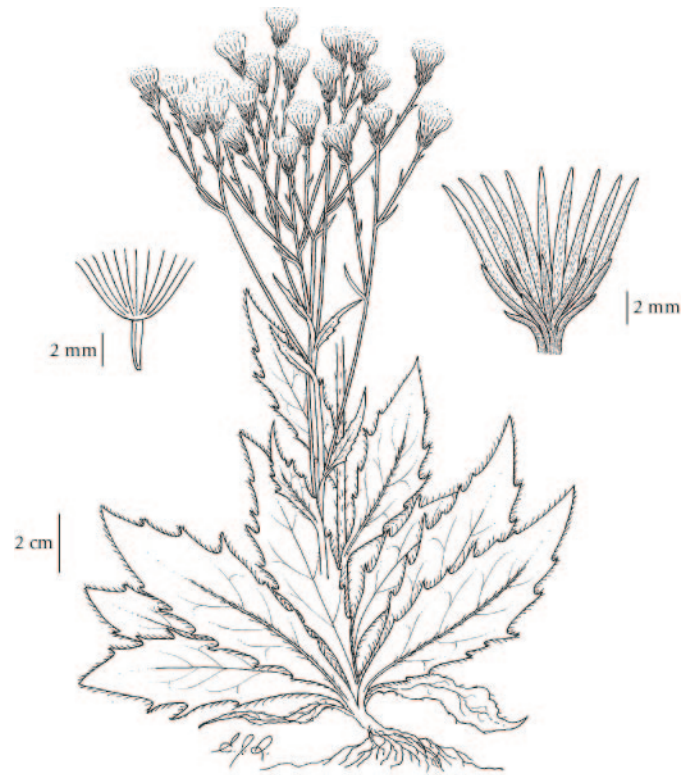
Mechanical: Mowing before flowering will prevent seed production of taller plants but will not prevent reproduction via rhizomes. Hand digging of small infestations where all root can be removed may be effective. Root fragments can generate new plants, therefore any mechanical tilling/cultivation would be ineffective.

Chemical: Hexazinone, 2,4-D, and glyphosate are registered for use on *Hieracium* spp./hawkweeds. Always check product labels to ensure the herbicide is registered for use on the target plant in Canada by the Pest Management Regulatory Agency. Consult your local Agricultural Fieldman or Certified Pesticide Dispenser for more information.

Biological: None researched to date specifically for *Hieracium sabaudum*.



KING COUNTY, WASHINGTON



ILLUSTRATED FLORA OF BRITISH COLUMBIA

REFERENCES

- 1 Wilson, Linda. Key to Identification of Invasive and Native Hawkweeds in the Pacific Northwest. British Columbia Ministry of Forests and Range, Forest Practices Branch, Invasive Alien Plant Program.
- 2 *Hieracium sabaudum*. Written Findings of the Washington State Noxious Weed Control Board. Draft stage, July 2007. Accessed: October 2014.