

Hawkweed Nomenclature & Identification

Taxonomically and morphologically, *Hieracium* species have had numerous name changes and can be difficult to identify. This Weed Post is dedicated to providing the most recent information on the names of the species in Montana, both native and exotic, and how to identify them. Because common names can vary greatly, scientific names will be used throughout in order to provide clarity.

First, how do you know it's a hawkweed? Look for hairs on elliptic basal leaves; milky sap when leaves are torn; and flowers squared off at the tip, with notches.

There are 4 native and 3 exotic hawkweed species in Montana. To identify to species, first examine flower color. Are the flowers orange? If yes, it is the exotic orange hawkweed, *H. aurantiacum*, which is the only *Hieracium* with orange flowers. If the flowers are not orange, select one of the options below:

-Stems with 0-2 stem leaves near the base: The plant could be *H. gracile* (native), *H. caespitosum* (exotic), or *H. praealtum* (exotic), all which have yellow flowers. *Hieracium gracile* occurs at high elevations, subalpine to lower subalpine. Additionally, the 'pappus bristles' (wispy appendages on seed that aid in wind dispersal) are arranged in two series as opposed to one series, characteristic of *H. caespitosum* and *H. praealtum*. Glandular bristles on the upper stem and flower head are dense on the heads of *H. caespitosum* (photo right, above), and scattered in *H. praealtum* (photo right, below).

-Stems with more than 2 leaves, not limited to lower 1/2 of stem: The plant could be *H. albiflorum*, *H. umbellatum*, or *H. scouleri*, all native. If the flowers are white, it's *H. albiflorum*. The other two species have yellow flowers. *Hieracium umbellatum* has upper leaves that are sparsely covered with long stiff hairs, and basal leaves wither at flowering. *Hieracium scouleri* leaves are densely covered in long stiff hairs, and basal leaves are present at flowering.

Note: Stolons (like the runners formed by strawberries) are a critical diagnostic feature as they are found only on exotic hawkweeds. However, fewer than five to ten percent of individual exotic hawkweed plants may develop these stolons under the generally dry conditions prevalent in Montana.

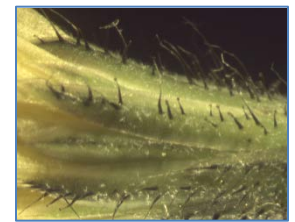
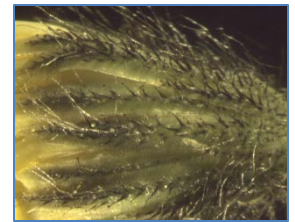
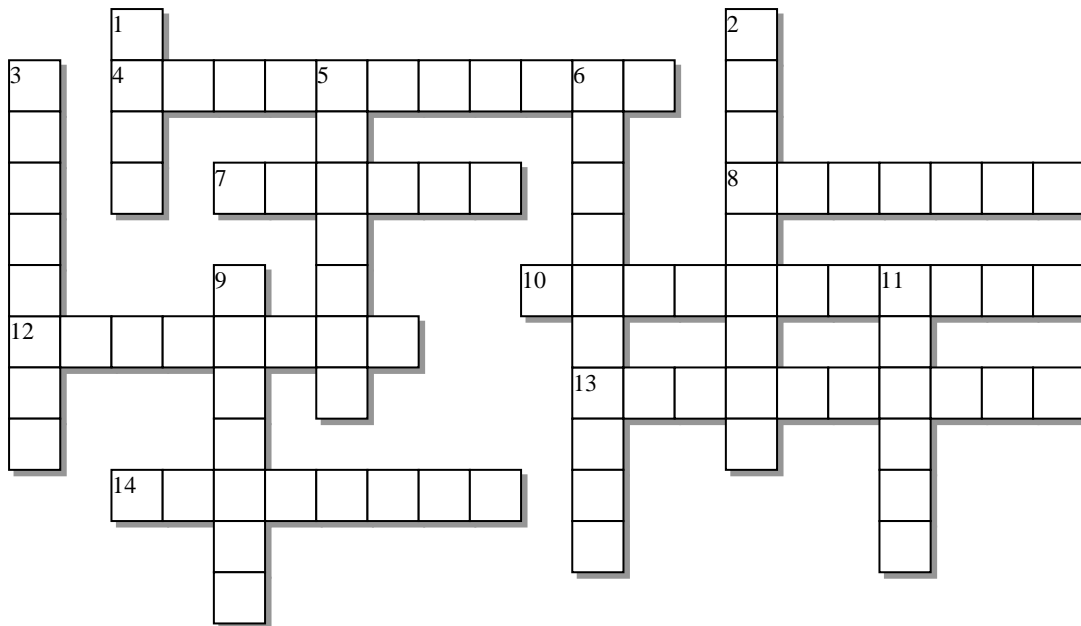


Table 1. Hawkweed species of Montana. Names in bold and underlined are exotic.

<u>Scientific name</u>	<u>Common name</u>	<u>Former names</u>	<u>Habitat</u>
<i>H. albiflorum</i>	White flowered hawkweed	Too many to list	Coniferous forest; valleys to lower subalpine
<u><i>H. aurantiacum</i></u>	<u>Orange hawkweed</u>		Disturbed soil of forest openings, rock slides, roadsides, lawns; valleys to lower subalpine
<u><i>H. caespitosum</i></u>	<u>Meadow hawkweed or Yellow hawkweed</u>	<i>H. pratense</i>	Grasslands, roadsides, lawns; valleys to lower subalpine
<i>H. gracile</i>	Alpine hawkweed		Meadows, turf, open forest, often where snow lies late; subalpine, lower alpine, rarely lower
<u><i>H. praealtum</i></u>	<u>Kingdevil</u>	<i>H. piloselloides</i>	Roadsides, grasslands; valleys, montane
<i>H. scouleri</i>	Houndstongue hawkweed or Scouler's hawkweed	<i>H. cynoglossoides</i> , <i>H. albertinum</i> , <i>H. cusickii</i> and others	Three varieties with habitats spanning open montane coniferous forests, grasslands, sagebrush steppe; valleys to subalpine
<i>H. umbellatum</i>	Narrowleaf hawkweed or Canadian hawkweed	Too many to list	Open forest, streambanks, woodlands, grasslands, roadsides; valleys, montane

For more pictures and detailed information on identification, see "Hawkweed Identification" by Peter Rice and John Halpop. <http://msuextension.org/publications/AgandNaturalResources/EB0187.pdf> Need help identifying a hawkweed or any other unknown plant? Submit it to the Schutter Diagnostic Lab at Montana State University. See <http://diagnostics.montana.edu/plant/> for details.

Test your Knowledge of Hawkweed Nomenclature & Identification



Across:

4 - The species name for the *Hieracium* of Montana with orange flowers

7 - If you see more than 2 leaves on the stem, not limited to the base, you can be pretty confident that the *Hieracium* is a _____ species

8 - *Hieracium* _____, a native species, rarely occurs at elevations below subalpine to lower alpine

10 - In contrast to dandelion, these are numerous and densely crowded in the hawkweeds*

12 - The name of the MSU lab where you can send plant samples if you need help with identification

13 - The species name for the *Hieracium* of Montana with white flowers

14 - *Hieracium* _____ has more than 2 stem leaves, flowers are not white, basal leaves are present at flowering and they're covered in long stiff hairs

Down:

1 - *Hieracium* is derived from the ancient Greek word for _____*

2 - The common name for the *Hieracium* species with 0-2 stem leaves and bristles that are scattered

3 - If you rip a leaf and you don't see _____ (two words) ooze out, you know it's not a hawkweed

5 - All *Hieracium* flower petals are squared off at the tip and have _____

6 - *Hieracium* _____ has more than two stem leaves, long stiff hairs on upper leaves, and basal leaves that wither at flowering

9 - While they might not always occur on exotic species, _____ are never present on native species

11 - If there are only 2 stem leaves, they're near the base, and the plant is at lower elevations (not lower subalpine or alpine) you can be pretty confident that the *Hieracium* is an _____ species

*Refer to "Hawkweed Identification" bulletin for answer

Solutions are posted to the MSU Extension Invasive Rangeland Weed website:

<http://www.msuextension.org/invasiveplantsMangold/extensionsub.html>

