

Hoary Cress

Lepidium draba



FAMILY	Brassicaceae- mustards & cabbages	ORIGIN	Southeastern Europe, Southwest Asia
LIFE CYCLE	Annual, biennial, or short-lived perennial	OTHER NAMES	Whitetop

QUICK FACTS

- Hoary Cress (or whitetop) is a perennial nuisance for farmers and ranchers, though it can be just as pernicious in urban settings. On top of its usual invasive characteristics, hoary cress is also allelopathic: it leaches toxic compounds into the surrounding soil, making it inhospitable to other plants even after it has been removed.
- It is excellent at invading irrigated pastures, croplands, and acequias, where it displaces both native species and agricultural plants and severely reduces forage quality for livestock and wildlife. While the young plant can be palatable, it is known to produce tainted milk in dairy cows.
- Hoary cress produces new shoots from its expansive root systems, quickly dominating landscapes with a monoculture of clones. Without competition, one plant can create over 450 shoots a year from its creeping root system, which can grow so large as to reach the water table below.

If you have ever looked out at a field and saw what looks like a blanket of snow topping the otherwise green foliage, or if you have dabbled in any sort of agricultural practices, you have probably come across hoary cress. This showy and prolific weed can easily outcompete crops and range forage, quickly leading to an out-of-control invasive monoculture and economic disaster.

What does it look like?

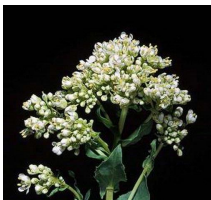
Hoary cress in New Mexico can be easily mistaken for perennial pepperweed (aka tall whitetop), a similar-looking relative from the mustard family. How can you tell which is which? Look out for the upper leaves – the bases of hoary cress leaves will clasp around the main stalk. Hoary cress is also much shorter than perennial pepperweed, which reaches a minimum of 2-4 feet tall.



Montana Statewide Noxious Weed Awareness and Education Program, Montana State University, Bugwood.org



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Julia Scher, USDA APHIS PPQ, Bugwood.org

Plant: Short perennial plant, can grow up to 2 feet tall but most often remains below knee-level. Each plant has a central stalk, from which multiple stems emerge outward like an umbrella

Leaves: Alternate on the stem; dark green to blue-green, often slightly waxy leaf surface can be wavy, and margins are inconsistently toothed. Leaves closer to the bottom have small stems attaching them to the main stalk; further up, the bases of the leaves are clasped around the main stalk

Flowers: Dense clusters of tiny flowers, each with 4 petals; clusters form at the tops of stems, which themselves emerge from a central stalk, such that the flowers all emerge at the same level, forming a flat top

Seeds: Heart-shaped or oval pods grow upside down, less than 1/2 inch in size. Opening up the pods reveals 1 to 2 seeds in each chamber, egg-shaped and reddish-brown in color.

Impact and Management

Agriculture and Food Security

Hoary cress is an invasive plant that rapidly takes over areas by releasing toxic compounds into the soil, inhibiting the growth of other vegetation. Once a colony forms, it continues to emit these harmful substances, effectively “poisoning” the soil. As a result, even if the plants are removed, little else can flourish.

Cattle typically steer clear of hoary cress because it is unpalatable and can lead to tainted milk, but sheep and goats might graze on it, especially the seedlings.

Managing a hoary cress infestation can be challenging. Prevention is key; once established, it becomes much more difficult to curb its spread or control its noxious impacts on the broader environment. Keep in mind that hoary cress’ sprawling root system accounts for most of the plant’s body tissue and can hold massive amounts of stored energy reserves, so addressing and exhausting those reserves over a length of time is crucial to any control efforts.



A large infestation of hoary cress.

John M. Randall, The Nature Conservancy, Bugwood.org

DO's

- Focus on exhausting root system by repeating cutting or burning operations.
- Prevent further spread by thoroughly cleaning equipment & machinery
- Prevent infestations by maintaining healthy plant communities and watch for young plants

DON'Ts

- Wait until the infestation is large and unmanageable
- Rely only on burning or cutting or other methods that focus only on aboveground parts
- Give up – it may take several years of combining methods to clear a large infestation



For more information on managing hoary cress, please visit www.nmweeds.org

