

Field Facts: Waterhemp

Waterhemp is one of the most aggressive, resistant weeds Midwest farmers deal with. It's a summer annual plant with herbicide resistance recorded in 19 states. Populations in certain states have shown resistance to up to six sites of action.¹ A joint study written by professors from the University of Illinois, the University of Missouri and Iowa State University reports waterhemp can reduce soybean yields by up to 44% and corn yields by up to 15%.

- **Common name:** waterhemp
- **Scientific name:** *Amaranthus tuberculatus*
- **Cotyledons:** egg-shaped
- **Leaf shape:** lance-shaped
- **Reproduction:** dioecious, with male and female flowers on separate plants (female plants have shiny, black seeds, while male plants do not)
- **Flowers:** male and female waterhemp have long, thin inflorescences



Fast facts

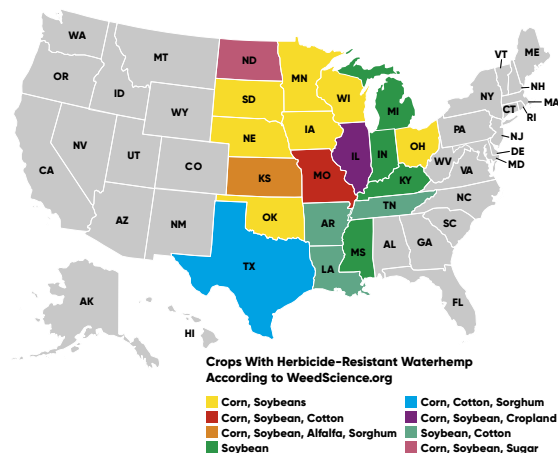
- Waterhemp is easily confused with other amaranths, particularly Palmer amaranth. Waterhemp leaves tend to be more narrow and lance-shaped than its cousins' leaves.
- Waterhemp grows faster than most other weeds or crops. It typically grows about one inch per day.¹
- Waterhemp produces about 250,000 seeds per plant, with some plants producing as many as 1 million seeds.¹
- Waterhemp seeds can remain viable in the soil for several years.¹
- The weed can be poisonous to livestock if ingested.
- A joint study written by professors from the University of Illinois, the University of Missouri and Iowa State University reports waterhemp can reduce soybean yields by 44% and corn yields by 15%.

Herbicide resistance

- Because waterhemp is dioecious, with separate male and female plants, it has the potential for greater genetic diversity. This gives it a better ability to develop herbicide resistance than non-dioecious weeds.¹
- In 2017, populations of waterhemp were recorded as showing resistance to six commonly used herbicide groups.¹ In the summer of 2019, a group of researchers at the University of Illinois reported finding a population of waterhemp with resistance to seven modes of action.
- According to WeedScience.org, 19 states have confirmed herbicide-resistant waterhemp in various crops.

Control tips

- A program approach to weed control with multiple modes of action and residual activity is recommended to control waterhemp. A program approach includes applications of a burndown, preemergence and postemergence.
 - Key corn herbicide options from the Corteva Agriscience™ portfolio include Resicore® herbicide, SureStart® II herbicide and Realm® Q herbicide.
 - For soybeans, customers should consider using Kyber™ herbicide, Sonic® herbicide and Trivence® herbicide.
- Farmers also can use several cultural practices to control waterhemp. Some of those include:¹
 - Planting in narrow rows to help soybeans, for example, outcompete the weed for sunlight and nutrients.
 - Deep tillage to reduce the amount of waterhemp seeds that germinate by burying them at unfavorable depths.
 - Planting fall-seeded cover crops like cereal rye.



¹ United Soybean Board, 'Waterhemp,' I Will Take Action, Oct. 10, 2020, <https://iwilltakeaction.com/weed/common-waterhemp>.

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