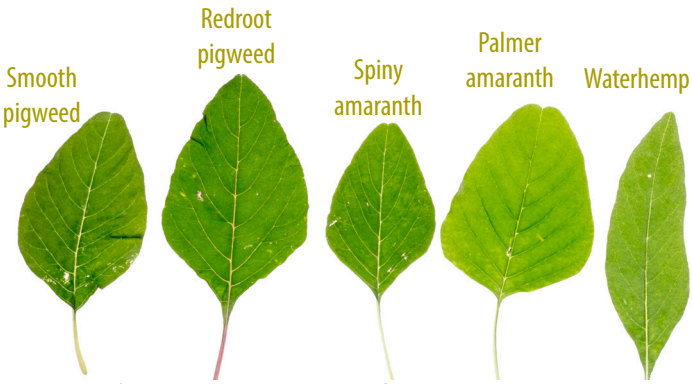
Identification for some WI pigweed species



Identifying pigweeds prior to flowering can be tricky. Leaf characteristics alone aren't accurate. Use the flowchart below to determine what type of pigweed you have.

First ····► If the pigweed is low growing and sprawling, then it is **Prostrate pigweed** (not pictured).

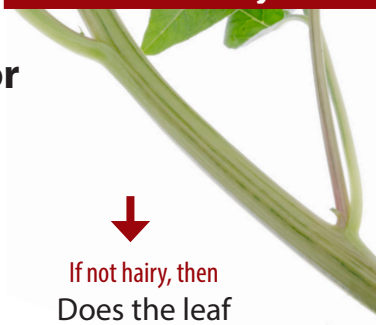
Next, look at or feel the stem, is it:

hairy

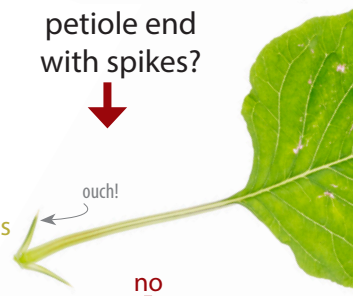
If hairy, then could be either **Redroot pigweed** (left), or **Smooth pigweed** (right) **Powell amaranth** (not pictured).

or

not hairy



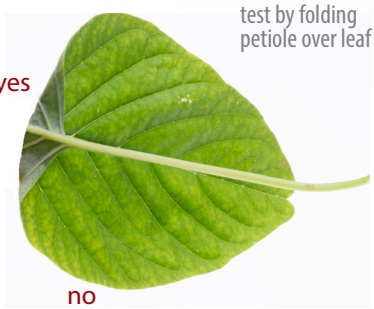
If not hairy, then Does the leaf petiole end with spikes?



yes ← If yes, then it is **Spiny armaranth**.

no

Is the petiole longer than the leaf ?



yes

If yes, then it is **Palmer amaranth,** confirm leaf being round-shaped

no

If no, then it is **Waterhemp,** confirm leaf being spear-shaped

Pigweed

Species of Agricultural Concern in

Wisconsin

Although there are many species from the pigweed family *(Amaranthus)*, only some of them are of agricultural importance and within those, there are 2 of special concern in Wisconsin:

Waterhemp *(Amaranthus tuberculatus)* and
Palmer amaranth *(Amaranthus palmeri)*

These two species have traits that make them especially challenging to control:

More competitive
- ✓ Have higher relative growth rates
- ✓ Produce more seeds
- ✓ Emerge later into the season

Separate plants for male and female flowers
- ✓ Promote cross breeding of plants
- ✓ Increase risk for herbicide resistance

If you believe you have **Waterhemp** or **Palmer amaranth**, report it! Tracking it will help us best manage the spread of these invasive species in Wisconsin!

Method 1: We recommend using the **Great Lakes Early Detection Network (GLEDN)** app, available at either Google Play or iTunes, then follow the instructions on our website
http://fyi.uwex.edu/wifdn/get-involved/report-invasive-species/

Method 2: Let our team know by emailing us at **reportapigweed@gmail.com** and include:

- ✓ **Photos:** Identifying characteristics, such as stems, leaves, flowers, etc.
- ✓ **Location:** GPS coordinates or address (including county)
- ✓ **Habitat:** Type of field, garden, roadside, etc.
- ✓ **If you believe your pigweed may be herbicide resistant,** let us know and include what herbicides have been sprayed!

Thank you in advance for **Reporting a Pigweed!**

FYI: In the U.S., both waterhemp and palmer amaranth have documented resistance to at least six herbicide modes of action*. In Wisconsin, waterhemp is present in 5% of fields with a pattern of annual increase; resistance to glyphosate (HRAC MoA 9) and PPO inhibitors (HRAC MoA 14) has been confirmed.

Palmer amaranth is not yet common in Wisconsin, but with the increasing populations in neighboring states, we should be proactively monitoring for this weed.

Quick note for mature plants! Waterhemp has **thin, wiry** seed heads **under 12 inches** tall. Palmer amaranth has **long terminal** seed heads **over 12 inches** tall.

*source: www.weedscience.org (01/5/17)

NPM 07-2017-3M

This publication is available from the Nutrient and Pest Management (NPM) Program. web (ipcm.wisc.edu); phone (608) 265-2660; email (npm@hort.wisc.edu).