



Preble Soil & Water Conservation District

Conserving our Natural Resources

1651 North Barron Street
Eaton, Ohio 45320-1021
(937) 456-5159
www.prebleswcd.org

PALMER AMARANTH IN PREBLE COUNTY

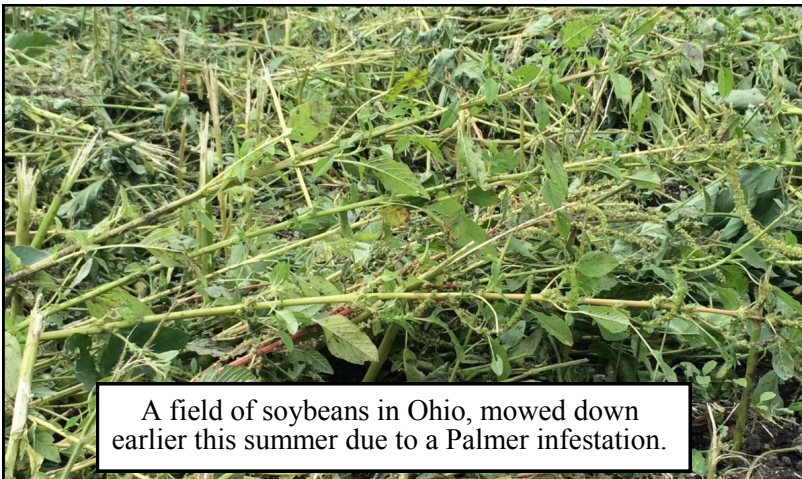


Palmer amaranth, a devastating weed for crop production, has been discovered in Preble County. In late summer 2017, it was identified in several crop fields, and it appears to have come from two separate infestations. It can affect landowners by lowering land values and impact farmers with complete crop losses and drastically increased herbicide costs.

Why is Palmer Amaranth a Huge Problem?

Palmer amaranth is a destructive weed that is native to desert regions of the southwest. It has become a huge problem in other parts of the U.S., and has slowly been finding its way to Ohio. A few of the reasons Palmer is so troublesome include:

- A single plant can produce hundreds of thousands of seeds, which are about the size of ground pepper.
- Plants can grow up to 3 inches per day, and must be sprayed before they are 3 inches tall to be adequately controlled.
- Palmer is resistant to glyphosate and several other herbicides.
- Herbicide costs to control Palmer will likely double for farmers.
- Uncontrolled, Palmer can reduce soybean and corn yields by approximately 80% and 90%, respectively.
- One or two missed plants in a soybean field can lead to a field having to be mowed down just 3-4 years later.
- This weed has been called 'the bane of agriculture' and one that 'scares weed scientists to death.'



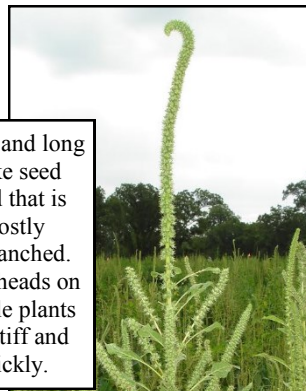
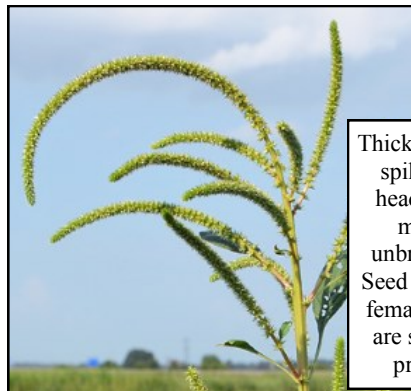
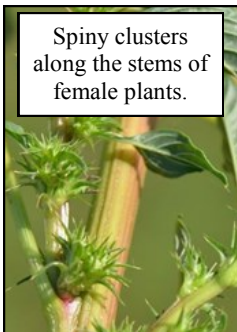
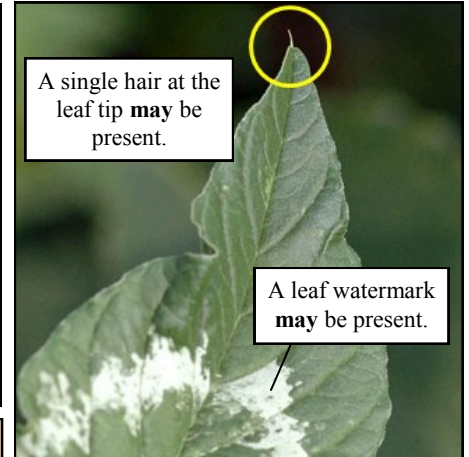
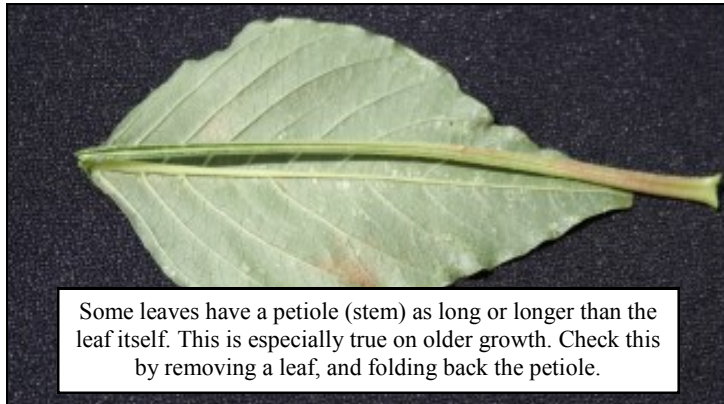
A field of soybeans in Ohio, mowed down earlier this summer due to a Palmer infestation.

Stop the Spread of Palmer!

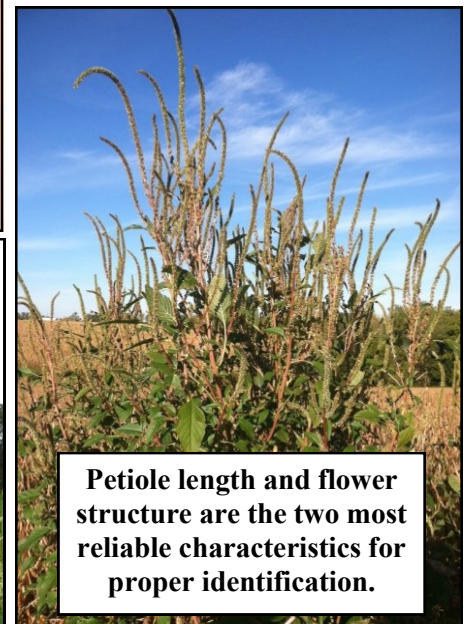
Palmer typically spreads in farm equipment or livestock feed which originated in states where Palmer is a problem, including Kansas, Georgia, North Carolina, South Carolina, Missouri, Tennessee, Arkansas, and Mississippi. When purchasing feed or equipment, find out the origin and potential for contamination with Palmer seed. **Be especially cautious of cottonseed feed products.**

Identifying Palmer Amaranth

Quick identification and removal of plants is critical. Scout fields and investigate any suspicious plants. Keep an especially close eye on livestock pastures and areas where manure has been spread.



Thick and long spike seed head that is mostly unbranched. Seed heads on female plants are stiff and prickly.



If you believe you have discovered Palmer amaranth, contact the SWCD office at (937) 456-5159 immediately.

Look-alike Weeds

The following weeds might be confused with Palmer amaranth. Included are pictures and suggestions for differences to look for between the weeds.

Waterhemp

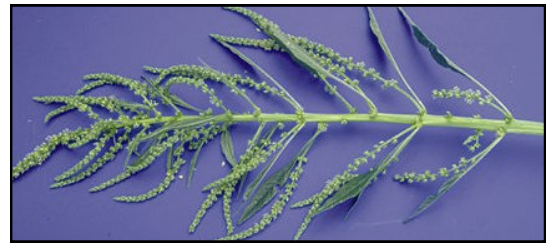
Waterhemp, another member of the pigweed family, is widespread in Preble County. It is a large problem, but not nearly as devastating as Palmer.

Similarities to Palmer:

- No hairs on stems or leaves.

Differences from Palmer:

- Longer, narrower leaves.
- Leaf petiole that is shorter than the leaf itself.
- Multiple branched seed heads that are shorter in length and not prickly.



Redroot and Smooth Pigweed

Common in local fields.

Similarities to Palmer:

- Leaf shape similar, but more round to oval.

Differences from Palmer:

- Hair present on stems and leaves, especially towards newer growth.
- Rough leaf surface.
- More condensed seedhead.



The following are not members of the pigweed family, but have been confused with Palmer when scouting fields. Simple differences from Palmer are listed for each.

Giant Ragweed

Rough, hairy stems and leaves, some or all leaves have three lobes.



Lambsquarter

Toothed leaf margins.



Marestail

Rough, hairy leaves.



Spiny Amaranth

Common in pastures and livestock feeding areas, but not common in crop fields.

Differences from Palmer:

- Has the presence of sharp spines at the base of leaf petioles.



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call the SWCD office at (937) 456-5159.

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If Palmer Is Identified, What Should You Do?

If Palmer amaranth is identified on your property, it is critical to:

- Contact the SWCD Office at (937) 456-5159. We will confirm proper identification and provide guidance for eradication.
- Determine a likely cause of infestation and contact others who may be affected.
- Remove all Palmer plants and related pigweeds by walking the field or property closely. Pull every plant, place them in bags to avoid possible spread of seeds, and burn them as soon as possible. Make sure roots are completely removed from the ground as plants will sprout back out if roots are not removed.
- Re-check areas every few weeks for new plants.
- Make a plan for preventing the spread of seeds to other fields, and a future cropping plan and herbicide program.

Additional Resources

Additional resources are available on our website at
<http://www.prebleswcd.org/palmer-amaranth.html>.