Palmer Amaranth is Up and Growing

Robert G. Hartzler
Iowa State University, hartzler@iastate.edu

Follow this and additional works at: http://lib.dr.iastate.edu/cropnews

Part of the Agricultural Science Commons, Agriculture Commons, Agronomy and Crop Sciences Commons, and the Weed Science Commons

Recommended Citation
http://lib.dr.iastate.edu/cropnews/839

The Iowa State University Digital Repository provides access to Integrated Crop Management News for historical purposes only. Users are hereby notified that the content may be inaccurate, out of date, incomplete and/or may not meet the needs and requirements of the user. Users should make their own assessment of the information and whether it is suitable for their intended purpose. For current information on integrated crop management from Iowa State University Extension and Outreach, please visit https://crops.extension.iastate.edu/.
Palmer Amaranth is Up and Growing

Abstract
Most people are aware that the first confirmed Palmer amaranth infestations were found in Iowa late in 2013. Infestations have been found in five Iowa counties, but we suspect there are more unknown infestations than known. Virgil Schmitt, Iowa State University (ISU) Extension and Outreach field agronomist, and I visited an infestation in Muscatine County on May 9. There was an abundance of Amaranthus seedlings present in the area infested with Palmer amaranth last fall. We are fairly confident that these seedlings were Palmer amaranth because there was little or no waterhemp, or other pigweed species, present in the field last fall. However, I am not convinced that it is possible to distinguish the two species while they are in the seedling stage.

Keywords
Agronomy

Disciplines
Agricultural Science | Agriculture | Agronomy and Crop Sciences | Weed Science
Palmer Amaranth is Up and Growing

By Bob Hartzler, Department of Agronomy

Most people are aware that the first confirmed Palmer amaranth infestations were found in Iowa late in 2013. Infestations have been found in five Iowa counties, but we suspect there are more unknown infestations than known.

Virgil Schmitt, Iowa State University (ISU) Extension and Outreach field agronomist, and I visited an infestation in Muscatine County on May 9. There was an abundance of Amaranthus seedlings present in the area infested with Palmer amaranth last fall. We are fairly confident that these seedlings were Palmer amaranth because there was little or no waterhemp, or other pigweed species, present in the field last fall. However, I am not convinced that it is possible to distinguish the two species while they are in the seedling stage.

While plants are in the vegetative stage the long petioles on Palmer amaranth are probably the best trait to differentiate Palmer amaranth and waterhemp. Palmer amaranth leaves frequently are wider in relation to their length compared to waterhemp. Palmer amaranth also tends to have a ‘busier’ growth habit, whereas waterhemp is leggy and has an open canopy. Another characteristic of Palmer amaranth is its very rapid growth rate. A poster describing the two weeds is available for downloading on the ISU Weed Science website, and we have a limited supply of printed copies.

The simplest way to manage a weed is to prevent it from getting established. While it is unlikely that all of the current Palmer amaranth infestations will be eradicated, the rate that Palmer amaranth spreads across the state can be reduced. Early detection of new infestations is critical; unfortunately, the similarities between Palmer amaranth and waterhemp complicate this process. Closely monitor fields for any ‘pigweeds’ that behave unusually. Fortunately, it is relatively easy to differentiate the two species once they begin to flower.

Image 1. Two-leaf Palmer amaranth.
Image 2. Group of Palmer amaranth seedling.

We would appreciate being contacted if any fields are found with suspected Palmer amaranth.

*Bob Hartzler is a professor of agronomy and weed science extension specialist with responsibilities in weed management and herbicide use. He can be reached at hartzler@iastate.edu or 515-294-1923.*

This article was published originally on 5/12/2014. The information contained within the article may or may not be up to date depending on when you are accessing the information.

Links to this material are strongly encouraged. This article may be republished without further permission if it is published as written and includes credit to the author, Integrated Crop Management News and Iowa State University Extension. Prior permission from the author is required if this article is republished in any other manner.