2-21-2014

Palmer Amaranth in Iowa Update

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/2

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 Users are hereby notified that the content may be inaccurate, out of date, incomplete and/or may not meet the needs and requirements of the user.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 in Iowa Update

Abstract
Palmer amaranth is native to the Southwest United States, but has been expanding its range for at least 50 years. Most recently it has moved into the Midwest and has been reported in all Cornbelt states except for Minnesota and the Dakotas. This article will provide information on known infestations in Iowa; it is likely there are additional infestations that have not been brought to our attention.

Keywords
Agronomy

Disciplines
Agricultural Science | Agriculture | Agronomy and Crop Sciences | Weed Science

Rights
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.

This article is available at Iowa State University Digital Repository: http://lib.dr.iastate.edu/cropnews/2
Palmer Amaranth in Iowa Update

By Bob Hartzler, Department of Agronomy

Palmer amaranth is native to the Southwest United States, but has been expanding its range for at least 50 years. Most recently it has moved into the Midwest and has been reported in all Cornbelt states except for Minnesota and the Dakotas. This article will provide information on known infestations in Iowa; it is likely there are additional infestations that have not been brought to our attention.

The first confirmed finding of Palmer amaranth in Iowa was near Modale in Harrison County in August 2013. It appeared the Palmer amaranth was introduced in two fields where sludge has been repeatedly applied due to the soils being unsuitable for crop production. The sludge was imported from Nebraska, but it does not appear to be a likely source of weed seed. We suspect the seed came as a hitchhiker on trucks bringing the sludge into Iowa. It is likely the Palmer has been present at this site for several years, and it has spread to several adjacent fields. A second, much smaller infestation was later found approximately 40 miles from the initial site. While it probably is too late to eradicate the Palmer at the Modale site, significant efforts are being made to contain the infestation.

Muscatine County was the next confirmed Palmer amaranth infestation. The field is on a sandy soil in the flood plain of the Cedar River. The likely source for Palmer amaranth at this site was swine feed. The infestation appears to be limited to a single field and the adjacent ground. The farmer is taking the problem seriously and there is a good likelihood of eradicating the weed from this location.

Two counties in the southwest corner of Iowa (Fremont and Page) were the next findings, both adjacent to commercial grain elevators. The likely source of Palmer amaranth at these sites is grain trucks that have been to areas in Nebraska or Missouri with Palmer amaranth.

The final report of Palmer amaranth in Iowa was received late in 2013 from a farmer in Davis County. He reported that the operation brings in cotton seed as a feed supplement for a cattle operation and believes this is where the Palmer amaranth originated.

I have not been to the last three infestations; therefore, I am not aware of the extent of the infestations or the efforts being made to eradicate/contain the Palmer amaranth.

Due to long-distance movement of equipment, grain and other agricultural materials, it is inevitable that new infestations of Palmer amaranth will be discovered. Knowing how to identify Palmer amaranth and keeping an eye out for “odd pigweeds” is the best tool to limit the rate of spread of Palmer amaranth. We appreciate being made aware of any new findings of Palmer amaranth in the state.

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.