Palmer Amaranth Weed Watch: From Bus Tour to Raising Awareness in Dickey County

Public Value Statement
Palmer amaranth education promotes proactive control to reduce economic losses to North Dakota.

The Situation
Palmer amaranth aggressively competes with row crops, with reported yield losses as great as 91 percent in corn (Massinga et al. 2012) and 78 percent in soybeans (Bensch et al. 2003) in Kansas. Some Palmer amaranth biotypes are resistant to six unique herbicide sites of action; some biotypes are cross-tolerant to multiple sites of action. Early identification of Palmer amaranth is vital to reduce economic losses in North Dakota.

Extension Response
A program team consisting of NDSU Extension specialists and agents traveled to Nebraska to learn Palmer amaranth identification and management in grower fields from University of Nebraska – Lincoln Extension staff, local agronomists and farmers. The program team developed teaching materials, including PowerPoint presentations, problem-based learning scenarios and other activities and resources, based on their experiences gained on the Nebraska tour.

Local Extension Agent, Breana Kiser helped develop these teaching materials and utilized them locally in 2018. Local Agent presented on what Nebraska is experiencing and taught how to identify key characteristics to identify Palmer Amaranth during the spring of 2018. Fall of 2018, Palmer Amaranth was found in McIntosh County and then in Dickey County. Local agent held a Harvest Awareness meeting for producers to look for Palmer while harvesting. Local Agent also worked with agronomists and other Extension personnel to scout fields in McIntosh and Dickey County to eradicate any existing weeds.

Impacts
Presentations taught by Local Extension Agent, Breana Kiser during the 2018 meeting season raised awareness of the potential economic impact of Palmer amaranth to North Dakota and how to identify the weed.

In Dickey County, 162 people were reached during the 2018 meeting season. An estimated 4,136 people in Dickey County were through weekly column, social media, and county newsletter. Participants in Dickey County indicated a 50% knowledge increase in their awareness of how competitive and adaptive Palmer amaranth is and ability to identify the characteristics of Palmer amaranth.

Feedback
“Seeing firsthand how quickly Palmer can spread and the damage it can cause in a producers field. This needs to be a priority for all producers to keep this weed managed by scouting their fields and knowing what they are looking for. We need to spread fear so this doesn’t become an unmanageable problem for all.” Pioneer agronomist.

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