

Palmer Amaranth Education and Awareness Campaign Continues

Public Value Statement

Palmer amaranth education promotes proactive control to reduce economic losses in North Dakota.

The Situation

A program team consisting of NDSU extension specialists and agents traveled to Nebraska to learn firsthand about Palmer amaranth (PA) identification and management in 2017. The team developed teaching materials based on experiences gleaned from the Nebraska tour and throughout 2018, directly and indirectly encountered 7,900 and 60,900 ND producers, landowners, and related stakeholders. Extension created awareness of the potential economic impact of Palmer amaranth to North Dakota, generating further interest.

Extension Response

Extension organized and sponsored a bus tour to Nebraska in August 2019 using a grant from North Dakota Soybean Council. Target audience was ag retailers, agronomists, producers, and county weed control officers. Additionally, Extension aimed at developing better media materials and developing Palmer amaranth control solutions for ND.

In-service training was organized to train Extension staff and County Weed Officers on lessons learned, PA identification and management, impacts of spray quality on PA control, and to review the ND PA protocol for first encounter.

Impacts

Nebraska bus tour attendees improved their PA identification skills 41% by attending the tour and improved their knowledge of factors influencing off-target movement and economic losses from PA by 24%.

NE Bus Tour Survey Questions	Before	After
My knowledge of factors influencing spray quality including drift and volatilization	66%	87%
My ability to identify Palmer amaranth	49%	91%
My understanding of potential economic losses from herbicide resistant weeds	65%	92%

Ninety-three percent of in-service training attendees are effectively able to use the ND PA protocol. Mastery of other hands-on skills grew 22% as an outcome of the training. PowerPoint presentations, images, videos and documents were made available to Extension personnel for further use.

In-Service Survey Questions	Before	After
Identify characteristics of PA	73%	91%
Understanding of pigweed management	62%	85%
Use ND Herbicide Chart & ND Weed Control Guide	59%	79%
Spray quality knowledge / nozzle selection / suitcase demo sprayer	55%	82%
Understanding of the ND Palmer Amaranth protocol	69%	93%

Feedback from the 2019 Nebraska bus tour:

- “This was a real eye opener for me this week. I didn't really know what to expect from this tour. I am concerned when this hits home to what the reaction is going to be.”
- “I thought it was a good experience to show everyone how a particular weed can take advantage of poor management strategies.”

Feedback from the 2019 in-service training:

- “The commitment to waterhemp/palmer management in ND is tremendous. Awareness has prevented minor problems from being major problems.”
- “Updated [teaching] resources were great.”

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