

IPM Outreach to Native American Youths in South Dakota



We are graduate students in the lab of **Febina Mathew**, assistant professor and field crops pathologist, at South Dakota State University (SDSU) in the Department of Agronomy, Horticulture, and Plant Science.

We were the recipients of the APS Mathre Education Endowment Award in 2016 in the amount of \$1,000 in support of our proposal to educate Native Americans in South Dakota on diseases and other pests. South Dakota has the third largest population of Native Americans in the United States (approximately 75,250 people). These reservations are considered food deserts due to their limited access to fresh and healthy food. As part of our efforts to educate Native Americans, we organized a one-day workshop on integrated pest management (IPM) on the Pine Ridge Indian Reservation in June 2016. The Pine Ridge Reservation is home to the Oglala Lakota people. The workshop was organized in collaboration with SDSU's Extension Native American Program and Little Wound School FACE Program in Kyle, SD.

The IPM workshop was attended by members currently registered in a community garden initiative undertaken by SDSU's Extension Native American Program. We discussed diseases, insects, and other pests affecting sweet corn, tomato, potato, and pepper, which are commonly grown in the community gardens. The diseases and other



Taylor Olson showing a participant a disease symptom on pepper plant at the Little Wound School community garden.

pests included corn smut, common corn rust, bacterial spot of pepper, early blight of potato, late blight of tomato, aphid, thrips, raccoon, bird, sun scald, and blossom end rot of tomato and pepper. Additionally, we provided the participants hands-on skill learning related to effective watering, drip irrigation, mulching, common diseases, and insect pests typically present in the community gardens. At the end of the workshop, the participants acknowledged that their knowledge about garden diseases and insect pests was improved.

Currently, we are working with the SDSU personnel and iGrow (SDSU extension service) to prepare factsheets on diseases and pests of sweet corn, tomato, potato, and pepper that will be available to Native

Americans and the community at large in the coming months.

For helping us with our efforts, we would like to acknowledge the assistance of SDSU personnel **Amanda Bachmann** (extension pesticide education and urban entomologist), **Shawn Burke** (former SDSU extension Native American program director), **Rhoda Burrows** (extension horticulture specialist), **Emmanuel Byamukama** (extension plant pathologist), **Febina Mathew** (field crop pathologist), **Jason Schoch** (extension beginning farmer and rancher program manager), and **Adam Varenhorst** (extension field crop entomologist)). We also like to thank the APS Foundation for the Mathre Education Endowment Award.

— Submitted by *Paul N. Okello, Taylor R. Olson, Phillip K. Alberti, and John P. Posch, South Dakota State University* ■

2017 Foundation Award Applications Due Friday, December 2

Awards

- Books for the World Award
- Browning Plant Medicine and Health Travel Award
- French-Monar Latin American Award
- Frank L. Howard Undergraduate Fellowship
- Mathre Education Endowment Award
- Student Educational Award
- Raymond J. Tarleton Student Fellowship

Status

Open for submissions

Deadline

Friday, December 2, 4:00 p.m. CST

Procedure

View details on materials required for each award at www.apsnet.org/members/foundation/apply/Pages/default.aspx. Submit via the online award application form located on each award's page. ■



Participants and endowment awardees at the IPM outreach workshop in Kyle, SD, on June 22, 2016.