

1116-VM-1614 **Molly Monk***, 701 North C Street, #3903, Indianola, IA 50125, and **Teig Loge, Park Ellis Mikels** and **Maggie Long**. *Using Modeling and a Community Based Participatory Research Strategy to Stop the Spread of Palmer Amaranth in Iowa*. Preliminary report.

Palmer amaranth, an herbicide resistant superweed, recently began spreading across Iowa. Weed experts say that if left unchecked, Palmer will devastate many sectors of Iowa's economy. An undergraduate research team modeled the spread of the weed over a 21 year period using NetLogo software. Consultations with local community members and experts in the field helped determine the factors in the model. The model results are an integral part of an awareness campaign targeting a diverse group of stakeholders. The research team will give an overview of their work to date and explain the impact math modeling can have on agricultural decision making. (Received September 20, 2015)