

Western Illinois University  
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**Abstract**

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Live Poster Session

Major: Agriculture Science

Faculty Mentor: Mark Bernards

**Residual Herbicide Effects on Brassica Cover Crop Species**

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Residual herbicides administered throughout a seasonal cash crop rotation have the capacity to remain viable in the soil and damage cover crops planted in succession. (Cornelius and Bradley, 2017).

The potential of herbicide carryover to cover crops is reliant on weather conditions, soil type, and herbicidal characteristics, however certain species of cover crops may be at an increased risk of injury due to chemical and physical reactions within the plant. (Rector et al., 2019).

Brassica cover crops such as turnip and forage radish were shown to be the two most sensitive species to residual herbicides that were applied in soybeans the previous year. (Walen et al., 2019).

Using a dose-response study allows the simulation of different concentrations of herbicide carryover in the soil (Heaton and Bernards, 2017).