

Nebraska Soybean Board



11/8/2019

Year-End Summary Research Report Form For Multi-Year Projects

Please use this form to summarize the practical benefits of your research project and what has been accomplished.

Your answers need to convey why the project is important and how the results impact soybean production.

Note that this form must be submitted with the 4th Quarter Report in all multi-year projects.

Project Title: #1737 Evaluating the impact of cover crop termination timing on insect pests and weed control in soybeans

Principal Investigator: Anthony Justin McMechan

U : 1 of 3 (For example: Year 1 of 3, Year 2 of 2)

1. What was the focus of the research project or educational activity?

The focus of this research project was evaluate how the timing of termination of a cover crop influences the potential for insect damage and/or weed suppression in the subsequent soybean crop.

2. What are the major findings of the research or impacts of the educational activity?

No significant impact from insects or weeds was observed across the treatments. Significant insect activity was observed at all sites and in some cases were related to cover crop treatments. Defoliation was significant as some sites but was not related to cover crop treatments.

3. Briefly summarize, in lay terms, the impact your findings have had, or will have, on improving the productivity of soybeans in Nebraska and the U.S.

Although yield data is still pending, one year of data shows that there currently little potential risk for insect pests in rye cover crop to soybean systems. In many cases, greater beneficial insect activity was observed. Additional years of research will be needed to clarify this result. Weed pressure was not high enough to evaluate.

4. Describe how your findings have been (or soon will be) distributed to (a) farmers and (b) public researchers. List specific publications, websites, press releases, etc.

This is the first year of data so we are at a stage where we can compile and present data to the public. As of now, arthropod activity data was presented at soybean management field days. A report will be provided all of the Nebraska Soybean growers in mid-December from the SMFD sites. Several presentations are scheduled during the winter to present this data.

5. Did the NE soybean checkoff funding of your project, leverage additional State or Federal funding support? Please list sources and dollars approved.

Additional support was provided by the North Central Soybean Research program. This expanded the number of Nebraska sites from 4 to 7 total sites and added pitfall traps to all sites. This robust data set will provide farmers with the confidence that the data has a greater representation to their farming operations.

Please e-mail this report to the Agriculture Research Division (jmonagham2@unl.edu).