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Jennifer:

The following is my final report for the project "**A sentinel plot program for detection of insect pests and diseases in Pennsylvania soybeans**," which the Soybean Board generously funded last year.

This past year's effort was the seventh year in a row that we have conducted this project, the goal of which is to track insect and disease pest populations in typical soybean fields around the state and share this information with growers.

Fourteen extension educators around PA participated in this effort, tracking populations in 26 fields in 20 counties (Table 1). Most of the educators scouted fields themselves and reported the data to me. For these educators, Soybean Board funds paid for travel to sites and any supplies they needed. Four educators hired interns to handle scouting and reporting, so Soybean funds paid the wages for these scouts and their mileage to fields.

Table 1. Penn State Extension Educators committed to scouting soybean fields.

County	Extension Educator	No. of fields
Armstrong	Rachel Milliron	2
Blair, Cambria, Somerset	Zach Larson	3
Bradford	Casey Guindon	1
Butler	Justin Brackenrich	2
Crawford	Joel Hunter	1
Elk, McKean, Potter	Nicole Santangelo	3
Lancaster	Jeff Graybill	2
Lebanon	Del Voight	3
Mercer	Claire Coombs	1
Montgomery	Andrew Frankenfield	2
Perry, Dauphin	Liz Bosak	3
Schuylkill	Dwane Miller	1
Union, Centre, Northumberland	Anna Busch	2

Fields used in the project were established in late May to mid June and scouting began upon emergence; due to wet weather during planting fields were established later than usual, but many farmers suffered from the same challenges. We began reporting pest populations on 12 June and have made the final report on 11 September, for a total of thirteen reports. We reported our findings in the Field Crop News (<https://extension.psu.edu/forage-and-food-crops>), which during the growing season was published online weekly and announced via an email list that reaches about 7100 agricultural professionals.

For 2018, like past years, our scouting efforts discovered a fairly narrow range of insects and only a few diseases. Importantly, our scouting discovered heavy feeding by an unexpected pest species, soybean thrips, and we were able to warn readers of the threat from this pest species, which rarely causes yield loss. We are not sure why populations of this pest species were problematic when they usually are not. Otherwise, pest populations remained low this year, as was the case for the six previous years, and this is an important message for growers to hear: *pest populations are not pervasive and always threatening soybean yield*. In fact, in many locations and in most years, pest populations do not develop and thus pesticide use should provide no advantage.

Thank you very much for your generous support.

Best regards,

A handwritten signature in black ink, appearing to read "John Tooker".

John Tooker
Associate Professor & Extension Specialist