**April 13, 2018, First year report Kansas Soybean Commission**

**TITLE:** Control of Pigweed with an Integrated Systems Approach in Soybean.

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**Field Status**

Sites at Ottawa and Ashland Bottoms Experiment Fields were harvested for yield data. Both sites received all treatments as required by the experiment plan with observations and biomass harvest samples of both pigweed and crop dried for analysis.

**Observations**

The importance of narrow row spacing, cover crop, and a complete herbicide program were made obvious in the findings of this research. In the absence of both a herbicide and cover crop, substantial pigweed pressure was observed. Pigweed biomass suppression was observed in both the 15 inch and 7.5 inch rows, whereas maximum pigweed biomass was observed in 30 inch rows. In the absence of herbicide but with row-crop cultivation and a winter wheat cover crop, approximately 65 to 80% pigweed control was observed. This is one example of how integrated weed management strategies were exemplified in this research. Additionally, the addition of a cover crop demonstrated that pigweed biomass and density can be reduced by approximately 50%.

**Field Day**

The results from this research were presented at the 2018 Kansas Soybean Expo during the poster session. This event provided producers with a first-hand glimpse at the work we are conducting on integrated weed management. Additionally, the results of this research were presented at the Kansas River Valley Irrigators meeting on February 9, 2018.

**Upcoming Work**

This research will be repeated in 2018 to gain another year of insight into the strategies surrounding integrated pigweed management. We will continue to share the results of our findings in all available venues during 2018. As a result of this research, we plan to publish our results in the scientific journal as well as generate an Extension Publication will color figures to be used in future extension programing when discussing pigweed management.