

Mid Term Report: Pennsylvania Soybean Board

Project Number R2015-05

Tracking Number 178950

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Title: Prevention and management of non nodulated soybeans

We have established two trials for this project consisting of ten treatments that consist of a variety of treatments that range from no inoculant to a combination of pre inoculated seed, in furrow inoculant and a peat based inoculant. On some of the untreated plots, 60lb/acre of N was applied to substitute for any lack of N from nodulation.

Two fields were selected for these trials that had no recent history of soybeans. One was following wheat and a second one was following potatoes. The trials were planted in late May under good conditions. Stand establishment and emergence has been good in both fields.

Vigor is good and color is good for all treatments however. It appears that all treatments have nodulated, even where we applied no inoculant with no history of soybean. This was unexpected since many farmers report nodulation issues under these conditions. So our ability to test the effectiveness of nodulation strategies under stress will be reduced. We will take detailed measurements of nodulation to see if we see any differences and also collect some NDVI ratings to see if we can detect any subtle differences in leaf greenness. We will also measure yield or maturity difference due to the inoculant methods at harvest. We will continue to follow through with these studies with all planned yield and data collection as planned.