

Management of Redbanded Stink Bug in MS Soybean Production Systems PROJECT #: 58-2019

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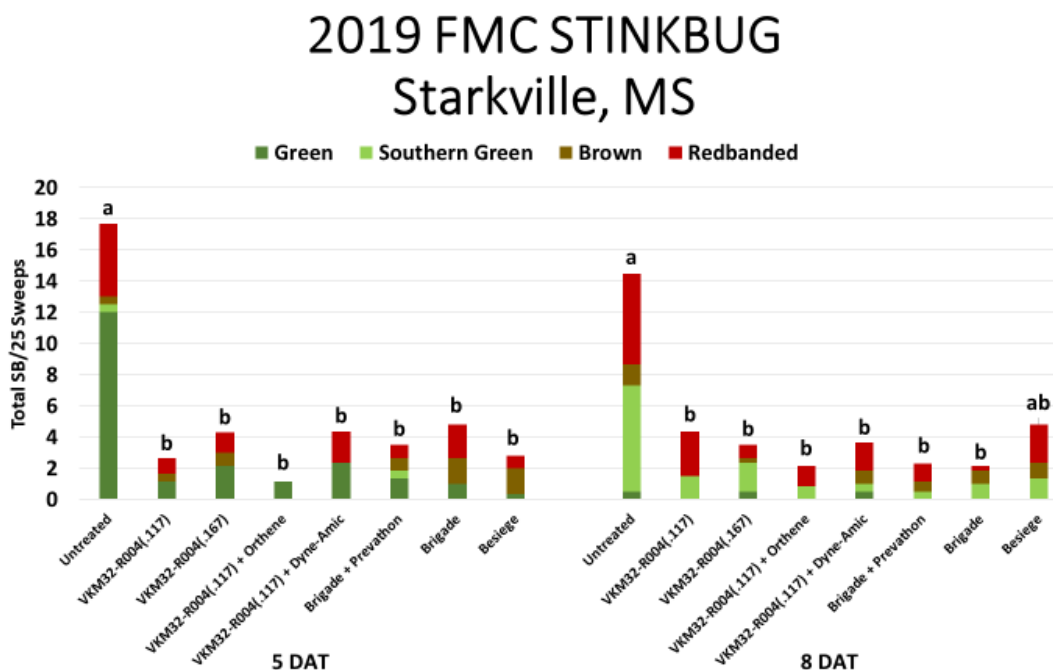
Objective 1: Determine insecticidal efficacy of insecticides to control redbanded stink bugs in MS.

Quarter 1 Progress: Not yet initiated

Quarter 2 Progress: 3 trials conducted on insecticide efficacy. Data being analyzed

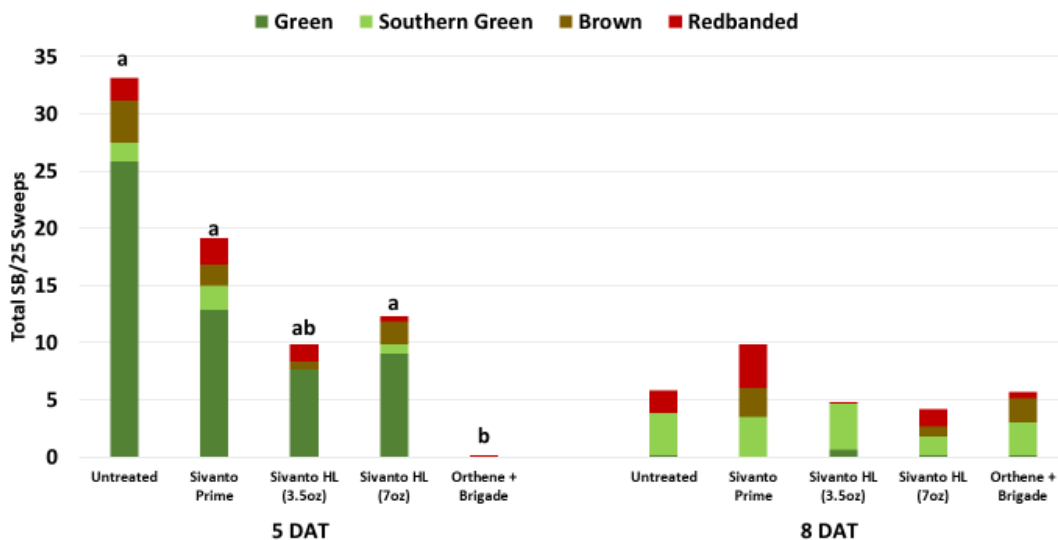
Quarter 3 Progress: 3 trials conducted on insecticide efficacy. Data being analyzed

Quarter 4 Progress:



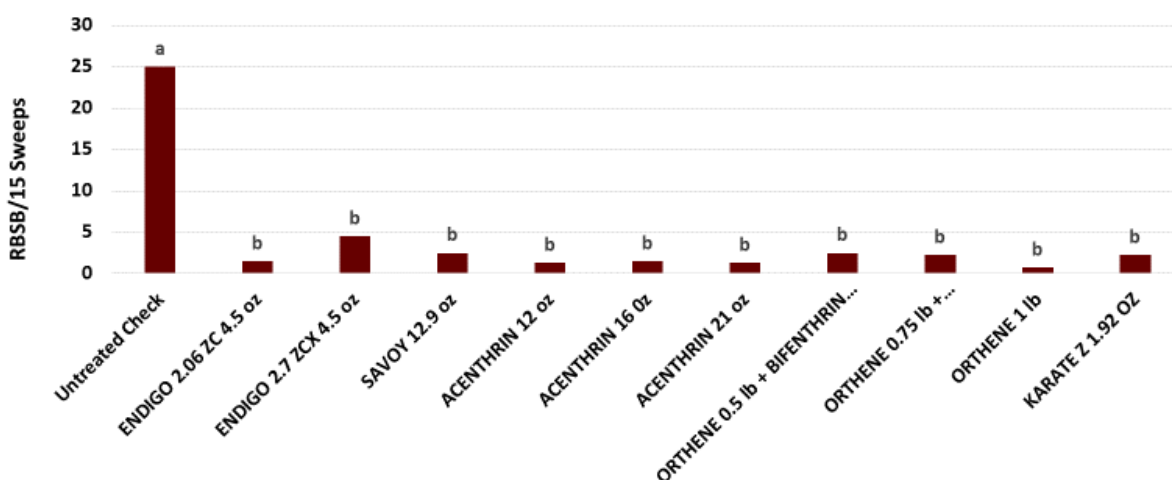
Testing Premixes of Bifenthrin and Prevathon (VKM32) for caterpillar pest and assessing efficacy on stink bugs. All products and rates significantly reduced mixed populations of stink bugs compared to the untreated control at 5 and 8 DAT. This will be a beneficial side benefit of treating caterpillar pests with stink bugs in the system. However, the products will likely not be applied to control stink bugs alone due to cost.

2019 BAYER STINKBUG Starkville, MS



Comparisons of rate titrations of Sivanto on mixed stink bug species compared to a standard treatment of Orthene + Bifenthrin. Sivanto provided numerical control at 5 DAT but did not separate from the untreated control. At 8 DAT populations dropped across the test site and there were no differences. It appears regardless of rate Sivanto has only marginal activity on mixed stink bug species.

2019 Redbanded Stink Bug Efficacy Starkville, MS 4 DAT



RBSB numbers increased dramatically in very late planted beans in Starkville, MS. The above trial was put out to test efficacy of various insecticides. Although numbers were extremely high (note counts are 15

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sweeps instead of 25) all products worked very well at 4 DAT. At later sample dates populations decreased. It is important to note that several products will provide decent knock down but if populations persist the amount of residual will become very important. In this trial there was not a constant source of infestation occurring to test residual.

Objective 2: Determine insecticide termination timing.

Quarter 1 Progress: Not yet initiated

Quarter 2 Progress: Numbers not high enough to establish trials in 2019

Quarter 3 Progress: Numbers not high enough to establish trials in 2019

Quarter 4 Progress: Numbers not high enough to establish trials in 2019

Objective 3: Determine greatest damage potential from RBSB by growth stage in soybean

Quarter 1 Progress: Not yet initiated

Quarter 2 Progress: Numbers not high enough to establish trials in 2019

Quarter 3 Progress: Numbers not high enough to establish trials in 2019

Quarter 4 Progress: Numbers not high enough to establish trials in 2019

Objective 4: Conduct ditch bank and early cover crop surveys in legumes in the early spring to predict RBSB populations

Quarter 1 Progress: Conducted numerous surveys around the state in the spring. Only 1 found to date.

Quarter 2 Progress: Survey completed. Only one found in 2019

Quarter 3 Progress: Survey completed. Only one found in 2019

Quarter 4 Progress: Survey completed. Only one found in 2019

Objective 5: Refine/Validate RBSB thresholds in soybean

Quarter 1 Progress: Not yet initiated

Quarter 2 Progress: Numbers not high enough to establish trials in 2019

Quarter 3 Progress: Numbers not high enough to establish trials in 2019

Quarter 4 Progress: Numbers not high enough to establish trials in 2019

Objective 6: Establish a colony of redbanded stink bug at the MSU Insect Rearing Center

Quarter 1 Progress: Not yet initiated

Quarter 2 Progress: Colony collected on 10/2/2019

Quarter 3 Progress: Stink bugs died in colony.

Quarter 3 Progress: Stink bugs died in colony.

Objective 7: Determine how GPA and droplet size effects RBSB efficacy in soybean

Quarter 1 Progress: Not yet initiated

Quarter 2 Progress: Numbers not high enough to establish trials in 2019

Quarter 3 Progress: Numbers not high enough to establish trials in 2019

Quarter 4 Progress: Numbers not high enough to establish trials in 2019