

Summary of Stink Bug Efficacy Trials (2005-2011) in Irwin County, Georgia

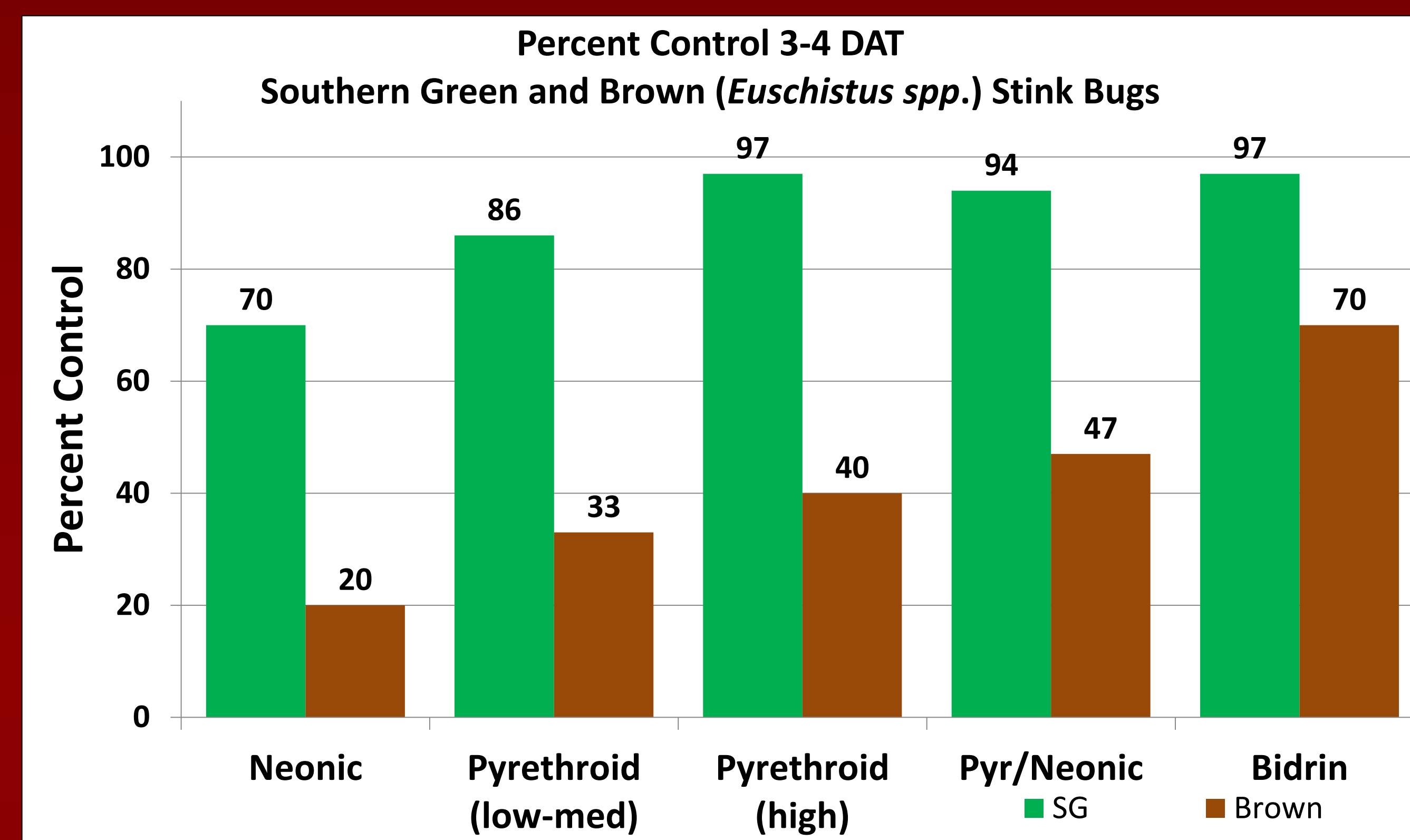
Edwards,* P.¹; Roberts, P.²

¹ Cooperative Extension, University of Georgia, 107 W. Fourth Street Ocilla, GA 31774

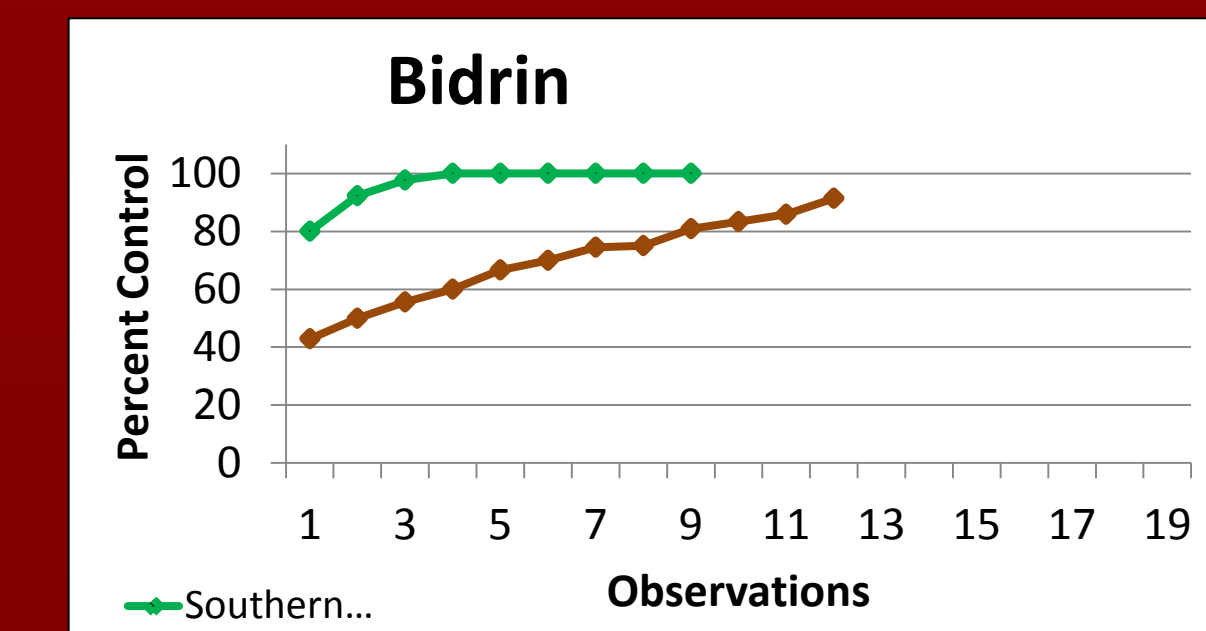
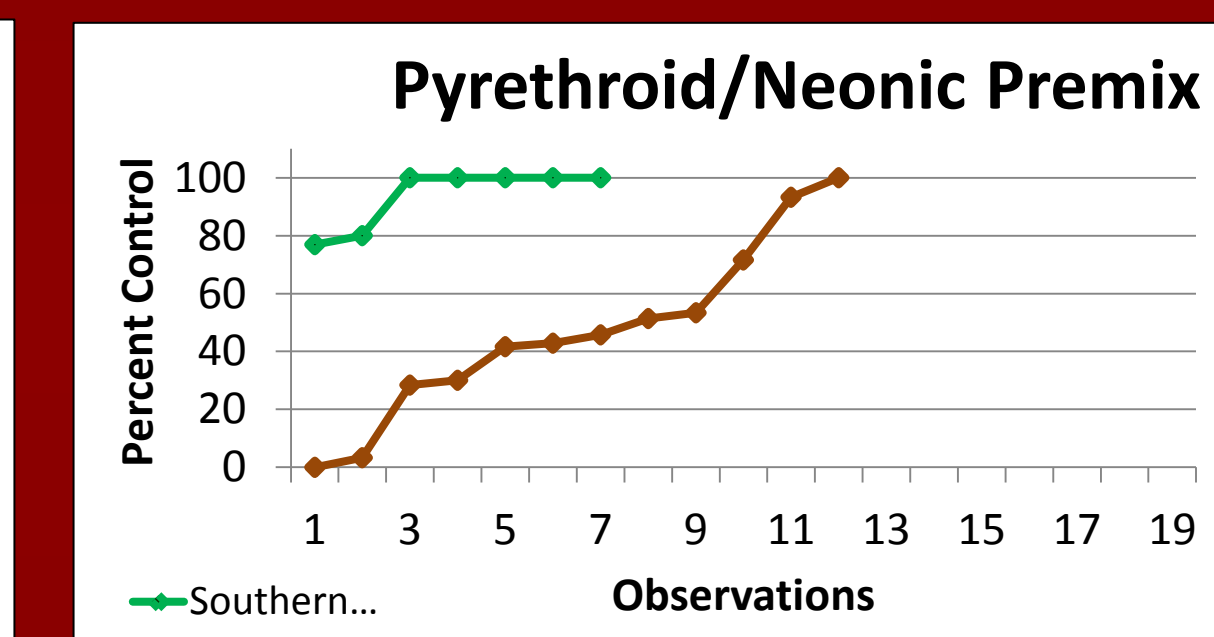
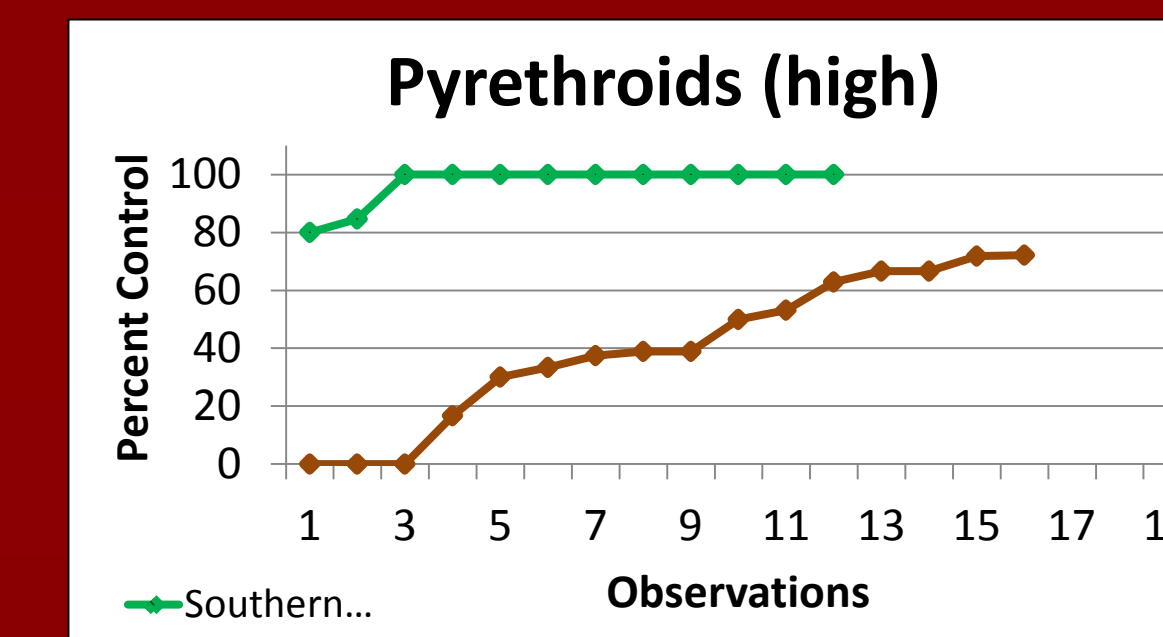
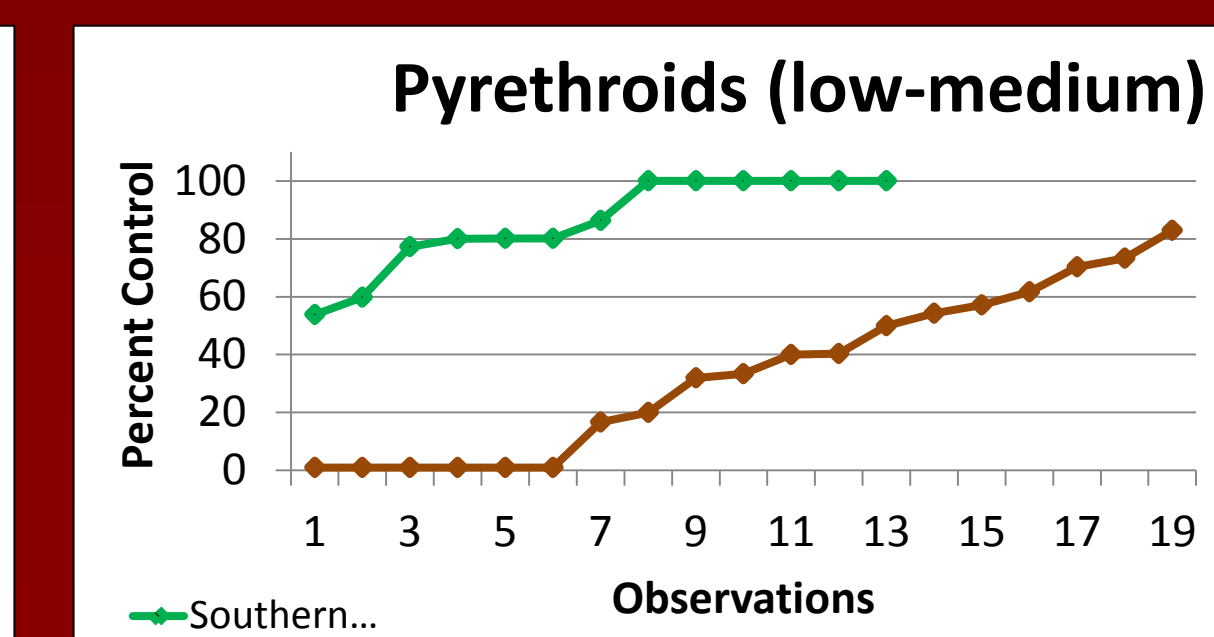
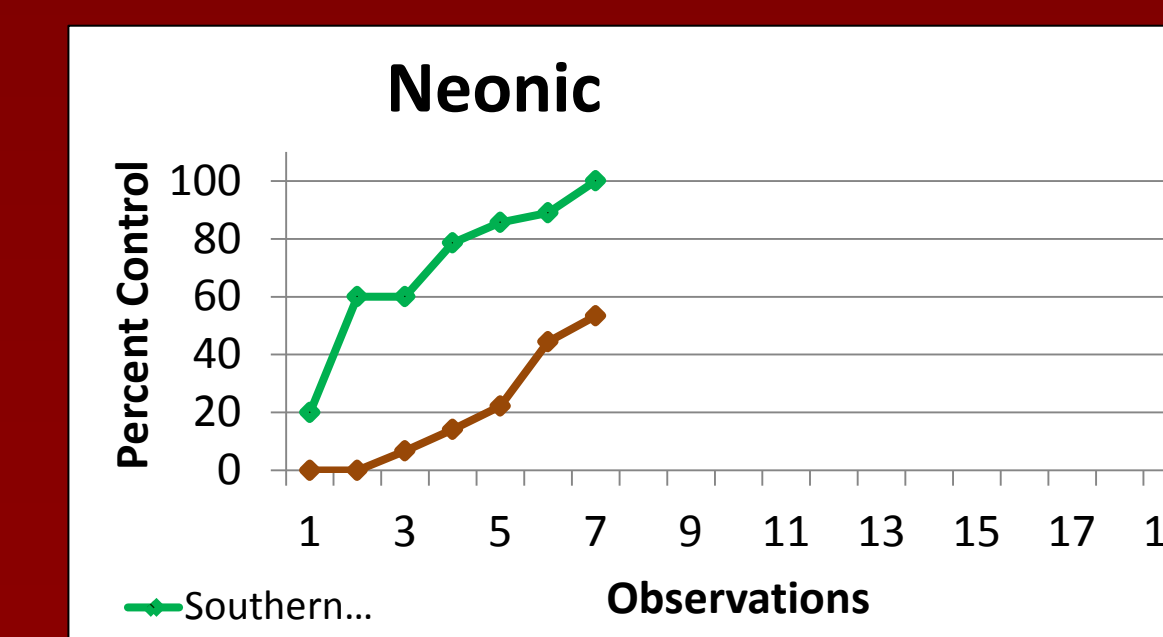
² Department of Entomology University of Georgia, Tifton, GA 31793

ABSTRACT

Stink bugs are a primary insect pest of Georgia cotton. Excessive stink bug damage negatively impacts both yield and quality. Since 2005, numerous insecticides have been evaluated in Irwin County GA to determine their effectiveness in controlling stink bugs in cotton. Trials were conducted in commercial cotton fields planted adjacent to peanut. Plots were arranged so that each plot bordered peanuts since stink bug populations are traditionally higher in cotton nearest the peanut planting compared with more interior areas of fields. Percent control of southern green stink bug was greater and more consistent for all treatments summarized compared with brown stink bug.



Insecticide	Southern Green Stink Bug			Brown Stink Bug (<i>Euschistus spp.</i>)		
	% Control	CV	(n)	% Control	CV	(n)
Neonic	70	38	7	20	106	7
Pyrethroid (low-medium)	86	19	13	33	86	19
Pyrethroid (high)	97	7	12	40	64	16
Pyrethroid/Neonic (premix)	94	11	7	47	66	12
Bidrin	97	7	9	70	22	12



Summary and scatter plots of observations (n) of percent southern green and brown stink bug control.

METHODS

- 14 replicated trials (2005-2011)
- Randomized Complete Block (4 Reps)
- Treatments applied with a high clearance sprayer calibrated to deliver 10 gpa.
- Treatments evaluated with a black drop cloth 3-4 DAT, 12 row feet were sampled and stink bugs were enumerated species and life stage.
- Mean percent control and the coefficient of variation were calculated for neonicotinoids, pyrethroids (low-medium and high rates), pyrethroid/neonic premixes, and Bidrin.



RESULTS

Southern Green Stink Bug: High rates of pyrethroids, pyrethroid/neonic premixes, and Bidrin provided excellent control of southern green stink bug and had the lowest CVs. Low-medium rates of pyrethroids provided good control of southern green but were slightly more variable when compared with high rates of pyrethroids. Neonics provided fair control of southern green stink bug.

Brown Stink Bug (*Euschistus spp.*): Bidrin provided the highest percent control of brown stink bug and had the lowest CV. Neonics, pyrethroids, and pyrethroid/neonic premixes provided poor to fair control and were less consistent when compared with Bidrin.

In summary, Bidrin provided the best control of mixed populations of southern green and brown stink bugs. Pyrethroids tended to provide good to excellent control of southern green but only fair control of brown stink bugs. Neonics were more efficacious on southern green compared with brown stink bugs.