Arthropod Management Tests, 47(1), 2022, 1–1
https://doi.org/10.1093/amt/tsac048
Section F: Field & Cereal Crops

ENTOMOLOGICAL SOCIETY OF AMERICA
SHARING INSECT SCIENCE GLOBALLY

OXFORD

SOYBEAN: *Glycine max* L. (Merr.), 'Asgrow 46X6'

Performance of Selected Insecticides Against Stink Bugs Infesting Soybean, 2018

D. R. Cook,[1] W. Crow, and J. Gore

Delta Mississippi Research and Extension Center, Mississippi State University, Stoneville, MS 38776, USA and [1]Corresponding author, e-mail: dcook@drec.msstate.edu

Soybean | *Glycine max*

Green stink bug | *Acrosternum hilare*, brown stink bug | *Euschistus servus*

The performance of selected foliar insecticides treatments against stink bugs in soybean was evaluated at the Delta Research and Extension Center (Washington County). Soybean seed (Asgrow 46X6) were planted on a Sharkey clay soil on 28 June at a seeding rate of 117,612 seed/acre. Plot size was four rows (40 in centers) by 40 feet. Treatments were replicated four times in an RCB. Foliar insecticide treatments were applied on 31 August with a high-clearance sprayer with a compressed air spray system calibrated to deliver 10 gpa through TX-6 hollow cone nozzles (2/row) at 3.5 mph. Stink bug densities were determined by sampling one of the center two rows with a 15-in.-diameter sweep net. A sample consisted of 25 sweeps per plot. Because there was not one predominate species, counts for adults and nymphs of green stink bug and brown stink bug were pooled. Plots were sampled at 4, 7, and 10 d after treatment (DAT). The same row in each plot was not sampled on consecutive sample dates. Data were subjected to ANOVA and means separated according to Fisher's protected least significant difference.

There were no differences in stink bug densities among treatments at 4 DAT (Table 1). At 6 and 8 DAT all of the insecticides, except Sivanto (both rates), Belay, and Sniper plus Belay reduced stink bug densities compared with the untreated check.[1]

Table 1.

Treatment	Rate/acre (fl oz product)	Total stink bugs[b]/25 sweeps 4 DAT	6 DAT[c]	8 DAT[c]
Sivanto Prime 1.67L	5.0	5.5	7.3ab	4.7a
Sivanto Prime 1.67L	7.0	4.4	8.0a	5.5a
Sniper 2EC	6.4	1.2	1.3cde	1.2bc
Sniper 2EC + Acephate 90S	6.4 + 0.75[a]	0.7	0.4e	0.6c
Endigo ZC 2.06CS	4.5	1.8	1.9cde	1.4bc
Leverage 360 3SC	2.85	1.8	2.6bcd	1.4bc
Acephate 90S	1.0[a]	1.4	0.8de	1.5bc
Belay 2.13SC	5.0	2.5	6.2ab	2.9ab
Sniper 2EC + Belay 2.13SC	6.4 + 4.0	0.9	3.4abc	4.7ab
Untreated check	—	5.0	7.8a	4.5a
$P > F$		0.07	<0.01	<0.01

Means within columns followed by a common letter are not significantly different (FPLSD, $P = 0.05$).
[a]lb AI per acre.
[b]Adults plus nymphs of green and brown stink bug.
[c]Data log transformed, actual means presented.

[1]This research was supported in part by industry gifts of pesticides, seed, and/or research funding and by the Mississippi Soybean Promotion Board.

© The Author(s) 2022. Published by Oxford University Press on behalf of Entomological Society of America.
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial License (https://creativecommons.org/licenses/by-nc/4.0/), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited.
For commercial re-use, please contact journals.permissions@oup.com

Downloaded from https://academic.oup.com/amt/article/47/1/tsac048/6555340 by guest on 29 September 2023