# Avoiding Soybean Insect Problems on the Upper Gulf Coast by Planting MGV and VI Soybeans


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## Introduction

On the Upper Gulf Coast of Texas, MGIV soybeans are planted early (approximately mid-April) and harvested early to avoid drought conditions during late summer when late MG soybeans are in the critical pod fill stages. However, MGIV soybeans usually are attacked severely by stink bugs [southern green stink bug (SGSB), *Nezara viridula*; green stink bug (GSB), *Acrosternum hilare*; and brown stink bug (BSB), *Euschistus servus*] during pod fill. Late MG soybeans (VIIs and VIIIs) are planted later (mid-May to mid-June) and harvested later in the fall. However, late MG soybeans can suffer from drought conditions during pod fill, be exposed to inclement weather during the fall causing seed deterioration and harvesting problems and often are attacked by damaging populations of defoliating Lepidoptera [velvetbean caterpillar (VBC), *Anticarsia gemmatalis*; green cloverworm (GCW), *Plathypena scabra*; and soybean looper (SL), *Pseudoplusia includens*]. Perhaps MGV and/or VI soybeans planted at the proper time can avoid both severe stink bug and Lepidoptera pressure and produce satisfactory yields with good seed quality. Thus, the objective of this study was to monitor insect populations and damage and compare yields and seed quality among MG IV-VII soybeans planted early and late.

## Materials and Methods

The study was conducted at the TAMU Agricultural Research and Extension Center at Beaumont in 2003. The study consisted of two identical experiments - two planting dates (mid April and late May). Each experiment was designed as a split plot with Maturity Group as main plots and treated or untreated for insects as sub-plots. The varieties and their Maturity Groups were: 1) RA 452 (indeterminate), MGIV; 2) S56-D7 (determinate), MGV; 3) S64-J1 (determinate), MGVI; and 4) S73-Z5 (determinate), MGVII. Insect-treated plots were sprayed multiple times with Orthene 90S at 1 lb/acre. Spray applications were made with a two-person spray rig equipped with 13 nozzles (tip size = 80015, 50 mesh screens) and pressurized with $CO_2$ (20-30 psi). Spray width was 21.7 ft and final spray volume was 12.3 gpa. Plot size was 43 ft x 8 rows (30 inches between rows). Treatments in each experiment were replicated four times.

## Early planting experiment

Plots were planted 14 Apr at approximately 8-10 seeds per foot of row. On 17 Apr, plots were sprayed with a tractor-drawn spray rig. The spray was a tank-mix of First Rate at 0.75 oz/acre and Dual Magnum at 1 pt/acre. Final spray volume was 35 gpa. On 20 Apr, soybeans emerged through Bernard-Morey fine sandy loam soil. On 21 May, plots were furrow-irrigated due to drought conditions in April and May. Escaped weeds were controlled by cultivation and a post-directed spray (using a hand-held sprayer) of Poast at 1.5 pt/acre, Basagran at 1.5 pt/acre, Blazer at 1 pt/acre and Latron AG-98 at 2 pt/100 gal spray on 3 Jun. Arthropods were sampled by taking 20 consecutive sweeps of a 15 inch diameter sweep net in each plot on the dates in Table 1A. The contents of each sweep net sample were placed in a plastic bag which was frozen. At a later date, bags were thawed and the contents identified and counted. On the same dates arthropods were sampled, soybean growth stage for each variety also was noted and recorded. In addition, Table 1A shows the dates when Orthene 90S was sprayed on treated plots. The middle four rows of each plot were harvested at maturity (see Table 1A for harvest dates) with a small plot combine. Yields were adjusted to 13% moisture. Seed from each plot was rated for quality using a 1-5 visual scale (1 = excellent, 5 = very poor). Bushel weight also was recorded for each plot. Immediately prior to harvest, pod and plant height were measured for each plot. Insect count data were transformed using $\sqrt{x + 0.5}$ and all data analyzed by ANOVA and LSD.

## Late planting experiment

Plots were planted 30 May at approximately 8-10 seeds per foot of row. On 3 Jun, plots were sprayed with a tractor-drawn spray rig. The spray was a tank-mix of First Rate at 0.75 oz/acre, Dual Magnum at 2 pt/acre and Glyphomax Plus at 2 pt/acre. Final spray volume was 35 gpa. On 4 Jun, soybeans emerged through Bernard-Morey fine silt loam soil. Escaped weeds were controlled by cultivation. Arthropods were sampled as in the early planting experiment. Table 1B shows when all plots were sampled for insects, when treated plots were sprayed with Orthene 90S and when stage of growth was recorded. All other materials and methods were the same as in the early planting experiment.

# Results

## Early planting experiment

SL, VBC and GCW populations were too low in the experiment for meaningful analysis (Tables 3-6B). However, populations of phytophagous stink bugs (nymphs and adults) - primarily SGSB - were significantly higher in MGIV than MGV and VI soybeans (Tables 7A-16B). Across sub plots, stink bug populations were significantly higher in MGIV than MGV or VI soybeans on 27 Jun (R5 for MGIV soybeans), 7 Jul (R5 for MGIV soybeans), 17 Jul (R6 for MGIV soybeans) and 29 Jul (R6/7 for MGIV soybeans) (Tables 1A and 16B). Populations of stink bugs were highest on MGV and VI soybeans on 19 Aug when MGV soybeans were R7 and MGVI soybeans were R6 (Tables 1A and 16A). Data suggest that stink bug populations were higher and more problematic on MGIV than MGV and VI soybeans, given an early planting date (14 Apr). Also, higher stink bug populations persisted on MGIV soybeans much longer than on MGV and VI soybeans. Perhaps, stink bug population dynamics are more geared

towards MGIV than V and VI soybeans on the Upper Gulf Coast, given an early planting date. Although stink bug populations were lower on MGV and VI than IV soybeans, yields of V and VI soybeans were relatively low (Tables 2A). Across sub plots, MGIV soybeans yielded 31.3 bu/acre while MGV and VI soybeans yielded only 18.1 and 14.2 bu/acre, respectively (Table 2B). Perhaps, on the Upper Gulf Coast, a later planting date would be more conducive to higher yields of MGV and VI soybeans and not attract high populations of stink bugs. Thus, in 2004 an experiment is planned to investigate planting dates (late April, mid May and late May) and stink bug populations on MGV and VI soybeans. The Entomology Project hopes to show that MGV and VI soybeans on the Upper Gulf Coast can produce acceptable yields with minimal stink bug pressure. In addition, MGV and VI soybeans can be harvested earlier than MGVII and VIII soybeans which permits harvesting operations during more favorable weather. All other arthropod populations were too low for meaningful analysis (Tables 17 - 25B).

## Late planting experiment

SL, VBC and GCW populations were too low for meaningful analysis (Tables 26A - 29B). Stink bug populations were relatively low throughout the experiment except on 19 Aug when phytophagous stink bug populations were significantly higher on MGIV and V soybeans than on MGVI and VII soybeans (Tables 30A - 39B). On this date, MGIV and V soybeans were R6 and R5, respectively (Table 1B). All other arthropod populations were too low for meaningful analysis (Tables 40A - 48B). Across sub plots, yields were significantly higher for MGVII than MGIV-VI soybeans (Table 2B). However, the late maturity date (29 Oct), 4 to 6 weeks later than the MGV and VI maturity dates in the early planting experiment (Table 2A ) often coincides with the onset of inclement weather on the Upper Gulf Coast.

Table 1A. Soybean maturity group/planting date vs. insects, early planting date (April 14). Beaumont, TX. 2003

| | Soybean growth stage at time of 20 sweeps | | | |
|---|---|---|---|---|
| Date of 20 sweeps | MGIV RA 452 | MGV S56-D7 | MGVI S64-J1 | MGVII S73-Z5 |
| Jun 7 (no sweeps) | R3 | R2 | R2 | R2 |
| Jun 13 | Applied 1.0 lb/A Orthene 90S on all TREATED plots | | | |
| Jun 17 | R4 | R4 | R3 | R2/3 |
| Jun 27 | R5 | R4/5 | R4 | R3 |
| Jun 30 | Applied 1.0 lb/A Orthene 90S on all TREATED plots | | | |
| Jul 7 | R5 | R5 | R4 | R4 |
| Jul 17 | R6 | R6 | R5 | R5 |
| Jul 18 | Applied 1.0 lb/A Orthene 90S on all TREATED plots | | | |
| Jul 29 | R6/7 | R6 | R5 | R5 |
| Jul 30 | Applied 1.0 lb/A Orthene 90S on all TREATED plots | | | |
| Aug 19 | R8 | R7 | R6 | R5 |
| Aug 21 | Applied 1.0 lb/A Orthene 90S on all TREATED plots | | | |
| Aug 29 | H[a] | R7 | R6 | R5/6 |
| Sep 5 | Applied 1.0 lb/A Orthene 90S on all TREATED plots | | | |
| Sep 11 | H | R8 | R7 | R6 |
| Sep 23 | Applied 1.0 lb/A Orthene 90S on all TREATED plots | | | |
| Sep 25 | H | H | R8 | R7 |

[a] Plots previously harvested, MGIV (RA 452) harvested Aug 20, MGV (S56-D7) harvested Sep 18.
MGVI (S64-J1) harvested on Sep 30.
MGVII (S73-Z5 harvested on Nov 3.

Table 1B. Soybean maturity group/planting date vs. insects, late planting date (May 30). Beaumont, TX. 2003

| | Soybean growth stage at time of 20 sweeps | | | |
|---|---|---|---|---|
| Date of 20 sweeps | MGIV RA 452 | MGV S56-D7 | MGVI S64-J1 | MGVII S73-Z5 |
| Jul 29 | R2/3 | R2 | R2 | R2 |
| Jul 30 | Applied 1.0 lb/A Orthene 90S on all TREATED plots | | | |
| Aug 8 | R3 | R3 | R2 | R2 |
| Aug 19 | R6 | R5 | R5 | R4 |
| Aug 21 | Applied 1.0 lb/A Orthene 90S on all TREATED plots | | | |
| Aug 29 | R6 | R6 | R5 | R5 |
| Sep 5 | Applied 1.0 lb/A Orthene 90S on all TREATED plots | | | |
| Sep 11 | R6 | R6 | R5 | R5 |
| Sep 23 | Applied 1.0 lb/A Orthene 90S on all TREATED plots | | | |
| Sep 25 | R7 | R7 | R6 | R6 |
| Oct 14 | H[a] | R7 | R7 | R7 |

[a] Plots previously harvested , MGIV (RA 452) harvested Oct 7.
MGVII (S73-Z5) harvested on Oct 24.
MGV (S56-D7) and MGVI (S64-J1) harvested on Nov 3.

Table 2A. Agronomic and yield data, soybean maturity group/planting date vs. insects.[a]
Beaumont, TX. 2003

| Variety | Maturity group | Treatment | Plant ht. (in.) | Pod ht. (in.) | Mature date | Bushel wt. (lb/bu) | Seed qual. (1-5) | Yield (bu/A) |
|---|---|---|---|---|---|---|---|---|
| *Early planting date (April 14)* | | | | | | | | |
| RA 452 | IV | Treated | 26 | 1 | Aug 15 | 59.6 | 2.5 | 37.4 |
| | | Untreated | 26 | 1 | Aug 21 | 57.4 | 3.8 | 25.2 |
| S56-D7 | V | Treated | 14 | 0 | Sep 12 | 45.8 | 5.0 | 19.5 |
| | | Untreated | 13 | 0 | Sep 18 | 44.8 | 5.0 | 16.6 |
| S64-J1 | VI | Treated | 17 | 1 | Sep 27 | 49.4 | 4.5 | 13.9 |
| | | Untreated | 17 | 1 | Oct 5 | 49.8 | 4.5 | 14.4 |
| S73-Z5 | VII | Treated | 13 | 0 | Nov 3 | 51.5 | 4.5 | 5.4 |
| | | Untreated | 13 | 0 | Nov 3 | 47.4 | 4.8 | 5.3 |
| *Late planting date (May 30)* | | | | | | | | |
| RA 452 | IV | Treated | 45 | 8 | Oct 8 | 58.3 | 3.3 | 22.7 |
| | | Untreated | 45 | 8 | Oct 17 | 53.3 | 4.3 | 17.2 |
| S56-D7 | V | Treated | 36 | 6 | Nov 12 | 53.4 | 3.9 | 23.4 |
| | | Untreated | 37 | 6 | Nov 18 | 53.5 | 4.3 | 10.8 |
| S64-J1 | VI | Treated | 43 | 7 | Nov 12 | 57.0 | 3.0 | 25.5 |
| | | Untreated | 41 | 6 | Nov 18 | 56.7 | 3.5 | 10.6 |
| S73-Z5 | VII | Treated | 41 | 7 | Oct 27 | 59.8 | 2.8 | 26.0 |
| | | Untreated | 41 | 7 | Oct 30 | 59.2 | 3.0 | 26.0 |

[a] See Table 2B for statistical analysis of agronomic and yield data, early and late planting date.

Table 2B. Statistical analysis of agronomic and yield data from Table 2A. Beaumont, TX. 2003

| | | Plant ht. (in.) | Pod ht. (in.) | Mature date | Bushel wt. (lb/bu) | Seed qual. (1-5) | Yield (bu/A) |
|---|---|---|---|---|---|---|---|
| *Early planting date (April 14)*[a] | | | | | | | |
| Main plot effects: | IV | 25.8a | 1a | Aug 18d | 58.5a | 3.1c | 31.3a |
| | V | 13.4c | 0b | Sep 15c | 45.3c | 5.0a | 18.1b |
| | VI | 17.3b | 1a | Oct 1b | 49.6b | 4.5b | 14.2c |
| | VII | 13.1c | 0b | Nov 3a | 49.4b | 4.6b | 5.4d |
| Subplot effects: | T | 17.5 | 0.5 | Sep 22b | 51.6a | 4.1b | 19.1a |
| | U | 17.3 | 0.5 | Sep 27a | 49.8b | 4.5a | 15.4b |
| Interactions: *P value*: | mp x sp | ns 0.9312 | ns | sig <0.0001 | sig 0.0044 | sig <0.0001 | sig 0.0002 |
| *Late planting date (May 30)*[a] | | | | | | | |
| Main plot effects: | IV | 44.8a | 8.0a | Oct 13c | 55.8b | 3.8b | 20.0b |
| | V | 36.4c | 6.3c | Nov 15a | 53.5c | 4.1a | 17.1c |
| | VI | 41.6b | 6.1c | Nov 15a | 56.9b | 3.3c | 18.0bc |
| | VII | 40.6b | 7.0b | Oct 29b | 59.5a | 2.9d | 26.0a |
| Subplot effects: | T | 41.1 | 6.9 | Oct 30b | 57.1a | 3.2b | 24.4a |
| | U | 40.6 | 6.8 | Nov 5a | 55.7b | 3.8a | 16.2b |
| Interactions: *P value*: | mp x sp | ns 0.4341 | ns 0.4123 | sig 0.0159 | sig 0.0152 | sig 0.0007 | sig <0.0001 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).

Table 3. Soybean looper data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. soybean looper/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0 | 0.3 | 0.8 | 0 | 0.5 | H[b] | H | H | H |
| | | Untreated | 0.3 | 0.5 | 0.3 | 0 | 0.8 | H | H | H | H |
| S56-D7 | V | Treated | 0.3 | 0 | 0 | 0 | 0 | 0 | 0.3 | H | H |
| | | Untreated | 0.3 | 0 | 0.3 | 0 | 0.5 | 0 | 0 | H | H |
| S64-J1 | VI | Treated | 0 | 0 | 0 | 0.3 | 0.3 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | 0.3 | 0 | 0.3 | 0.3 |
| S73-Z5 | VII | Treated | 0 | 0 | 0.3 | 0.5 | 0 | 0 | 0.3 | 0 | 0 |
| | | Untreated | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.3 |

[a] Means in all columns are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 4A. Green cloverworm data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. green cloverworm/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0 | 0 | 0.3 | 0 | 0 | H[b] | H | H | H |
| | | Untreated | 0.3 | 0 | 0 | 0 | 0.3 | H | H | H | H |
| S56-D7 | V | Treated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | H | H |
| | | Untreated | 0.5 | 0 | 0.3 | 0 | 0 | 0 | 0 | H | H |
| S64-J1 | VI | Treated | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Untreated | 0.5 | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0.3 |
| S73-Z5 | VII | Treated | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 |
| | | Untreated | 0.3 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 |

[a] See Table 4B for statistical analysis of green cloverworm data.
[b] H = plots previously harvested.

Table 4B. Statistical analysis of green cloverworm data from Table 4A. Beaumont, TX. 2003

| | | 0 no. green cloverworm/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 0.1 | 0 | 0.1 | 0 | 0.1 | H[b] | H | H | H |
| | V | 0.3 | 0 | 0.1 | 0 | 0 | 0 | 0 | H | H |
| | VI | 0.3 | 0.1 | 0.1 | 0 | 0 | 0 | 0 | 0 | 0.1 |
| | VII | 0.1 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 |
| Subplot effects: | T | 0b | 0.1 | 0.1 | 0 | 0 | 0 | 0.1 | 0 | 0 |
| | U | 0.4a | 0 | 0.1 | 0 | 0.1 | 0 | 0.1 | 0 | 0.1 |
| Interactions: mp x sp | | ns | ns | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.8352 | 0.4098 | 0.3232 | – | 0.4098 | – | 1.0000 | – | 0.3370 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 5. Velvetbean caterpillar data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. velvetbean caterpillar/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0 | 0 | 0 | 0 | 0 | H[b] | H | H | H |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | H | H | H | H |
| S56-D7 | V | Treated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | H | H |
| | | Untreated | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 | H | H |
| S64-J1 | VI | Treated | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 | 0 | 0 |
| | | Untreated | 0.3 | 0 | 0 | 0 | 0.3 | 0 | 0 | 0 | 0 |
| S73-Z5 | VII | Treated | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 | 0 |

[a] Means in all columns are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 6A. Lepidopterous larvae (SL + GCW + VBC) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. lepidopterous larvae (SL + GCW + VBC)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0 | 0.3 | 1.0 | 0 | 0.5 | H[b] | H | H | H |
| | | Untreated | 0.5 | 0.5 | 0.3 | 0 | 1.0 | H | H | H | H |
| S56-D7 | V | Treated | 0.3 | 0 | 0 | 0 | 0 | 0 | 0.3 | H | H |
| | | Untreated | 0.8 | 0 | 0.5 | 0 | 0.8 | 0 | 0 | H | H |
| S64-J1 | VI | Treated | 0 | 0.3 | 0 | 0.3 | 0.5 | 0 | 0 | 0 | 0 |
| | | Untreated | 0.8 | 0 | 0.3 | 0 | 0.3 | 0.3 | 0 | 0.3 | 0.5 |
| S73-Z5 | VII | Treated | 0 | 0 | 0.3 | 0.5 | 0 | 0 | 0.8 | 0 | 0 |
| | | Untreated | 0.5 | 0 | 0 | 0 | 0 | 0 | 0.3 | 0.8 | 0.3 |

[a] See Table 6B for statistical analysis of lepidopterous larvae (SL + GCW + VBC) data.
[b] H = plots previously harvested.

Table 6B. Statistical analysis of lepidopterous larvae (SL + GCW + VBC) data from Table 6A. Beaumont, TX. 2003

| | | 0 no. lepidopterous larvae (SL + GCW + VBC)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 0.3 | 0.4a | 0.6 | 0 | 0.8 | H[b] | H | H | H |
| | V | 0.5 | 0b | 0.3 | 0 | 0.4 | 0 | 0.1 | H | H |
| | VI | 0.4 | 0.1b | 0.1 | 0.1 | 0.4 | 0.1 | 0 | 0.1 | 0.3 |
| | VII | 0.3 | 0b | 0.1 | 0.3 | 0 | 0 | 0.5 | 0.4 | 0.1 |
| Subplot effects: | T | 0.1b | 0.1 | 0.3 | 0.2 | 0.3 | 0 | 0.3 | 0 | 0 |
| | U | 0.6a | 0.1 | 0.3 | 0 | 0.5 | 0.1 | 0.1 | 0.5 | 0.4 |
| Interactions: mp x sp | | ns | ns | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.9711 | 0.7553 | 0.2030 | 0.5568 | 0.8013 | 0.3874 | 0.6399 | 0.3988 | 0.5250 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 7A. Southern green stink bug nymph data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. southern green stink bug nymphs/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0 | 0 | 0 | 4.8 | 0.3 | H[b] | H | H | H |
| | | Untreated | 0 | 0 | 0 | 3.8 | 13.3 | H | H | H | H |
| S56-D7 | V | Treated | 0 | 0 | 0 | 0 | 0.3 | 4.0 | 0 | H | H |
| | | Untreated | 0 | 0 | 0 | 0.8 | 0 | 1.8 | 0.7 | H | H |
| S64-J1 | VI | Treated | 0 | 0 | 0 | 0 | 0 | 4.3 | 0 | 0.3 | 0 |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | 3.3 | 0.3 | 0.3 | 2.3 |
| S73-Z5 | VII | Treated | 0 | 0 | 0 | 0 | 0 | 4.3 | 0.8 | 0.5 | 0.3 |
| | | Untreated | 0 | 0 | 0 | 0 | 0.8 | 3.5 | 0.3 | 1.3 | 2.3 |

[a] See Table 7B for statistical analysis of southern green stink bug nymph data.
[b] H = plots previously harvested.

Table 7B. Statistical analysis of southern green stink bug nymph data from Table 7A. Beaumont, TX. 2003

| | | 0 no. southern green stink bug nymphs/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 0 | 0 | 0 | 4.3a | 6.8a | H[b] | H | H | H |
| | V | 0 | 0 | 0 | 0.4b | 0.1b | 2.9 | 0.3 | H | H |
| | VI | 0 | 0 | 0 | 0b | 0b | 3.8 | 0.1 | 0.3 | 1.1 |
| | VII | 0 | 0 | 0 | 0b | 0.4b | 3.9 | 0.5 | 0.9 | 1.3 |
| Subplot effects: | T | 0 | 0 | 0 | 1.2 | 0.1b | 4.2 | 0.3 | 0.4 | 0.1 |
| | U | 0 | 0 | 0 | 1.1 | 3.5a | 2.8 | 0.4 | 0.8 | 2.3 |
| Interactions: mp x sp | | ns | ns | ns | ns | sig | ns | ns | ns | ns |
| *P value*: | | – | – | – | 0.7360 | 0.0149 | 0.9418 | 0.3073 | 0.5240 | 0.8824 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 8A. Southern green stink bug adult data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. southern green stink bug adults/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0.3 | 2.3 | 0 | 1.0 | 0.5 | H[b] | H | H | H |
| | | Untreated | 0.5 | 2.0 | 0 | 0.8 | 4.5 | H | H | H | H |
| S56-D7 | V | Treated | 0.3 | 0.5 | 0 | 0 | 0.5 | 0.8 | 0 | H | H |
| | | Untreated | 0 | 0 | 0 | 0.3 | 0 | 0.3 | 0.3 | H | H |
| S64-J1 | VI | Treated | 0 | 0.3 | 0 | 1.0 | 0 | 1.8 | 0 | 0 | 0 |
| | | Untreated | 0 | 0.3 | 0 | 0.3 | 0.8 | 2.5 | 0 | 0 | 0 |
| S73-Z5 | VII | Treated | 0.5 | 0.5 | 0 | 0 | 0 | 0.8 | 0 | 0.3 | 0 |
| | | Untreated | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

[a] See Table 8B for statistical analysis of southern green stink bug adult data.
[b] H = plots previously harvested.

Table 8B. Statistical analysis of southern green stink bug adult data from Table 8A. Beaumont, TX. 2003

| | | 0 no. southern green stink bug adults/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 0.4 | 2.1a | 0 | 0.9 | 2.5a | H[b] | H | H | H |
| | V | 0.1 | 0.3b | 0 | 0.1 | 0.3b | 0.5b | 0.1 | H | H |
| | VI | 0 | 0.3b | 0 | 0.6 | 0.4b | 2.1a | 0 | 0 | 0 |
| | VII | 0.3 | 0.4b | 0 | 0 | 0b | 0.4b | 0 | 0.1 | 0 |
| Subplot effects: | T | 0.3 | 0.9 | 0 | 0.5 | 0.3 | 1.1 | 0 | 0.1 | 0 |
| | U | 0.1 | 0.6 | 0 | 0.3 | 1.3 | 0.9 | 0.1 | 0 | 0 |
| Interactions: mp x sp | | ns | ns | ns | ns | sig | ns | ns | ns | ns |
| *P value*: | | 0.4594 | 0.9346 | – | 0.8178 | 0.0240 | 0.5082 | 0.3874 | 0.3370 | – |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 9A. Southern green stink bug (nymphs + adults) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. southern green stink bug (nymphs + adults)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0.3 | 2.3 | 0 | 5.8 | 0.8 | H[b] | H | H | H |
| | | Untreated | 0.5 | 2.0 | 0 | 4.5 | 17.8 | H | H | H | H |
| S56-D7 | V | Treated | 0.3 | 0.5 | 0 | 0 | 0.8 | 4.8 | 0 | H | H |
| | | Untreated | 0 | 0 | 0 | 1.0 | 0 | 2.0 | 1.0 | H | H |
| S64-J1 | VI | Treated | 0 | 0.3 | 0 | 1.0 | 0 | 6 | 0 | 0.3 | 0 |
| | | Untreated | 0 | 0.3 | 0 | 0.3 | 0.8 | 5.8 | 0.3 | 0.3 | 2.3 |
| S73-Z5 | VII | Treated | 0.5 | 0.5 | 0 | 0 | 0 | 5.0 | 0.8 | 0.8 | 0.3 |
| | | Untreated | 0 | 0.3 | 0 | 0 | 0.8 | 3.5 | 0.3 | 1.3 | 2.3 |

[a] See Table 9B for statistical analysis of southern green stink bug (nymphs + adults) data.
[b] H = plots previously harvested.

Table 9B. Statistical analysis of southern green stink bug (nymphs + adults) data from Table 9A. Beaumont, TX. 2003

| | | 0 no. southern green stink bug (nymphs + adults)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 0.4 | 2.1a | 0 | 5.1a | 9.3a | H[b] | H | H | H |
| | V | 0.1 | 0.3b | 0 | 0.5b | 0.4b | 3.4 | 0.4 | H | H |
| | VI | 0 | 0.3b | 0 | 0.6b | 0.4b | 5.9 | 0.1 | 0.3 | 1.1 |
| | VII | 0.3 | 0.4b | 0 | 0b | 0.4b | 4.3 | 0.5 | 1.0 | 1.3 |
| Subplot effects: | T | 0.3 | 0.9 | 0 | 1.7 | 0.4b | 5.3 | 0.3 | 0.5 | 0.1 |
| | U | 0.1 | 0.6 | 0 | 1.4 | 4.8a | 3.8 | 0.5 | 0.8 | 2.3 |
| Interactions: mp x sp | | ns | ns | ns | ns | sig | ns | ns | ns | ns |
| *P value*: | | 0.4594 | 0.9346 | – | 0.5425 | 0.0066 | 0.7554 | 0.3125 | 0.7518 | 0.8824 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 10A. Green stink bug nymph data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. green stink bug nymphs/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0.3 | 0.3 | 0.3 | 2.0 | 1.0 | H[b] | H | H | H |
| | | Untreated | 0 | 0 | 4.0 | 1.5 | 0.5 | H | H | H | H |
| S56-D7 | V | Treated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | H | H |
| | | Untreated | 0 | 0.3 | 0.3 | 0 | 0 | 0 | 0 | H | H |
| S64-J1 | VI | Treated | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S73-Z5 | VII | Treated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0 | 0 | 0.3 | 0.3 | 0 | 0.5 | 0 |

[a] See Table 10B for statistical analysis of green stink bug nymph data.
[b] H = plots previously harvested.

Table 10B. Statistical analysis of green stink bug nymph data from Table 10A. Beaumont, TX. 2003

| | | 0 no. green stink bug nymphs/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 0.1 | 0.1 | 2.1a | 1.8a | 0.8 | H[b] | H | H | H |
| | V | 0 | 0.1 | 0.1b | 0b | 0 | 0 | 0 | H | H |
| | VI | 0 | 0.1 | 0b | 0b | 0 | 0 | 0 | 0 | 0 |
| | VII | 0 | 0 | 0b | 0b | 0.1 | 0.1 | 0 | 0.3 | 0 |
| Subplot effects: | T | 0.1 | 0.1 | 0.1 | 0.5 | 0.3 | 0 | 0 | 0 | 0 |
| | U | 0 | 0.1 | 1.1 | 0.4 | 0.2 | 0.1 | 0 | 0.3 | 0 |
| Interactions: mp x sp | | ns | ns | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.4098 | 0.3232 | 0.0770 | 0.9960 | 0.6647 | 0.3874 | – | 0.3370 | – |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 11. Green stink bug adult data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. green stink bug adults/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0 | 0.3 | 0 | 0 | 0.3 | H[b] | H | H | H |
| | | Untreated | 0 | 0 | 0.8 | 0 | 0.3 | H | H | H | H |
| S56-D7 | V | Treated | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 | H | H |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | H | H |
| S64-J1 | VI | Treated | 0 | 0 | 0 | 0 | 0.5 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S73-Z5 | VII | Treated | 0 | 0 | 0 | 0 | 0.3 | 0.3 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0 | 0 | 0.3 | 0 | 0.3 | 0 | 0 |

[a] Means in all columns are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 12A. Green stink bug (nymphs + adults) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. green stink bug (nymphs + adults)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0.3 | 0.5 | 0.3 | 2.0 | 1.3 | H[b] | H | H | H |
| | | Untreated | 0 | 0 | 4.8 | 1.5 | 0.8 | H | H | H | H |
| S56-D7 | V | Treated | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 | H | H |
| | | Untreated | 0 | 0.3 | 0.3 | 0 | 0 | 0 | 0 | H | H |
| S64-J1 | VI | Treated | 0 | 0.3 | 0 | 0 | 0.5 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S73-Z5 | VII | Treated | 0 | 0 | 0 | 0 | 0.3 | 0.3 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0 | 0 | 0.5 | 0.3 | 0.3 | 0.5 | 0 |

[a] See Table12B for statistical analysis of green stink bug (nymphs + adults) data.
[b] H = plots previously harvested.

Table 12B. Statistical analysis of green stink bug (nymphs + adults) data from Table 12A. Beaumont, TX. 2003

| | | 0 no. green stink bug (nymphs + adults)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 0.1 | 0.3 | 2.5a | 1.8a | 0 | H[b] | H | H | H |
| | V | 0 | 0.1 | 0.1b | 0b | 0.1 | 0 | 0 | H | H |
| | VI | 0 | 0.1 | 0b | 0b | 0.3 | 0 | 0 | 0 | 0 |
| | VII | 0 | 0 | 0b | 0b | 0.4 | 0.3 | 0.1 | 0.3 | 0 |
| Subplot effects: | T | 0.1 | 0.2 | 0.1b | 0.5 | 0.6 | 0.1 | 0 | 0 | 0 |
| | U | 0 | 0.1 | 1.3a | 0.4 | 0.3 | 0.1 | 0.1 | 0.3 | 0 |
| Interactions: mp x sp | | ns | ns | sig | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.4098 | 0.3539 | 0.0233 | 0.9960 | 0.7617 | 1.0000 | 0.3874 | 0.3370 | – |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 13. Brown stink bug nymph data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. brown stink bug nymphs/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0 | 0 | 0 | 0 | 0.3 | H[b] | H | H | H |
| | | Untreated | 0 | 0 | 0 | 0 | 0.3 | H | H | H | H |
| S56-D7 | V | Treated | 0 | 0 | 0 | 0 | 0 | 1.3 | 0 | H | H |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | H | H |
| S64-J1 | VI | Treated | 0 | 0 | 0 | 0 | 0 | 0.8 | 0.5 | 0 | 0 |
| | | Untreated | 0 | 0 | 0 | 0 | 0.3 | 0.3 | 0 | 0 | 0 |
| S73-Z5 | VII | Treated | 0 | 0.3 | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | 0.8 | 0 | 0 | 0 |

[a] Means in all columns are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 14A. Brown stink bug adult data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. brown stink bug adults/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 2.5 | 1.0 | 0 | 1.3 | 0.8 | H[b] | H | H | H |
| | | Untreated | 1.5 | 1.0 | 0.3 | 0 | 1.5 | H | H | H | H |
| S56-D7 | V | Treated | 0.3 | 0 | 0 | 0 | 0.8 | 0.8 | 0.3 | H | H |
| | | Untreated | 1.5 | 0.3 | 0 | 0 | 0.3 | 0.5 | 0 | H | H |
| S64-J1 | VI | Treated | 1.0 | 0 | 0 | 0.8 | 0 | 0.8 | 0.3 | 0.5 | 0.3 |
| | | Untreated | 2.0 | 0.5 | 0 | 0.5 | 0.5 | 1.0 | 0.3 | 0.3 | 0.3 |
| S73-Z5 | VII | Treated | 0.5 | 0.5 | 0 | 0 | 0.5 | 0.8 | 1.0 | 0.8 | 0.3 |
| | | Untreated | 0.3 | 0 | 0 | 0 | 0 | 0.5 | 2.8 | 1.0 | 0.8 |

[a] See Table 14B for statistical analysis of brown stink bug adult data.
[b] H = plots previously harvested.

Table 14B. Statistical analysis of brown stink bug adult data from Table 14A. Beaumont, TX. 2003

| | | 0 no. brown stink bug adults/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 2.0 | 0 | 0.1 | 0.6a | 1.1 | H[b] | H | H | H |
| | V | 0.9 | 0.1 | 0 | 0b | 0.5 | 0.6 | 0.1b | H | H |
| | VI | 1.5 | 0.3 | 0 | 0.6a | 0.3 | 0.9 | 0.3b | 0.4 | 0.3 |
| | VII | 0.4 | 0.3 | 0 | 0b | 0.3 | 0.6 | 1.9a | 0.9 | 0.5 |
| Subplot effects: | T | 1.1 | 0.4 | 0 | 0.5 | 0.5 | 0.8 | 0.5 | 0.6 | 0.3 |
| | U | 1.3 | 0.4 | 0.1 | 0.1 | 0.6 | 0.7 | 1.1 | 0.6 | 0.5 |
| Interactions: mp x sp | | ns | ns | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.2411 | 0.4898 | 0.4098 | 0.1240 | 0.2668 | 0.8333 | 0.3374 | 0.4396 | 0.4939 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 15A. Brown stink bug (nymphs + adults) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. brown stink bug (nymphs + adults)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 2.5 | 1.0 | 0 | 1.3 | 1.0 | H[b] | H | H | H |
| | | Untreated | 1.5 | 1.0 | 0.3 | 0 | 1.8 | H | H | H | H |
| S56-D7 | V | Treated | 0.3 | 0 | 0 | 0 | 0.8 | 2.0 | 0.3 | H | H |
| | | Untreated | 1.5 | 0.3 | 0 | 0 | 0.3 | 0.5 | 0 | H | H |
| S64-J1 | VI | Treated | 1.0 | 0 | 0 | 0.8 | 0 | 1.5 | 0.8 | 0.5 | 0.3 |
| | | Untreated | 2 | 0.5 | 0 | 0.5 | 0.8 | 1.3 | 0.3 | 0.3 | 0.3 |
| S73-Z5 | VII | Treated | 0.5 | 0.8 | 0 | 0 | 0.5 | 0.8 | 1.3 | 0.8 | 0.3 |
| | | Untreated | 0.3 | 0 | 0 | 0 | 0 | 1.3 | 2.8 | 1.0 | 0.8 |

[a] See Table 15B for statistical analysis of brown stink bug (nymphs + adults) data.
[b] H = plots previously harvested.

Table 15B. Statistical analysis of brown stink bug (nymphs + adults) data from Table 15A. Beaumont, TX. 2003

| | | 0 no. brown stink bug (nymphs + adults)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 2.0 | 1.0 | 0.1 | 0.6a | 1.4 | H[b] | H | H | H |
| | V | 0.9 | 0.1 | 0 | 0b | 0.5 | 1.3 | 0.1b | H | H |
| | VI | 1.5 | 0.3 | 0 | 0.6a | 0.4 | 1.4 | 0.5b | 0.4 | 0.3 |
| | VII | 0.4 | 0.4 | 0 | 0b | 0.3 | 1.0 | 2.0a | 0.9 | 0.5 |
| Subplot effects: | T | 1.1 | 0.4 | 0 | 0.5 | 0.6 | 1.4 | 0.8 | 0.6 | 0.3 |
| | U | 1.3 | 0.4 | 0.1 | 0.1 | 0.7 | 1.0 | 1.1 | 0.6 | 0.5 |
| Interactions: mp x sp | | ns | ns | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.2411 | 0.2619 | 0.4098 | 0.1240 | 0.3305 | 0.3205 | 0.4476 | 0.4396 | 0.4939 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 16A. Total phytophagous stink bugs (nymphs + adults) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. total phytophagous stink bugs (nymphs + adults)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 3.0 | 3.8 | 0.3 | 9.0 | 3.0 | H[b] | H | H | H |
| | | Untreated | 2.0 | 3.0 | 5.0 | 6.0 | 20.3 | H | H | H | H |
| S56-D7 | V | Treated | 0.5 | 0.5 | 0 | 0 | 1.8 | 6.8 | 0.3 | H | H |
| | | Untreated | 1.5 | 0.5 | 0.3 | 1.0 | 0.3 | 2.5 | 1.0 | H | H |
| S64-J1 | VI | Treated | 1.0 | 0.5 | 0 | 1.8 | 0.5 | 7.5 | 0.8 | 0.8 | 0.3 |
| | | Untreated | 2.0 | 0.8 | 0 | 0.8 | 1.5 | 7.0 | 0.5 | 0.5 | 2.5 |
| S73-Z5 | VII | Treated | 1.0 | 1.3 | 0 | 0 | 0.8 | 6.0 | 2.0 | 1.5 | 0.5 |
| | | Untreated | 0.3 | 0.3 | 0 | 0 | 1.3 | 5.0 | 3.0 | 2.8 | 3.0 |

[a] See Table16B for statistical analysis of total phytophagous stink bugs (nymphs + adults) data.
[b] H = plots previously harvested.

Table 16B. Statistical analysis of total phytophagous stink bugs (nymphs + adults) data from Table 16A. Beaumont, TX. 2003

| | | 0 no. total phytophagous stink bugs (nymphs + adults)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 2.5 | 3.4a | 2.6a | 7.5a | 11.6a | H[b] | H | H | H |
| | V | 1.0 | 0.5b | 0.1b | 0.5b | 1.0b | 4.6 | 0.6b | H | H |
| | VI | 1.5 | 0.6b | 0b | 1.3b | 1.0b | 7.3 | 0.6b | 0.6b | 1.4 |
| | VII | 0.6 | 0.8b | 0b | 0b | 1.0b | 5.5 | 2.6a | 2.1a | 1.8 |
| Subplot effects: | T | 1.4 | 1.5 | 0.1b | 2.7 | 1.5b | 6.8 | 1.0 | 1.1 | 0.4 |
| | U | 1.4 | 1.1 | 1.3a | 1.9 | 5.8a | 4.8 | 1.6 | 1.6 | 2.8 |
| Interactions: mp x sp | | ns | ns | sig | ns | sig | ns | ns | ns | ns |
| *P value*: | | 0.2773 | 0.4957 | 0.0078 | 0.5408 | 0.0047 | 0.5996 | 0.9005 | 0.2746 | 0.8252 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 17. Threecornered alfalfa hopper nymph data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. threecornered alfalfa hopper nymphs/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0 | 0 | 0 | 0 | 0 | H[b] | H | H | H |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | H | H | H | H |
| S56-D7 | V | Treated | 0 | 0 | 0 | 0.3 | 0 | 0 | 0 | H | H |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | H | H |
| S64-J1 | VI | Treated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 |
| S73-Z5 | VII | Treated | 0 | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

[a] Means in all columns are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 18A. Threecornered alfalfa hopper adult data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. threecornered alfalfa hopper adults/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0.3 | 1.8 | 0.3 | 1.8 | 1.3 | H[b] | H | H | H |
| | | Untreated | 2.5 | 4.3 | 2.0 | 0.3 | 1.3 | H | H | H | H |
| S56-D7 | V | Treated | 1.0 | 1.8 | 0 | 0 | 1.8 | 2.5 | 0 | H | H |
| | | Untreated | 2.0 | 3.0 | 0 | 1.8 | 0.5 | 2.0 | 0 | H | H |
| S64-J1 | VI | Treated | 0.3 | 1.0 | 0.5 | 0.3 | 0.3 | 1.8 | 0.3 | 0 | 0 |
| | | Untreated | 1.3 | 2.0 | 1.3 | 1.0 | 0.3 | 2.3 | 0.3 | 0 | 0.8 |
| S73-Z5 | VII | Treated | 1.3 | 2.0 | 1.0 | 1.0 | 0 | 2.0 | 0 | 1.0 | 0 |
| | | Untreated | 1.3 | 4.0 | 1.3 | 0.8 | 0.3 | 2.3 | 0.5 | 0.5 | 0 |

[a] See Table 18B for statistical analysis of threecornered alfalfa hopper adult data.
[b] H = plots previously harvested.

Table 18B. Statistical analysis of threecornered alfalfa hopper adult data from Table 18A. Beaumont, TX. 2003

| | | 0 no. threecornered alfalfa hopper adults/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 1.4 | 3.0 | 1.1 | 1.0 | 1.3a | H[b] | H | H | H |
| | V | 1.5 | 2.4 | 0 | 0.9 | 1.1ab | 2.3 | 0 | H | H |
| | VI | 0.8 | 1.5 | 0.9 | 0.6 | 0.3bc | 2.0 | 0.3 | 0 | 0.4 |
| | VII | 1.3 | 3.0 | 1.1 | 0.9 | 0.1c | 2.1 | 0.3 | 0.8 | 0 |
| Subplot effects: | T | 0.7b | 1.6b | 0.4 | 0.8 | 0.8 | 2.1 | 0.1 | 0.5 | 0 |
| | U | 1.8a | 3.3a | 1.1 | 0.9 | 0.6 | 2.2 | 0.3 | 0.3 | 0.4 |
| Interactions: mp x sp | | ns | ns | ns | sig | ns | ns | ns | ns | ns |
| *P value*: | | 0.2527 | 0.9354 | 0.5029 | 0.0175 | 0.4506 | 0.8360 | 0.3242 | 0.5250 | 0.3370 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 19A. Threecornered alfalfa hopper (nymphs + adults) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. threecornered alfalfa hopper (nymphs + adults)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0.3 | 1.8 | 0.3 | 1.8 | 1.3 | H[b] | H | H | H |
| | | Untreated | 2.5 | 4.3 | 2.0 | 0.3 | 1.3 | H | H | H | H |
| S56-D7 | V | Treated | 1.0 | 1.8 | 0 | 0.3 | 1.8 | 2.5 | 0 | H | H |
| | | Untreated | 2.0 | 3.0 | 0 | 1.8 | 0.5 | 2.0 | 0 | H | H |
| S64-J1 | VI | Treated | 0.3 | 1.0 | 0.5 | 0.3 | 0.3 | 1.8 | 0.3 | 0 | 0 |
| | | Untreated | 1.3 | 2.0 | 1.5 | 1.0 | 0.3 | 2.3 | 0.3 | 0 | 0.8 |
| S73-Z5 | VII | Treated | 1.3 | 2.0 | 1.0 | 1.0 | 0 | 2.3 | 0 | 1.0 | 0 |
| | | Untreated | 1.3 | 4.0 | 1.3 | 0.8 | 0.3 | 2.3 | 0.5 | 0.5 | 0 |

[a] See Table 19B for statistical analysis of threecornered alfalfa hopper (nymphs + adults) data.
[b] H = plots previously harvested.

Table 19B. Statistical analysis of threecornered alfalfa hopper (nymphs + adults) data from Table 19A. Beaumont, TX. 2003

| | | 0 no. threecornered alfalfa hopper (nymphs + adults)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 1.4 | 3.0 | 1.1 | 1.0 | 1.3a | H[b] | H | H | H |
| | V | 1.5 | 2.4 | 0 | 1.0 | 1.1ab | 2.3 | 0 | H | H |
| | VI | 0.8 | 1.5 | 1.0 | 0.6 | 0.3bc | 2.0 | 0.3 | 0 | 0.4 |
| | VII | 1.3 | 3.0 | 1.1 | 0.9 | 0.1c | 2.3 | 0.3 | 0.8 | 0 |
| Subplot effects: | T | 0.7b | 1.6b | 0.4 | 0.8 | 0.8 | 2.2 | 0.1 | 0.5 | 0 |
| | U | 1.8a | 3.3a | 1.2 | 0.9 | 0.6 | 2.2 | 0.3 | 0.3 | 0.4 |
| Interactions: mp x sp | | ns | ns | ns | sig | ns | ns | ns | ns | ns |
| *P value*: | | 0.2527 | 0.9354 | 0.4725 | 0.0375 | 0.4506 | 0.8204 | 0.3242 | 0.5250 | 0.3370 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 20A. Grasshopper (nymphs + adults) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. grasshoppers (nymphs + adults)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0.8 | 0.5 | 0.3 | 0 | 0.3 | H[b] | H | H | H |
| | | Untreated | 0.8 | 0.3 | 2.0 | 0.3 | 1.0 | H | H | H | H |
| S56-D7 | V | Treated | 0.3 | 0.8 | 0.3 | 0 | 0.3 | 0.3 | 0.3 | H | H |
| | | Untreated | 0.3 | 2.0 | 1.0 | 1.0 | 1.5 | 0.3 | 0 | H | H |
| S64-J1 | VI | Treated | 0 | 0.8 | 0.3 | 0.5 | 0 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0.5 | 1.0 | 0.3 | 0.3 | 0.5 | 0.3 | 0 | 0 |
| S73-Z5 | VII | Treated | 0 | 0 | 0.3 | 0 | 0.3 | 0 | 0.5 | 0 | 0 |
| | | Untreated | 0.3 | 1.0 | 1.0 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0 |

[a] See Table 20B for statistical analysis of grasshopper (nymphs + adults) data.
[b] H = plots previously harvested.

Table 20B. Statistical analysis of grasshopper data from Table 20A. Beaumont, TX. 2003

| | | 0 no. grasshoppers/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 0.8 | 0.4 | 1.1 | 0.1 | 0.6 | H[b] | H | H | H |
| | V | 0.3 | 1.4 | 0.6 | 0.5 | 0.9 | 0.3 | 0.1 | H | H |
| | VI | 0 | 0.6 | 0.6 | 0.4 | 0.1 | 0.3 | 0.1 | 0 | 0 |
| | VII | 0.1 | 0.5 | 0.6 | 0.3 | 0.4 | 0.3 | 0.5 | 0.3 | 0 |
| Subplot effects: | T | 0.3 | 0.5 | 0.3b | 0.1b | 0.2b | 0.1 | 0.3 | 0 | 0 |
| | U | 0.3 | 0.9 | 1.3a | 0.5a | 0.8a | 0.4 | 0.3 | 0.3 | 0 |
| Interactions: mp x sp | | ns | ns | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.9485 | 0.2477 | 0.7725 | 0.1001 | 0.5377 | 0.5799 | 0.6830 | 0.3370 | – |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 21A. Banded cucumber beetle data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. banded cucumber beetle/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 1.3 | 1.0 | 1.8 | 0.8 | 0 | H[b] | H | H | H |
| | | Untreated | 1.0 | 1.8 | 3.5 | 2.3 | 0 | H | H | H | H |
| S56-D7 | V | Treated | 0 | 2.8 | 2.0 | 1.8 | 0.8 | 0 | 0 | H | H |
| | | Untreated | 0.3 | 0.8 | 1.3 | 1.0 | 0.5 | 0 | 0 | H | H |
| S64-J1 | VI | Treated | 0.3 | 1.5 | 2.8 | 2.8 | 0 | 0 | 0 | 0 | 0 |
| | | Untreated | 0.8 | 1.3 | 4.0 | 1.5 | 0 | 1.5 | 0 | 0 | 0 |
| S73-Z5 | VII | Treated | 0.3 | 1.5 | 1.3 | 1.3 | 0 | 2.0 | 0 | 0 | 0 |
| | | Untreated | 0.3 | 1.5 | 1.5 | 1.3 | 0.5 | 0.8 | 0 | 0 | 0 |

[a] See Table 21B for statistical analysis of banded cucumber beetle data.
[b] H = plots previously harvested.

Table 21B. Statistical analysis of banded cucumber beetle data from Table 21A. Beaumont, TX. 2003

| | | 0 no. banded cucumber beetle/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 1.1a | 1.4 | 2.6 | 1.5 | 0b | H[b] | H | H | H |
| | V | 0.1b | 1.8 | 1.6 | 1.4 | 0.6a | 0 | 0 | H | H |
| | VI | 0.5ab | 1.4 | 3.4 | 2.1 | 0b | 0.8 | 0 | 0 | 0 |
| | VII | 0.3b | 1.5 | 1.4 | 1.3 | 0.3ab | 1.4 | 0 | 0 | 0 |
| Subplot effects: | T | 0.4 | 1.7 | 1.9 | 1.6 | 0.2 | 0.7 | 0 | 0 | 0 |
| | U | 0.6 | 1.3 | 2.6 | 1.5 | 0.3 | 0.8 | 0 | 0 | 0 |
| Interactions: mp x sp | | ns | ns | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.7574 | 0.4933 | 0.7831 | 0.3748 | 0.4098 | 0.1667 | – | – | – |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 22A. Spotted cucumber beetle data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. spotted cucumber beetle/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0.3 | 0 | 0.5 | 0.5 | 0 | H[b] | H | H | H |
| | | Untreated | 0 | 0.5 | 1.0 | 0 | 1.5 | H | H | H | H |
| S56-D7 | V | Treated | 0 | 0.3 | 1.8 | 1.0 | 0.8 | 0 | 0 | H | H |
| | | Untreated | 0 | 0 | 1.0 | 0 | 2.0 | 0 | 0 | H | H |
| S64-J1 | VI | Treated | 0 | 0 | 0.3 | 0.5 | 0.5 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0.5 | 1.0 | 0.5 | 0.5 | 0.5 | 0 | 0 | 0 |
| S73-Z5 | VII | Treated | 0 | 0 | 1.3 | 1.8 | 1.3 | 2.0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0.3 | 0.5 | 0.5 | 0.8 | 0 | 0 | 0 |

[a] See Table 22B for statistical analysis of spotted cucumber beetle data.
[b] H = plots previously harvested.

Table 22B. Statistical analysis of spotted cucumber beetle data from Table 22A. Beaumont, TX. 2003

| | | 0 no. spotted cucumber beetle/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 0.1 | 0.3 | 0.8 | 0.3 | 0.8 | H[b] | H | H | H |
| | V | 0 | 0.1 | 1.4 | 0.5 | 1.4 | 0 | 0 | H | H |
| | VI | 0 | 0.3 | 0.6 | 0.5 | 0.5 | 0 | 0 | 0 | 0 |
| | VII | 0 | 0 | 0.8 | 1.1 | 0.9 | 0.3 | 0 | 0 | 0 |
| Subplot effects: | T | 0.1 | 0.1 | 0.9 | 0.9 | 0.6 | 0.2 | 0 | 0 | 0 |
| | U | 0 | 0.3 | 0.8 | 0.3 | 1.1 | 0 | 0 | 0 | 0 |
| Interactions: mp x sp | | ns | ns | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.4098 | 0.0877 | 0.5305 | 0.6162 | 0.0579 | 0.3874 | – | – | – |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 23A. Leafhopper (nymphs + adults) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. leafhoppers (nymphs + adults)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0.8 | 0.5 | 0 | 0 | 0.3 | H[b] | H | H | H |
| | | Untreated | 0.5 | 0 | 0.5 | 0.8 | 0.8 | H | H | H | H |
| S56-D7 | V | Treated | 0.8 | 1.8 | 0 | 0.3 | 0.3 | 0 | 0 | H | H |
| | | Untreated | 0.8 | 1.0 | 0.5 | 0 | 0.3 | 0.8 | 0 | H | H |
| S64-J1 | VI | Treated | 0 | 0 | 0 | 0.3 | 0.3 | 0 | 0 | 0 | 0 |
| | | Untreated | 1.8 | 0.8 | 0.8 | 0.3 | 0.5 | 1.0 | 0 | 0.5 | 0 |
| S73-Z5 | VII | Treated | 0 | 0.3 | 0 | 0.5 | 0 | 0.8 | 0 | 1.0 | 0 |
| | | Untreated | 0.8 | 0 | 0.3 | 0 | 0.5 | 0.8 | 0.5 | 0 | 0 |

[a] See Table 23B for statistical analysis of leafhopper (nymphs + adults) data.
[b] H = plots previously harvested.

Table 23B. Statistical analysis of leafhopper (nymphs + adults) data from Table 23A. Beaumont, TX. 2003

| | | 0 no. leafhoppers (nymphs + adults)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 0.6 | 0.3b | 0.3 | 0.4 | 0.5 | H[b] | H | H | H |
| | V | 0.8 | 1.4a | 0.3 | 0.1 | 0.3 | 0.4 | 0 | H | H |
| | VI | 0.9 | 0.4b | 0.4 | 0.3 | 0.4 | 0.5 | 0 | 0.3 | 0 |
| | VII | 0.4 | 0.1b | 0.1 | 0.3 | 0.3 | 0.8 | 0.3 | 0.5 | 0 |
| Subplot effects: | T | 0.4b | 0.6 | 0b | 0.3 | 0.2 | 0.3 | 0 | 0.5 | 0 |
| | U | 0.9a | 0.4 | 0.5a | 0.3 | 0.5 | 0.8 | 0.2 | 0.3 | 0 |
| Interactions: mp x sp | | sig | ns | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.0015 | 0.2500 | 0.6393 | 0.1023 | 0.7004 | 0.5047 | 0.0751 | 0.1938 | – |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 24A. Spider data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. spiders/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 4.8 | 4.5 | 1.8 | 0.3 | 0 | H[b] | H | H | H |
| | | Untreated | 7.0 | 3.8 | 1.5 | 2.0 | 0.5 | H | H | H | H |
| S56-D7 | V | Treated | 2.8 | 4.8 | 2.0 | 1.0 | 0.3 | 0.5 | 0 | H | H |
| | | Untreated | 4.0 | 5.3 | 1.8 | 1.8 | 0.8 | 0 | 0 | H | H |
| S64-J1 | VI | Treated | 5.0 | 5.3 | 3.5 | 2.0 | 0.3 | 0.5 | 0.3 | 0.8 | 0.5 |
| | | Untreated | 5.5 | 6.5 | 2.3 | 4.5 | 0.3 | 1.3 | 0 | 2.0 | 0.5 |
| S73-Z5 | VII | Treated | 5.3 | 5.5 | 2.8 | 0.3 | 1.8 | 1.8 | 0.5 | 1.0 | 0 |
| | | Untreated | 5.3 | 5.5 | 2.0 | 1.5 | 0.3 | 1.0 | 0 | 1.3 | 0.3 |

[a] See Table 24B for statistical analysis of spider data.
[b] H = plots previously harvested.

Table 24B. Statistical analysis of spider data from Table 24A. Beaumont, TX. 2003

| | | 0 no. spiders/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 5.9a | 4.1 | 1.6 | 1.1b | 0.3 | H[b] | H | H | H |
| | V | 3.4b | 5.0 | 1.9 | 1.4b | 0.5 | 0.3 | 0.3 | H | H |
| | VI | 5.3a | 5.9 | 2.9 | 3.3a | 0.3 | 0.9 | 0.1 | 1.4 | 0.5 |
| | VII | 5.3a | 5.5 | 2.4 | 0.9b | 1.0 | 1.4 | 0.3 | 1.1 | 0.1 |
| Subplot effects: | T | 4.4 | 5.0 | 2.5 | 0.9b | 0.6 | 0.9 | 0.3 | 0.9 | 0.3 |
| | U | 5.4 | 5.3 | 1.9 | 2.4a | 0.4 | 0.8 | 0.2 | 1.6 | 0.4 |
| Interactions: mp x sp | | ns | ns | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.6075 | 0.9134 | 0.9858 | 0.6238 | 0.0541 | 0.4296 | 0.1508 | 0.4113 | 0.7061 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 25A. Assassin bug (nymphs + adults) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Early planting date (April 14)* | | | 0 no. assassin bugs (nymphs + adults)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| RA 452 | IV | Treated | 0.5 | 0.5 | 0.3 | 1.0 | 0.3 | H[b] | H | H | H |
| | | Untreated | 0.5 | 1.3 | 0.8 | 1.3 | 1.0 | H | H | H | H |
| S56-D7 | V | Treated | 0 | 0.5 | 0 | 0 | 0 | 0.5 | 0.8 | H | H |
| | | Untreated | 0.5 | 0.3 | 0.8 | 0 | 0 | 0.5 | 0.7 | H | H |
| S64-J1 | VI | Treated | 0 | 0 | 0.3 | 0.3 | 0 | 0.8 | 0.3 | 0 | 0 |
| | | Untreated | 0.3 | 0.5 | 0 | 0.5 | 0.3 | 1.5 | 0.3 | 0 | 0 |
| S73-Z5 | VII | Treated | 0 | 0.3 | 0 | 0.3 | 0 | 0.5 | 0 | 0 | 0 |
| | | Untreated | 0.3 | 0 | 0.5 | 0 | 0.5 | 1.0 | 0 | 0.3 | 0.5 |

[a] See Table 25B for statistical analysis of assassin bug (nymphs + adults) data.
[b] H = plots previously harvested.

Table 25B. Statistical analysis of assassin bug (nymphs + adults) data from Table 25A.
Beaumont, TX. 2003

| | | 0 no. assassin bugs (nymphs + adults)/20 sweeps[a] | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Jun 17 | Jun 27 | Jul 7 | Jul 17 | Jul 29 | Aug 19 | Aug 29 | Sep 11 | Sep 25 |
| Main plot effects: | IV | 0.5 | 0.9a | 0.5 | 1.1a | 0.6 | H[b] | H | H | H |
| | V | 0.3 | 0.4ab | 0.4 | 0b | 0 | 0.5 | 0.7a | H | H |
| | VI | 0.1 | 0.3b | 0.1 | 0.4ab | 0.1 | 1.1 | 0.3ab | 0 | 0 |
| | VII | 0.1 | 0.1b | 0.3 | 0.1b | 0.3 | 0.8 | 0b | 0.1 | 0.3 |
| Subplot effects: | T | 0.1 | 0.3 | 0.1 | 0.4 | 0.1 | 0.6 | 0.3 | 0 | 0 |
| | U | 0.4 | 0.5 | 0.5 | 0.4 | 0.4 | 1.0 | 0.3 | 0.1 | 0.3 |
| Interactions: mp x sp | | ns | ns | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.8555 | 0.1779 | 0.3238 | 0.8072 | 0.7552 | 0.8293 | 0.7962 | 0.3370 | 0.3370 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 26A. Soybean looper data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. soybean loopers/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0.5 | 0.3 | 2.0 | 0.5 | 0.8 | 0.3 | H[b] |
| | | Untreated | 1.0 | 0.3 | 0.5 | 0 | 1.0 | 1.8 | H |
| S56-D7 | V | Treated | 0.8 | 0.3 | 0 | 0 | 0.3 | 0 | H |
| | | Untreated | 0.8 | 0.8 | 0.5 | 0 | 1.5 | 2.5 | H |
| S64-J1 | VI | Treated | 1.0 | 0.5 | 0.5 | 0.3 | 0.5 | 6.0 | 0 |
| | | Untreated | 1.0 | 0.5 | 0.3 | 0 | 2.0 | 2.5 | 0 |
| S73-Z5 | VII | Treated | 0.3 | 0.5 | 1.0 | 0.3 | 0 | 2.5 | 0 |
| | | Untreated | 0 | 0.8 | 0.5 | 0.3 | 1.8 | 3.8 | 0 |

[a] See Table 26B for statistical analysis of soybean looper data.
[b] H = plots previously harvested.

Table 26B. Statistical analysis for soybean looper data from Table 26A. Beaumont, TX. 2003

| | | 0 no. soybean loopers/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 0.8 | 0.3 | 1.3 | 0.3 | 0.9 | 1.0 | H[b] |
| | V | 0.8 | 0.5 | 0.3 | 0 | 0.9 | 1.3 | H |
| | VI | 1.0 | 0.5 | 0.4 | 0.1 | 1.3 | 4.3 | 0 |
| | VII | 0.1 | 0.6 | 0.8 | 0.3 | 0.9 | 3.1 | 0 |
| Subplot effects: | T | 0.6 | 0.4 | 0.9 | 0.3 | 0.4b | 2.2 | 0 |
| | U | 0.7 | 0.6 | 0.4 | 0.1 | 1.6a | 2.6 | 0 |
| Interactions: | mp x sp | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.9614 | 0.9400 | 0.2579 | 0.7088 | 0.3807 | 0.3957 | – |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 27A. Green cloverworm data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. green cloverworm/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0.5 | 0 | 0.3 | 0 | 0.3 | 0 | H[b] |
| | | Untreated | 0 | 0.3 | 0 | 0.5 | 0.8 | 0.8 | H |
| S56-D7 | V | Treated | 0 | 0 | 0 | 0 | 0 | 0 | H |
| | | Untreated | 0 | 0 | 0 | 0.3 | 0.3 | 0.5 | H |
| S64-J1 | VI | Treated | 0 | 0.5 | 0 | 0 | 0.3 | 0 | 0 |
| | | Untreated | 0.3 | 0.3 | 0 | 0.5 | 0 | 0.8 | 0 |
| S73-Z5 | VII | Treated | 0 | 0.5 | 0 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0.3 | 0.5 | 0.5 | 0.3 | 0.8 | 0 |

[a] See Table 27B for statistical analysis of green cloverworm data.
[b] H = plots previously harvested.

Table 27B. Statistical analysis for green cloverworm data from Table 27A. Beaumont, TX. 2003

| | | 0 no. green cloverworm/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 0.3 | 0.1 | 0.1 | 0.3 | 0.5 | 0.4 | H[b] |
| | V | 0 | 0 | 0 | 0.1 | 0.1 | 0.3 | H |
| | VI | 0.1 | 0.4 | 0 | 0.3 | 0.1 | 0.4 | 0 |
| | VII | 0 | 0.4 | 0.3 | 0.3 | 0.1 | 0.4 | 0 |
| Subplot effects: | T | 0.1 | 0.3 | 0.1 | 0b | 0.1 | 0b | 0 |
| | U | 0.1 | 0.2 | 0.1 | 0.4a | 0.3 | 0.7a | 0 |
| Interactions: | mp x sp | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.0672 | 0.8300 | 0.2998 | 0.9373 | 0.6958 | 0.9645 | – |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 28A. Velvetbean caterpillar data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. velvetbean caterpillar/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0.5 | 0.3 | 0 | 0 | 0 | 0 | H[b] |
| | | Untreated | 0.5 | 0.3 | 1.0 | 0.5 | 0 | 0 | H |
| S56-D7 | V | Treated | 0.3 | 0 | 0 | 0 | 0 | 0 | H |
| | | Untreated | 0 | 0.8 | 0 | 0 | 0 | 0 | H |
| S64-J1 | VI | Treated | 0.3 | 0.3 | 0 | 0 | 0 | 0 | 0 |
| | | Untreated | 0.5 | 0.3 | 0 | 0 | 0 | 0 | 0 |
| S73-Z5 | VII | Treated | 0.3 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0.3 | 0 | 0 | 0 | 0 | 0 |

[a] See Table 28B for statistical analysis of velvetbean caterpillar data.
[b] H = plots previously harvested.

Table 28B. Statistical analysis for velvetbean caterpillar data from Table 28A. Beaumont, TX. 2003

| | | 0 no. velvetbean caterpillar/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 0.5 | 0.3 | 0.5 | 0.3a | 0 | 0 | H[b] |
| | V | 0.1 | 0.4 | 0 | 0b | 0 | 0 | H |
| | VI | 0.4 | 0.3 | 0 | 0b | 0 | 0 | 0 |
| | VII | 0.1 | 0.1 | 0 | 0b | 0 | 0 | 0 |
| Subplot effects: | T | 0.3 | 0.1 | 0 | 0 | 0 | 0 | 0 |
| | U | 0.3 | 0.4 | 0.3 | 0.1 | 0 | 0 | 0 |
| Interactions: | mp x sp | ns | ns | ns | sig | ns | ns | ns |
| *P value*: | | 0.7085 | 0.7175 | 0.4098 | 0.0504 | – | – | – |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 29A. Lepidopterous larvae (SL + GCW + VBC) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. lepidopterous larvae (SL + GCW + VBC)/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 1.5 | 0.5 | 2.3 | 0.5 | 1.0 | 0.3 | H[b] |
| | | Untreated | 1.5 | 0.8 | 1.5 | 1.0 | 1.8 | 2.5 | H |
| S56-D7 | V | Treated | 1.0 | 0.3 | 0 | 0 | 0.3 | 0 | H |
| | | Untreated | 0.8 | 1.5 | 0.5 | 0.3 | 1.8 | 3.0 | H |
| S64-J1 | VI | Treated | 1.3 | 1.3 | 0.5 | 0.3 | 0.8 | 6.0 | 0 |
| | | Untreated | 1.8 | 1.0 | 0.3 | 0.5 | 2.0 | 3.3 | 0 |
| S73-Z5 | VII | Treated | 0.5 | 1.0 | 1.0 | 0.3 | 0 | 2.5 | 0 |
| | | Untreated | 0 | 1.3 | 1.0 | 0.8 | 2.0 | 4.5 | 0 |

[a] See Table 29B for statistical analysis of lepidopterous larvae (SL + GCW + VBC) data.
[b] H = plots previously harvested.

Table 29B. Statistical analysis for lepidopterous larvae (SL + GCW + VBC) data from Table 29A. Beaumont, TX. 2003

| | | 0 no. lepidopterous larvae (SL + GCW + VBC)/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 1.5 | 0.6 | 1.9 | 0.8 | 1.4 | 1.4 | H[b] |
| | V | 0.9 | 0.9 | 0.3 | 0.1 | 1.0 | 1.5 | H |
| | VI | 1.5 | 1.1 | 0.4 | 0.4 | 1.4 | 4.6 | 0 |
| | VII | 0.3 | 1.1 | 1.0 | 0.5 | 1.0 | 3.5 | 0 |
| Subplot effects: | T | 1.1 | 0.8 | 0.9 | 0.3 | 0.5b | 2.2 | 0 |
| | U | 1.0 | 1.1 | 0.8 | 0.6 | 1.9a | 3.3 | 0 |
| Interactions: | mp x sp | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.7986 | 7585 | 0.7778 | 0.9672 | 0.5991 | 0.4889 | – |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 30A. Southern green stink bug nymph data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. southern green stink bug nymphs/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0.5 | 0 | 2.5 | 0.3 | 1.5 | 0 | H[b] |
| | | Untreated | 0 | 0.5 | 8.0 | 0 | 1.8 | 0 | H |
| S56-D7 | V | Treated | 0.5 | 0 | 0.5 | 0.5 | 0 | 0.5 | H |
| | | Untreated | 0 | 0 | 2.3 | 0.3 | 1.5 | 1.0 | H |
| S64-J1 | VI | Treated | 0 | 0 | 0.5 | 0 | 0 | 0.3 | 0.3 |
| | | Untreated | 0 | 0 | 0 | 0 | 4.0 | 2.0 | 0 |
| S73-Z5 | VII | Treated | 0.5 | 0 | 0.3 | 0 | 0 | 0 | 0.3 |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | 1.8 | 0.3 |

[a] See Table 30B for statistical analysis of southern green stink bug nymph data.
[b] H = plots previously harvested.

Table 30B. Statistical analysis for southern green stink bug nymph data from Table 30A.

| | | 0 no. southern green stink bug nymphs/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 0.3 | 0.3a | 5.3a | 0.1 | 1.6 | 0 | H[b] |
| | V | 0.3 | 0b | 1.4b | 0.4 | 0.8 | 0.8 | H |
| | VI | 0 | 0b | 0.3b | 0 | 2.0 | 1.1 | 0.1 |
| | VII | 0.3 | 0b | 0.1b | 0 | 0 | 0.9 | 0.3 |
| Subplot effects: | T | 0.4 | 0 | 0.9 | 0.2 | 0.4 | 0.2b | 0.3 |
| | U | 0 | 0.1 | 2.6 | 0.1 | 1.8 | 1.2a | 0.1 |
| Interactions: | mp x sp | ns | sig | ns | ns | ns | ns | ns |
| *P value*: | | 0.8013 | 0.0504 | 0.1477 | 0.7542 | 0.4733 | 0.2701 | 0.5744 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 31A. Southern green stink bug adult data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. southern green stink bug adults/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0.5 | 0 | 2.0 | 0 | 0.8 | 0 | H[b] |
| | | Untreated | 0 | 1.8 | 2.3 | 0 | 1.5 | 1.5 | H |
| S56-D7 | V | Treated | 0.8 | 0.8 | 1.8 | 0 | 0 | 0.3 | H |
| | | Untreated | 0.5 | 0.3 | 2.8 | 0.3 | 1.0 | 0 | H |
| S64-J1 | VI | Treated | 0.3 | 0 | 0.5 | 0 | 0 | 0 | 0.3 |
| | | Untreated | 0 | 0 | 0.5 | 0 | 1.0 | 0.3 | 0.5 |
| S73-Z5 | VII | Treated | 1.0 | 0 | 0 | 0 | 0 | 0 | 0.3 |
| | | Untreated | 0.5 | 0 | 0 | 0 | 0.8 | 0.5 | 0.8 |

[a] See Table 31B for statistical analysis of southern green stink bug adult data.
[b] H = plots previously harvested.

Table 31B. Statistical analysis for southern green stink bug adult data from Table 31A. Beaumont, TX. 2003

| | | 0 no. southern green stink bug adults/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 0.3 | 0.9a | 2.1 | 0 | 1.1 | 0.8 | H[b] |
| | V | 0.6 | 0.5ab | 2.3 | 0.1 | 0.5 | 0.1 | H |
| | VI | 0.1 | 0b | 0.5 | 0 | 0.5 | 0.1 | 0.4 |
| | VII | 0.8 | 0b | 0 | 0 | 0.4 | 0.3 | 0.5 |
| Subplot effects: | T | 0.6 | 0.2 | 1.1 | 0 | 0.2b | 0.1 | 0.3 |
| | U | 0.3 | 0.5 | 1.4 | 0.1 | 1.1a | 0.6 | 0.6 |
| Interactions: | mp x sp | ns | sig | ns | ns | ns | ns | ns |
| *P value*: | | 0.9746 | 0.0142 | 0.8357 | 0.4098 | 0.9579 | 0.2378 | 0.6396 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 32A. Southern green stink bug (nymphs + adults) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. southern green stink bug (nymphs + adults)/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 1.0 | 0 | 4.5 | 0.3 | 2.3 | 0 | H[b] |
| | | Untreated | 0 | 2.3 | 10.3 | 0 | 3.3 | 1.5 | H |
| S56-D7 | V | Treated | 1.3 | 0.8 | 2.3 | 0.5 | 0 | 0.8 | H |
| | | Untreated | 0.5 | 0.3 | 6.0 | 0.5 | 2.5 | 1.0 | H |
| S64-J1 | VI | Treated | 0.3 | 0 | 1.0 | 0 | 0 | 0.3 | 0.5 |
| | | Untreated | 0 | 0 | 0.5 | 0 | 5.0 | 2.3 | 0.5 |
| S73-Z5 | VII | Treated | 1.5 | 0 | 0.3 | 0 | 0 | 0 | 0.5 |
| | | Untreated | 0.5 | 0 | 0 | 0 | 0.8 | 2.3 | 1.0 |

[a] See Table 32B for statistical analysis of southern green stink bug (nymphs + adults) data.
[b] H = plots previously harvested.

Table 32B. Statistical analysis for southern green stink bug (nymphs + adults) data from Table 32A. Beaumont, TX. 2003

| | | 0 no. southern green stink bug (nymphs + adults)/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 0.5 | 1.1a | 7.4a | 0.1b | 2.8 | 0.8 | H[b] |
| | V | 0.9 | 0.5ab | 3.6b | 0.5a | 1.3 | 0.9 | H |
| | VI | 0.1 | 0b | 0.8c | 0b | 2.5 | 1.3 | 0.5 |
| | VII | 1.0 | 0b | 0.1c | 0b | 0.4 | 1.1 | 0.8 |
| Subplot effects: | T | 1.0 | 0.2 | 2.0b | 0.2 | 0.6b | 0.3b | 0.5 |
| | U | 0.3 | 0.6 | 3.9a | 0.1 | 2.9a | 1.8a | 0.8 |
| Interactions: | mp x sp | ns | sig | sig | ns | ns | ns | ns |
| *P value*: | | 0.9484 | 0.0060 | 0.0323 | 0.8444 | 0.5403 | 0.5483 | 0.4860 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 33. Green stink bug nymph data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. green stink bug nymphs/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0 | 0 | 0 | 0 | 0 | 0.3 | H[b] |
| | | Untreated | 0 | 0 | 0 | 0.3 | 0 | 0 | H |
| S56-D7 | V | Treated | 0 | 0 | 0 | 0 | 0.3 | 0.3 | H |
| | | Untreated | 0 | 0 | 0 | 0 | 0.8 | 1.0 | H |
| S64-J1 | VI | Treated | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0 | 0 | 0.5 | 0 | 0 |
| S73-Z5 | VII | Treated | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | 0.5 | 0 |

[a] Means in all columns are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 34A. Green stink bug adult data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. green stink bug adults/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0 | 0 | 0 | 0.5 | 0.3 | 0 | H[b] |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | 0 | H |
| S56-D7 | V | Treated | 0 | 0 | 0 | 0 | 0 | 0 | H |
| | | Untreated | 0 | 0 | 0 | 0 | 0.5 | 0 | H |
| S64-J1 | VI | Treated | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0 | 0.8 | 0.8 | 0 | 0 |
| S73-Z5 | VII | Treated | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0 | 0 | 0.3 | 0 | 0 |

[a] See Table 34B for statistical analysis of green stink bug adult data.
[b] H = plots previously harvested.

Table 34B. Statistical analysis for green stink bug adult data from Table 34A. Beaumont, TX. 2003

| | | 0 no. green stink bug adults/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 0 | 0 | 0 | 0.3 | 0.1 | 0 | H[b] |
| | V | 0 | 0 | 0 | 0 | 0.3 | 0 | H |
| | VI | 0 | 0 | 0 | 0.4 | 0.4 | 0 | 0 |
| | VII | 0 | 0 | 0 | 0 | 0.1 | 0 | 0 |
| Subplot effects: | T | 0 | 0 | 0 | 0.1 | 0.1 | 0 | 0 |
| | U | 0 | 0 | 0 | 0.2 | 0.4 | 0 | 0 |
| Interactions: | mp x sp | ns | ns | ns | sig | ns | ns | ns |
| *P value*: | | – | – | – | 0.0268 | 0.1933 | – | – |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 35A. Green stink bug (nymphs + adults) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. green stink bug (nymphs + adults)/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0 | 0 | 0 | 0.5 | 0.3 | 0.3 | H[b] |
| | | Untreated | 0 | 0 | 0 | 0.3 | 0 | 0 | H |
| S56-D7 | V | Treated | 0 | 0 | 1.0 | 0 | 0.3 | 0.3 | H |
| | | Untreated | 0 | 0 | 0 | 0 | 1.3 | 1.0 | H |
| S64-J1 | VI | Treated | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0 | 0.8 | 1.3 | 0 | 0 |
| S73-Z5 | VII | Treated | 0 | 0 | 0 | 0 | 0 | 0 | 0.5 |
| | | Untreated | 0 | 0 | 0 | 0 | 0.3 | 0.5 | 0 |

[a] See Table 35B for statistical analysis of green stink bug (nymphs + adults) data.
[b] H = plots previously harvested.

Table 35B. Statistical analysis for green stink bug (nymphs + adults) data from Table 35A.

| | | 0 no. green stink bug (nymphs + adults)/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 0 | 0 | 0 | 0.4 | 0.1 | 0.1 | H[b] |
| | V | 0 | 0 | 0.5 | 0 | 0.8 | 0.6 | H |
| | VI | 0 | 0 | 0 | 0.4 | 0.6 | 0 | 0 |
| | VII | 0 | 0 | 0 | 0 | 0.1 | 0.3 | 0.3 |
| Subplot effects: | T | 0 | 0 | 0.3 | 0.1 | 0.1b | 0.1 | 0.3 |
| | U | 0 | 0 | 0 | 0.3 | 0.7a | 0.4 | 0 |
| Interactions: | mp x sp | ns | ns | ns | ns | sig | ns | ns |
| *P value*: | | – | – | 0.4098 | 0.1437 | 0.0565 | 0.3676 | 0.3370 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 36A. Brown stink bug nymph data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. brown stink bug nymphs/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0 | 0 | 0 | 0 | 0 | 0 | H[b] |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | 0 | H |
| S56-D7 | V | Treated | 0 | 0 | 0 | 0 | 0 | 0 | H |
| | | Untreated | 0 | 0 | 0 | 0 | 0.8 | 0.8 | H |
| S64-J1 | VI | Treated | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| S73-Z5 | VII | Treated | 0 | 0 | 0 | 0 | 0 | 0 | 0.3 |
| | | Untreated | 0 | 0 | 0.3 | 0 | 0 | 0.3 | 0 |

[a] See Table 36B for statistical analysis of brown stink bug nymph data.
[b] H = plots previously harvested.

Table 36B. Statistical analysis for brown stink bug nymph data from Table 36A.

| | | 0 no. brown stink bug nymphs/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 0 | 0 | 0 | 0 | 0 | 0b | H[b] |
| | V | 0 | 0 | 0 | 0 | 0.4 | 0.4a | H |
| | VI | 0 | 0 | 0 | 0 | 0 | 0b | 0 |
| | VII | 0 | 0 | 0.1 | 0 | 0 | 0.1ab | 0.1 |
| Subplot effects: | T | 0 | 0 | 0 | 0 | 0 | 0b | 0.1 |
| | U | 0 | 0 | 0.1 | 0 | 0.2 | 0.3a | 0 |
| Interactions: | mp x sp | ns | ns | ns | ns | ns | sig | ns |
| *P value*: | | – | – | 0.4098 | – | 0.0716 | 0.0192 | 0.3370 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 37A. Brown stink bug adult data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. brown stink bug adults/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0.3 | 0 | 0.8 | 0 | 0.8 | 0 | H[b] |
| | | Untreated | 0 | 0 | 0.8 | 0.3 | 0.3 | 0.3 | H |
| S56-D7 | V | Treated | 0.3 | 0.5 | 0.3 | 0 | 0 | 0.3 | H |
| | | Untreated | 0.3 | 0 | 2.8 | 0 | 0.5 | 0.3 | H |
| S64-J1 | VI | Treated | 0 | 0 | 0.3 | 0 | 0 | 0 | 0.3 |
| | | Untreated | 0.3 | 0 | 0.5 | 0 | 0.8 | 1.5 | 3.0 |
| S73-Z5 | VII | Treated | 0 | 0.3 | 0.3 | 0 | 0 | 0 | 1.0 |
| | | Untreated | 0.5 | 0 | 0.5 | 0.3 | 0.8 | 0.5 | 2.5 |

[a] See Table 37B for statistical analysis of brown stink bug adult data.
[b] H = plots previously harvested.

Table 37B. Statistical analysis for brown stink bug adult data from Table 37A. Beaumont, TX. 2003

| | | 0 no. brown stink bug adults/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 0.1 | 0 | 0.8 | 0.1 | 0.5 | 0.1 | H[b] |
| | V | 0.3 | 0.3 | 1.5 | 0 | 0.3 | 0.3 | H |
| | VI | 0.1 | 0 | 0.4 | 0 | 0.4 | 0.8 | 1.6 |
| | VII | 0.3 | 0.1 | 0.4 | 0.1 | 0.4 | 0.3 | 1.8 |
| Subplot effects: | T | 0.1 | 0.2 | 0.4 | 0 | 0.2 | 0.1b | 0.6b |
| | U | 0.3 | 0 | 1.1 | 0.1 | 0.6 | 0.6a | 2.8a |
| Interactions: | mp x sp | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.3137 | 0.5568 | 0.6462 | 0.5807 | 0.3356 | 0.1087 | 0.2537 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 38A. Brown stink bug (nymphs + adults) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. brown stink bug (nymphs + adults)/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0.3 | 0 | 0.8 | 0 | 0.8 | 0 | H[b] |
| | | Untreated | 0 | 0 | 0.8 | 0.3 | 0.3 | 0.3 | H |
| S56-D7 | V | Treated | 0.3 | 0.5 | 0.3 | 0 | 0 | 0.3 | H |
| | | Untreated | 0.3 | 0 | 2.8 | 0 | 1.3 | 1.0 | H |
| S64-J1 | VI | Treated | 0 | 0 | 0.3 | 0 | 0 | 0 | 0.3 |
| | | Untreated | 0.3 | 0 | 0.5 | 0 | 0.8 | 1.5 | 3.0 |
| S73-Z5 | VII | Treated | 0 | 0.3 | 0.3 | 0 | 0 | 0 | 1.3 |
| | | Untreated | 0.5 | 0 | 0.8 | 0.3 | 0.8 | 0.8 | 2.5 |

[a] See Table 38B for statistical analysis of brown stink bug (nymphs + adults) data.
[b] H = plots previously harvested.

Table 38B. Statistical analysis for brown stink bug (nymphs + adults) data from Table 38A. Beaumont, TX. 2003

| | | 0 no. brown stink bug (nymphs + adults)/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 0.1 | 0 | 0.8 | 0.1 | 0.5 | 0.1 | H[b] |
| | V | 0.3 | 0.3 | 1.5 | 0 | 0.3 | 0.3 | H |
| | VI | 0.1 | 0 | 0.4 | 0 | 0.4 | 0.8 | 1.6 |
| | VII | 0.3 | 0.1 | 0.4 | 0.1 | 0.4 | 0.3 | 1.8 |
| Subplot effects: | T | 0.1 | 0.2 | 0.4 | 0.5 | 0.2 | 0.1b | 0.6b |
| | U | 0.3 | 0 | 1.1 | 0.3 | 0.6 | 0.6a | 2.8a |
| Interactions: | mp x sp | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.3137 | 0.5568 | 0.6694 | 0.5807 | 0.3242 | 0.4087 | 0.1229 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 39A. Phytophagous stink bug (nymphs + adults) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. phytophagous stink bug (nymphs + adults)/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 1.3 | 0 | 5.3 | 0.5 | 3.3 | 0.3 | H[b] |
| | | Untreated | 0 | 2.3 | 11.0 | 0.5 | 3.5 | 1.8 | H |
| S56-D7 | V | Treated | 1.5 | 1.3 | 3.5 | 0.5 | 0.3 | 1.3 | H |
| | | Untreated | 0.8 | 0.3 | 7.8 | 0.5 | 5.0 | 3.0 | H |
| S64-J1 | VI | Treated | 0.3 | 0 | 1.3 | 0 | 0 | 0.3 | 0.8 |
| | | Untreated | 0.3 | 0 | 1.0 | 1.8 | 7.0 | 3.8 | 3.5 |
| S73-Z5 | VII | Treated | 1.5 | 0.3 | 0.5 | 0 | 0 | 0 | 2.3 |
| | | Untreated | 1.0 | 0 | 0.8 | 0.3 | 1.8 | 3.5 | 3.5 |

[a] See Table 39B for statistical analysis of phytophagous stink bug (nymphs + adults) data.
[b] H = plots previously harvested.

Table 39B. Statistical analysis for phytophagous stink bug (nymphs + adults) data from Table 39A. Beaumont, TX. 2003

| | | 0 no. phytophagous stink bug (nymphs + adults)/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 0.6 | 1.1 | 8.1a | 0.6 | 3.4 | 1.0 | H[b] |
| | V | 1.1 | 0.8 | 5.6a | 0.5 | 2.6 | 2.1 | H |
| | VI | 0.3 | 0 | 1.1b | 0.4 | 3.5 | 2.0 | 2.1 |
| | VII | 1.3 | 0.1 | 0.6b | 0.1 | 0.9 | 1.8 | 2.9 |
| Subplot effects: | T | 1.1 | 0.4 | 2.6b | 0.3 | 0.9b | 0.4b | 1.5b |
| | U | 0.5 | 0.6 | 5.1a | 0.5 | 4.3a | 3.0a | 3.5a |
| Interactions: | mp x sp | ns | sig | ns | ns | ns | ns | ns |
| *P value*: | | 0.7328 | 0.0182 | 0.1572 | 0.4940 | 0.4593 | 0.6816 | 0.2840 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 40A. Threecornered alfalfa hopper nymph data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. threecornered alfalfa hopper nymphs/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0 | 0 | 2.0 | 0 | 0.5 | 0 | H[b] |
| | | Untreated | 0.3 | 0 | 0.5 | 0 | 0.5 | 0 | H |
| S56-D7 | V | Treated | 0 | 0 | 1.0 | 0 | 0 | 0 | H |
| | | Untreated | 0 | 0 | 0.3 | 0 | 0.3 | 0 | H |
| S64-J1 | VI | Treated | 0 | 0 | 1.8 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0.3 | 0 | 0 | 0 | 0.5 |
| S73-Z5 | VII | Treated | 0 | 0 | 1.5 | 0 | 0.3 | 0 | 0 |
| | | Untreated | 0 | 0 | 0.3 | 0 | 0 | 0 | 0 |

[a] See Table 40B for statistical analysis of threecornered alfalfa hopper nymph data.
[b] H = plots previously harvested.

Table 40B. Statistical analysis for threecornered alfalfa hopper nymph data from Table 40A. Beaumont, TX. 2003

| | | 0 no. threecornered alfalfa hopper nymphs/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 0.1 | 0 | 1.3 | 0 | 0.5 | 0 | H[b] |
| | V | 0 | 0 | 0.6 | 0 | 0.1 | 0 | H |
| | VI | 0 | 0 | 1.0 | 0 | 0 | 0 | 0.3 |
| | VII | 0 | 0 | 0.9 | 0 | 0.1 | 0 | 0 |
| Subplot effects: | T | 0 | 0 | 1.6a | 0 | 0.2 | 0 | 0 |
| | U | 0.1 | 0 | 0.3b | 0 | 0.2 | 0 | 0.3 |
| Interactions: | mp x sp | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.4098 | – | 0.9391 | – | 0.7922 | – | 0.3370 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 41A. Threecornered alfalfa hopper adult data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. threecornered alfalfa hopper adults/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 2.8 | 1.0 | 1.3 | 0.8 | 1.3 | 0 | H[b] |
| | | Untreated | 3.8 | 1.0 | 5.5 | 0.8 | 1.5 | 1.0 | H |
| S56-D7 | V | Treated | 1.3 | 1.3 | 3.0 | 1.0 | 0.8 | 0 | H |
| | | Untreated | 1.3 | 1.5 | 3.5 | 0 | 1.0 | 0.8 | H |
| S64-J1 | VI | Treated | 1.5 | 1.0 | 3.3 | 0.5 | 0.5 | 0 | 0 |
| | | Untreated | 2.0 | 1.3 | 7.0 | 0.5 | 1.5 | 1.0 | 0.8 |
| S73-Z5 | VII | Treated | 1.8 | 0.5 | 3.3 | 1.3 | 1.3 | 0.5 | 0 |
| | | Untreated | 2.0 | 2.3 | 4.8 | 0.3 | 1.0 | 0.5 | 0 |

[a] See Table 41B for statistical analysis of threecornered alfalfa hopper adult data.
[b] H = plots previously harvested.

Table 41B. Statistical analysis for threecornered alfalfa hopper adult data from Table 41A.

| | | 0 no. threecornered alfalfa hopper adults/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 3.3 | 1.0 | 3.4 | 0.8 | 1.4 | 0.5 | H[b] |
| | V | 1.3 | 1.4 | 3.3 | 0.5 | 0.9 | 0.4 | H |
| | VI | 1.8 | 1.1 | 5.1 | 0.5 | 1.0 | 0.5 | 0.4 |
| | VII | 1.9 | 1.4 | 4.0 | 0.8 | 1.1 | 0.5 | 0 |
| Subplot effects: | T | 1.8 | 0.9 | 2.7b | 0.9 | 0.9 | 0.1b | 0 |
| | U | 2.3 | 1.5 | 5.2a | 0.4 | 1.3 | 0.8a | 0.4 |
| Interactions: | mp x sp | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.9748 | 0.4125 | 0.4812 | 0.5423 | 0.8598 | 0.4978 | 0.1294 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 42A. Threecornered alfalfa hopper (nymphs + adults) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. threecornered alfalfa hopper (nymphs + adults)/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 2.8 | 1.0 | 3.3 | 0.8 | 1.8 | 0 | H[b] |
| | | Untreated | 4.0 | 1.0 | 6.0 | 0.8 | 2.0 | 1.0 | H |
| S56-D7 | V | Treated | 1.3 | 1.3 | 4.0 | 1.0 | 0.8 | 0 | H |
| | | Untreated | 1.3 | 1.5 | 3.8 | 0 | 1.3 | 0.8 | H |
| S64-J1 | VI | Treated | 1.5 | 1.0 | 5.0 | 0.5 | 0.5 | 0 | 0 |
| | | Untreated | 2.0 | 1.3 | 7.3 | 0.5 | 1.5 | 1.0 | 1.3 |
| S73-Z5 | VII | Treated | 1.8 | 0.5 | 4.8 | 1.3 | 1.5 | 0.5 | 0 |
| | | Untreated | 2.0 | 2.3 | 5.0 | 0.3 | 1.0 | 0.5 | 0 |

[a] See Table 42B for statistical analysis of threecornered alfalfa hopper (nymphs + adults) data.
[b] H = plots previously harvested.

Table 42B. Statistical analysis for threecornered alfalfa hopper (nymphs + adults) data from Table 42A. Beaumont, TX. 2003

| | | 0 no. threecornered alfalfa hopper (nymphs + adults)/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 3.4 | 1.0 | 4.6 | 0.8 | 1.9 | 0.5 | H[b] |
| | V | 1.3 | 1.4 | 3.9 | 0.5 | 1.0 | 0.4 | H |
| | VI | 1.8 | 1.1 | 6.1 | 0.5 | 1.0 | 0.5 | 0.6 |
| | VII | 1.9 | 1.4 | 4.9 | 0.8 | 1.3 | 0.5 | 0 |
| Subplot effects: | T | 1.8 | 0.9 | 4.3 | 0.9 | 1.1 | 0.1b | 0 |
| | U | 2.3 | 1.5 | 5.5 | 0.4 | 1.4 | 0.8a | 0.6 |
| Interactions: | mp x sp | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.9658 | 0.4125 | 0.6687 | 0.5423 | 0.8321 | 0.4978 | 0.1732 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 43. Grasshopper (nymphs + adults) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. grasshoppers (nymphs + adults)/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0.8 | 0.3 | 0.8 | 0 | 0 | 0 | H[b] |
| | | Untreated | 0.8 | 0.3 | 0 | 0 | 0.3 | 0 | H |
| S56-D7 | V | Treated | 0.3 | 0 | 0.5 | 0 | 0 | 0 | H |
| | | Untreated | 0.5 | 0 | 0 | 0 | 0 | 0 | H |
| S64-J1 | VI | Treated | 0.3 | 0.3 | 0.3 | 0 | 0 | 0 | 0 |
| | | Untreated | 1.0 | 0 | 0.3 | 0 | 0 | 0 | 0.3 |
| S73-Z5 | VII | Treated | 0.5 | 0.5 | 0 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0.5 | 0 | 0 | 0 | 0 |

[a] Means in all columns are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 44A. Banded cucumber beetle data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. banded cucumber beetle/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0.8 | 3.8 | 1.3 | 0.8 | 0 | 0 | H[b] |
| | | Untreated | 2.8 | 2.5 | 2.5 | 0 | 0.3 | 0 | H |
| S56-D7 | V | Treated | 1.5 | 1.3 | 3.3 | 0 | 0 | 0 | H |
| | | Untreated | 1.0 | 2.0 | 2.3 | 0 | 0 | 0.3 | H |
| S64-J1 | VI | Treated | 3.0 | 2.5 | 1.3 | 0 | 0.3 | 0 | 0 |
| | | Untreated | 2.5 | 2.8 | 4.8 | 0.3 | 0 | 0 | 0 |
| S73-Z5 | VII | Treated | 1.8 | 1.5 | 4.3 | 0.3 | 0 | 0 | 0 |
| | | Untreated | 0.8 | 2.0 | 2.5 | 0.3 | 0 | 0 | 0 |

[a] See Table 44B for statistical analysis of banded cucumber beetle data.
[b] H = plots previously harvested.

Table 44B. Statistical analysis for banded cucumber beetle data from Table 44A. Beaumont, TX. 2003

| | | 0 no. banded cucumber beetle/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 1.8 | 3.1 | 1.9 | 0.4 | 0.1 | 0 | H[b] |
| | V | 1.3 | 1.6 | 2.8 | 0 | 0 | 0.1 | H |
| | VI | 2.8 | 2.6 | 3.0 | 0.1 | 0.1 | 0 | 0 |
| | VII | 1.3 | 1.8 | 3.4 | 0.3 | 0 | 0 | 0 |
| Subplot effects: | T | 1.8 | 2.3 | 2.5 | 0.3 | 0.1 | 0 | 0 |
| | U | 1.8 | 2.3 | 3.0 | 0.1 | 0.1 | 0.1 | 0 |
| Interactions: | mp x sp | ns | ns | ns | sig | ns | ns | ns |
| *P value*: | | 0.3139 | 0.4796 | 0.1442 | 0.0504 | 0.2869 | 0.4098 | – |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 45A. Spotted cucumber beetle data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. spotted cucumber beetle/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0 | 0 | 0 | 0 | 0 | 0 | H[b] |
| | | Untreated | 0.3 | 2.3 | 0 | 0 | 0 | 0 | H |
| S56-D7 | V | Treated | 0.8 | 0 | 0.8 | 0 | 0 | 0 | H |
| | | Untreated | 0.5 | 0 | 1.3 | 0 | 0 | 0 | H |
| S64-J1 | VI | Treated | 0.5 | 0 | 0.3 | 0.8 | 0 | 0 | 0 |
| | | Untreated | 0.3 | 0.3 | 0 | 1.0 | 0 | 0 | 0 |
| S73-Z5 | VII | Treated | 1.3 | 0.3 | 1.8 | 0 | 0 | 0 | 0 |
| | | Untreated | 0.8 | 0.3 | 0 | 0 | 0 | 0 | 0 |

[a] See Table 45B for statistical analysis of spotted cucumber beetle data.
[b] H = plots previously harvested.

Table 45B. Statistical analysis for spotted cucumber beetle data from Table 45A. Beaumont, TX. 2003

| | | 0 no. spotted cucumber beetle/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 0.1 | 1.1 | 0 | 0b | 0 | 0 | H[b] |
| | V | 0.6 | 0 | 1.0 | 0b | 0 | 0 | H |
| | VI | 0.4 | 0.1 | 0.1 | 0.9a | 0 | 0 | 0 |
| | VII | 1.0 | 0.3 | 0.9 | 0b | 0 | 0 | 0 |
| Subplot effects: | T | 0.6 | 0.1 | 0.7 | 0.2 | 0 | 0 | 0 |
| | U | 0.4 | 0.7 | 0.3 | 0.3 | 0 | 0 | 0 |
| Interactions: | mp x sp | ns | sig | ns | ns | ns | ns | ns |
| *P value*: | | 0.9188 | 0.1186 | 0.2872 | 0.9989 | – | – | – |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 46. Leafhopper (nymphs + adults) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. leafhoppers (nymphs + adults)/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0.8 | 0.3 | 0.8 | 0 | 0 | 0 | H[b] |
| | | Untreated | 0.8 | 0.3 | 0 | 0 | 0.3 | 0 | H |
| S56-D7 | V | Treated | 0.3 | 0 | 0.5 | 0 | 0 | 0 | H |
| | | Untreated | 0.5 | 0 | 0 | 0 | 0 | 0 | H |
| S64-J1 | VI | Treated | 0.3 | 0.3 | 0.3 | 0 | 0 | 0 | 0 |
| | | Untreated | 1.0 | 0 | 0.3 | 0 | 0 | 0 | 0.3 |
| S73-Z5 | VII | Treated | 0.5 | 0.5 | 0 | 0 | 0 | 0 | 0 |
| | | Untreated | 0 | 0 | 0.5 | 0 | 0 | 0 | 0 |

[a] Means in all columns are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 47. Spider data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. spiders/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0.8 | 1.8 | 0.5 | 0 | 0 | 0.3 | H[b] |
| | | Untreated | 2.8 | 1.0 | 0.3 | 0 | 1.0 | 0.8 | H |
| S56-D7 | V | Treated | 1.5 | 0.3 | 0 | 0 | 0.8 | 0 | H |
| | | Untreated | 0.8 | 2.0 | 0.5 | 0 | 0.5 | 0.3 | H |
| S64-J1 | VI | Treated | 1.0 | 0 | 0.5 | 0 | 0.3 | 0.3 | 0 |
| | | Untreated | 1.0 | 0.5 | 0.8 | 0 | 0.5 | 0 | 0 |
| S73-Z5 | VII | Treated | 1.0 | 0 | 0 | 0 | 1.5 | 0.3 | 0.3 |
| | | Untreated | 0.3 | 0.5 | 1.3 | 0 | 1.8 | 0.8 | 0 |

[a] Means in all columns are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.

Table 48A. Assassin bug (nymphs + adults) data for soybean maturity group/planting date vs. insects. Beaumont, TX. 2003

| *Late planting date (May 30)* | | | 0 no. assassin bug (nymphs + adults)/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Variety | Maturity group | Treatment | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| RA 452 | IV | Treated | 0 | 0 | 1.8 | 0 | 0 | 0 | H[b] |
| | | Untreated | 0.3 | 0.3 | 2.0 | 0 | 0.5 | 0 | H |
| S56-D7 | V | Treated | 0.3 | 0 | 1.0 | 0 | 0.3 | 0 | H |
| | | Untreated | 0 | 0.3 | 1.3 | 0 | 0 | 0 | H |
| S64-J1 | VI | Treated | 0 | 0.3 | 0.3 | 0 | 0.3 | 0 | 0 |
| | | Untreated | 0 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0 |
| S73-Z5 | VII | Treated | 0.3 | 0 | 0.3 | 0 | 0.3 | 0 | 0.3 |
| | | Untreated | 0 | 0.3 | 0.8 | 0 | 1.0 | 0 | 0 |

[a] See Table 48B for statistical analysis of assassin bug (nymphs + adults) data.
[b] H = plots previously harvested.

Table 48B. Statistical analysis for assassin bug (nymphs + adults) data from Table 48A. Beaumont, TX. 2003

| | | 0 no. assassin bugs (nymphs + adults)/20 sweeps[a] | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | | Jul 29 | Aug 8 | Aug 19 | Aug 29 | Sep 11 | Sep 25 | Oct 14 |
| Main plot effects: | IV | 0.1 | 0.1 | 1.9a | 0 | 0.3 | 0 | H[b] |
| | V | 0.1 | 0.1 | 1.1ab | 0 | 0.1 | 0 | H |
| | VI | 0 | 0.3 | 0.3c | 0.1 | 0.3 | 0.1 | 0 |
| | VII | 0.1 | 0.1 | 0.5bc | 0 | 0.6 | 0 | 0.1 |
| Subplot effects: | T | 0.1 | 0.1 | 0.8 | 0 | 0.2 | 0 | 0.1 |
| | U | 0.1 | 0.3 | 1.1 | 0.1 | 0.4 | 0.1 | 0 |
| Interactions: | mp x sp | ns | ns | ns | ns | ns | ns | ns |
| *P value*: | | 0.3232 | 0.8953 | 0.9057 | 0.4098 | 0.4580 | 0.4098 | 0.3370 |

[a] Means in a column followed by the same or no letter are not significantly different at the 5% level (ANOVA, LSD).
[b] H = plots previously harvested.