

University of Tennessee

Evaluation of Foliar Applications for Tarnished Plant Bugs - Madison Co.

Location: West TN Research and Education Center (Jackson)

Variety: DP 1522 B2XF (planted: 5-8-18)

Application: Appl A 7-20-18; Appl B 8-1-18; High clearance sprayer (9.4 GPA, 40 PSI, 8001FF)

Rating: 2 drop cloths per plot (10 row ft)

Plots: 4 Rows x 40 ft (RCBD, 4 Reps)

Investigators: Stewart, S.Steckel, Williams

TPB= Tarnished Plant Bug; Total PB = Tarnished + Clouded; Total SB = Green + Brown Stink Bugs;

| Description | | | | | TPB | Total PB | Total SB | TPB | Total PB | Total SB | TPB | Total PB | Total SB |
|---------------------|-------------|-------------|-------------|----|-----------|--------------|--------------|-----------|--------------|--------------|-----------|--------------|--------------|
| Pest Stage Majority | | | | | Immature | Adult + Imm. | Adult + Imm. | Immature | Adult + Imm. | Adult + Imm. | Immature | Adult + Imm. | Adult + Imm. |
| Rating Date | | | | | 7/24/2018 | 7/24/2018 | 7/24/2018 | 7/27/2018 | 7/27/2018 | 7/27/2018 | 7/30/2018 | 7/30/2018 | 7/30/2018 |
| Trt-Eval Interval | | | | | 4 DA-A | 4 DA-A | 4 DA-A | 7 DA-A | 7 DA-A | 7 DA-A | 10 DA-A | 10 DA-A | 10 DA-A |
| Treatment | Formulation | Rate | Appl | | | | | | | | | | |
| 1 | Transform | 50 % | 1.0 oz wt/a | A | 9.00 b | 9.50 b | 0.25 a | 10.50 b | 11.25 b | 0.00 a | 10.00 b | 10.75 b | 1.25 a |
| | Orthene | 97 % | 8 oz wt/a | A | | | | | | | | | |
| | Orthene | 97 % | 12 oz wt/a | B | | | | | | | | | |
| 2 | Orthene | 97 % | 12 oz wt/a | AB | 6.50 b | 7.25 b | 0.00 a | 5.25 b | 5.25 b | 0.00 a | 6.50 b | 6.50 b | 0.25 a |
| | Diamond | 0.83 lb/gal | 6 fl oz/a | A | | | | | | | | | |
| 3 | Untreated | | | | 38.50 a | 41.75 a | 0.75 a | 28.75 a | 30.75 a | 0.25 a | 40.00 a | 45.75 a | 0.50 a |
| Treatment Prob(F) | | | | | 0.0025 | 0.0033 | 0.2746 | 0.0067 | 0.0045 | 0.4219 | 0.0012 | 0.0008 | 0.4527 |

| Description | | | | | TPB | Total PB | Total SB | TPB | Total PB | Total SB | Yield |
|---------------------|-------------|-------------|-------------|----|----------|--------------|--------------|-----------|--------------|--------------|-------------|
| Pest Stage Majority | | | | | Immature | Adult + Imm. | Adult + Imm. | Immature | Adult + Imm. | Adult + Imm. | Seed Cotton |
| Rating Date | | | | | 8/6/2018 | 8/6/2018 | 8/6/2018 | 8/10/2018 | 8/10/2018 | 8/10/2018 | 10/4/2018 |
| Trt-Eval Interval | | | | | 5 DA-B | 5 DA-B | 5 DA-B | 9 DA-B | 9 DA-B | 9 DA-B | (lbs/acre) |
| Treatment | Formulation | Rate | Appl | | | | | | | | |
| 1 | Transform | 50 % | 1.0 oz wt/a | A | 1.00 b | 1.00 b | 0.00 a | 1.50 b | 1.50 b | 0.25 a | 3768 a |
| | Orthene | 97 % | 8 oz wt/a | A | | | | | | | |
| | Orthene | 97 % | 12 oz wt/a | B | | | | | | | |
| 2 | Orthene | 97 % | 12 oz wt/a | AB | 1.25 b | 1.25 b | 0.00 a | 3.50 b | 3.50 b | 0.00 a | 3730 a |
| | Diamond | 0.83 lb/gal | 6 fl oz/a | A | | | | | | | |
| 3 | Untreated | | | | 19.75 a | 21.25 a | 1.25 a | 17.50 a | 19.00 a | 1.00 a | 3151 b |
| Treatment Prob(F) | | | | | 0.0001 | 0.0001 | 0.2529 | 0.0029 | 0.0030 | 0.0963 | 0.0028 |

Means followed by same letter or symbol do not significantly differ (P=.05, LSD)