

# **Pink Bollworm Program**

## Silverleaf Whitefly Report for the San Joaquin Valley

July 11, 2017 – August 11, 2017



**Silverleaf Whitefly Report**  
**Sampling Period: 7/11/2017 – 8/11/2017**  
**Prepared By: Lauren Murphy**

**Introduction**

Sampling for the silverleaf whitefly (SLWF) surveys began on Tuesday, July 11, 2017. Program personnel collected samples from pink bollworm (PBW) trap sites at 5% of all cotton fields in each county. The Program has a total of 109 SLWF sampling sites with 29 sites in Fresno County, 13 sites in Kern County, 24 sites in Kings County, 1 site in Madera County, 31 sites in Merced County, and 11 sites in Tulare County. At each site 1 leaf sample from 10 different cotton plants was collected for a total of 10 leaves/site.

**Kern County:**

Nine of the thirteen sample sites (69%) were positive for SLWF during the first survey round. All of the thirteen sites (100%) were positive for aphids. A total of 130 leaves were collected, of which thirty-eight leaves (29%) were infested with SLWF, and 107 leaves (82%) were infested with aphids. All nine of the sites positive for SLWF (100%) had leaves in the 1-5 nymphs/leaf range, while six sites (67%) had leaves in the 6-49 nymphs/leaf range, and none of the sites infested with SLWF contained leaves in the 50 or more nymphs/leaf range. Eleven of the sites positive for aphids (85%) had leaves in the 1-5 aphids/leaf range, ten of the sites (77%) had leaves in the 6-49 aphids/leaf range, and five of the sites (38%) had leaves in the 50 or more aphids/leaf range. Eleven of the thirteen sites (85%) had leaves with honeydew and five sites (38%) had leaves with sooty mold. Mites were found at eight sites (62%), armyworm at one site (8%), and two of the sample sites (15%) had leaves with other whitefly species.

**Kings County:**

Six of the twenty-four sample sites (25%) were positive for SLWF and twenty-two of the twenty-four sites (92%) were positive for aphids. A total of 420 leaves were collected, of which twenty leaves (5%) were infested with SLWF and 241 leaves (57%) were infested with aphids. All six of the sites positive for SLWF (100%) had leaves in the 1-5

nymph/leaf range, while two of the sites (33%) had leaves in the 6-49 nymphs/leaf range, and one site (17%) had leaves in the 50 or more nymphs/leaf range. Twenty of the sites positive for aphids (91%) had leaves in the 1-5 aphids/leaf range, while thirteen of the sites (59%) had leaves in the 6-49 aphids/leaf range, and nine of the sites (41%) had leaves in the 50 or more aphids/leaf range. Fifteen of the twenty-four sample sites (63%) had leaves with honeydew and seven of the sites (29%) had leaves with sooty mold. Mites were found at fifteen sites (63%), armyworm at one of the sites (4%), and four sites (17%) had leaves with other whitefly species.

### **Tulare County:**

One of the eleven sample sites (9%) were positive for SLWF and nine of the eleven sites (82%) were positive for aphids. A total of 130 leaves were collected, of which one leaf (0.8%) was infested with SLWF, and thirty-seven leaves (28%) were infested with aphids. The only site that was positive for SLWF had one leaf in the 1-5 nymphs/leaf range; no other leaves contained SLWF. All nine of the sites positive for aphids (100%) had leaves in the 1-5 aphids/leaf range, while two of the sites (22%) had leaves in the 6-49 aphids/leaf range, and none of the sites had leaves in the 50 or more aphids/leaf range. Three of the eleven sample sites (27%) had leaves with honeydew and two of the sites (18%) had leaves with sooty mold. Mites were found at six of the sites (55%), while none of the sites had armyworm or other whitefly species.

### **Fresno County:**

Eight of the twenty-nine sample sites (28%) were positive for SLWF and twenty-five of the twenty-nine sites (86%) were positive for aphids. A total of 590 leaves were collected, of which sixteen leaves (3%) were infested with SLWF, and 257 leaves (44%) were infested with aphids. All eight of the sites positive for SLWF (100%) had leaves in the 1-5 nymphs/leaf range, while one site (13%) had a leaf in the 6-49 nymphs/leaf range, and none of the leaves were in the 50 or more nymphs/leaf range. Twenty-four of the sites positive for aphids (96%) had leaves in the 1-5 aphids/leaf range, while nineteen of the sites (76%) had leaves in the 6-49 aphids/leaf range, and nine of the sites (36%) had leaves in the 50 or more aphids/leaf range. Nine of the twenty-nine

sample sites (31%) had leaves with honeydew and only one of the sites (3%) had leaves with sooty mold. Mites were found at eight of the sites (28%), armyworms at two sites (7%), and only one site (3%) had leaves with other whitefly species.

**Madera County:**

The one sample site was not positive for SLWF, but was positive for aphids. A total of 20 leaves were collected, of which zero leaves were infested with SLWF, and two leaves (20%) were infested with aphids. The two sites that were positive for aphids had leaves in the 1-5 aphids/leaf range only. There were zero leaves with honeydew, sooty mold, mites, armyworms, or other whitefly species found at this site.

**Merced County:**

Two of the thirty-one sample sites (6%) were positive for SLWF, and eighteen of the thirty-one sites (58%) were positive for aphids. A total of 460 leaves were collected, of which two leaves (0.4%) were infested with SLWF, and eighty-eight leaves (19%) were infested with aphids. The two sites positive for SLWF (100%) had leaves in the 1-5 nymphs/leaf range only. All eighteen of the sites positive for aphids (100%) had leaves in the 1-5 aphids/leaf range, while seven of the sites (39%) had leaves in the 6-49 aphids/leaf range, and five of the sites (28%) had leaves in the 50 or more aphids/leaf range. Three of the thirty-one sample sites (10%) had leaves with honeydew, and two of the sites (6%) had leaves with sooty mold. Mites were found at seven sites (23%), armyworms at two sites (6%), and there were zero sites that had leaves with other whitefly species.

**SLWF - Leaf Counts - 2017 Survey**

7/11/17 - 8/11/17

<b>No. Leaves in Each Range of Nymphs Per Leaf</b>							
<b>County</b>	<b>Sample Sites</b>	<b>0</b>	<b>1 - 5</b>	<b>6 - 49</b>	<b>50+</b>	<b># Leaves</b>	<b>Total Sites Infested</b>
<b>Kern</b>	13	92	27	11	0	130	<b>9</b>
<b>Kings</b>	24	400	10	9	1	420	<b>6</b>
<b>Tulare</b>	11	129	1	0	0	130	<b>2</b>
<b>Fresno</b>	29	574	15	1	0	590	<b>8</b>
<b>Madera</b>	1	20	0	0	0	20	<b>0</b>
<b>Merced</b>	31	458	2	0	0	460	<b>2</b>
<b>Totals</b>	<b>109</b>	<b>1673</b>	<b>55</b>	<b>21</b>	<b>1</b>	<b>1750</b>	<b>27</b>

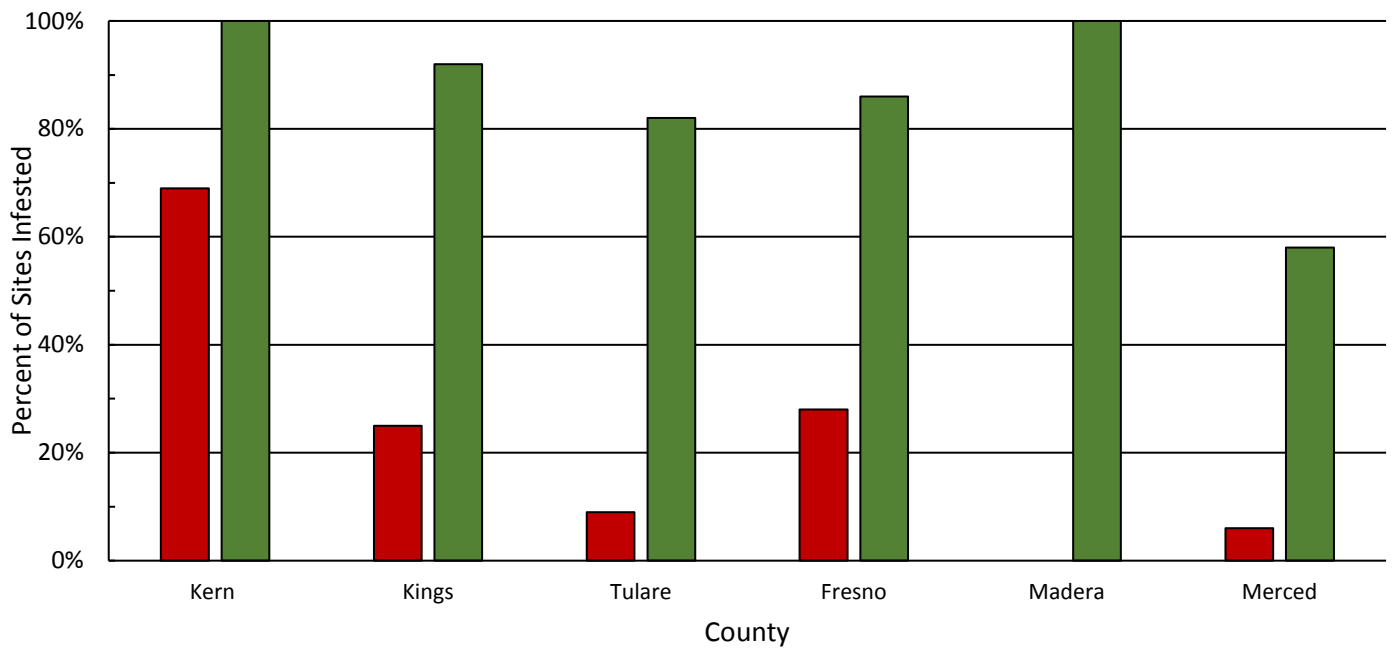
**APHID - Leaf Counts - 2017 Survey**

7/11/17 - 8/11/17

<b>No. Leaves in Each Range of Aphids Per Leaf</b>							
<b>County</b>	<b>Sample Sites</b>	<b>0</b>	<b>1 - 5</b>	<b>6 - 49</b>	<b>50+</b>	<b># Leaves</b>	<b>Total Sites Infested</b>
<b>Kern</b>	13	23	50	38	19	130	<b>13</b>
<b>Kings</b>	24	179	91	86	64	420	<b>22</b>
<b>Tulare</b>	11	93	33	4	0	130	<b>9</b>
<b>Fresno</b>	29	333	135	81	41	590	<b>25</b>
<b>Madera</b>	1	18	2	0	0	20	<b>1</b>
<b>Merced</b>	31	372	44	24	20	460	<b>18</b>
<b>Totals</b>	<b>109</b>	<b>1018</b>	<b>355</b>	<b>233</b>	<b>144</b>	<b>1750</b>	<b>88</b>

# PERCENT OF INFESTED SAMPLE SITES IN EACH COUNTY

■ SLWF ■ APHIDS



## Percent of Sample Sites Infested with Other Pests - 2017 Survey

7/11/17 - 8/11/17

<u>County</u>	<u>Other Whitefly</u>	<u>Mites</u>	<u>Armyworm</u>	<u>Honeydew</u>	<u>Sooty Mold</u>
<b>Kern</b>	15%	62%	8%	85%	38%
<b>Kings</b>	17%	63%	4%	63%	29%
<b>Tulare</b>	0%	55%	0%	27%	18%
<b>Fresno</b>	3%	28%	7%	31%	3%
<b>Madera</b>	0%	0%	0%	0%	0%
<b>Merced</b>	0%	23%	6%	10%	6%

### PERCENT OF SITES INFESTED WITH OTHER COTTON PESTS

