

Pink Bollworm Program

Silverleaf Whitefly Report for the San Joaquin Valley

August 14, 2017 – September 14, 2017



Silverleaf Whitefly Report
Sampling Period: 8/14/2017 – 9/14/2017
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Introduction

This period of sampling for the silverleaf whitefly (SLWF) surveys began on Monday, August 14, 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:

All thirteen sample sites (100%) were positive for both SLWF and aphids during this survey round. A total of 390 leaves were collected, of which 227 leaves (58%) were infested with SLWF, and 198 leaves (51%) were infested with aphids. All thirteen of the sites positive for SLWF (100%) had leaves in the 1-5 nymphs/leaf range, while ten sites (77%) had leaves in the 6-49 nymphs/leaf range, and three sites (23%) had leaves in the 50 or more nymphs/leaf range. All thirteen of the sites positive for aphids (100%) had leaves in the 1-5 aphids/leaf range, while 10 sites (77%) had leaves in the 6-49 aphids/leaf range, and four sites (31%) had leaves in the 50 or more aphids/leaf range. All thirteen of the sites (100%) had leaves with honeydew and eleven sites (85%) had leaves with sooty mold. Mites were found at eleven sites (85%), armyworm at two sites (15%), and three of the sample sites (23%) had leaves with other whitefly species.

Kings County:

Twenty-two of the twenty-four samples sites (92%) were positive for SLWF and twenty-three of the twenty-four sites (96%) were positive for aphids. A total of 520 leaves were collected, of which 123 leaves (24%) were infested with SLWF and 253 leaves (49%) were infested with aphids. All twenty-two of the sites positive for SLWF (100%) had

leaves in the 1-5 nymphs/leaf range, while seven of the sites (29%) had leaves in the 6-49 nymphs/leaf range, and none of the sites (0%) had leaves in the 50 or more nymphs/leaf range. Twenty-two of the sites positive for aphids (96%) had leaves in the 1-5 aphids/leaf range, while seventeen of the sites (74%) had leaves in the 6-49 aphids/per leaf range, and eight of the sites (35%) had leaves in the 50 or more aphids/leaf range. Fourteen on the twenty-four sample sites (58%) had leaves with honeydew and eighteen of the sites (75%) had leaves with sooty mold. Mites were found at twenty-one sites (88%), armyworm at three of the sites (13%), and two of the sites (8%) had leaves with other whitefly species.

Tulare County:

All eleven of the sample sites (100%) were positive for SLWF and aphids. A total of 300 leaves were collected, of which 111 leaves (37%) were infested with SLWF, and 178 leaves (59%) were infested with aphids. All eleven sites (100%) that were positive for SLWF had leaves in the 1-5 nymphs/leaf range, while five of the sites (45%) had leaves in the 6-49 nymphs/leaf range, and one of the sites (9%) had a leaf in the 50 or more nymphs/leaf range. All eleven of the sites positive for aphids (100%) had leaves in the 1-5 aphids/leaf range, while nine of the sites (82%) had leaves in the 6-49 aphids/leaf range, and two of the sites (18%) had leaves in the 50 or more aphids/leaf range. Seven of the eleven sample sites (64%) had leaves with honeydew and ten of the sites (91%) had leaves with sooty mold. Mites were found at seven of the sites (64%), armyworm at three of the sites (27%), and two of the sites (18%) had leaves with other whitefly species.

Fresno County:

Twenty-two of the twenty-nine sample sites (76%) were positive for SLWF and all twenty-nine sites (100%) were positive for aphids. A total of 780 leaves were collected, of which 180 leaves (23%) were infested with SLWF, and 359 leaves (46%) were infested with aphids. All Twenty-two of the sites positive for SLWF (100%) had leaves in the 1-5 nymphs/leaf range, while nine of the sites (41%) had leaves in the 6-49 nymphs/leaf range, and four of the sites (18%) had leaves in the 50 or more

nymphs/leaf range. All twenty-nine of the sites positive for aphids (100%) had leaves in the 1-5 aphids/leaf range, while twenty-five of the sites (86%) had leaves in the 6-49 aphids/leaf range, and nine of the sites (31%) had leaves in the 50 or more aphids/leaf range. Four of the twenty-nine sample sites (14%) had leaves with honeydew and seven of the sites (24%) had leaves with sooty mold. Mites were found at twenty-four of the sites (83%), armyworm at four sites (14%), and seven of the sites (24%) had leaves with other whitefly species.

Madera County:

The one sample site (100%) was positive for both SLWF and aphids. A total of 20 leaves were collected, of which three leaves (15%) were infested with SLWF, and six leaves (30%) were infested with aphids. All three leaves from this site that were infested with SLWF were in the 1-5 nymphs/leaf range. Of the six leaves from this site that were infested with aphids, four of the leaves were in the 1-5 aphids/leaf range and two of the leaves were in the 6-49 aphids/leaf range. This site did contain leaves with mites and other whitefly species, but had zero leaves with armyworm, honeydew, and sooty mold.

Merced County:

Twenty of the thirty-one sample sites (65%) were positive for SLWF, and twenty-eight of the sites (90%) were positive for aphids. A total of 880 leaves were collected, of which 125 leaves (14%) were infested with SLWF, and 302 leaves (34%) were infested with aphids. All twenty sites positive for SLWF (100%) had leaves in the 1-5 nymphs/leaf range, while four of the sites (20%) had leaves in the 6-49 nymphs/leaf range, and zero of the leaves (0%) had leaves in the 50 or more nymphs/leaf range. Twenty-seven of the sites positive for aphids (96%) had leaves in the 1-5 aphids/leaf range, while sixteen of the sites (57%) had leaves in the 6-49 aphids/leaf range, and eight of the sites (29%) had leaves in the 50 or more aphids/leaf range. Eight of the thirty-one sample sites (26%) had leaves with honeydew, and nineteen of the sites (61%) had leaves with sooty mold. Mites were found at twenty-six sites (84%), armyworm at two sites (6%), and six of the sites (19%) had leaves with other species of whitefly.

SLWF - Leaf Counts - 2017 Survey

8/14/17 - 9/14/17

No. Leaves in Each Range of Nymphs Per Leaf							
County	Sample Sites	0	1 - 5	6 - 49	50+	# Leaves	Total Sites Infested
Kern	13	163	110	83	34	390	13
Kings	24	397	112	11	0	520	22
Tulare	11	189	90	20	1	300	11
Fresno	29	600	107	63	10	780	22
Madera	1	17	3	0	0	20	1
Merced	31	755	102	23	0	880	20
Totals	109	2121	524	200	45	2890	89

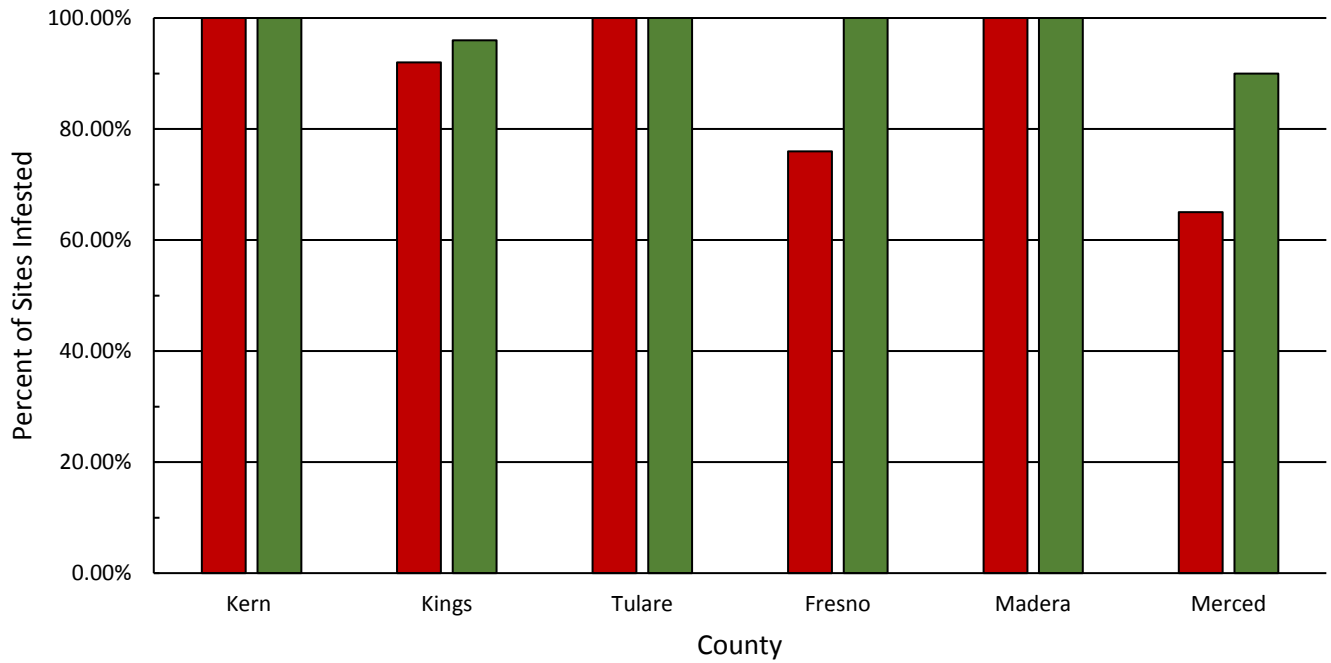
APHID - Leaf Counts - 2017 Survey

8/14/17 - 9/14/17

No. Leaves in Each Range of Aphids Per Leaf							
County	Sample Sites	0	1 - 5	6 - 49	50+	# Leaves	Total Sites Infested
Kern	13	192	137	46	15	390	13
Kings	24	267	109	97	47	520	23
Tulare	11	122	132	44	2	300	11
Fresno	29	421	186	124	49	780	29
Madera	1	14	4	2	0	20	1
Merced	31	578	171	88	43	880	28
Totals	109	1594	739	401	156	2890	105

PERCENT OF INFESTED SAMPLE SITES IN EACH COUNTY

■ SLWF ■ APHIDS



Percent of Sample Sites Infested with Other Pests - 2017 Survey

8/14/17 - 9/14/17

<u>County</u>	<u>Other Whitefly</u>	<u>Mites</u>	<u>Armyworm</u>	<u>Honeydew</u>	<u>Sooty Mold</u>
Kern	23%	85%	15%	100%	85%
Kings	8%	88%	13%	58%	75%
Tulare	18%	64%	27%	64%	91%
Fresno	24%	83%	14%	14%	24%
Madera	100%	100%	0%	0%	0%
Merced	19%	84%	6%	26%	61%

