

Pink Bollworm Program

Silverleaf Whitefly Report

Sampling Period: 7/27/2020 – 8/07/2020

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Source: USDA-ARS

I. Introduction

The third round of sampling for the silverleaf whitefly (SLWF) surveys began on Monday, July 27, 2020. Program personnel collected samples from designated sites at 10 percent of all cotton fields in each county of the San Joaquin Valley. The Program has a total of 154 SLWF sampling sites with 12 sites in Kern County, 37 sites in Kings County, 11 sites in Tulare County, 40 sites in Fresno County, 2 sites in Madera County, and 52 sites in Merced County. At each site one leaf sample from 10 different cotton plants was collected for a total of 10 leaves per site.

II. Kern County

During the third round of sampling, 120 leaves were collected from 12 sites within Kern County.

A total of 18 leaves from six sites contained SLWF nymphs:

- six sites had leaves within the 1-5 nymphs/leaf range; and
- two sites had leaves within the 6-49 nymphs/leaf range (**Table 1**).

A total of nine leaves from six sites contained aphids:

- six sites had leaves in the 1-5 aphids/leaf range (**Table 2**).

None of the 12 sites had leaves with honeydew or sooty mold. Mites were found at two sites, whereas none of the sites had leaves with armyworm or other whitefly species (**Table 3**).

III. Kings County

During the third round of sampling, 370 leaves were collected from 37 sites within Kings County.

A total of 13 leaves from eight sites contained SLWF nymphs:

- 8 sites had leaves within the 1-5 nymphs/leaf range and
- one site had leaves within the 6-49 nymphs/leaf range (**Table 1**).

A total of 34 leaves from 15 sites contained aphids:

- 15 sites had leaves in the 1-5 aphids/leaf range; and
- 3 sites had leaves in the 6-49 aphids/leaf range; and
- one site had leaves within the 50+ aphids/leaf range (**Table 2**).

None of the 37 sites had leaves with honeydew or sooty mold. Mites, armyworm, or other whitefly species were not found on leaves at any of the 37 sites (**Table 3**).

IV. Tulare County

During the third round of sampling, 110 leaves were collected from 11 sites within Tulare County.

A total of three leaves from three sites contained SLWF nymphs:

- Three sites had leaves within the 1-5 nymphs/leaf range (**Table 1**).

A total of 16 leaves from seven sites contained aphids:

- seven sites had leaves in the 1-5 aphids/leaf range and
- two sites had leaves in the 6-49 aphids/leaf range (**Table 2**).

None of the 11 sites had leaves with honeydew or sooty mold. Mites were found at four sites, whereas none of the sites had leaves with armyworm or other whitefly species (**Table 3**).

V. Fresno County

During the third round of sampling, 400 leaves were collected from 40 sites within Fresno County.

Zero of the 40 sites had leaves that contained SLWF nymphs (**Table 1**).

A total of 58 leaves from 13 sites contained aphids:

- 13 sites had leaves in the 1-5 aphids/leaf range and
- two sites had leaves in the 6-49 aphids/leaf range (**Table 2**).

Of the 40 sites, 32 sites had leaves with honeydew and none of the 40 sites had sooty mold. Mites were found at one site and armyworm was found at one site, whereas none of the sites had leaves with other whitefly species (**Table 3**).

VI. Madera County

During the third round of sampling, 20 leaves were collected from two sites within Madera County.

Zero of the two sites had leaves that contained SLWF nymphs (**Table 1**) and zero of the two sites had leaves that contained aphids (**Table 2**).

Both two sites had leaves with honeydew and zero of the two sites had leaves with sooty mold. None of the sites had leaves with mites, armyworm, or other whitefly species (**Table 3**).

VII. Merced County

During the third round of sampling, 520 leaves were collected from 52 sites within Merced County.

One leaf from one site contained SLWF nymphs:

- The one site had a leaf within the 1-5 nymphs/leaf range (**Table 1**).

A total of 41 leaves from 16 sites contained aphids:

- 16 sites had leaves in the 1-5 aphids/leaf range and
- one site had leaves in the 6-49 aphids/leaf range (**Table 2**).

47 of the 52 sites had leaves with honeydew and seven of the 52 sites had leaves with sooty mold. Mites were found at one site, whereas none of the sites had leaves with armyworm or other whitefly species (**Table 3**).

VIII. Tables and Graphs

Table 1: SLWF Leaf Count for the Sampling Period

<u>County</u>	<u>Sample Sites</u>	<u>No. Leaves in Each Range of Nymphs Per Leaf</u>				<u># Leaves</u>	<u>% Leaves w/ SLWF nymphs</u>
		<u>0</u>	<u>1 - 5</u>	<u>6 - 49</u>	<u>50+</u>		
Kern	12	102	14	4	0	120	15%
Kings	37	357	12	1	0	370	4%
Tulare	11	107	3	0	0	110	3%
Fresno	40	400	0	0	0	400	0%
Madera	2	20	0	0	0	20	0%
Merced	52	519	1	0	0	520	0%
Totals	154	1,505	30	5	0	1,540	21%

Table 2: Aphids Leaf Count for the Sampling Period

<u>County</u>	<u>Sample Sites</u>	<u>No. Leaves in Each Range of Aphids Per Leaf</u>				<u># Leaves</u>	<u>% Leaves w/ aphids</u>
		<u>0</u>	<u>1 - 5</u>	<u>6 - 49</u>	<u>50+</u>		
Kern	12	111	9	0	0	120	8%
Kings	37	336	22	4	8	370	9%
Tulare	11	94	14	2	0	110	15%
Fresno	40	342	50	8	0	400	15%
Madera	2	20	0	0	0	20	0%
Merced	52	479	39	2	0	520	8%
Totals	154	1,382	134	16	8	1,540	54%

Figure 1: Percent of Leaves Collected with SLWF and Aphids for Sampling Period

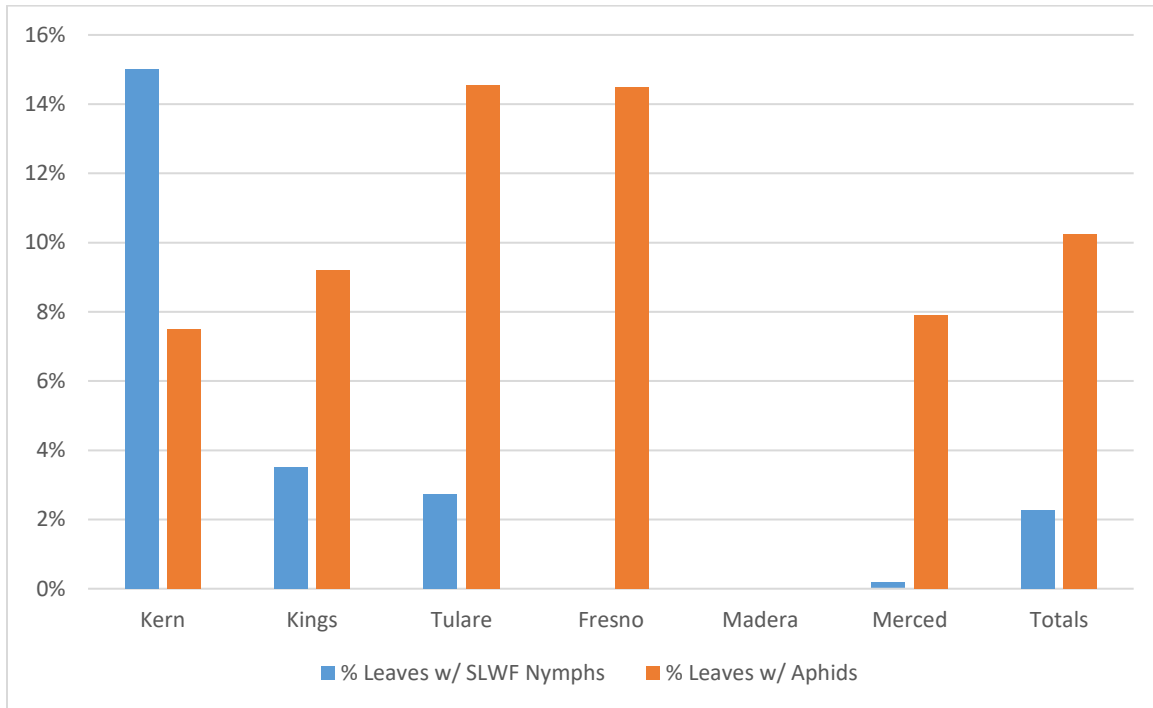


Table 3: Percent of Sample Sites Containing Leaves with Other Pests

<u>County</u>	<u>Other Whitefly</u>	<u>Mites</u>	<u>Armyworm</u>	<u>Honeydew</u>	<u>Sooty Mold</u>
Kern	0%	17%	0%	0%	0%
Kings	0%	0%	0%	0%	0%
Tulare	0%	36%	0%	0%	0%
Fresno	0%	3%	3%	80%	0%
Madera	0%	0%	0%	100%	0%
Merced	0%	2%	0%	90%	13%

Figure 2: Percent of Sample Sites Containing Leaves with Other Pests

PERCENT OF SAMPLE SITES CONTAINING LEAVES WITH OTHER PESTS

