

Pink Bollworm Program

Silverleaf Whitefly Report

Sampling Period: 7/13/2020 – 7/24/2020

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Source: USDA-ARS

I. Introduction

The second round of sampling for the silverleaf whitefly (SLWF) surveys began on Monday, July 13, 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 second round of sampling, 120 leaves were collected from 12 sites within Kern County.

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

- six 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 eight leaves from five sites contained aphids:

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

III. Kings County

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

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

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

A total of 22 leaves from 16 sites contained aphids:

- 16 sites had leaves in the 1-5 aphids/leaf range; and
- 1 site had leaves in the 6-49 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 second round of sampling, 110 leaves were collected from 11 sites within Tulare County.

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

A total of nine leaves from six sites contained aphids:

- six sites had leaves in the 1-5 aphids/leaf range; and
- one site 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 three sites, whereas none of the sites had leaves with armyworm or other whitefly species (**Table 3**).

V. Fresno County

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

A total of four leaves from two sites contained SLWF nymphs:

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

A total of 73 leaves from 17 sites contained aphids:

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

Of the 40 sites, 29 sites had leaves with honeydew and none of the 40 sites had sooty mold. Mites were found at one site, whereas none of the sites had leaves with armyworm or other whitefly species (**Table 3**).

VI. Madera County

During the second 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**).

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

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

A total of 45 leaves from 18 sites contained aphids:

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

38 of the 52 sites had leaves with honeydew and two of the 52 sites had leaves with sooty mold. Mites were found at two sites, 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	111	8	1	0	120	8%
Kings	37	366	4	0	0	370	1%
Tulare	11	110	0	0	0	110	0%
Fresno	40	396	4	0	0	400	1%
Madera	2	20	0	0	0	20	0%
Merced	52	520	0	0	0	520	0%
Totals	154	1,523	16	1	0	1,540	1%

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	112	5	3	0	120	7%
Kings	37	348	21	1	0	370	6%
Tulare	11	101	7	2	0	110	8%
Fresno	40	327	48	24	1	400	18%
Madera	2	20	0	0	0	20	0%
Merced	52	475	45	0	0	520	9%
Totals	154	1,383	126	30	1	1,540	10%

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

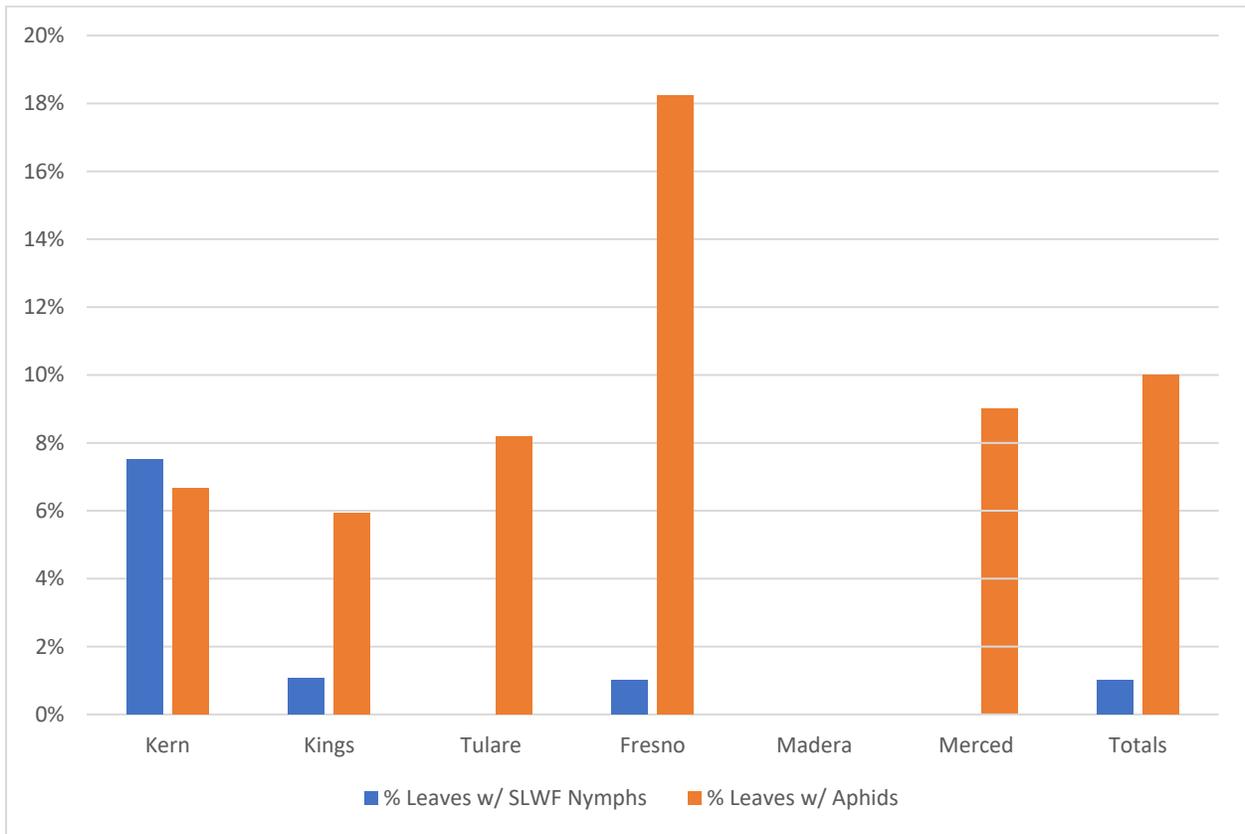


Table 3: Percent of Sample Sites Containing Leaves with Other Pests

<u>County</u>	<u>Other Whitefly</u>	<u>Mites</u>	<u>Armyworm</u>	<u>Honeydew</u>	<u>Sooty Mold</u>
Kern	0%	8%	0%	0%	0%
Kings	0%	0%	0%	0%	0%
Tulare	0%	27%	0%	0%	0%
Fresno	0%	3%	0%	73%	0%
Madera	0%	0%	0%	100%	0%
Merced	0%	4%	0%	73%	4%

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

