

Cotton Pest Control Program

Silverleaf Whitefly Report for the San Joaquin Valley

July 26, 2021 – August 6, 2021



Source: USDA-ARS

Silverleaf Whitefly Report
Sampling Period: 7/26/2021 – 8/6/2021
Prepared By: Emily Schoenborn

I. Introduction

The third round of sampling for the silverleaf whitefly (SLWF) surveys began on Monday, July 26, 2021. 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 125 SLWF sampling sites with 10 sites in Kern County, 30 sites in Kings County, 11 sites in Tulare County, 27 sites in Fresno County, 2 sites in Madera County, and 45 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, 100 leaves were collected from 10 sites within Kern County.

Zero of the 10 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 (**Table 2**).

None of the 10 sites had leaves with honeydew or sooty mold. Mites were found at one site, whereas armyworm and other whitefly species were not found at any sites (**Table 3**).

III. Kings County

During the third round of sampling not all of the sample sites were able to be collected from. Of the 30 sample sites in Kings County, 230 leaves were collected from 23 sites.

A total of 15 leaves from seven sites contained SLWF nymphs:

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

A total of 37 leaves from 15 sites contained aphids:

- 14 sites had leaves within the 1-5 aphids/leaf range and
- 4 sites had leaves within the 6-49 aphids/leaf range (**Table 2**).

None of the 10 sites had leaves with honeydew or sooty mold. Mites, armyworm, and other whitefly species were not found at any sites (**Table 3**).

IV. Tulare County

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

One leaf from one site contained SLWF nymphs:

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

A total of 17 leaves from five sites contained aphids:

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

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

V. Fresno County

During the third round of sampling, 270 leaves were collected from 27 sites within Fresno County.

One leaf from one site contained SLWF nymphs:

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

A total of four leaves from three sites contained aphids:

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

Of the 27 sites, one site had leaves with honeydew and sooty mold. Mites, armyworm, and other whitefly species were not found at any sites (**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**).

Zero of the two sites had leaves that contained aphids (**Table 2**).

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

VII. Merced County

During the third round of sampling, 450 leaves were collected from 45 sites within Merced County.

Zero of the 45 sites had leaves that contained SLWF nymphs (**Table 1**).

Three leaves from three sites contained aphids:

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

Of the 41 sites, one site had leaves with honeydew and sooty mold. Mites, armyworm, and other whitefly species were not found at any sites (**Table 3**).

VIII. Tables and Graphs

Table 1: SLWF Leaf Count for 7/26/21 - 8/6/21

<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	10	100	0	0	0	100	0%
Kings	30*	215	15	0	0	230	7%
Tulare	11	109	1	0	0	110	1%
Fresno	27	269	1	0	0	270	0%
Madera	2	20	0	0	0	20	0%
Merced	45	450	0	0	0	450	0%
Totals	125*	1163	17	0	0	1180	8%

*During the third round of sampling, samples were only collected from 23 of the 30 Kings County sites. A total of 118 samples sites were collected from during the third round of sampling.

Table 2: Aphids Leaf Count for 7/26/21 - 8/6/21

<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	10	91	9	0	0	100	9%
Kings	30*	193	31	6	0	230	16%
Tulare	11	93	15	2	0	110	15%
Fresno	27	266	4	0	0	270	1%
Madera	2	20	0	0	0	20	0%
Merced	45	447	3	0	0	450	1%
Totals	125*	1,110	62	8	0	1,180	6%

* During the third round of sampling, samples were only collected from 23 of the 30 Kings County sites. A total of 118 samples sites were collected from during the third round of sampling.

Figure 1: Percent of Leaves Collected Containing SLWF and Aphids for 7/26 - 8/6

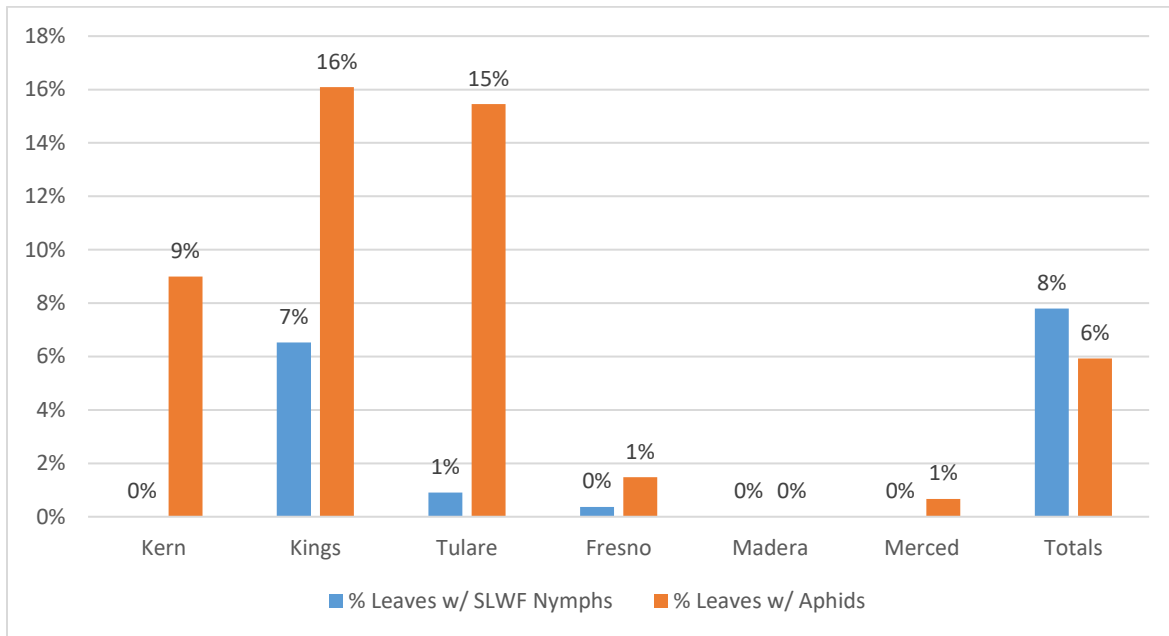


Table 3: Percent of Sample Sites Containing Leaves with Other Pests

<u>County</u>	<u>Other Whitefly</u>	<u>Mites</u>	<u>Armyworm</u>	<u>Honeydew</u>	<u>Sooty Mold</u>
Kern	0%	1%	0%	0%	0%
Kings	0%	0%	0%	0%	0%
Tulare	0%	0%	0%	0%	0%
Fresno	0%	0%	0%	4%	4%
Madera	0%	0%	0%	0%	0%
Merced	0%	0%	0%	2%	2%

Figure 2: Percent of Sample Sites Containing Leaves with Other Pests for 7/26 - 8/6

