

Cotton Pest Control Program

Silverleaf Whitefly Report for the San Joaquin Valley

July 12, 2021 – July 23, 2021



Source: USDA-ARS

Silverleaf Whitefly Report
Sampling Period: 7/12/2021 – 7/23/2021
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I. Introduction

The second round of sampling for the silverleaf whitefly (SLWF) surveys began on Monday, July 12, 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 second 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 three leaves from one site contained aphids:

- one site had leaves in the 1-5 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**).

III. Kings County

During the second round of sampling not all of the sample sites were able to be collected from. Of the 30 sample sites in Kings County, 260 leaves were collected from 26 sites.

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

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

A total of 20 leaves from seven sites contained aphids:

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

One of the 26 sites had leaves with honeydew, whereas none of the sites had leaves with sooty mold. Mites were found at one site, whereas armyworm and other whitefly species were not found at any sites (**Table 3**).

IV. Tulare County

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

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

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

A total of 14 leaves from five sites contained aphids:

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

Of the 11 sites, two sites had leaves with honeydew, whereas none of the sites had leaves with sooty mold. Mites were found at one site, whereas armyworm and other whitefly species were not found at any sites (**Table 3**).

V. Fresno County

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

A total of two leaves from one site contained SLWF nymphs:

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

Zero of the 27 sites had leaves that contained aphids (**Table 2**).

Of the 27 sites, four 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 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**).

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 second round of sampling not all of the sample sites were able to be collected from. Of the 45 sample sites in Merced County, 410 leaves were collected from 41 sites.

Zero of the 41 sites had leaves that contained SLWF nymphs (**Table 1**).

Two leaves from one site contained aphids:

- one site had a leaf in the 1-5 aphids/leaf range (**Table 2**).

Of the 41 sites, twelve sites had leaves with honeydew and six sites had leaves with 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 7/12/21 - 7/23/21

<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*	258	2	0	0	260	1%
Tulare	11	106	4	0	0	110	4%
Fresno	27	268	2	0	0	270	1%
Madera	2	20	0	0	0	20	0%
Merced	45*	410	0	0	0	410	0%
Totals	125*	1,162	8	0	0	1,170	1%

*During the second round of sampling, samples were only collected from 26 of the 30 Kings County sites and 41 of the 45 Merced County sites. A total of 117 samples sites were collected from during the second round of sampling.

Table 2: Aphids Leaf Count for 7/12/21 - 7/23/21

<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	97	3	0	0	100	3%
Kings	30*	240	15	5	0	260	8%
Tulare	11	96	14	0	0	110	13%
Fresno	27	270	0	0	0	270	0%
Madera	2	20	0	0	0	20	0%
Merced	45*	408	2	0	0	410	0%
Totals	125*	1,131	34	5	0	1,170	3%

* During the second round of sampling, samples were only collected from 26 of the 30 Kings County sites and 41 of the 45 Merced County sites. A total of 117 samples sites were collected from during the second round of sampling.

Figure 1: Percent of Leaves Collected Containing SLWF and Aphids for 7/12 - 7/23

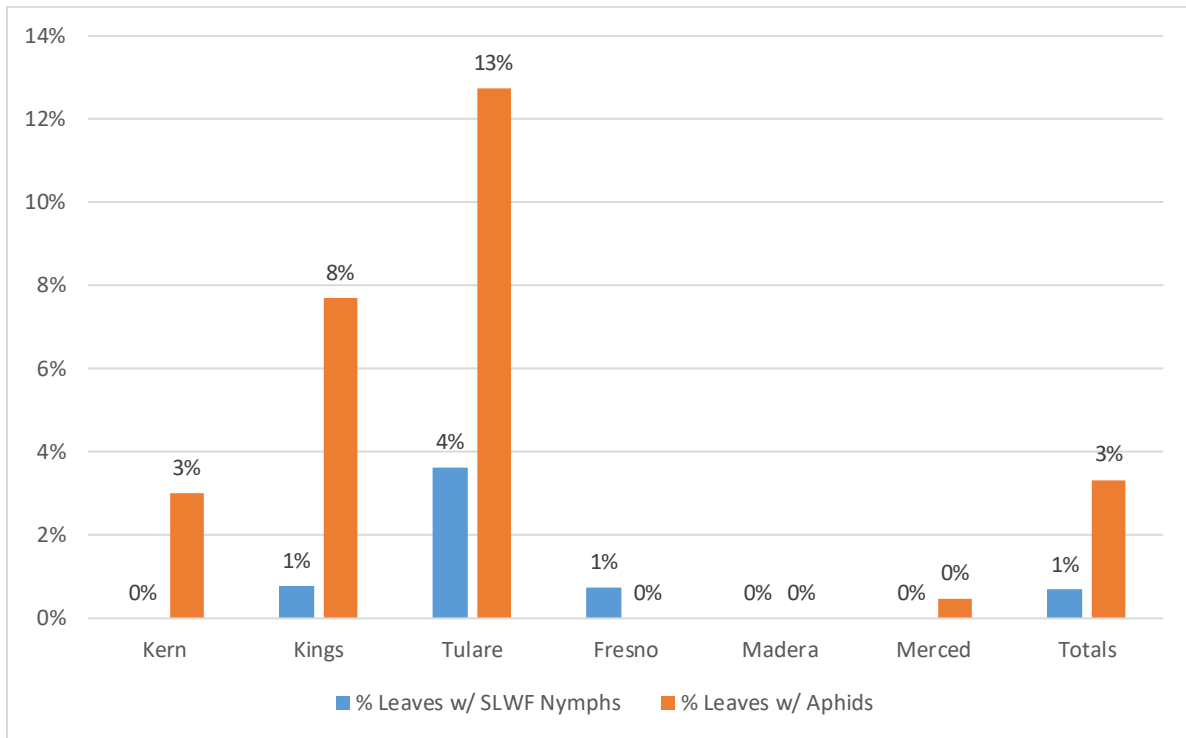


Table 3: Percent of Sample Sites Containing Leaves with Other Pests

<u>County</u>	<u>Other Whitefly</u>	<u>Mites</u>	<u>Armyworm</u>	<u>Honeydew</u>	<u>Sooty Mold</u>
Kern	0%	0%	0%	0%	0%
Kings	0%	3%	0%	3%	0%
Tulare	0%	9%	0%	18%	0%
Fresno	0%	0%	0%	15%	15%
Madera	0%	0%	0%	0%	0%
Merced	0%	0%	0%	29%	15%

Figure 2: Percent of Sample Sites Containing Leaves with Other Pests for 7/12 - 7/23

