

Cotton Pest Control Program

Silverleaf Whitefly Report for the San Joaquin Valley

June 28, 2021 – July 9, 2021



Source: USDA-ARS

Silverleaf Whitefly Report
Sampling Period: 6/28/2021 – 7/09/2021
Prepared By: Emily Schoenborn

I. Introduction

Sampling for the silverleaf whitefly (SLWF) surveys began on Monday, June 28, 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 first 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 six leaves from five sites contained aphids:

- Five 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, armyworm, and other whitefly species were not found at any sites.

III. Kings County

During the first round of sampling not all of the sample sites were able to be collected from. Of the 30 sample sites in Kings County, 30 leaves were collected from 3 sites.

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

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

None of the three sites had leaves with honeydew, one site had leaves with sooty mold. Mites, armyworm, and other whitefly species were not found at any sites.

IV. Tulare County

During the first round of sampling, 110 leaves were collected from 11 sites within Tulare 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 13 leaves from six sites contained aphids:

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

Of the 11 sites, one site had leaves with honeydew and two sites had leaves with sooty mold. Mites, armyworm, and other whitefly species were not found at any sites.

V. Fresno County

During the first round of sampling not all of the sample sites were able to be collected from. Of the 27 sample sites in Fresno County, 260 leaves were collected from 26 sites. Zero of the 26 sites had leaves that contained SLWF nymphs (**Table 1**).

Zero of the 26 sites had leaves that contained aphids (**Table 2**).

Of the 26 sites, four had leaves with sooty mold and zero sites had leaves with honeydew. Mites, armyworm, and other whitefly species were not found at any sites.

VI. Madera County

During the first round of sampling, Madera County was not sampled. Madera County's two sites will be included in the second round of sampling.

VII. Merced County

During the first round of sampling not all of the sample sites were able to be collected from. Of the 45 sample sites in Merced County, 430 leaves were collected from 43 sites. Zero of the 43 sites had leaves that contained SLWF nymphs (**Table 1**).

One leaf from one site contained aphids:

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

Of the 43 sites, two sites had leaves with honeydew and seven sites had leaves with sooty mold. Mites, armyworm, and other whitefly species were not found at any sites.

VIII. Tables and Graphs

Table 1: SLWF Leaf Count for 6/28/21 - 7/09/21

<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*	30	0	0	0	30	0%
Tulare	11	106	4	0	0	110	4%
Fresno	27*	260	0	0	0	260	0%
Madera	2*	0	0	0	0	0	0%
Merced	45*	430	0	0	0	430	0%
Totals	125*	926	4	0	0	930	0.4%

*During the first round of sampling, samples were only collected from 3 of the 30 Kings County sites, 26 of the 27 Fresno County sites, 0 of the 2 Madera County sites, and 43 of the 45 Merced County sites. A total of 93 samples sites were collected from during the first round of sampling.

Table 2: Aphids Leaf Count for 6/28/21 - 7/09/21

<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	94	6	0	0	100	6%
Kings	30*	30	0	0	0	30	0%
Tulare	11	97	12	1	0	110	12%
Fresno	27*	260	0	0	0	260	0%
Madera	2*	0	0	0	0	0	0%
Merced	45*	429	1	0	0	430	0%
Totals	125*	910	19	1	0	930	2.2%

*During the first round of sampling, samples were only collected from 3 of the 30 Kings County sites, 26 of the 27 Fresno County sites, 0 of the 2 Madera County sites, and 43 of the 45 Merced County sites. A total of 93 samples sites were collected from during the first round of sampling.

Figure 1: Percent of Leaves Collected Containing SLWF and Aphids for 6/28 - 7/09

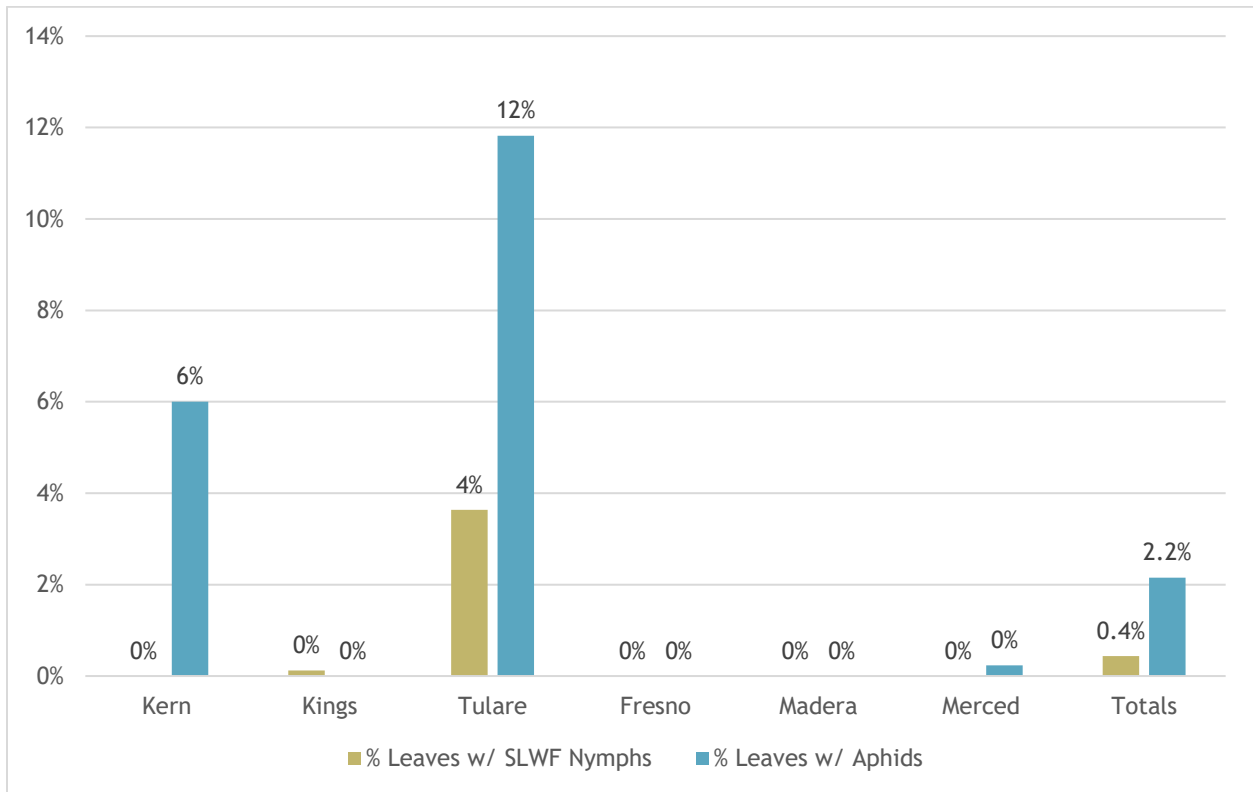


Table 3: Percent of Sample Sites Containing Leaves with Other Pests

<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%	0%	0%	0%	33%
Tulare	0%	0%	0%	9%	18%
Fresno	0%	0%	0%	0%	15%
Madera	0%	0%	0%	0%	0%
Merced	0%	0%	0%	4%	16%

Figure 2: Percent of Sample Sites Containing Leaves with Other Pests for 6/28 - 7/09

