Cotton Pest Control Program

Silverleaf Whitefly Report for the San Joaquin Valley

August 9, 2021 – August 20, 2021



Source: USDA-ARS

Silverleaf Whitefly Report Sampling Period: 8/9/2021 – 8/20/2021 Prepared By: Emily Schoenborn

I. Introduction

The fourth round of sampling for the silverleaf whitefly (SLWF) surveys began on Monday, August 9, 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 fourth round of sampling, 100 leaves were collected from 10 sites within Kern County.

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

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

A total of 24 leaves from seven sites contained aphids:

- seven 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 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 fourth round of sampling, 300 leaves were collected from 30 sites within Kings County.

A total of 20 leaves from nine sites contained SLWF nymphs:

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

A total of 66 leaves from 19 sites contained aphids:

• 19 sites had leaves within the 1-5 aphids/leaf range,

- 7 sites had leaves within the 6-49 aphids/leaf range, and
- One site had leaves within the 50+ aphids/leaf range (Table 2).

None of the 30 sites had leaves with honeydew or sooty mold. Other white fly species were found at one site, whereas mites and armyworm were not found at any sites (**Table 3**).

IV. Tulare County

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

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

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

A total of 10 leaves from five sites contained aphids:

• five sites had leaves in the 1-5 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 fourth round of sampling, 270 leaves were collected from 27 sites within Fresno County.

A total of 14 leaves from six sites contained SLWF nymphs:

• six sites had a leaf within the 1-5 nymphs/leaf range (**Table 1**).

A total of seven leaves from seven sites contained aphids:

• seven sites had leaves in the 1-5 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**).

VI. Madera County

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

A total of 22 leaves from three sites contained SLWF nymphs:

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

A total of eight leaves from three sites contained aphids:

- three 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 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**).

VIII. Tables and Graphs

County	Sample Sites	No. Leaves in Each Range of Nymphs Per Leaf				<u># Leaves</u>	<u>% Leaves w/</u> SLWF nymphs
		<u>0</u>	<u>1 - 5</u>	<u>6 - 49</u>	<u>50+</u>		
Kern	10	96	4	0	0	100	4%
Kings	30	280	19	1	0	300	7%
Tulare	11	108	2	0	0	110	2%
Fresno	27	256	14	0	0	270	5%
Madera	2	20	0	0	0	20	0%
Merced	45	428	12	10	0	450	5%
Totals	125	1188	51	11	0	1250	5%

Table 1: SLWF Leaf Count for 8/9/21 - 8/20/21

Table 2: Aphids Leaf Count for 8/9/21 - 8/20/21

County	Sample Sites	<u>No. Leaves in Each Range</u> of Aphids Per Leaf				<u># Leaves</u>	<u>% Leaves w/</u> aphids
		<u>0</u>	<u>1 - 5</u>	<u>6 - 49</u>	<u>50+</u>		
Kern	10	76	22	2	0	100	24%
Kings	30	234	55	10	1	300	22%
Tulare	11	100	10	0	0	110	9%
Fresno	27	263	7	0	0	270	3%
Madera	2	20	0	0	0	20	0%
Merced	45	442	5	3	0	450	2%
Totals	125	1,135	99	15	1	1,250	9%

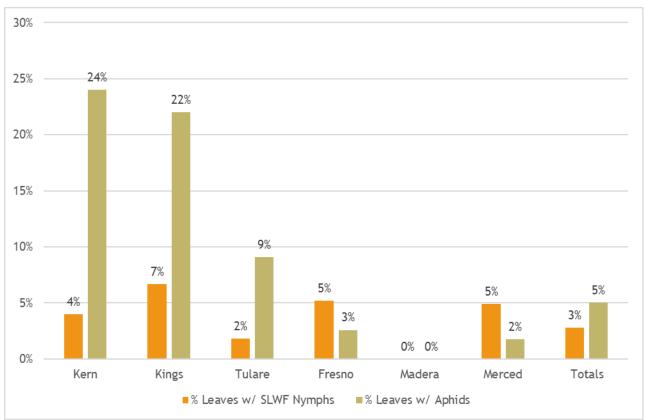


Figure 1: Percent of Leaves Collected Containing SLWF and Aphids for 8/9 - 8/20

County	<u>Other</u> Whitefly	<u>Mites</u>	<u>Armyworm</u>	<u>Honeydew</u>	Sooty Mold
Kern	0%	0%	0%	0%	0%
Kings	10%	0%	0%	0%	0%
Tulare	0%	0%	0%	0%	0%
Fresno	0%	0%	0%	0%	0%
Madera	0%	0%	0%	0%	0%
Merced	0%	0%	0%	0%	0%

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

Figure 2: Percent of Sample Sites Containing Leaves with Other Pests for 8/9 - 8/20

