

COTTON PEST CONTROL PROGRAM – SILVERLEAF WHITEFLY REPORT

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Sample Period – June 29, 2022 – August 2, 2022

Introduction

Sampling for the silverleaf whitefly (SLWF) surveys began on Monday, June 29, 2022. 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 152 SLWF sampling sites with 16 sites in Kern County, 28 sites in Kings County, 10 sites in Tulare County, 39 sites in Fresno County, 1 site in Madera County, and 58 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.

Kern County

During the first round of sampling, 160 leaves were collected from 16 sites within Kern County. The first round of sampling was conducted during the period of August 3rd to August 10th.

A total of 17 leaves from six sites contained SLWF nymphs:

- Six sites had leaves within the 1-5 nymphs/leaf range and
- One site had leaves in the 6-49 nymphs/leaf range (**Table 1**).

A total of two leaves from two sites contained aphids:

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

None of the 16 sites had leaves with sooty mold and 14 of the 16 sites had leaves with honeydew. Mites, armyworm, and other whitefly species were not found at any sites.

Kings County

During the first round of sampling, 280 leaves were collected from 28 sites within Kings County. The first round of sampling was conducted during the period of July 20th to August 1st.

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

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

A total of six leaves from four sites contained aphids:

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

None of the 28 sites had leaves with sooty mold and 28 of the 28 sites had leaves with honeydew. Mites, armyworm, and other whitefly species were not found at any sites.

Tulare County

During the first round of sampling, 100 leaves were collected from 10 sites within Tulare County. The first round of sampling was conducted during the period of July 27th to August 2nd.

A total of 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 one leaf from one site contained aphids:

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

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

Fresno County

During the first round of sampling, 390 leaves were collected from 39 sites within Fresno County. The first round of sampling was conducted during the period of June 29th to July 19th.

A total of 24 leaves from 15 sites contained SLWF nymphs:

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

A total of three leaves from two sites contained aphids:

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

Of the 39 sites, 39 sites had leaves with honeydew and zero sites had leaves with sooty mold. Mites were found on leaves from one site. Armyworm and other whitefly species were not found at any sites.

Madera County

During the first round of sampling, 10 leaves were collected from one site within Madera County. The first round of sampling was conducted July 8th.

The one site did not have leaves that contained SLWF nymphs (**Table 1**).

The one site did not have leaves that contained aphids (**Table 2**).

The one site had leaves with honeydew, but sooty mold was not present on the leaves from the one site. The one site did not have leaves with mites, armyworm, or other whitefly species (**Table 3**).

Merced County

During the first round of sampling, 580 leaves were collected from 58 sites within Merced County. The first round of sampling was conducted during the period of July 8th to July 28th.

A total of 34 leaves from 19 sites contained SLWF nymphs:

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

A total of five leaves from three sites contained aphids:

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

Of the 58 sites, 58 sites had leaves with honeydew and zero sites had leaves with sooty mold. Mites, armyworm, and other whitefly species were not found at any sites.

Tables and Graphs

Table 1: SLWF Leaf Count for 6/29/2022 – 8/02/2022

County	Sample Period	Sample Sites	No. Leaves in Each Range of Nymphs Per Leaf				# Leaves	% Leaves w/ SLWF nymphs
			0	1 - 5	6 - 49	50+		
Kern	8/03-8/10	16	143	16	1	0	160	11%
Kings	7/20-8/01	28	266	14	0	0	280	5%
Tulare	7/27-8/02	10	99	1	0	0	100	1%
Fresno	6/29-7/19	39	366	24	0	0	390	6%
Madera	7/08	1	10	0	0	0	10	0%
Merced	7/08-7/28	58	546	34	0	0	580	6%
Totals	6/29-8/02	152	1430	89	1	0	1520	6%

Table 2: Aphids Leaf Count for 6/29/2022 – 8/02/2022

County	Sample Period	Sample Sites	No. Leaves in Each Range of Aphids Per Leaf				# Leaves	% Leaves w/ Aphids
			0	1 - 5	6 - 49	50+		
Kern	8/03-8/10	16	158	1	1	0	160	1%
Kings	7/20-8/01	28	274	6	0	0	280	2%
Tulare	7/27-8/02	10	99	1	0	0	100	1%
Fresno	6/29-7/19	39	387	3	0	0	390	1%
Madera	7/08	1	10	0	0	0	10	0%
Merced	7/08-7/28	58	575	5	0	0	580	1%
Totals	6/29-8/02	152	1503	16	1	0	1520	1%

Figure 1: Percent of Leaves Collected Containing SLWF and Aphids for 6/29 - 8/02

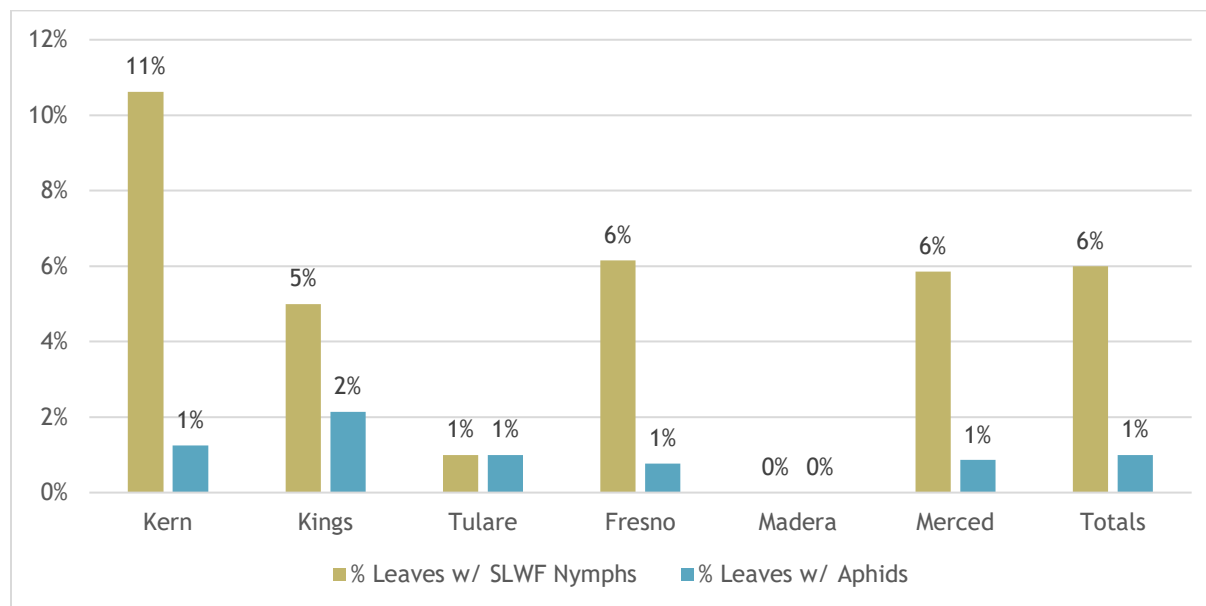


Table 3: Percent of Sample Sites Containing Leaves with Other Pests and Pest Indicators

<u>County</u>	<u>Other Whitefly</u>	<u>Mites</u>	<u>Armyworm</u>	<u>Honeydew</u>	<u>Sooty Mold</u>
Kern	0%	0%	0%	88%	0%
Kings	0%	0%	0%	100%	0%
Tulare	0%	0%	0%	100%	0%
Fresno	0%	3%	0%	100%	0%
Madera	0%	0%	0%	100%	0%
Merced	0%	0%	0%	100%	0%

Figure 2: Percent of Sample Sites Containing Leaves with Other Pests and Pest Indicators for 6/29 - 8/02

