# **Pink Bollworm Program**

Silverleaf Whitefly Report for the San Joaquin Valley

June 29, 2020 – July 10, 2020



Source: USDA-ARS

### Silverleaf Whitefly Report

Sampling Period: 6/29/2020 – 7/10/2020 Prepared By: Emily Schoenborn

#### Introduction

Sampling for the silverleaf whitefly (SLWF) surveys began on Monday, June 29, 2020. 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 154 SLWF sampling sites with 12 sites in Kern County, 37 sites in Kings County, 11 sites in Tulare County, 40 sites in Fresno County, 2 sites in Madera County, and 52 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, four of the 12 sample sites in Kern County had leaves containing SLWF nymphs. A total of 120 leaves were collected, of which five leaves contained SLWF nymphs. All four sites positive for SLWF nymphs contained leaves in the 1-5 nymphs/leaf range, and none of the sites contained leaves in the 6-49 nymphs/leaf range or the 50 or more nymphs/leaf range. Three of the 12 sites had at least one leaf containing aphids. Out of the 120 leaves collected, three leaves contained aphids. All three of the sites positive for aphids had leaves in the 1-5 aphids/leaf range. None of the 12 sites had leaves with honeydew or sooty mold. Mites were found at one site, whereas none of the sites had leaves with armyworm or other whitefly species.

#### **Kings County:**

During the first survey round, two of the 37 sample sites had leaves containing SLWF nymphs. A total of 370 leaves were collected, of which two leaves contained SLWF nymphs. The two sites positive for SLWF nymphs contained leaves in the 1-5 nymphs/leaf range, while none of the sites contained leaves in the 6-49 nymphs/leaf range or the 50 or more nymphs/leaf range. Five of the sites had at least one leaf containing aphids. Out of the 370 leaves collected, five leaves contained aphids. Four of

the sites positive for aphids had leaves in the 1-5 aphids/leaf range, while one of the sites had leaves in the 6-49 aphids/leaf range, and none of the sites had leaves in the 50 or more aphids/leaf range. Eleven of the 37 sample sites had leaves with honeydew and three of the sites had leaves with sooty mold. Mites were found at five of the sites, whereas none of the sites had leaves with armyworm or other whitefly species.

#### **Tulare County:**

During the first survey round, none of the 11 sample sites had leaves containing SLWF nymphs. A total of 110 leaves were collected, of which no leaves contained SLWF nymphs. One of the sites had at least one leaf containing aphids. Out of the 110 leaves collected, one leaf contained aphids. The one site positive for aphids had a leaf in the 1-5 aphids/leaf range. None of the 11 sample sites had leaves with honeydew or sooty mold. Mites were found at two of the sites, whereas none of the sites had leaves with armyworm or other whitefly species.

#### Fresno County:

During the first survey round, six of the 40 sample sites had leaves containing SLWF nymphs. A total of 400 leaves were collected, of which 20 leaves contained SLWF nymphs. All six of the sites positive for SLWF nymphs contained leaves in the 1-5 nymphs/leaf range, and none of the sites contained leaves in the 6-49 nymphs/leaf range or the 50 or more nymphs/leaf range. Nine of the sites had at least one leaf containing aphids. Out of the 400 leaves collected, 34 leaves contained aphids. Twenty-seven of the sites positive for aphids had leaves in the 1-5 aphids/leaf range, while 7 of the sites had leaves in the 6-49 aphids/leaf range, and none of the sites had leaves in the 50 or more aphids/leaf range. Twenty-five of the 40 sample sites had leaves with honeydew and none of the sites had leaves with sooty mold. Mites were found at two of the sites, whereas none of the sites had leaves with armyworm or other whitefly species.

#### **Madera County:**

During the first survey round, one of the two sample sites contained leaves with SLWF nymphs. A total of 20 leaves were collected, of which two leaves contained SLWF nymphs. The one site positive for SLWF nymphs had two leaves in the 1-5 nymphs/leaf range. One of the two sites had at least one leaf containing aphids. Out of the 20 leaves collected, two leaves contained aphids. One of the sites contained leaves in the 1-5 aphids/leaf range, while the none of the sites contained leaves in the 6-49 aphids/leaf range and the 50 or more aphids/leaf range. Both of the sample sites had leaves with honeydew, and one of the sites had leaves with sooty mold. Neither of the sites had leaves with mites, armyworm, or other whitefly species.

#### **Merced County:**

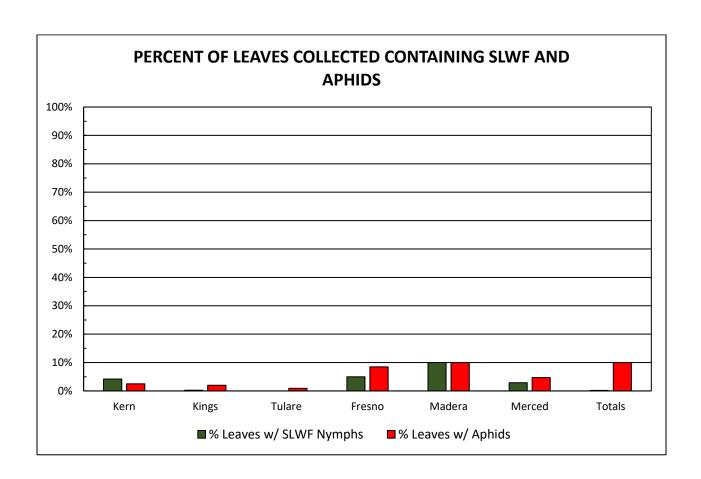
During the first survey round, eight of the 52 sample sites had at least one leaf containing SLWF nymphs. A total of 520 leaves were collected, of which 15 leaves contained SLWF nymphs in the 1-5 nymphs/leaf range, and none of the sites had leaves in the 6-49 nymphs/leaf range or the 50 or more nymphs per leaf range. Twelve of the sites had at least one leaf containing aphids. Out of the 520 leaves collected, 25 leaves contained aphids. All 12 of the sites positive for aphids had leaves in the 1-5 aphids/leaf range, while one of the sites had leaves in the 6-49 aphids/leaf range, and none of the sites had leaves in the 50 or more aphids/leaf range. Forty-four of the 52 sample sites had leaves with honeydew and two of the sites had leaves with sooty mold. Mites were found at one site, armyworms were found on leaves at one of the sites, and none of the sites had leaves with other whitefly species.

## SLWF - Leaf Counts - 2020 Survey 6/29/20 - 7/10/20

No. Leaves in Each Range of Nymphs Per Leaf							
County	Sample Sites	<u>o</u>	<u>1 - 5</u>	<u>6 - 49</u>	<u>50+</u>	# Leaves	% Leaves w/ SLWF nymphs
Kern	12	115	4	1	0	120	4%
Kings	37	368	2	0	0	370	1%
Tulare	11	110	0	0	0	110	0%
Fresno	40	380	20	0	0	400	5%
Madera	2	18	2	0	0	20	10%
Merced	52	505	15	0	0	520	3%
Totals	154	1497	43	1	0	1540	3%

## APHID - Leaf Counts - 2020 Survey 6/29/20 - 7/10/20

No. Leaves in Each Range of Aphids Per Leaf							
County	Sample Sites	<u>o</u>	<u>1 - 5</u>	<u>6 - 49</u>	<u>50+</u>	# Leaves	% Leaves w/ aphids
Kern	12	117	3	0	0	120	3%
Kings	37	365	4	1	0	370	1%
Tulare	11	109	1	0	0	110	1%
Fresno	40	366	27	7	0	400	9%
Madera	2	18	2	0	0	20	10%
Merced	52	495	23	2	0	520	5%
Totals	154	1470	60	10	0	1540	5%



# Percent of Sample Sites Containing Leaves with Other Pests - 2020 Survey 6/29/20 - 7/10/20

County	<u>Other</u> Whitefly	<u>Mites</u>	<u>Armyworm</u>	<u>Honeydew</u>	Sooty Mold
Kern	0%	8%	0%	0%	0%
Kings	0%	14%	0%	30%	8%
Tulare	0%	18%	0%	0%	0%
Fresno	0%	5%	0%	63%	0%
Madera	0%	0%	0%	100%	50%
Merced	0%	2%	2%	85%	4%

