

Silverleaf Whitefly Report for the Central Valley

2025 Season - Monthly Report

September 02, 2025 – September 12, 2025

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Source: USDA-ARS

I. Introduction

The sampling period for the silverleaf whitefly (SLWF) surveys started on September 02, 2025, and ended on September 12, 2025. Program personnel collected samples from designated sites at 10 percent of all cotton fields in each county of the San Joaquin Valley. The Program had a total of 116 SLWF sampling sites, with 11 sites in Kern County, 26 sites in Kings County, 5 sites in Tulare County, 25 sites in Fresno County, 1 site in Madera County, 45 sites in Merced County, and 3 sites in Glenn County. At each site, one leaf sample from 10 different cotton plants was collected for a total of 10 leaves per site. However, during the entire sampling period, not all sites could be sampled in Kings County.

II. Kern County

During the first cycle of the 2025 cotton growing season, out of the total 11 sample sites in Kern County, 8 sites contained leaves with SLWF nymphs or adults. A total of 110 leaves were collected, of which 34 leaves (31%) contained SLWF nymphs or adults (Table 1). Out of the 11 accessible sample sites, 4 sites had at least one leaf containing aphids during the second sampling cycle of the season. Out of the 110 leaves collected, 13 leaves (12%) contained aphids (Table 2). Honeydew and sooty mold were not found at any sites. Mites were found at 11 sites, but armyworms and other whitefly species were not found at any site.

III. Kings County

During the first cycle of the 2025 cotton growing season, out of the total 26 sample sites in Kings County, one site was inaccessible. Of the 25 accessible sites, 24 sites had at least one leaf containing SLWF nymphs or adults. A total of 250 leaves were collected, of which 98 leaves (39%) contained SLWF nymphs and adults (Table 1). Out of the 25 accessible sample sites, 10 sites had at least one leaf containing aphids during the second sampling cycle of the season. Out of the 250 leaves collected, 21 leaves (8%) contained aphids (Table 2). Honeydew was found at 3 sites and sooty mold was found at one site. Mites were found at 4 sites, and sooty mold was not found at any site. Mites were found at 18 sites, but armyworms and other whitefly species were not found at any site.

IV. Tulare County

Out of the 5 sample sites in Tulare County, all 5 sites had at least one leaf containing SLWF nymphs or adults during first sampling cycle of the 2025 cotton growing season. A total of 50 leaves were collected, of which 10 leaves (20%) contained SLWF nymphs or adults (Table 1). During the second sampling cycle of the season, none of the 5 sample sites had at least one leaf containing aphids. Out of the 50 leaves collected, zero leaves (0%) contained aphids, as shown in Table 2. Honeydew was not found at any site and sooty mold was found at one site. Mites were found at two sites, whereas none of the sites had leaves with armyworms or other whitefly species.

V. Fresno County

Out of the 25 sample sites in Fresno County, 11 sites had at least one leaf containing SLWF nymphs or adults during the 2025 cotton growing season. A total of 250 leaves were collected, of which 35 leaves (14%) contained SLWF nymphs or adults (Table 1). Out of the 25 sample sites, 4 sites had at least one leaf containing aphids during the second sampling cycle of the season. Out of the 250 leaves collected, 8 leaves (3%) contained aphids (Table 2). Honeydew was found at two sample sites, sooty mold was not found at 7 sample sites, mites were found at ten sites, and other whitefly species and armyworms were not found at any of the sites.

VI. Madera County

Out of the 1 sample sites in Madera County, none had at least one leaf containing SLWF nymphs or adults during the first cycle of the 2025 cotton growing season. A total of 10 leaves were collected, of none of the sites (0%) contained SLWF nymphs or adults (Table 1). There were no aphids found on any site. Out of the 10 leaves collected, none of the samples (0%) contained aphids (Table 2). Honeydew and sooty mold were not found at any of the sites. Mites were found at one site. Other whitefly species, and armyworms were not found at any of the sites.

VII. Merced County

Out of the 45 sample sites in Merced County, 17 sites had at least one leaf containing SLWF nymphs or adults during the first cycle of 2025 cotton growing season. A total of 450 leaves were collected, of which 33 leaves (7%) contained SLWF nymphs or adults (Table 1). Out of the 45 sample sites, 12 sites had at least one leaf containing

aphids during the first sampling cycle of the season. Out of the 450 leaves collected, 37 leaves (8%) contained aphids (Table 2). Honeydew was found at five sites, sooty mold was found at 9 sites, and mites were found at 20 sites. Whereas other whitefly species and armyworms were not found at any of the sites.

VIII. Glenn County

Out of the 3 sample sites in Glenn County, none of the sites had at least one leaf containing SLWF nymphs or adults during the first sampling cycle of the 2025 cotton growing season. A total of 30 leaves were collected, of which none of the leaves (0%) contained SLWF nymphs or adults (Table 1). Out of the 3 sites, 2 sites had at least one leaf containing aphids during the first sampling cycle of the season. Out of the 30 leaves collected, 5 leaves (17%) contained aphids (Table 2). Honeydew was not found at any site, sooty mold was found at one site, mites were found in one site, and other whitefly species and armyworms were not found at any of the sites.

VIII. Tables and Graphs

Table 1: 2025 Percentage of SLWF Survey Total Leaf Count

<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>		
Glenn	3	30	0	0	0	30	0%
Kern	11	76	18	16	0	110	31%
Kings*	25	152	73	25	0	250	39%
Tulare	5	40	10	0	0	50	20%
Fresno	25	215	25	10	0	250	14%
Madera	1	10	0	0	0	10	0%
Merced	45	417	23	10	0	450	7%
Totals	115	940	149	61	0	1150	18%

* During the entire sampling period, not all sites could be sampled in Kings County.

Table 2: 2025 Percentage of Aphids Survey Total Leaf Count

County	Sample Sites	No. Leaves in Each Range of Aphids Per Leaf				# Leaves	% Leaves with Aphids
		0	1 - 5	6 - 49	50+		
Glenn	3	25	5	0	0	30	17%
Kern*	11	97	13	0	0	110	12%
Kings*	25	229	21	0	0	250	8%
Tulare	5	50	0	0	0	50	0%
Fresno	25	242	8	0	0	250	3%
Madera	1	10	0	0	0	10	0%
Merced	45	413	27	10	0	450	8%
Totals	115	1066	74	10	0	1150	7%

* During the entire sampling period, not all sites could be sampled in Kings County.

Figure 1: Percent of Leaves Collected Containing SLWF and Aphids – September 2025 Survey

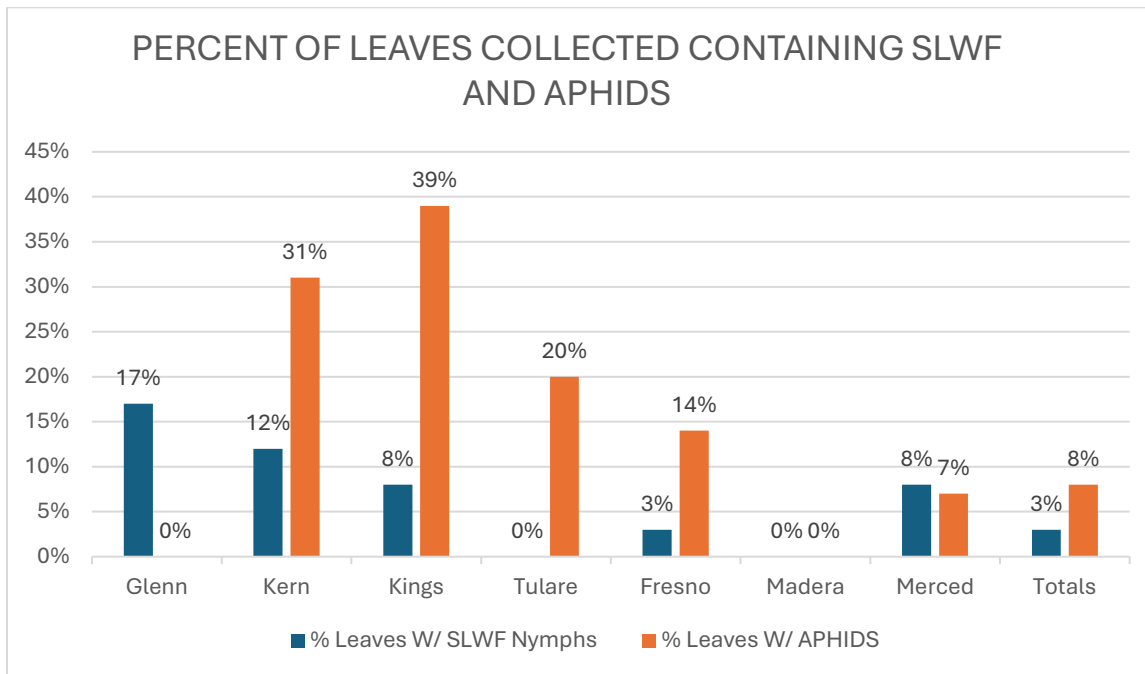


Table 3: Percent of total Sample Sites Containing Leaves with Other Pests and Pest Indicators

<u>County</u>	<u>Other Whitefly</u>	<u>Mites</u>	<u>Armyworm</u>	<u>Honeydew</u>	<u>Sooty Mold</u>
Glenn	0%	33%	0%	0%	33%
Kern	0%	100%	0%	18%	0%
Kings	0%	72%	0%	16%	0%
Tulare	0%	40%	0%	0%	20%
Fresno	0%	40%	0%	8%	28%
Madera	0%	100%	0%	0%	0%
Merced	0%	44%	0%	11%	20%

Figure 2: Percent of Sample Sites Containing Leaves with Other Pests and Pest Indicators – 2025 Survey Total

