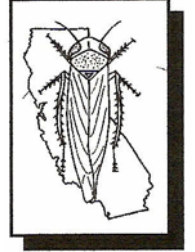


BEET CURLY TOP VIRUS MONTHLY REPORT



CURLY TOP VIRUS CONTROL PROGRAM

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Report for May, 2014

Program-wide notice

- The Beet Curly Top Virus Control Program (BCTVCP) has been vigilant in monitoring fallow ground. As beetle leafhopper populations reach treatment threshold, every effort is made to conduct either aerial or ground treatment applications. Environmental factors such as wind and heat have interfered with planned treatment days, however, program personnel continue with treatment as needed. Due to the water shortage, there are several more fallow fields this year. Russian thistle has been observed in these fallow fields with high counts of BLH. Some fields have counts as high as 30 BLH per single sweep. Many of those fields that would normally be treated in the fall are currently being treated or will be treated in early summer. The BCTVCP would like to remind growers to treat any fallow fields and roadside host plants before disking or mowing, to prevent movement of beetle leafhoppers into neighboring tomato fields.

Fresno County

- The Beet Curly Top Virus Control Program (BCTVCP) began the annual spring treatment campaign on April 16. Wind, rain, and heat were a factor resulting in an intermittent spray campaign. A total of 17,320 acres were treated aerially in April. Aerial treatment continued in May with an additional 5,050 acres treated. As of May 30th, a total of 22,370 acres were treated aerially in Fresno County.
- Post treatment beetle leafhopper (BLH) population counts were conducted with a 95% reduction.
- Ground rig treatment was conducted throughout the month of May. As of May 30th, a total of 640 gallons of tank mixed Malathion was used to treat roadsides and fallow fields. Ground rig treatment will continue as needed.
- Personnel will continue to monitor fallow fields and treatment applications will be conducted as needed.
- The Program continued to monitor yellow panel traps along trap lines downwind of several major historic hot spots for BLH. Beetle leafhopper (BLH) counts on the traps peaked about the third week of April, with counts close to 200 BLH on a single trap. In May, BLH counts on the traps dropped significantly to as low as 1 BLH to as high as 20. Traps continued to be sent to the lab in Davis for testing. Interestingly, only 29 out of 98 samples tested positive for CTV and the average virus load is lower.
- Program personnel have collected BLH samples, Russian thistle samples, and tomato samples to be tested for curly top virus. Results will be included in the next report.

Imperial/Riverside Counties

- Program personnel will be surveying the desert areas of Imperial and Riverside Counties in June. Results will be included in the next report.

Kern County

- There were a few areas of concern in Kern County that program personnel were monitoring. One area is a tomato field in Arvin. There were weed hosts and other crops nearby. Sweep surveys produced 0-3 adult BLH and zero nymphs per 10 sweeps. The tomato field appears to have some curly top virus damage along the perimeter where the weed hosts have been eliminated. Two of the four tomato samples sent for testing were positive for CTV.
- Another area of concern is in the Lost Hills area. There was primarily Russian thistle but other hosts were present as well, such as London rocket. Sweep surveys produced variable counts, 5-7 adult BLH per 10 sweeps up to 20 adult BLH per 10 sweeps. Approximately 10% of those were 3rd and 4th instar nymphs. This area was mapped and will be treated the first week of June.
- The last area of concern is a portion of Highway 46. There was abundant host vegetation in good condition from Lost Hills to the northwest county line. Sweep surveys were 10-20 adult BLH per 10 sweeps.
- Aerial treatment of larger fallow fields will take place the first week of June.
- Some ground rig treatment applications were conducted. A total of 80 gallons of tank mixed Malathion was used to treat roadsides and fallow fields.
- Personnel will continue to monitor roadsides and fallow ground and treatment will be conducted as needed. There is approximately 1,000 acres mapped for treatment in Kern County. Aerial treatment will take place in early June.
- Beet leafhopper samples were collected and sent for testing. Results will be included in the next report.

Kings County

- Aerial treatment was conducted on a couple of fallow fields. A total of 450 acres were treated aerially in Kings County. Majority of treatment was conducted near Kettleman City and one field in Stratford.
- BLH counts were moderately high on Russian thistle, with 8-10 adult BLH per sweep with approximately 1/3 being nymphs.
- Approximately, 1,500 acres have been mapped for treatment in Kings County. Aerial treatment will take place in early June.
- Ground rig treatment applications were also conducted. A total of 320 gallons of tank mixed Malathion was used to treat roadsides and fallow fields. Majority of ground rig applications were conducted along Utica Avenue.
- Ground rig applications will continue as needed.
- Personnel will continue to monitor the fallow fields and Russian thistle development.

Merced County

- Ground rig treatment applications were conducted at the beginning of the month. A total of 45 gallons of tank mixed Malathion was used to treat roadsides.
- Vegetation and BLH population surveys were conducted in Merced County along the following roadsides:
- Pole Line Road north of the county line had sufficient weed hosts, such as, London rocket, Russian thistle, stressed filaree, and mustard. Sweep surveys produced 3 adult BLH and zero nymphs per 50 sweeps. Roadside weeds were in the process of being mowed/ disked.
- South of Eagle Field Road on Pole Line Road there was a fallow field adjacent to a large tomato field. Weed hosts included Russian thistle, mallow, mustard, and London rocket. Out of 100 sweeps, 18 adult BLH were identified and zero nymphs.
- West of Sunset Avenue east of Canyon Road there was a fallow field with mallow, filaree, mustard, and London rocket. Out of 100 sweeps, 14 adult BLH were identified and zero nymphs.
- Along Ramos Road north of Highway 152 there was a small stretch of goosefoot

and purslane. Sweep counts produced 50 adult BLH and 100 2nd and 3rd instar nymphs out of 100 sweeps. BLH samples were collected and sent for testing. Results will be included in the next report.

- Personnel will continue to monitor vegetation and BLH populations.

Sacramento Valley

- Program personnel will be surveying the Sacramento Valley in June. Results will be included in the next report.

Salinas Valley

- Program personnel will be surveying the Salinas Valley in June. Results will be included in the next report.

San Joaquin County

- Survey was conducted within the Contra Costa Water District property off of South Corral Hollow Road. There were several suitable slopes for BLH activity; however, very minimal counts of BLH were identified. The vegetation dried out by early May and no BLH have been observed there since.
- Fallow field surveys, tomato crop surveys, roadside host vegetation, and BLH population surveys were conducted. Majority of tomato fields are in good condition and perimeters were clean and void of host plant weeds.
- A fallow field south of West 11th Street on Banta Road NE of Tracy Defense Depot had sufficient host plant weeds, such as mallow, London rocket, mustard, goosefoot, and filaree. At time of survey, zero BLH were observed.
- South of West 11th Street on South Bird Road along the eastside of the road was another fallow field. There were sufficient host plant weeds, such as Russian thistle, mustard, and goosefoot. At time of survey, zero BLH were observed.
- A small fallow field on the eastside of Interstate 5 south of West Linne Road contained adequate host plants, such as Russian thistle, goosefoot, mustard, and Shepherd's purse. Out of 50 sweeps, 1 adult BLH was observed.
- Program personnel collected several samples of tomatoes and sent for testing. Results will be included in the next report.

Stanislaus County

- Fallow field, tomato crop, roadside host vegetation and BLH population surveys were conducted. Tomatoes appear healthy and in good condition so far. Perimeter roads were clear of roadside host weeds.
- BLH sweep surveys on Frank Cox Road west of Highway 33 produced zero BLH in 50 sweeps. Host plants included filaree, mustard, and mallow.
- An organic almond orchard had several BLH host weeds such as, mustard, goosefoot, and mallow. The orchard neighbors a young tomato field. Sweep surveys produced zero BLH out of the 100 sweeps conducted.
- Sweeps conducted on Russian thistle, mallow, and mustard along Highway 33 and railroad tracks produced zero BLH out of 100 sweeps.
- Program personnel will continue to monitor these areas for BLH.