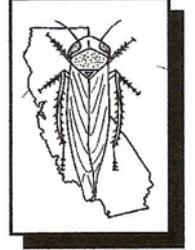


# BEET CURLY TOP VIRUS MONTHLY REPORT



## **CURLY TOP VIRUS CONTROL PROGRAM**

2895 N. Larkin, Suite A  
Fresno, CA 93727  
PHONE: (559) 294-2031  
FAX: (559) 294-2037

---

---

Report for April 18-30, 2014

### **Fresno County**

- The Beet Curly Top Virus Control Program (BCTVCP) began the annual spring treatment campaign on April 16 and continued to April 19, 2014. Wind and rain delayed treatment for a few days from April 21<sup>st</sup>-23<sup>rd</sup>. Treatment operations resumed on April 24<sup>th</sup> and were delayed again due to rain and wind. Treatment recommenced April 27<sup>th</sup> and 28<sup>th</sup>. A total of 17,320 acres was treated aerially in Fresno County.
- Aerial treatment will continue in May, as weather permits.
- Post treatment beetle leafhopper (BLH) population counts were conducted with a 98% reduction. Counts were on average less than 1 adult/nymph BLH per 10 sweeps.
- Ground rig treatment was conducted April 30<sup>th</sup> on roadsides near Huron. Ground rig treatment will continue 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 have continued to increase with counts ranging from 50-100+. Traps continued to be sent to the lab in Davis for testing. In general, the majority of the BLH are testing positive for Curly Top Virus. The yellow panel traps were also showing very high numbers of thrips.
- The Program has been called to survey several tomato fields and collect samples to confirm CTV. There is evidence of very light CTV infection in a few tomato fields, i.e., 1-2 plants occasionally within a field. Currently, the tomato fields look good and nothing close to what was witnessed last year as CTV devastated numerous fields. Tomato Spotted Wilt Virus is of concern this year and symptoms are similar to Curly Top Virus. It is important to have tomato plants tested to confirm which virus is causing the damage.
- The Program has also responded to several growers asking that neighboring fallow fields be treated.
- Most likely BLH are moving through the tomato fields when the weeds they have been lingering on are disked or mowed. It is good practice to treat fallow field weeds before disking to reduce the risk of CTV in neighboring tomato fields.
- Personnel will continue to monitor fallow fields and treatment applications will be conducted as needed. Russian thistle has begun to develop along roadsides and within fallow fields and BLH have been observed on the Russian thistle.

- On April 14, 2014 Beet Curly Top Virus Control Program (BCTVCP) staff met with a representative from Brandt Consolidated Inc. They set up a few trial plots to test the efficacy of organic pesticides on the beet leafhopper. Results indicated that while there were no significant differences in post-application counts, all insecticide treatments had numerically lowered nymph numbers than the untreated. TriTek was the only product that numerically lowered adult numbers relative to the untreated, and had the lowest total BLH counts. (All areas of the test trials were also included in the aerial treatment application two days later).
- The test trial provides a good base to build upon, allowing for improvements and minor adjustments to gain better results. The Program anticipates conducting another test trial before the fall treatment campaign.

## **Kern County**

- Western Kern County remains very dry and void of substantial host vegetation. Yellow panel traps along the typical hot spots are absent of BLH activity.
- Survey was conducted in the Antelope Hills and Antelope Plains in the north western portion of Kern County. Filaree and other host vegetation were drying down. Sweep counts from the distressed filaree were low, average 0-3 adult BLH per 10 sweeps.
- Russian thistle began to develop and remains scattered around fallow fields and in rangeland. Sweep counts from the thistle were 5-7 adult BLH per 10 sweeps. 3<sup>rd</sup> and 4<sup>th</sup> instar nymphs were observed.
- Personnel will continue to monitor the fallow fields and Russian thistle development. Treatment applications will be conducted as needed.

## **Kings County**

- Vegetation remained very dry and void of any significant beet leafhopper host plants. Sweep survey counts remained very low, with less than 1 adult BLH per 10 sweeps.
- Personnel will continue to monitor the fallow fields and Russian thistle development. Treatment applications will be conducted as needed.

## **Merced County**

- Vegetation and BLH population surveys were conducted near Los Banos Reservoir. Filaree and annual grasses continued to dry due to high temperatures and high winds. Counts were less than 1 adult BLH per 10 sweeps, and zero nymphs.
- Surveys were conducted off of Volta Road and South Pioneer Road. Counts were less than 1 BLH per 10 sweeps, and zero nymphs.
- Stressed filaree, mallow, and London rocket were found along the roadsides on Alverado Trail west of South Creek Road; however, sweeps produced less than 1 BLH per 10 sweeps, and zero nymphs.
- There was a good mix of roadside hosts along Henry Miller Road west of Volta Road; however, sweeps produced less than 1 BLH per 10 sweeps, and zero nymphs.
- Personnel will continue to monitor vegetation and BLH populations.