

How has this past winter's drought affected the berry crops of Santa Cruz County?

This past winter's drought has affected the berry crops of Santa Cruz County in several ways:

1- Salinity: The lack of water from rain, which contains no salt and serves berry growers in leaching away potentially harmful salts in the soil such as chlorides and nitrates during the winter months, instead allowed these to accumulate and cause harm to the newly planted strawberries and raspberries in November through January. The symptoms of an excess of salt in the soil was burning of leaf margins and a stunting of plant growth. Since they were not obtaining any leaching from rain, growers rather leached salts by regularly sprinkling fields with overhead irrigation or heavy watering through the drip system. However, what it really took was the heavy rain which occurred in late February to completely leach these salts away from the plant and roots, and since then this office has not heard of any more cases of salt toxicity.

2- Acceleration of plant growth: In many areas berry fields have begun to produce fruit earlier than usual not only because the weather was warmer this past winter, but also the absence of cloudy and rainy weather though the winter months allowed planting beds stay warmer than normal and therefore promote faster plant growth and earlier maturation. It is estimated fruit production in some areas of our county has been accelerated by two weeks.

3- Effects on Insect Development: The warmer, drier weather has apparently had an effect on local populations of light brown apple moth (LBAM), with anecdotally more being found in the berry fields as well as a couple of field closures due to USDA-CDFA regulatory actions underway several weeks earlier than they have in the past few years. This anecdotal evidence is corroborated with the logs (link provided below) of light brown apple moth activity in the Monterey Bay area by UCCE Staff Research Associate Neal Murray, which reports activity of this pest being above average this spring.

<http://cesantacruz.ucanr.edu/files/157533.pdf>

The populations of another common pest of strawberries lygus bug has also been affected by the warmer and dry weather patterns this year. Lygus bugs migrate out of areas bordering berry fields in the spring when these areas dry down, but this past winter the areas bordering the fields were quite dry though the winter until the rains of February and March. Now that these areas are finally green and growing lygus bugs would tend not to leave yet for strawberries until these border areas stop growing and dry down.

The above is an article about the effects of the warmer and dry winter of 2013-2014. For questions about this article or any others concerning strawberries or caneberries, please contact Mark Bolda at 763-8025 or mpbolda@ucanr.edu.