







PRESS RELEASE

July 17, 2024

Blister Beetle Confirmed in Plumas and Sierra Counties

The Plumas-Sierra Agricultural Department received samples of multiple bugs from Sierra Valley with concerns of blister beetle. The California Department of Food and Agriculture Plant Pest Diagnostics Center confirmed this week the samples were *Meloidae*, belonging to the blister beetle family.

"The samples were collected on plants in Sierra Valley," reports Willo Vieira, Plumas Sierra Agricultural Commissioner. "We have heard reports of the blister beetle in Modoc County this year and sent the samples to CDFA laboratory for confirmation."

The black blister beetle recently found in Sierra Valley is about ½ inch long, narrow, elongates and the covering over the wings is soft and flexible. There are other blister beetles, including gray or stripped (usually yellow or orange and black). The blister beetles are known to feed on grasshopper egg pods or



Blister beetle on field bindweed in Sierra Valley.

eggs of ground-nesting bees. They will also feed in alfalfa fields or native hay meadows/pastures that have clover or other flowering plants. When there are no blooms, the blister beetles will feed on leaves.

"The beetles are not typically problematic in California. However, they are a concern due to the secretion of a toxin called cantharidin, that can cause blisters on the skin and be lethal to livestock," states Tracy Schohr, UC Cooperative Extension Livestock and Natural Resources Advisor in Plumas, Sierra and Butte Counties. "To reduce livestock mortality, you should check hay before feeding to livestock and to reduce incidence of blister beetles in hay by cutting before peak bloom."

Beetle species vary in the range of cantharidin toxin present within them. In some cases, 30 beetles may kill an adult horse, and other beetle species, over a 1,000 are lethal. Being cautious is important, since the toxicity levels are unknown.

If beetles are present, they typically will start out on field margins, and most often will not be spread throughout the entire field. Cutting early, before bloom can help prevent their spread. Also minimize flowering weed populations in fields, as the blooms will attract the beetles. Prior to cutting, scout the field, and in areas with beetles cut around those areas and don't harvest. Harvesting with older equipment without hay conditioner may reduce crushed beetles in the hay.

"There are insecticides that are registered and may be effective for blister beetle control", states Tom Getts UC Cooperative Extension Weed Ecology and Cropping Systems Advisor for

Lassen, Modoc, Plumas and Sierra Counties. "However, given the large growth stage of the crop when the application would need to be made, and the required pre harvest intervals for the various products, there can be pros and cons to making an application. Cut the field before the beetles start to move into the field before bloom may be the most economical option."

For more information or questions contact Tom Getts with UCCE at (530) 251-2601 or Willo Vieira in the Plumas Sierra Agricultural Commissioner's office at (530) 283-6365.

Resources and Additional Reading -

- UC IPM Agriculture: Alfalfa Pest Management Guidelines: Blister Beetle
- UC Davis Veterinarians Discover Blister Beetle Toxicity in Goat
- Colorado State Extension: Blister Beetle in Forage Crops
- North Dakota Cooperative Extension Fact Sheet on Blister Beetles