

Old Cucurbit Pest Makes New Appearance In California Cantaloupes



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During the spring 2020 melon season, local pest control advisors (PCAs) in the Palo Verde Valley of far eastern California began noticing damage which appeared as tunneling on the outer rind of cantaloupes (*Cucumis melo* var. *cantalupensis*) (Fig. 1) from multiple commercial fields.



Fig. 1. Damaged cantaloupe rind.

Further investigation found the caterpillars that were causing the damage (Fig. 2).

Entomologists in the low desert with 30+ years of melon experience did not recognize the damage or the pest.

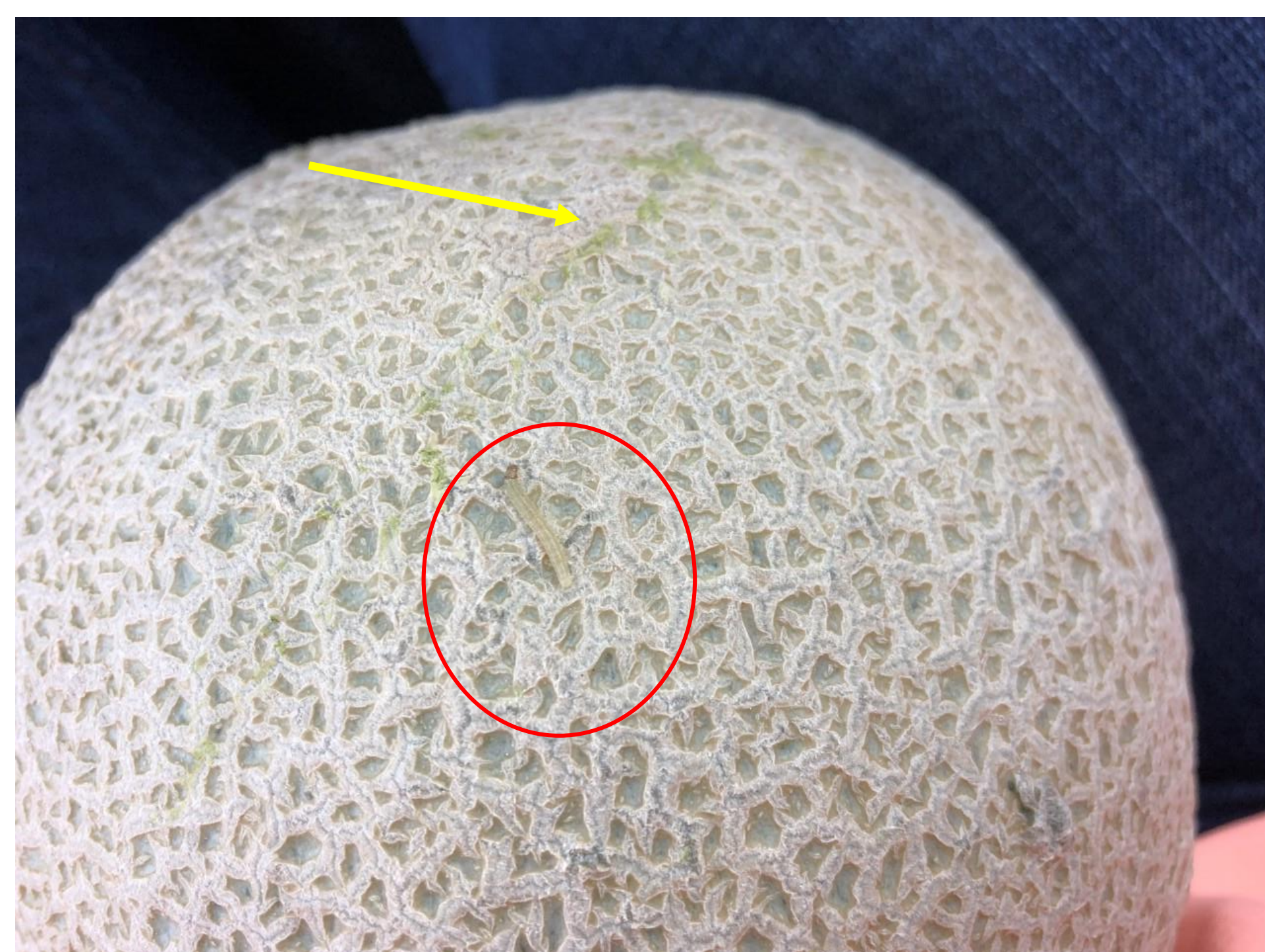


Fig. 2. Cantaloupe with tunneling (arrow) and causal caterpillar (circled).

Caterpillars under magnification were noted to have almost transparent setae, and distinctive white markings on each thoracic and abdominal segment (Fig. 3).



Fig. 3. Setae and white marks evident under magnification.

Caterpillars were provided cantaloupe leaves, which they ate and silked together (Fig. 4). Feeding on leaves was not noted in fields.



Fig. 4. Larvae fed upon and silked leaves together.

Reared adults (Fig. 5) from caterpillars were determined to be omnivorous leafroller (*Platynota stultana*) by Dr. Marc Epstein with the California Department of Food and Agriculture.

This insect was a serious pest of Arizona melons in the 1930s-1950s, prior to widespread availability of many insecticides. It was noted as not only tunneling on cantaloupes but also honeydew melons, *C. melo* L. (Inodorus Group) 'Honey Dew'.



Fig. 5. Adult omnivorous leafroller.

Low pest pressures during spring 2020 production season resulted in fewer insecticide applications targeting lepidopterous pests. Tunneling was also noted on cantaloupes in fall 2020 fields where treatments were not applied for other caterpillar pests.



Fig. 6. Tunneling often healed before cantaloupes reached maturity.