

Identification of the Cactus Moth, *Cactoblastis cactorum*

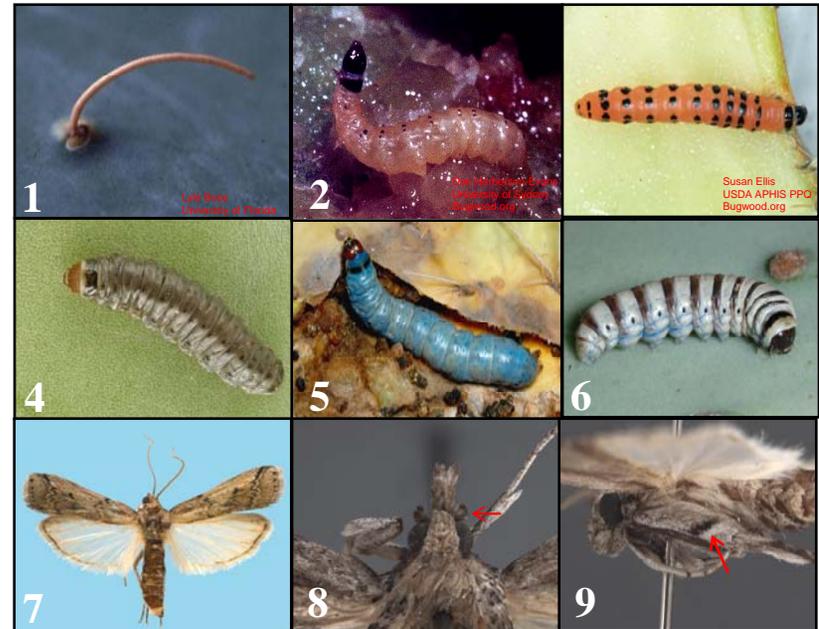
Egg Sticks. Egg sticks of the cactus moth (Fig. 1) cannot be distinguished reliably from those of native species of the cactus feeding *Melitara*.

Larvae. Early instar larvae of *Cactoblastis* (Fig. 2) lack distinctive colors and should be examined by a specialist for identification or held in rearing containers to obtain the pigmented later instars. Late instar larvae of *Cactoblastis* are red with red bands or spots (Fig. 3), which differs from all native species in the U.S. that feed on prickly pear cactus (Figs. 4-6).

Adults. Forewings of *Cactoblastis* and *Melitara* are similar in having a gray ground color crossed by a dark zigzag line near base and a double zigzag line near apex (Figs. 7). The anterior, or costal, area of the wing is lightly colored between the zigzag lines. The labial palpi of *Cactoblastis* are long and extend forward beyond the head in females and are shorter and curved upward in males. The maxillary palpi are large and fan-shaped and are visible at the sides of the labial palpi (Fig. 8), a character distinguishing *Cactoblastis* from *Melitara* and other species commonly found in pheromone traps. The antennae of both sexes are simple, without any lateral pectinate projections, whereas the antennae are pectinate in both sexes of *Melitara* species. The middle leg has an oblique black stripe on the tibia in *Cactoblastis* and *Melitara* (Fig. 9), but is lacking in many non-target species in pheromone traps.

Identification of *Cactoblastis* in Pheromone Traps. An identification key for screening pheromone traps is provided on the opposite page. Many non-target species in traps are small phycitine moths that have forewing lengths less than 3/8 inch long. The most common non-target species of similar size is *Spodoptera exigua* is the most common non-target species that is similar in size to *Cactoblastis*. *Spodoptera exigua* differs in having a yellow spot near the middle of the forewing and small spines on the tarsi of the hind leg. Also, *Spodoptera* lacks the fan-shaped maxillary palpi and the black band on the tibia of the middle leg.

Other information on the cactus moth can be found at the websites http://www.aphis.usda.gov/plant_health/plant_pest_info/cactoblastis/ and <http://www.gri.msstate.edu/research/cmdmn/>.



1. Egg Stick of *Cactoblastis cactorum*
2. Early instar of *Cactoblastis cactorum*
3. Late instars of *Cactoblastis cactorum*
4. Larva of *Melitara prodenialis*
5. Larva of *Melitara* sp. (Arizona)
6. Larva of *Melitara* sp. (Texas)
7. *Cactoblastis cactorum* adult
8. Maxillary palpus of *Cactoblastis cactorum* (arrow)
9. Stripe (arrow) on tibia of middle leg of *Cactoblastis cactorum*

Acknowledgements

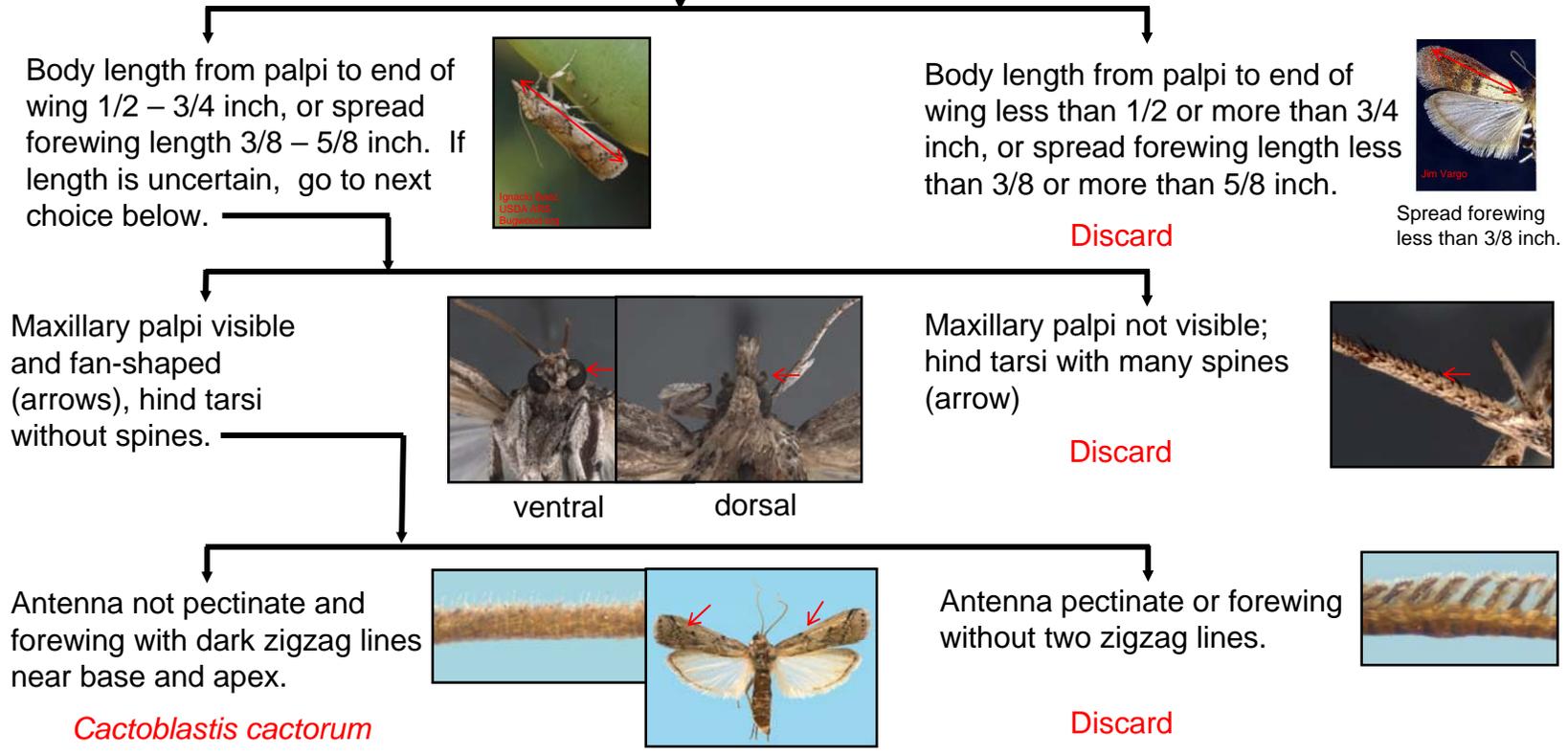
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Identification Key for Screening Pheromone Traps for *Cactoblastis cactorum*

Start Here (magnifier required)

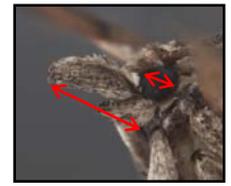


Other Key Characters for Discarding Non-target Species

Forewing with yellow spot (*Spodoptera eridania*)



Length of labial palpi more than 2x width of compound eye (many Pyraloidea)



Middle leg without oblique black stripe (*Cactoblastis* with stripe shown here)

