

Cactoblastis cactorum

Cactus Moth



The cactus moth, *Cactoblastis cactorum*, is a non-native pest of prickly pear cacti (*Opuntia* spp.). Originally from Argentina, this pest threatens the growth of native, endangered, and ornamental cacti in many coastal areas of Florida. Of great concern is the potential for *C. cactorum* to spread into *Opuntia*-rich areas of the western United States and Mexico.

There are four developmental stages of this moth: eggs, larvae (caterpillars), pupae, and adults. The female moth lays its eggs on cactus in a chain. The eggs are stacked pancake-like to form an eggstick (Fig. 1).



Fig. 1. Eggstick

The eggstick often resembles a cactus spine (Fig. 2).

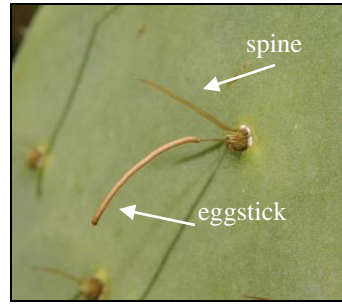


Fig. 2. Eggstick and Cactus Spine

Eggs require 3-5 weeks to develop. Eggs in a single eggstick hatch at about the same time. The small larvae burrow into the cactus pad and fed gregariously inside the pad (Fig. 3).



Fig. 3. Initial Penetration of Larvae into Cactus Pad

As larvae feed inside the pad (Fig. 4) they push out frass and mucilage and a noticeable “ooze” forms on the pad and ground (Fig. 5).



Fig. 4. Larvae Inside Pad

Fig. 5. “Ooze”

Later in larval development the cactus pad may become yellow, transparent (Fig. 6), and hollow (Fig. 7).



Fig. 6. Transparent Pad

Fig. 7. Hollow Pad

Larvae of the cactus moth are orange to red with black spots that form bands (Fig. 8).



Fig. 8. Cactus Moth Larva

Larvae leave the plant and pupate between cactus pads and in leaf litter. The pupal cocoons (Fig. 9) are difficult to find.



Fig. 9. Cactus Moth Cocoon

Adults are active immediately before dawn and are rarely seen. Typically, female moths are larger than males (Fig. 10).

(over)
→

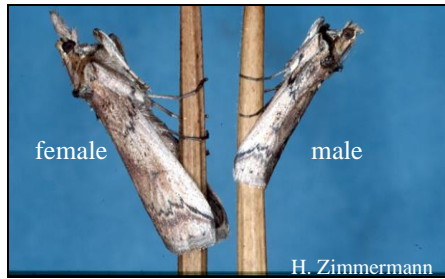


Fig. 10. Adult Cactus Moth

Damage from this pest can be devastating and entire cactus stands can be destroyed (Fig. 11 and 12).



Fig. 11. Before Infestation



Fig. 12. After Infestation

The cactus moth attacks all *Opuntia* spp. found in Florida. Examples include: *Opuntia humifusa* (Fig.13), *Opuntia pusilla* (Fig. 14), *Opuntia ficus-indica* (Fig. 15), and *Opuntia stricta* (Fig. 16).



Fig. 13. *O. humifusa*

Fig. 14. *O. pusilla*



Fig. 15. *O. ficus-indica*

Fig. 16. *O. stricta*

The current distribution of this species in the United States includes much of the coastal areas of Florida and up the Atlantic coastline to Charleston, SC (Fig. 17).

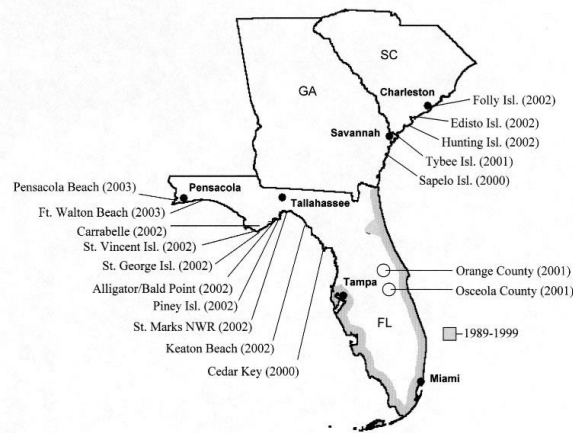


Fig. 17. Distribution of *Cactoblastis cactorum* in the United States

A native cactus moth is common in Florida cactus pads. The native cactus moth is far less devastating to these cacti than its non-native counterpart. Larvae of the native cactus moth, *Melitara prodenialis*, are solid blue to purple (Fig. 18).



Fig. 18. Native Cactus Moth

Larvae of the native caterpillar are easily distinguished from non-native larvae by their differences in color (compare Fig. 18 and 19).



Fig. 19. Non-native Cactus Moth

**For additional information please contact
USDA-ARS-CMAVE:**

Dr. Stephen D. Hight
Phone: 850-219-5754
Email: hight@nettally.com

Nathan J. Herrick
Phone: 850-219-5753
Email: bugs333@juno.com