



CAES

The Connecticut Agricultural Experiment Station

Putting Science to Work for Society since 1875

Founded in 1875

Putting science to work for society

*Ms. Rose T. Hiskes
Valley Laboratory
The Connecticut Agricultural Experiment Station
153 Cook Hill Road, P. O. Box 248
Windsor, CT 06095*

Phone: (860) 683-4977

Fax: (860) 683-4987

Email: Rose.Hiskes@ct.gov

Website: www.ct.gov/caes

Brazilian Skipper/Larger Canna Leafroller, *Calpododes ethlius* (Lepidoptera: HesperIIDae)

A gray caterpillar was brought to the CAES Information Office in Windsor on August, 28, 2018. A planting of canna lilies at a community garden in Granby, CT was getting decimated by the feeding of these insects. Using Dave Wagner's Caterpillars of Eastern North America and canna as a host, it was identified as the Brazilian skipper. Dave Wagner confirmed this and after inquiring of other lepidopterists in the state, found that this skipper has been seen twice in Connecticut as an adult. These were classified as vagrants found outside their normal range. It remains to be seen over time if the species overwinters and breeds in the state.

DESCRIPTION

The 2" long, glassine mature caterpillar (Figure 1) has a 'neck' common to the skipper group. The reddish tan, angular head has 2 black eye spots low on each side and a black triangle in the front middle of the head. The body is transparent with the white strands of the trachea visible. The intestinal tract is visible, taking on the greenish color of the leaves eaten, which then darkens as it is processed further along in the system. There are five pairs of prolegs with a circle of crochets on the bottom of each.

Pupae shorten, become whitish and develop the proboscis or mouthparts outside the body (Figure 2).

Adults are a dark chocolate brown butterfly with a hairy body, clubbed antennae and a 2.25" wingspan (Figure 3). All four wings have some transparent to whitish spots.

Small 1.25mm diameter eggs are pale green when first laid and mature to a pink color before hatching.



Figure 1. Larva, Larger Canna Leafroller, *Calpododes ethlius*. © CAES

LIFE CYCLE AND HISTORY

As the common name of the adult suggests, this insect most likely does not overwinter in Connecticut. Massachusetts Audubon records a September sighting in Northampton in 2003, calling it a vagrant. The New Jersey Butterfly Club

documented an adult in Cape May on May 20 of this year. It was classified as an immigrant, saying the species does not overwinter in New Jersey. North Carolina calls some sightings migrants but also reports breeding populations.

How does northern Connecticut get a mature larva on August 28? The citizen reports that he keeps bulbs over from year to year. Could a nearby garden center have gotten a potted plant from a southern producer that had eggs laid on it?

The life cycle and history in Connecticut are completely unknown. In the south, adults can be seen all months of the year. They are strong fliers and take nectar from many different plants.

Eggs are laid singly on the upper or lower leaf surfaces of cannas. In Florida they hatch in four to five days.



Figure 2. Pupae, Brazilian Skipper or Larger Canna Leafroller, *Calpododes ethlius*.

Photo by Kim King, University of Western Ontario.

Larvae feed at night. They create a shelter to hide in by eating two narrow strips in from a leaf edge and attaching silken strands between this flap and the main part of the leaf. Once exposed to air the silk either dries and/or contracts pulling the leaf flap down to the main leaf. Two of these silken connectors can be seen in the lower portion of Figure 1. Frass is forcefully ejected from the shelter. Larvae move on to another leaf when needed and can decimate canna plantings when populations are high (Figure 4).



Figure 3. Adult, Brazilian skipper, *Calpododes ethlius*.
© Lois Stacey, 2005

MANAGEMENT

A few different management options can be tried. For the homeowner with a few plants nearby, handpicking of leaves with eggs or small caterpillars should be effective.



Figure 4. Damage on Canna lily from larvae of Larger Canna Leafroller, *Calpododes ethlius*.

© CAES

Once the caterpillar is in the shelter it is hard to use contact insecticides. If larvae are still around an inch in length, products such as *Bacillus thurengiensis* 'kurstaki' and spinosad can be sprayed on nearby foliage and when eaten the stomach poisons will do the job.

Research in Florida has shown that red leaved varieties have more eggs laid on them. Also those plants with red, yellow and orange flowers are eaten more than those with white flowers, regardless of foliage color.

Biocontrol occurs in the tropics. It remains to be seen if any parasites or predators attack the caterpillars here in Connecticut.

REFERENCES

Gillett-Kaufman, J. 2018. Editor, Featured Creatures, Larger canna leafroller. University of Florida.