

# Mexican Bromeliad Weevil Report

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The production of *Lixadmontia franki* pupae improved significantly after the down period of the previous six months. Average weekly production of pupae was 162, with a maximum of 345. In April, 742 pupae were produced, in May 737 pupae, and in March 622 pupae. The trimestral total was 2,101, an increase of 48% over the previous trimester.

Field releases of *L. franki* were made on four dates at four sites. Field release data for the reporting period is:

Loxahatchee NWR	14 April	41 ??	39 ??
Big Cypress NP	6 May	52 ??	33 ??
Enchanted Forest Sanctuary	27 May	55 ??	42 ??
Collier-Seminole SP	17 June	48 ??	33 ??
TOTAL		196 ??	147 ??

No recoveries of the parasitic fly from any of the release sites have been made.

### LABORATORY RESEARCH:

*Lixadmontia franki* eggs develop internally and contain neonate maggots when the female is ready to deposit them. However, it is unknown whether the maggots are deposited still enclosed in the egg or if the maggots hatch internally and exit without the egg. Research has begun to make this determination. Female flies were marked with non-toxic paint while mating. At 10, 12, 14 and 16 days after mating, the females were dissected and the reproductive tract revealed. The number of eggs and neonate maggots was counted and the maggots were checked for the presence or absence of a chorion (eggshell). Only 6 females were dissected, 2 each for days 10 and 14 and 1 each for days 12 and 16. All examined maggots were enclosed by a chorion. One female, though witnessed mating, had no reproductive development. For the remaining females, the average number of eggs was 65 and maggots 38. Further research is pending.

### PRESENTATIONS:

- Treasure Coast Bromeliad Society, Vero Beach, May 11 (R. Cave)
- Florida Exotic Pest Plant Council's 24<sup>th</sup> Annual Symposium, Delray Beach, 28 May 2009 (T. M. Cooper)

### PUBLICATIONS

Frank, J.H., Lounibos. L.P. 2009 Insects and allies associated with bromeliads: a review. *Terrestrial Arthropod Reviews* 1 (2008): 125-153.