

Mexican Bromeliad Weevil Report

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The operations for producing pupae of *Lixadmontia franki* in Honduras were shut down in early May for three reasons: 1) shipments of pupae during the hot months of June to September run the risk of becoming overheated during transit and killing the pupae, 2) the Ft. Pierce colony is doing well and is self-sustainable, and 3) the funding cycle has reached the end.

The Ft. Pierce colony is doing well. Average weekly production of pupae during the reporting period was 125, with a maximum of 249. In April, 469 pupae were produced, in May 635, and in June 391; 3-month total was 1,495. The lower production in June was due to an aging and smaller than normal breeding population as a result of most emerging flies being used for field releases. However, the population is now invigorated with many new, young flies. To date, 2,125 adult *L. franki* (1,105 females, 1,020 males) have been released in the field.

April 2008. Sixty-nine flies (33 females, 36 males) were released at Lake Rogers State Park on April 3. At Loxahatchee National Wildlife Refuge, 79 flies (36 females, 43 males) were released on April 11. In Enchanted Forest on April 28, 101 adults (53 females, 48 males) were released.

May 2008. On May 12, 73 flies (41 females, 32 males) were released in Big Cypress National Preserve.

June 2008. Ninety-four flies (48 females, 46 males) were released at Lake Rogers State Park on June 4. On June 13, 54 flies (28 females, 26 males) were released at Fakahatchee Strand State Park, the first release at this site. In Enchanted Forest, 100 flies (52 females, 48 males) were released on June 23. Ron Cave gave a talk on the weevil biological control program to the Boca Raton Bromeliad Society on June 19.

The method for evaluating establishment of flies at four release sites continues with weevil-infested sentinel pineapples tops left in the field for 2 weeks. No recoveries of flies were made during the reporting period.

Howard Frank and R. Cave were awarded a 2-year grant for \$46,762 from the Tropical Subtropical Agriculture Research Special Grant of the USDA-CSREES program. The funds will be used to pay Teresa Cooper's stipend and cover costs for two exploratory trips to Guatemala to search for new natural enemies of bromeliad-eating weevils.

David Pick, a high school student working in the Ft. Pierce laboratory, presented his research project "EVALUATION OF ARTIFICIAL DIETS FOR REARING METAMASIVUS CALLIZONA (COLEOPTERA: DRYOPHTHORIDAE)" at the Florida State Science and Engineering Fair in April and placed 3rd in his category (Zoology). He also displayed his project in May at the International Science and Engineering Fair in Atlanta, GA.