



CALIFORNIA DEPARTMENT OF
FOOD & AGRICULTURE

Karen Ross, Secretary

DATE: July 14, 2021

TO: County Agricultural Commissioners

FROM: Pest Detection/Emergency Projects

SUBJECT: **Pest Detection Advisory No. PD08-2021**
Black Fig Fly (BFF), *Silba adipata*

Background

The black fig fly, *Silba adipata*, a fig pest common in the Mediterranean and Middle East regions, has been detected in Los Angeles, Orange, Santa Barbara, and Ventura counties. Adult flies are 3.5-4.5 mm in length and feed primarily on exudates from figs or fig-tree sap exuded from an injured plant.

The only known host for this species is edible fig (*Ficus carica*). There are reportedly 4-6 generations per year. Since *Silba adipata* can cause major fruit drop, there could be a major economic impact to California's fig industry. The most effective known attractants are hexanol and ammonium sulfate solution, which have been tested elsewhere in McPhail traps. Fig sap is also reported to be attractive.

Damage occurs after the adult female lays eggs in the fruit, which hatch into larvae that tunnel through the flesh of the fruit making it unfit for consumption. Infested figs may change color and will often prematurely drop from the tree before ripening. Dropped figs may have larval emergence holes (approximately 1 mm in diameter – please see Figure 1 below for an emergence hole from when larvae leave the fruit to pupate) and larvae may be present inside the fruit (please see Figure 2 below for larvae feeding damage). The presence of larvae in dropped fruit that is still in relatively good condition is an indication that the fruit drop is a result of an infestation and any larvae found should be submitted to the Plant Pest Diagnostics Center as potential black fig fly. To help with the early detection of the black fig fly, please find below some photos to aid with identifying suspects.

Los Angeles County – Los Angeles and Santa Monica

- On June 29, one male, one female, and four BFF larvae were detected by visual survey on Westhaven Street in Los Angeles.



CDFA inspectors Tina Galindo and Margarete Krick and Los Angeles County trapper Matthew Meares are credited with detecting the BFFs.

- On July 2, six BFF larvae were detected by visual survey at one location on 20th Street in Santa Monica.

CDFA inspector Margarete Krick and Los Angeles County inspector Matthew Meares are credited with collecting the BFF larvae.

- On July 8, eight BFF larvae were detected by visual survey at one location on Oakwood Avenue in Sierra Madre.

CDFA inspector Margarete Krick and Los Angeles County inspector Daniel Munoz are credited with collecting the BFF larvae.

CDFA Senior Insect Biosystematist Dr. Martin Hauser and Senior Environmental Scientist (Supervisor) Dr. Shaun Winterton made the determinations, which were verified using DNA analysis by CDFA Senior Insect Biosystematist Dr. Peter Kerr.

Orange County- Fullerton and Santa Ana

- On June 29, six BFF larvae were detected by visual survey at one location on Deerpark Drive in Fullerton.

CDFA inspectors Abraham Lopez-Zuniga, Maribel del Toro Pacheco, and Kimberly Rodriguez are credited with collecting the larvae.

- On June 29, 10 BFF larvae were detected by visual survey at one location on North Placentia Avenue in Fullerton.

CDFA inspectors Abraham Lopez-Zuniga, Maribel del Toro Pacheco, and Kimberly Rodriguez are credited with collecting the larvae.

- On June 30, 21 BFF larvae were detected by visual survey at one location on West Buffalo Avenue in Santa Ana.

CDFA inspectors Abraham Lopez-Zuniga, Maribel del Toro Pacheco, and Kimberly Rodriguez are credited with collecting the larvae.

CDFA Senior Insect Biosystematist Dr. Martin Hauser made the determination, which was verified using DNA analysis by CDFA Senior Insect Biosystematist Peter Kerr.

Santa Barbara County- Goleta, Isla Vista, and Santa Barbara

- On June 24, one BFF larva was detected by visual survey at one location on Robin Hill Road in Santa Barbara.

CDFA trapper Kerri Bermudez is credited with collecting the larva.

- On June 29, one male BFF was detected by visual survey on Robin Hill Road in Santa Barbara.

CDFA trapper Amanda Veatch is credited with detecting the BFF.

- On June 30, five larvae were detected by visual survey at one location on Calle Noguera in Santa Barbara.
- On June 30, seven larvae were detected by visual survey at one location on Atascadero Drive in Santa Barbara.
- On June 30, three larvae were detected by visual survey at one location on Ribera Drive in Santa Barbara.
- On June 30, three larvae were detected by visual survey at one location on Padaro Lane in Carpinteria.

CDFA trappers Kerri Bermudez, Amanda Veatch, and Jeanne Mayer are credited with collecting the larvae.

- On June 29, four BFF larvae were detected by visual survey at one location on Arboledo Road in Santa Barbara.

CDFA trapper Amanda Veatch is credited with collecting the larvae.

- On June 29, one BFF larva was detected by visual survey at one location on Camino del Sur in Isla Vista.

CDFA trapper Amanda Veatch is credited with collecting the larva.

CDFA Senior Insect Biosystematists Dr. Martin Hauser and Dr. Peter Kerr made the determinations.

Ventura County- Ventura

- On July 8, one BFF larva was detected by visual survey at one location on Darling Road in Ventura.

Amir Atrash (Ventura County) is credited with collecting the larva.

CDFA Senior Insect Biosystematist Dr. Peter Kerr made the determination.

Reference PDRs: AM0P06255436 - AM0P06255438, CR0P06226090, HA0P06008298, HA0P06943446, HA0P06943450, LM0P50000402 - LM0P50000413

Summary – 2021 Black Fig Fly Detections			
County	Adults Detected	Date of Last Adult Detected	Larval Properties
Los Angeles	2	06/29/21	3
Orange	0	-	3
Santa Barbara	1	06/29/21	7
Ventura	0	-	1

CDFA is working with the counties to determine the extent of the infestations. Possible infestations should be reported to the pest hotline at 1-800-491-1899.

For information on the pest risk assessment and rating of black fig fly in California, please visit: <https://blogs.cdfa.ca.gov/Section3162/wp-content/uploads/2021/07/Silba-adipata.pdf>

If you have any questions regarding this advisory, please contact Sandeep Sahota by email at sandeep.sahota@cdfa.ca.gov.

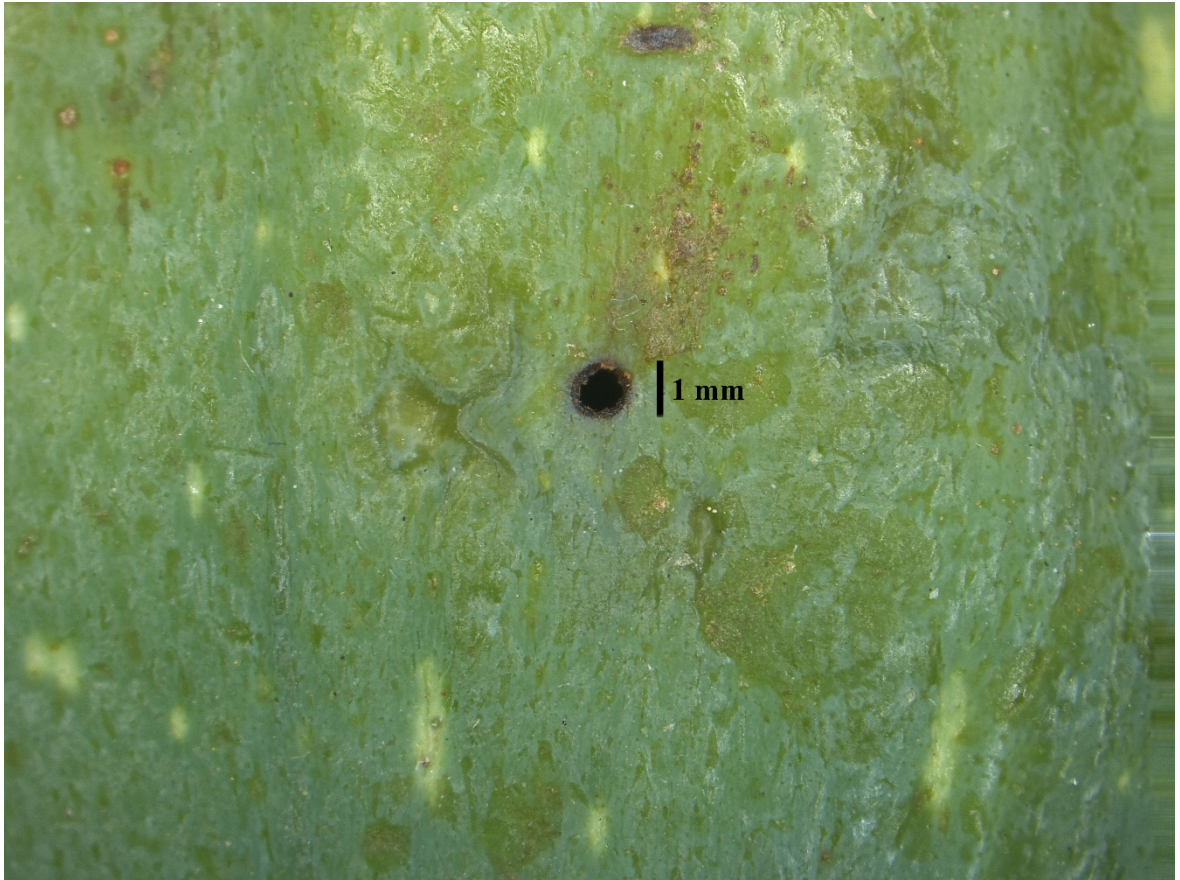


Figure 1 – Black fig fly emergence hole



Figure 2 – Black fig fly larva feeding damage

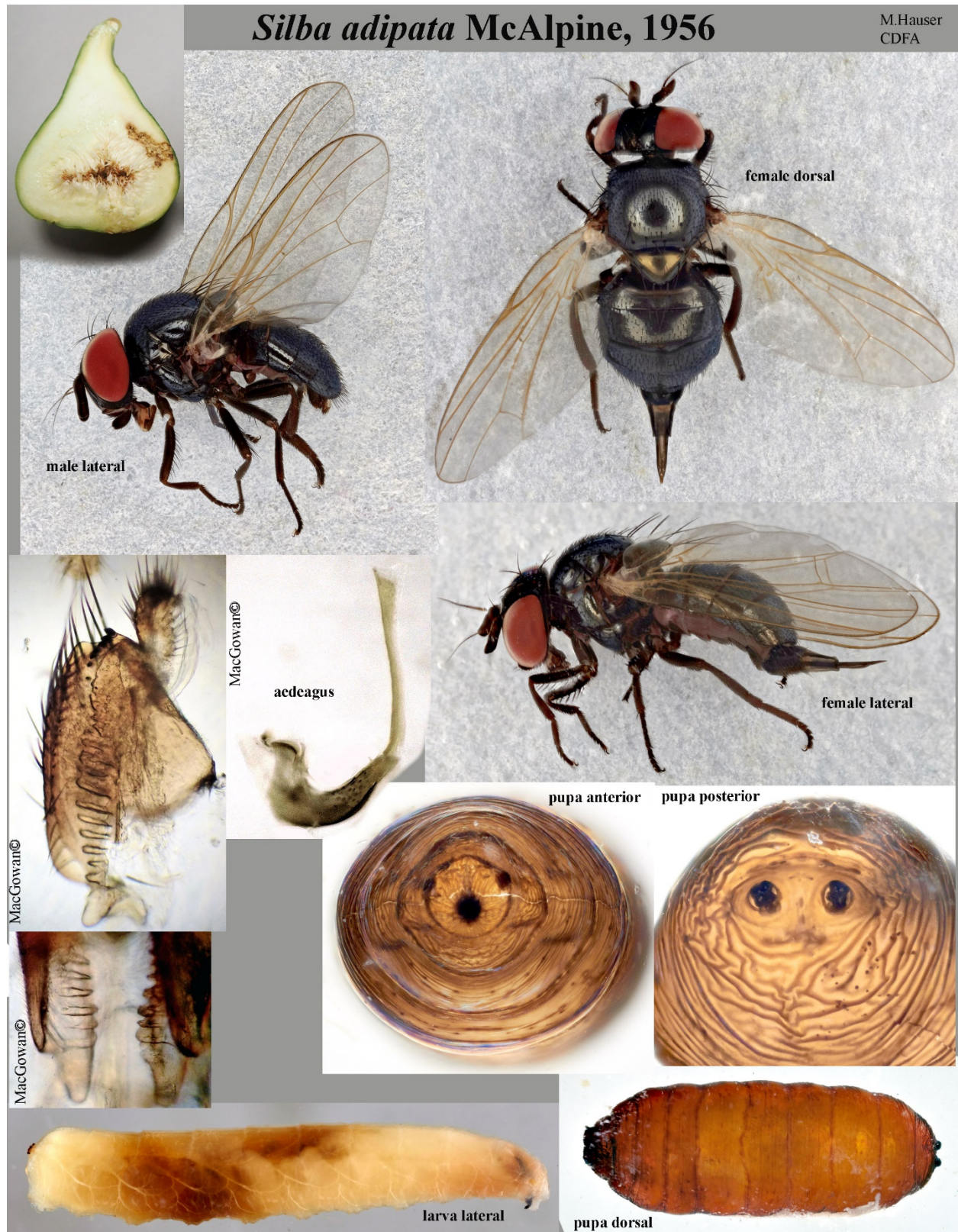


Figure 3 – Identifying black fig fly