



Insect Pests – Baluchistan Melon Fly

What is the Baluchistan Melon Fly?

The Baluchistan Melon Fly (*Myiopardalis pardalina*) is a major pest of melons and other cucurbits. It is distributed throughout the Middle East and western Asia from Israel to India. Eggs of the Baluchistan melon fly (BMF) are able to survive harsh winter conditions. It has a 30 day life cycle when conditions are optimal. Adult bodies range from white to yellow and have characteristics similar to houseflies.



Melon fly adults have white to yellow bodies.¹

What is the Damage Caused?

Adult flies pierce fruits, such as melons to lay eggs under the skin. Upon emerging from the egg, the long white larvae eat and destroy fruit then burrow out. Because the life cycle is short, it is common to have 3-4 generations per season. Crop loss can be as high as 80%.

How to Manage BMF?

There are no known natural enemies to the Baluchistan Melon fly. Plowing, unless deeper than 50 cm, does not adequately control the pest.

• Cultural Management:

- The egg-laying females target fresh, young cucurbit fruits. Covering or bagging these immature fruits is a very effective way to provide protection. In one study, 40,000 melons were produced protected by bags in the same area where only 2,500 exposed fruits were produced.
- Look for the presence of fly exit holes on individual fruit, and bury infested fruits to 75 cm or more. Apply insecticides over burial.

• Pesticide Treatment Options:

- Application of Deltamethrin (DeltaGard T & O*) at 20-30 ml mixed with 3 kg of sugar and 100 L water for every 100 m² of area. The sugar tends to keep flies on pesticide treated areas longer. It is still inconclusive how effective Deltamethrin is for BMF.

For more IPM options visit www.ipm.ucdavis.edu

*Commercial name. The authors make no endorsement towards commercial brands mentioned in this document nor are the absence of other brand names an implication of our disapproval.

Prepared by Frank Zalom, Emily Symmes, Mark Henderson and Mark Bell, July 2009

Primary references: Statewide IPM Program, Agriculture and Natural Resources, University of California <http://www.ipm.ucdavis.edu/index.html>
Myiopardalis pardalina in Afghanistan, 2006, J. Stonehouse, SM Sadeed, A. Harvey
http://www.moscamed.org.br/pdf/Cap_01.pdf

Photo Credit: ¹Russel IPM Fine Chemicals

For more information visit: International Programs: <http://ip.ucdavis.edu>

Copyright © UC Regents Davis campus, 2011. All Rights Reserved.