

## “Predator-based off-season biocontrol tool for *Ceratitis capitata* (Medfly)”

### Short description

This novel tool to control the Mediterranean fruit fly (medfly), *Ceratitis capitata*, developed by the FF-IPM project, consists of the establishment of a ground cover, either a sown green cover of the grass *Festuca arundinacea* (Poaceae) (FA), or a mulch of straw (MS), which result in enhanced populations of soil-dwelling predators of mature larvae, pupae and emerging adults of *C. capitata* compared to bare soil (BS).

The FF-IPM project demonstrated that BS, which is a widespread ground cover management technique in the Mediterranean area, is the least favorable for the conservation biological control of *C. capitata*. A 29.2% increased adult emergence compared to the other two covers was observed. Therefore, the implementation of FA or MS should be considered as a tool to increase the impact of ground-dwelling predators on OFF-Season populations of *C. capitata*. Although that increase cannot be directly translated into a particular increase in damage in a particular orchard and time, overall, the use of FA or MS should contribute to reduced damage caused by *C. capitata*.