

Entomopathogenic fungi

National Reference Center for Biological Control

Entomopathogenic fungi is an alternate method of biological control, and technology has been developed for the use and management of *Metarhizium acridum* against the Central American locust (*Schistocerca piceifrons*) pest, of *Isaria fumosoreosea* to control the brown citrus aphid (*Toxoptera citricida*) and the Asian citrus psyllid *Diaphorina citri*, and the *Isaria javanica* and *Metarhizium anisopliae* species (under monitoring). Technology has also been developed to use variants of entomopathogenic fungi species against the spotted wing fly (*Drosophila suzukii*).

The foregoing is the product of a specialized area in the National Center of Biological Control tasked with creating, adopting, and validating technology for the massive breeding and use and management of pathogenic fungi as biological control agents for regulated agricultural pests, through the following strategies:

- Search for native entomopathogenic fungi.
- Selection of isolated samples and variants of entomopathogenic fungi classified by virulence and productivity.
- Massive production technology.
- Preparation.
- Biological safety for beneficial insects associated to the pest, and mammals.
- Assessment of application equipment.
- Assessment of the impact on the populations of the target pest.

The development of these lines of work has led to the creation of technological packages for the implementation of microbial control programs.