

# Swirski Combo

## *Amblyseius swirskii* + BioArtFeed

BioSwirski is an efficient predator mite that feeds on a variety of pests, plant pollen and flower nectar. Swirski Combo combines the predatory mite *Amblyseius swirskii* with BioArtFeed (premium deactivated *Artemia* cysts). This highly nutritious feed promotes and improves the establishment of BioSwirski in crops, at low pest densities or if flowering is delayed.

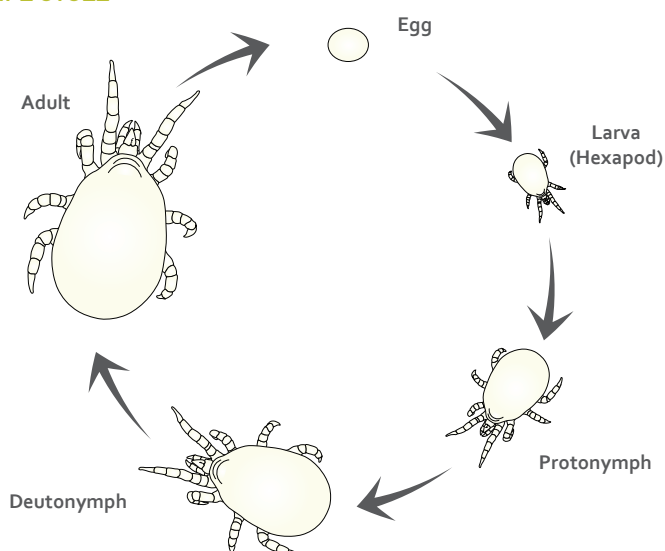
### TARGET PESTS

Young stages of sweet potato whitefly, greenhouse whitefly, broad mites, spider mites and young stages of the western flower thrips.

### DESCRIPTION

The mites are pale yellow to pale tan while their eggs are white and oval shaped. The mites change color to light orange when feeding on *Artemia*.

### LIFE CYCLE



This beneficial mite is active and reproductive in a wide range of climatic conditions. It does not hibernate and functions effectively even during short days if temperatures allow it. The developmental rate of the *A. swirskii* mite depends on temperature, relative humidity and type of available prey. When prey is not yet available it can thrive on BioArtFeed.

*Artemia* is a genus of aquatic crustaceans, also known as brine shrimp. *Artemia* eggs, also known as cysts, are pale brown to dark brown in color.

BioArtFeed is a sustainable, natural, highly nutritious source of protein and fat for a wide range of beneficial predators.

### CROPS

Greenhouse and outdoor vegetables, flower, ornamentals and fruit trees.

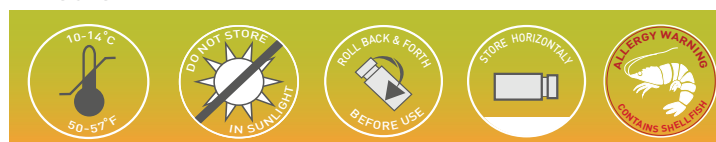
### THE STANDING ARMY APPROACH

One of the challenges of biologically based IPM is the establishment of thrips and other pests prior to the establishment of beneficials. This may cause plant damage, increase the time and expense required for pest control, require chemical treatments as an interim solution, delay beneficial release, and increase the required application rate of beneficial insects.

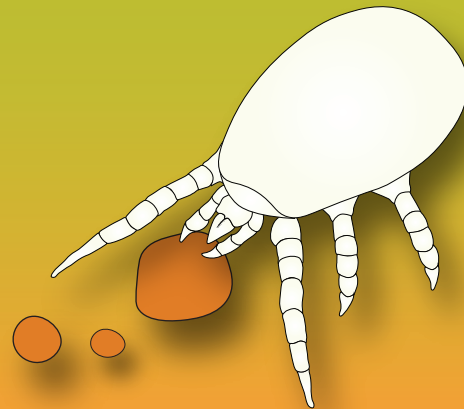
By starting biological control early on and providing good quality nutrition, it is possible to establish a "standing army" of predators on the crop, thus providing earlier and overall better pest control.

### ADVANTAGES

- BioSwirski and the feed are applied simultaneously in the same area, achieving precise application which allows the predators to start feeding and reproducing immediately.
- Exact feed dosage sustains the predators for a period of approximately 2 weeks.
- Improved and simplified field application prevents waste.
- Can be applied with drone.
- Saves time.
- Saves manpower.
- The BioArtFeed included in Swirski Combo can also provide alternative feed for BioOrius which can coexist in the same habitat.



# Swirski Combo



## THE PRODUCT



- 1l cylinder contains 50K mobile stages (adults and juveniles) of BioSwirski premixed with BioArt-Feed.
- 5l bag contains 200K or 250K mobile stages (adults and juveniles) of BioSwirski premixed with BioArtFeed.



- The shaker includes a dosing cap that facilitates application.

- The product is mixed with a bran-based media.

## APPLICATION & HANDLING

The application is simple and safe:

- The product should be transported to the crop site in the insulated shipping boxes.
- Before applying, gently rotate the container to evenly mix the mites, BioArtFeed and bran-based media.
- Turn the dosing cap to the desired opening and gently tap the container over the plant foliage, while walking between the rows of the crops.
- DO NOT EXPOSE TO DIRECT SUNLIGHT

## STORAGE

- If the mites cannot be immediately released, the product must be stored in its original packaging, in a cool dark place, at temperatures between 10°C-14°C (50°F -57°F).
- Store horizontally.
- Swirski Combo can be stored for up to 2 days in recommended conditions.

## DOSAGE

- Swirski Combo can be introduced preventively, before the appearance of pests, to create a "standing army" because the BioArtFeed provided within the cylinder will allow it to feed and reproduce regardless of the pollen or pest presence the crop.
- The amount and frequency of releases is determined by the degree of infestation, weather conditions and damage inflicted on the crop.
- Please consult your BioBee technical field representative, for best suited strategy in your crop.

## MONITORING

Scouting and monitoring is crucial.



## GENERAL COMMENTS

Before combining BioSwirski Combo with any chemical pesticide in the crop, please consult your BioBee Technical Sales Representative.

## DISCLAIMER

The success of biological pest control is affected by the crops initial pest population (upon application of the product), weather conditions and chemical residue present in the crop, among other possible aggravating factors.