

Persimilis Predatory Mites

Persimilis

Persimilis predatory mites (*Phytoseiulus persimilis*) have been commercially reared and used in Integrated Pest Management programs for more than 15 years, in a wide range of crops.

Persimilis are a small, fast moving predatory mite that feed voraciously on two spotted mites. Two spotted mites are sometimes referred to as red spider mites as they over winter as a lighter red/orange colour.

The adult Persimilis is pear shaped, orange to red in colour with long front legs. Younger stages are clear in colour, and can be difficult to distinguish from pest mites.

Target Pests

Persimilis is a predatory mite that is extremely effective at controlling two-spotted mites. They will also feed on some other mite species, although they are not effective against russet or rust mites.



Persimilis attacking two spotted mites

Product Description

Persimilis come in two sized orders; the 'standard' garden pack contains approximately 1000 mites, with the 'large' garden pack containing approximately 2,000 mites.

The mites are despatched as mixed age mites on bean trifoliolate leaves. The number of leaves will vary depending on the number of mites assessed to be on each leaf, but is usually around 10 leaves per 1000 mites.

To release the mites, bean trifoliolate leaves are placed in the crop, and the mites move from these onto the surrounding plants. Packaging should be opened in the vicinity of the crop and left there for a day or so after release, as some Persimilis may remain in the container.

In IPM every bug counts!!

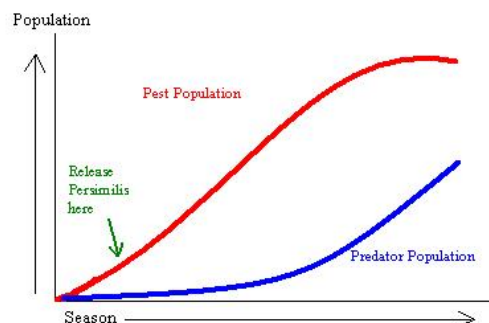
Full instructions on release and care of the Persimilis are provided with your order.



Persimilis (L) and Two Spotted Mite (R)

How It Works!

Pests generally build up rapidly at the start of each season, with predators & parasites not active until pests have reached damaging levels. This is shown in the graph below.



Control will be most effective if beneficials are released before high pest levels occur.

Multiple Releases

For some predators and parasites, a double release is sometimes recommended. However, *Persimilis* normally only require a single release, with numbers slowly building over 4 to 6 weeks.

Suitable Crops/Environments

Persimilis prefer warm, slightly humid conditions, and are therefore very good in shade houses or similar environments. However, they are also very effective in small crops, such as vegetable gardens or small ornamental plants.

For larger tree crops in hot environments, another predatory mite, *Typhlodromus*, may be more suitable.

After Release

Detailed information is not available on the toxicity of all pesticides, but it is fair to say that many will kill your *Persimilis*! Some fungicides will also cause disruption to natural enemies, and it is better to avoid products that do not specifically detail their effects on beneficials.

Products such as tomato dust often contain highly toxic insecticides like Carbaryl. Such products will kill most beneficial insects and should be avoided.

You should monitor pest levels after release to ensure the *Persimilis* are doing their job. However, the young mites are small, and difficult to distinguish from young two spotted mites, so exact identification may be difficult.

Persimilis & IPM

Integrated Pest Management (IPM) relies on a range of activities to manage pest levels. IPM does not aim to totally eliminate pests, as this is neither natural nor desirable. IPM seeks to achieve a balance between all organisms in the garden.

A balance of pests as well as beneficial insects is the sign of a healthy garden.

Releasing good bugs helps maintain this balance. Using plants that encourage beneficial insects is also recommended.

If a pesticide does need to be applied due to a high level of pest activity, then select the product with the lowest toxicity possible.

Releasing predators and parasites after such an application is important, allowing time for the pesticide to dissipate, and to help restore the natural balance.

Green lacewings are also an effective control agent for mites, as well as a range of other pests such as aphids, whitefly and thrips. Using these in conjunction with *Persimilis* if a range of pests is present may provide better results.

For further information on this or other products:

Visit www.bugcentral.com.au

Or email questions@bugcentral.com.au

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