

# Using Predatory Mites In Your Garden

You can now use predatory mites to keep damaging populations of spider mites in check. You can order Predatory mites at your nearest Dawson's store and then orders are sent out by our partner Manchil IPM Services.

Two spotted Mites (TSM) also known as red spider mites are amongst the most troublesome pests affecting ornamental plants.

TSM are tiny creatures which damage plants by sucking the sap. Severe infestations can seriously stunt plant growth and leaves can be sucked dry to a point where partial or complete leaf drop may occur.

In Perth TSM is mainly active over the warmer months of the year. It is often first seen in late spring and is most active during summer and early-mid autumn. Mite populations build up very fast in hot, dry conditions. The best time to release Predatory Mites in your garden is in spring, this allows predators to check TSM populations as they build up with the warming weather.

First symptoms of TSM attack is usually faint, white speckling or spotting on the upper surface of plant leaves. TSM are mainly active on the underside of plant leaves. The Mite colonies can often be seen as silvery-grey-brown patches on lower leaf surface. TSM are tiny arachnids or spiders and secrete a very fine silky spider web. In severe infestations this webbing becomes readily visible and can cover much of the plant's foliage.

Predatory mites are a safe form of biological control of TSM you can use in your garden. Predatory mites feed on TSM and quietly work away helping restore the natural balance and keeping TSM populations down to non damaging levels.

Using predatory mites, allows you to control TSM populations with minimal or no chemical use.

## **Ordering Predatory Mites.**

Once ordered at Dawson's your predatory mites are express posted via Australia Post. You will normally receive your order around 2-3 business days after your order is placed. Your predatory mites are posted in plastic bottles. The bottles contain active live nymph and adult mites mixed in a vermiculite spreading agent. Each bottle contains an average of 3,000 predatory mites.

## **Releasing Predatory mites**

On receipt of your predatory mites introduce them as soon as possible\*. Allow the mites in the bottle to adjust to the ambient temperature before use. To use turn and shake the

bottle to mix the predatory mites equally with the vermiculite carrier. Remove the sticker on the screw cap and sprinkle the material over the leaves of TSM infested plants. Sprinkling over the upper leaf surface, this will allow more predators to remain on the target plants and not fall off. Sprinkle the vermiculite/mite mix at random over plants infested with TSM and release at higher rates in TSM hot spots. When necessary, predatory mites can be introduced a second time after 2-3 weeks. Predatory mites will colonize your plants and then follow TSM populations around the garden. Predatory mites are usually slightly larger than TSM and have an orange colouring. Depending on how good your eyesight is adult predatory mites will be visible to the naked eye or can easily be observed with a hand lens. It's a good idea to mark a few of your release sites so you can check for the establishment of predatory mites. Released predatory mites disperse quickly in pursuit of TSM. Predatory mites breed twice as fast as TSM, that's how they get on top and gradually keep TSM populations in check.

The best thing you can do to help predatory mites is to gently mist a water spray over TSM affected plants before releasing predatory mites and again a few days after release. Predatory mites enjoy hot humid weather, so it helps encourage them.

\*If you cannot use the predatory mites straight away, they can be stored for a short period by placing the bottle horizontally in a cool (6-8°C) and dark place.

### **Which Fungicides and Insecticides can I use if predatory mites are present?**

The whole idea of introducing predatory mites is to get away from the idea of regular chemical spraying for mite control. By introducing predatory mites, you are reinstating the natural balances in your garden between predatory and pest mites. Pesticides you spray on plants may be toxic to predatory mites, so as a general rule, stop all chemical spraying for 1-2 weeks prior to release and don't spray any chemicals following release for at least 2-3 weeks. The idea is to minimise spraying, so only do it if necessary.

From time to time other pests might require control in plants or areas of the garden where you've released predatory mites. Below is a list of some sprays you can use which have a lower impact on predatory mites. Many chemicals are hazardous to beneficial insects and predatory mites. Care must be taken in the choice of products and the timing and frequency of application. A comprehensive guide to chemical toxicity to predatory mites can be found online at [www.goodbugs.org.au/chemicals.html](http://www.goodbugs.org.au/chemicals.html)

**Pesticides which are least damaging to predatory mites** are Eco- Oil, Natrasoap (both general use against soft bodied insects) and Success (useful for caterpillar control).

**For fungal problems when using predatory mites try.**

Eco Rose safe for use for Black spot, powdery mildew control on roses and powdery mildew control on grapes.

Fungus Fighter- moderately safe for control of many fungal diseases

Mancozeb Plus moderately safe

Triforine moderately safe



Predator mites showing orange colouring (1 predator mite eats 20 two spotted mites).



Adult two-spotted spider mite (left) and predatory mite (right).