Knowing your enemy is the key to beating any insect pests, but equally important for edible plants is crop rotation. This is important for the uptake of nutrients in the soil, but more importantly rotating is also important as pests can build up an immunity to some types of insecticides.

Garden insects can be divided into two groups: chewing insects and sap-sucking insects. Chewing insects eat plant tissue, which includes leaves, stems, roots, buds, flowers and fruit. They are controlled with a contact insecticide. Sap-sucking insects suck the sap from stems, young shoots, flower buds and leaves. To control these pests either a contact insecticide or a systemic insecticide can be used. If you grow edible crops you should use only contact insecticides. To help you identify which spray to use, you will need to identify the insect. Once you know what insect your plant has, we can point you to the right options.

What's the difference between systemic and contact insecticides?

Systemic insecticides are absorbed by the plant's leaves and travels through the sap of the plant; therefore, when an insect eats or sucks on the plant, the toxin is in the plant and kills the insect.

Contact insecticides work by contact only; therefore, it is essential to get full coverage including spraying the underside of the leaves. Generally a systemic spray is reapplied every 14–21 days and contact sprays should be reapplied every 3-10 days depending on the insect issue.

Save the Bees! Where possible always use sprays that are safe for bees. Systemic sprays are not safe for bees because they stay in the plant for so long; therefore, if your plants are in flower avoid spraying with a systemic insecticide. Apply insecticides in late evening, night or early morning while bees are not foraging. Bees generally forage between an hour after sunrise right until an hour before sunset, and the sprays need to be dry before bees arrive, so allow some drying time (generally one hour).

Aphids (Sap)

Aphids are small insects that cluster on the underside of the new or soft growth on the plant. They come in an array of colours but are generally green or black. They have a three-day life cycle so repetitive spraying is important to control and eliminate this virus-carrying bug. We suggest using Egmont's Beat a Bug or Yates Mavrik regularly to control these aggressive pests.

Caterpillars (Chew)

There are many types of caterpillars, most of which you can see clearly on plants. Plants prone to caterpillar damage are brassicas (cabbages, cauliflowers and broccoli), flaxes, kowhai, photinia, beans, silverbeet, passionfruit and tamarillo. Yates Success Ultra is a very safe and effective spray for the control of caterpillars. Derris Dust is very effective when used on brassicas and is safe to consume. Also ideal is Biogrow's Diatomaceous Earth, an amazing new biogro-certified product. A great way to deterr catepillars is the new Grazers White Butterfly & Caterpillars Deterrent Spray.

Leaf Miners (Chew)

These insects live in the leaf tissue; as they eat the tissue they leave trails. Because the leaf miner is on the inside of the leaf it is quite hard to kill, because the insect needs to ingest the chemical. So a systemic spray is generally best. Yates Success Ultra has a translaminar effect and a short withholding period for edible crops so is an ideal choice; otherwise, Yates Conqueror Oil works with the intention of smothering the infestation.

Leafroller Caterpillars (Chew)

Leafroller caterpillars will roll the leaves inwards making it very hard to kill the insect. Plants prone to leafroller damage are callistemon (bottle brush), gum trees, manuka, tomatoes, blueberries, brambles, citrus, currants, feijoa, grapes and stone fruit. Yates Success Ultra is ideal for leafroller caterpillar, but be sure to give good coverage to help penetrate their cocoons.

Mealy Bug (Sap)

This is a hard insect to kill and you need to be persistent with spraying. The bug can be either on the plant or in the soil. If it is in the soil you will need to drench the ground as well as spray the plant. Yates Conqueror Oil is great for mealy bugs as it puts a coating on the insect and suffocates them, but good coverage is required as these evasive pests are good at hiding in every nook and cranny.

Mites (Sap)

Mites are generally found on fruit trees, roses and some vegetables. When feeding they puncture the leaves, causing the leaves to look yellow and mottled; there will also be fine webbing on the underside of the leaves. Yates Mavrik, Kiwicare Super Sulphur and Kiwicare Spectrum Plus are used for the control of mites.

Psyllids (Sap)

These are normally found on the underside of the leaves of pittosporum, tomatoes, peppers and potatoes. You can normally tell it is psyllid by the bumps on the leaf surface. The insect lives in the crevice on the underside of the bump. Yates Mavrik is the only product registered for the prevention of the psyllid and we often recommend Yates Success Ultra which kills psyllids and is safe for edibles. However, often once the psyllid is on your edible plants the damage has been done. The psyllids inject a toxin into the plant that causes a multitude of issues for your plant depending on the plant's phase of development; therefore prevention is key. Spray fortnightly to ensure your plant doesn't become infected with the pest at all. Other methods such as Neem granules in the soil have had some success. Oderings has 'crop cover', which is a very fine mesh that provides protection from all insect pests. You can also purchase hoops to drape the 'crop cover' over or create your own structure to attach the cover to and the pests will be unable to touch your precious crops.

Scale (Sap)

Next to the aphid, this is probably the most common insect in the garden. There are many different-looking scale insects but normally they are characterised by the waxy coating (back) that protects them. Spraying oil, such as Yates Conqueror Oil, is the best and safest way to get rid of scale. If the scale is present on your roses the perfect time to clear them away is during the winter with a good dose of lime sulphur; this will strip the plant of scale and at the same time rid your roses of moss, lichen and other nasties.

Thrips (Sap)

Thrips are tiny insects that are only just visible to the naked eye; they disfigure plants, foliage and flowers, and transmit viruses. Spray plants in November because you won't see the damage until February or March. Plants that are prone to infestations, and therefore require spraying at the right time are viburnums, rhododendrons, etc. There are two key ways for managing thrips. Coat your plant with a spraying oil (such as Yates Conqueror Oil), Yates Mavrik, Yates Nature's Way Insect Spray Natrasoap or Yates Nature's Way Citrus, Vegie & Ornamental Spray. Or you can use the Tree Health Band which you soak in Neem Oil and wrap around the trunk of your plant; the plant will absorb the insecticide for a month, protecting your whole plant. Reapply or remove the band after a month or it will cause more issues than it solves.

Whitefly (Sap)

These small sap-sucking insects will transmit and spread viruses. They mainly attack annuals and vegetable crops, especially tomatoes and beans, and they will fly when disturbed. Yates Mavrik is reliable insecticides used for the control of whitefly infestations.

Yates®

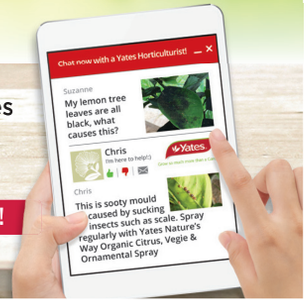
Grow so much more than a Garden®

Yates® Conqueror Spraying Oil is an organically certified mineral oil insect spray that works by coating pests with a suffocating film. Great for treating scale, mealy bug, aphids and mites on your roses, ornamentals & fruit trees. Also great as an indoor plant leaf polish.

Yates® Success® Ultra is a clever insect control spray, derived from beneficial soil bacteria. Controls a wide range of insects including codling moth on apples & pears, tomato potato psyllid on tomatoes & potatoes and caterpillars on vegetables.

For more advice on growing vegies talk to Yates on **0800 693 297**, or via **Live Chat** on **yates.co.nz**

WHERE YOU CAN SEND PICS FOR QUICK PROBLEM SOLVING!



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Insect Pests

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