



**Biological
Controls**

Partnering with nature to deliver natural solutions to plant health

Using natural predators, pathogens, parasitoids or microbial insecticides to manage pests helps to maintain forest ecosystems where chemical use might not be appropriate. At Agrigem, we partner with leading biological controls experts delivering a range of biocontrol products to help target pest species and tree diseases.

Natural enemies



Aphidend

Predatory gall midge | *Aphidoletes aphidimyza*

Use for all species and stages of aphids. Adult gall midges emerge from the pupae and deposit their eggs in the aphid colonies. After emerging from the eggs, the larvae consume the aphids entirely - only skin remains.

Pack size	1,000; 10,000 pupae
Presentation	100 ml; 500 ml bottle

Ahipar

Parasitic wasp | *Aphidius colemani*

Use for pests: cotton aphid, tobacco aphid, peach-potato aphid. Female adult parasitic wasps emerge and lay their eggs into aphids. The next generation of parasitic wasps develops inside the aphid, which converts into a leathery mummy. First mummies are noticed in the crop after 10-14 days.

Pack size	500; 1,000; 5,000 mummies
Presentation	100 ml; 500 ml bottles



Aphiscout

Parasitic wasps | *Aphidius colemani*, *Aphidius ervi*, *Aphelinus abdominalis*, *Praon volucre*, *Ephedrus cerasicola*

Effective against most commonly occurring aphids. Female adult parasitic wasps emerge and lay their eggs into aphids. The next generation of parasitic wasps develops inside the aphid, which converts into a leathery mummy. First mummies are noticed in the crop after 14 days.

Pack size	250 mummies: 20% <i>Aphidius colemani</i> , 15% <i>Aphidius ervi</i> , 15% <i>Aphelinus abdominalis</i> , 40% <i>Praon volucre</i> , 10% <i>Ephedrus cerasicola</i>
Presentation	90 ml cardboard cylinder with shaker lid



Chrysopa

Lacewing | *Chrysoperla carnea*

Use for pests: aphids, mealybugs, *Echinothrips* and eggs of *Lepidoptera* pests. Larvae of the lacewing attack their prey and suck their body fluids. Resulting shrivelled skins are difficult to find. *Chrysoperla carnea* is active mainly during the night. The larvae hide during the day.

Pack size	1,000; 10,000 larvae
Presentation	500 ml bottle; 6 litre bucket

Entomite

Predatory mite | *Stratiolaelaps scimitus* (*Hypoaspis miles*)

Use for eggs, larvae and pupae of sciarid flies, and the pupae of thrips. The predatory mites feed on larvae of sciarid flies, thrips pupae and other soil-dwelling insects. The mites appear in and on the soil and at the base of plant stems. The reduction of the infestation level occurs at a slow but steady rate.

Pack size	10,000, 50,000, 125,000 predatory mites
Presentation	0.9 litre; 3.6 litre cardboard cylinders



Entonem

Entomopathogenic nematodes | *Steinernema feltiae*

Entonem can be used for biological control of various insect pests in protected crops and urban greens including sciarid flies, shore flies, leaf miners, thrips, black vine weevil, caterpillars, oak processionary moth, common swift moth, cutworms, silver-Y moth and sycamore lace bug. It is effective at low temperatures, thus can also be applied in colder parts of the season. The nematodes enter the pest and release symbiotic bacteria into the pest's body cavity. These bacteria convert the host tissue into a food source, on which nematodes feed, develop, and reproduce inside the host. This kills the pest within a few hours to days after infection.

Pack size

50 million - 1 sachet of 50 million in a box, 500 million - 2 sachets of 250 million in a box, 2,500 million - 10 sachets of 250 million in a box.



Larvanem

Entomopathogenic nematodes | *Heterorhabditis bacteriophora*

Larvanem can be used for biological control of larvae of weevils and other pest beetles in a wide range of crops. The nematodes enter the pest and release symbiotic bacteria into the pest's body cavity. These bacteria convert the host tissue into a food source, on which nematodes feed, develop, and reproduce inside the host. This kills the pest within a few hours to days after infection. Infected pest insects in the root zone turn red to brown but may be difficult to find, due to rapid degradation.

Pests include

Black vine weevil, European chafer, Summer chafer, Common cockchafer, Garden chafer, Dung beetles, Common swift moth caterpillars.

Pack size

50 million - 1 sachet of 50 million in a box, 500 million - 2 sachets of 250 million in a box, 2,500 million - 10 sachets of 250 million in a box.



DID YOU KNOW?

Nematodes can be dispersed through a drone! Under test conditions, nematodes remain 100% viable using this highly effective dispersal process.

Contact Lauren Barker to find out more about nematode dispersal using drones:

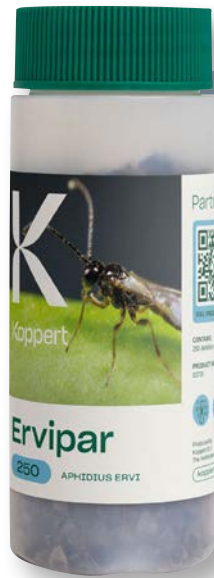
lauren.barker@agrigen.co.uk

Ervipar

Parasitic Wasp | *Aphidius ervi*

Use for the control of pests including potato aphid, glasshouse potato aphid and tobacco aphid. Female adult parasitic wasps emerge and lay their eggs into aphids. The next generation of parasitic wasps develops inside the aphid, which converts into a leathery mummy. First mummies are noticed in the crop after 10-14 days.

Pack size	250; 500; 5,000 mummies
Presentation	100 ml bottle, 0.9 litre cardboard cylinder



Macro-Mite

Predatory mite | *Macrocheles robustulus*

Use for control of eggs, larvae and pupae of sciarid flies, thrips pupae, and Lyprauta larvae. The predatory mites feed on larvae of sciarid flies, thrips pupae and other soil-dwelling insects. The mites appear in and on the soil and at the base of plant stems. The reduction of the infestation level occurs at a slow but steady rate.

Pack size	50,000 predatory mites
Presentation	3.6 litre cardboard cylinder

Spical

Predatory mite | *Neoseiulus californicus*

Use for control of two-spotted spider mite, European red mite, citrus red mite, and other spider mite species. Predatory mites pierce their prey with their mouthparts and suck out the contents.

Pack size	25,000 predatory mites
Presentation	500 ml bottle



Spidex

Predatory mite | *Phytoseiulus persimilis*

Use for control of two-spotted spider mite and other *Tetranychus spp.*, except *Tetranychus evansi*. These predatory mites pierce their prey with their mouthparts and suck out the contents.

Pack size	2,000; 10,000 predatory mites
Presentation	100 ml bottle with dosage plug; 500 ml bottle



Syrphidend

Hoverfly | *Episyrphus balteatus*

Use for control of all species of aphids. Adult hoverflies emerge from the pupae and deposit their eggs in the aphid colonies. The young larvae start feeding on the aphids. Aphids are consumed entirely, only skin remains. Dark excrement (meconium) on the leaves is an indicator of hoverfly larvae activity.

Pack size	50 pupae
Presentation	3.5 x 3.5 x 3.5 cm cardboard box

Beehives

Natupol

Beehive | Pollinating Buff-tailed bumblebees, *Bombus terrestris*

Use Natupol for a wide range of crops, grown on surfaces bigger than 2000 m² and with approximately 25-35 flowers per m² per week. Suitable for round, beef and plum tomatoes and many other vegetable and fruit crops.

After introduction of the hive, worker bumblebees start pollinating the flowers while at the same time collecting pollen to feed the brood. More workers emerge from the brood in the weeks after the introduction, increasing both colony size and pollination performance. After some weeks the colony will reach its maximum size and starts declining in size and pollination activity. Colony development depends on environmental conditions and the amount and quality of pollen.



Pack size	One standard colony of bumblebees including a queen, workers, brood and sugar water.
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Please get in touch for more information on storage conditions, handling and application.

Bio-insecticides and Bio-fungicides

Mycotal

Bio-insecticide | *Lecanicillium muscarium* Ve6

Use for the control of whitefly. After spraying Mycotal, the spores germinate and grow to hyphae that penetrate the pest's body cavity, proliferating and destroying the tissues. The fungus then grows through the insect cuticle and produces spores on the outside of the cadaver, which may spread the infection to other vulnerable pests. Mycotal is effective through direct contact, and under the right environmental conditions, kills the target after 7-10 days. Infested insects shrivel, or in humid conditions, develop a fluffy mycelium outside the insect.

Pack size	500 gram bag with a cardboard outer casing
Presentation	Water dispersible granules (WG)

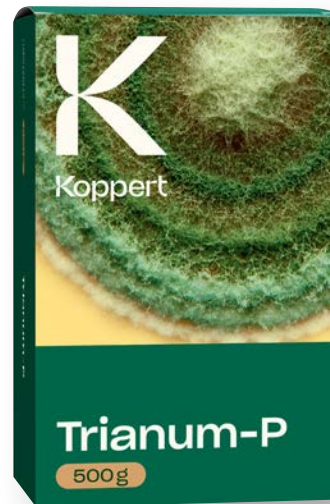


Trianum-P

Bio-fungicide | *Trichoderma harzianum* T-22

Trianum-P protects plants against a range of soil-borne root diseases (such as *Pythium* spp., *Rhizoctonia* spp. and *Fusarium* spp.) through several different modes of action. It also improves root system development, nutrient uptake and plant growth. The mode of action of *Trianum-P* is based on competition for space, competition for nutrients, parasitism of pathogens, and strengthening of the plant. Please get in touch for more information relating to mode of action.

Pack size	500 gram and 5 kg bags with a cardboard outer casing
Presentation	Water dispersible granules (WG).



Dipel

Bio-insecticide | *Bacillus thuringiensis* var. *kurstaki*

Use for the control of small immature caterpillars. Acts quickly on target larvae after initial ingestion of treated plant vegetation.

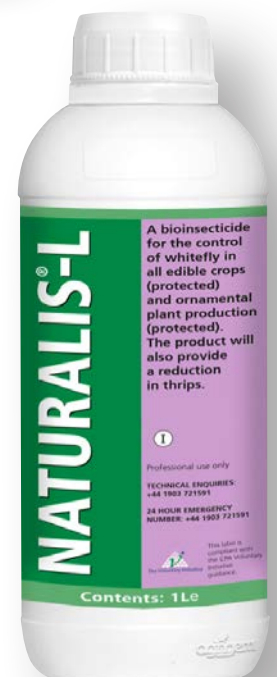
Pack size	500 g
Presentation	Water dispersible granules

Naturalis

Bio-insecticide | *Beauveria bassiana*-strain ATCC 74040

Controls whitefly, thrips, spider mite, and may be effective against other pests including Capsid, aphids, caterpillar, Leafhopper, Shore fly, fruit flies and sciarid flies. Fast acting-pests will be seen dead 3-5 days after application.

Pack size	1 L
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Attractant / adjuvants

Attracker

Lure

Attracker lures thrips from their shelter places and improves their exposure to insecticide sprays resulting in better control. It is a solution of several sugars which lures thrips from their shelter places. When adding Attracker to an insecticide spray solution, insects are more exposed to the product leading to increased control.

Pack size	5 and 10 litre container
Formulation	Soluble concentrate



Addit

Adjuvant | Rapeseed triglycerides

Improves the effect of Mycotal and entomopathogenic nematodes, improving the spread of plant protection products onto the plant surface. When added to Mycotal, this will increase the chance that spores of the entomopathogenic fungus come in contact with the target pest. Addit also improves the spreading of entomopathogenic nematodes in foliar applications.

Monitoring

Horiver Disc

Sticky trap with dry glue

Use Horiver Disc for trapping root aphids and fungus gnats. Insect pests are attracted to the colour of the sticky trap and get caught in the glue.



Presentation	Polystyrene disc coated with dry sticky glue. Yellow 18cm diameter
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Horiver Roller Traps

Sticky ribbon with wet glue

Use for trapping whiteflies, thrips, leaf miner and fungus gnats in hot spots or places where high pressure can be expected, such as along gables, ventilation windows and (other) draughty places. Insect pests are attracted to the light reflected from the colour of the sticky trap and get caught in the glue.



Standard sizes	5, 15 and 30 cm x 100 m. 15 cm width is also available in lengths of 125, 150 and 500 m; other lengths on request
Presentation	Polyethylene ribbon coated with wet sticky glue. Yellow, blue, white, red, black and transparent.

Horiver Wetstick

Sticky trap with wet glue

Use Horiver Wetstick for trapping and monitoring different flying insects. Insect pests are attracted to the colour of the sticky trap and get caught in the glue.

Standard sizes	Yellow: 10 x 25 cm; 20 x 25 cm; 25 x 40 cm Blue: 10 x 25 cm; 20 x 25 cm; 25 x 40 cm
Presentation	Polysterene cards coated with wet sticky glue.



Horiver Drystick

Use Horiver Drystick for trapping and monitoring different flying insects. The traps work particularly well for bugs such as *Lygus spp.* and *Nesidiocoris tenuis*. Insect pests are attracted to the colour of the sticky trap and get caught in the glue.

Standard sizes	Yellow: <i>Nesidiocoris tenuis</i> . 10 x 25 cm; 20 x 25 cm; 25 x 40 cm Blue: thrips. 10 x 25 cm; 20 x 25 cm; 25 x 40 cm
Presentation	Polysterene cards coated with dry sticky glue.

