BUGS FOR BUGS

# Bugs for Bugs Update

Spring 2018

## **Monties prove a valuable tool** in the fight against thrips and whitefly at Flavorite

Flavorite operate an impressive greenhouse vegetable production facility at Warragul, east of Melbourne. This site accommodates around 11ha of tomatoes and a similar area of capsicums. They are a company committed to IPM and have employed a dedicated IPM specialist, Karen Swanepoel who oversees a team of crop scouts.

Karen has been aware of increasing reports of success with Montdorensis (Monties) in Europe and was keen to explore them for wider use in her capsicum plantings where thrips, whitefly, aphids and spider mites are the main pest issues.

Karen's experience over the last two seasons has shown that Monties establish quickly and soon distribute widely amongst the capsicums. They are able to build up to high populations and thrive under the warm environmental conditions found in the Flavorite greenhouses.

Karen said that "while Monties don't feed directly on adult thrips that fly in, they are taking out the eggs and immature stages so that thrips do not build up in the crop".

Other clear benefits observed by Karen include the capacity for Monties to feed on whitefly and spider mites helping to suppress these pests also. Karen comments that she consistently finds Monties in higher numbers wherever spider mites occur.

This season Flavorite have committed to ongoing commercial trials of Montdorensis in their capsicums. We are working closely with them to learn more about how to get the best from this native Australian predatory mite that is proving so valuable in many parts of the world.

Photos: Karen Swanepoel and Dan Papacek at Flavorite

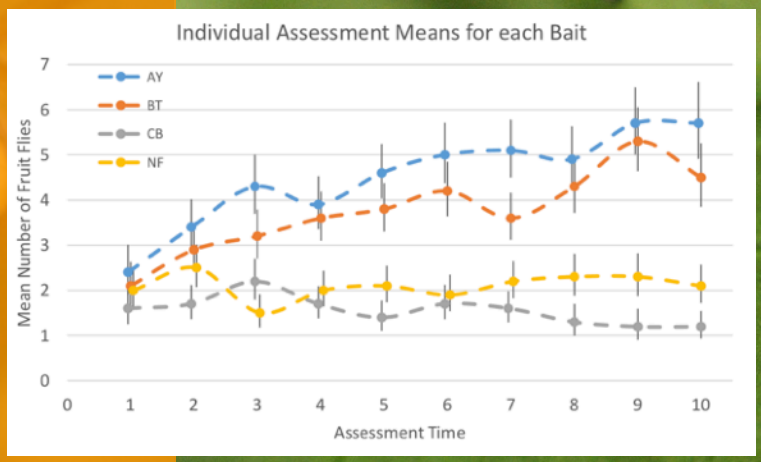
# **Bait spraying for fruit fly?** Not all protein lures are created equal

Protein bait sprays are the backbone of any effective fruit fly management program. Our R&D division has recently carried out lab studies to see if there are differences between the commercially available protein lures.

These feeding trials compared our autolysed yeast (AY) with three other commercial products.

This work was subjected to independent scientific analysis and the results clearly show that our autolysed yeast is the most attractive to fruit flies.

Bugs for Bugs' **Fruit Fly Lure** is produced in Australia to an exacting formula by a specialist yeast manufacturer. We are happy to discuss and share the results of these trials if you are interested.




Graph: Shows relative attractiveness of protein lures (Bugs for Bugs' Fruit Fly Lure in blue)

# **Neonicotinoid insecticides** under scrutiny

Agricultural and horticultural industries all over the world are under increasing pressure to reduce or eliminate their use of several of the commonly available neonicotinoid insecticides. This pressure is coming from a variety of sources including government regulators, retailers and consumers.

In April this year the European Union made a landmark decision to ban the use of three neonicotinoid insecticides in all outdoor crops. Canada is likely to follow suit. In Australia, Bunnings recently announced that they will no longer stock crop protection products containing neonicotinoids. They are also requiring production nurseries that supply them to phase out the use of these compounds.

Restrictions on the use of this group of systemic insecticides are expected to increase. Now is the time to be proactive – contact us to discuss IPM alternatives. Bugs for Bugs offers a range of biological control agents that can help take the place of these systemic chemicals. We have a range of beneficials that target sucking pests such as aphids, mealybugs, whiteflies and scale insects.

# Biocontrol **alternatives to systemic insecticides**

**Lacewings**
Targets include aphids, mealybugs, scale insects and psyllids

**Spotted ladybirds**
Targets include aphids, whiteflies and psyllids

**Cryptolaemus ladybirds**
Target mealybugs and soft scale insects

**Chilochorus ladybirds**
Target armoured scale insects

**Hayati wasps**
Target silver leaf whitefly

**Aphytis wasps**
Target armoured scale insects

# **Spotted ladybirds tackle aphids** in Tasmanian strawberries

Kaylia Marshall (horticulturalist at Costa Berries, Tasmania) has begun trials investigating the potential for our spotted ladybird beetles to control aphids in their tabletop strawberry operations.

The aim was to see if it is possible to establish a population in Tasmania in early spring while conditions are still relatively cool. Kaylia introduced adult ladybirds and ladybird eggs (*Harmonia conformis*) into aphid infested strawberry plants that were enclosed in field cages for ease of monitoring.

Initial indications are promising. The trial started in mid-September and despite several significant frost events, she has been able to observe continued egg hatching and adult ladybird activity.

Ongoing trials will investigate how well an established population of spotted ladybird beetles will contribute to aphid control and how they can be incorporated into an IPM program for Tasmanian tabletop strawberry production.

Photos: Adult spotted ladybirds (above) and newly hatched larvae (below) in the Costa Berry field cage

## Staff profile: **Fraser Harris**

Fraser has been with Bugs for Bugs for almost three years. He worked on Persimilis predatory mite production at our Sunshine Coast facility before moving into the field, offering monitoring and consulting services to our clients in Queensland.

He has recently moved to Victoria to spend a season representing Bugs for Bugs across the southern production regions.

Fraser is currently studying Biological Sciences at RMIT. He enjoys working outdoors and loves interacting with growers. He is passionate about helping them reduce their reliance on pesticides and committed to helping them achieve outstanding results.

You can contact Fraser via e-mail at
**fraser@bugsforbugs.com.au**

## Keen to know **who is flying through?**

Our sticky traps are a great way to keep tabs on unwelcome visitors in your crop.

# Pest feature: **mealybugs**

At this time of year we receive many enquiries about mealybugs. These nasty pests belong to the group of sucking insects which include aphids, scale insects and whiteflies. They insert their mouthparts directly into the plant and extract the nutrients they need for growth and reproduction.

Mealybugs are not easy to control with chemicals because:

- They hide in crevices and hard-to-reach parts of the plant (including under the calyx and in the stylar end of fruit) making coverage very difficult.
- Their hallmark waxy (mealy) covering tends to be water and chemical repellent.
- Very few chemicals are effective against this group of insects.
- Those chemicals registered for mealybug control are often harmful to beneficial species.

Background photo: Solenopsis mealybug
Photo insert: Cryptolaemus ladybird

Biological control is the best long term solution for mealybug problems. Cryptolaemus ladybird beetles and lacewings can both deliver excellent results. We also try to help you enlist the assistance of naturally occurring beneficial species which may include other predators and small parasitic wasps.

If you do have a problem with mealybugs give us a call. We will want to know what chemicals you have used in the crop (in case any of these are especially harmful to beneficials) and also if ants are present and active.

## We would love to hear from you

We are constantly trying to improve our products and services. Please keep in touch and share your feedback with us. Contact us through our website or give us a call on:

**07 4646 2628**

## Follow us on Facebook

You can keep up-to-date with Bugs for Bugs news via Facebook at:

**www.facebook.com/bugsforbugs/**

## Explore our website

Our website is a wealth of knowledge and information about sustainable pest management. View our product range, browse our 'what's your pest' section and much more at:

**www.bugsforbugs.com.au**