



agrovista
fruit



Integrated pest management

Control pests, boost pollination,
and improve plant growth and
crop resilience



*growing through **innovation***

A guide to Integrated Pest Management

In this short summary you will learn a little about how we have managed to combine diligent crop monitoring, the latest in technical innovations along with biological control agents and improving crop health, in order, to help deliver the best results possible both in sustainable and profitable yields of Class 1 fruit, as well as environmental health.

We recommend and support farms in implementing or improving their practises and making the most of key components of IPM, such as:

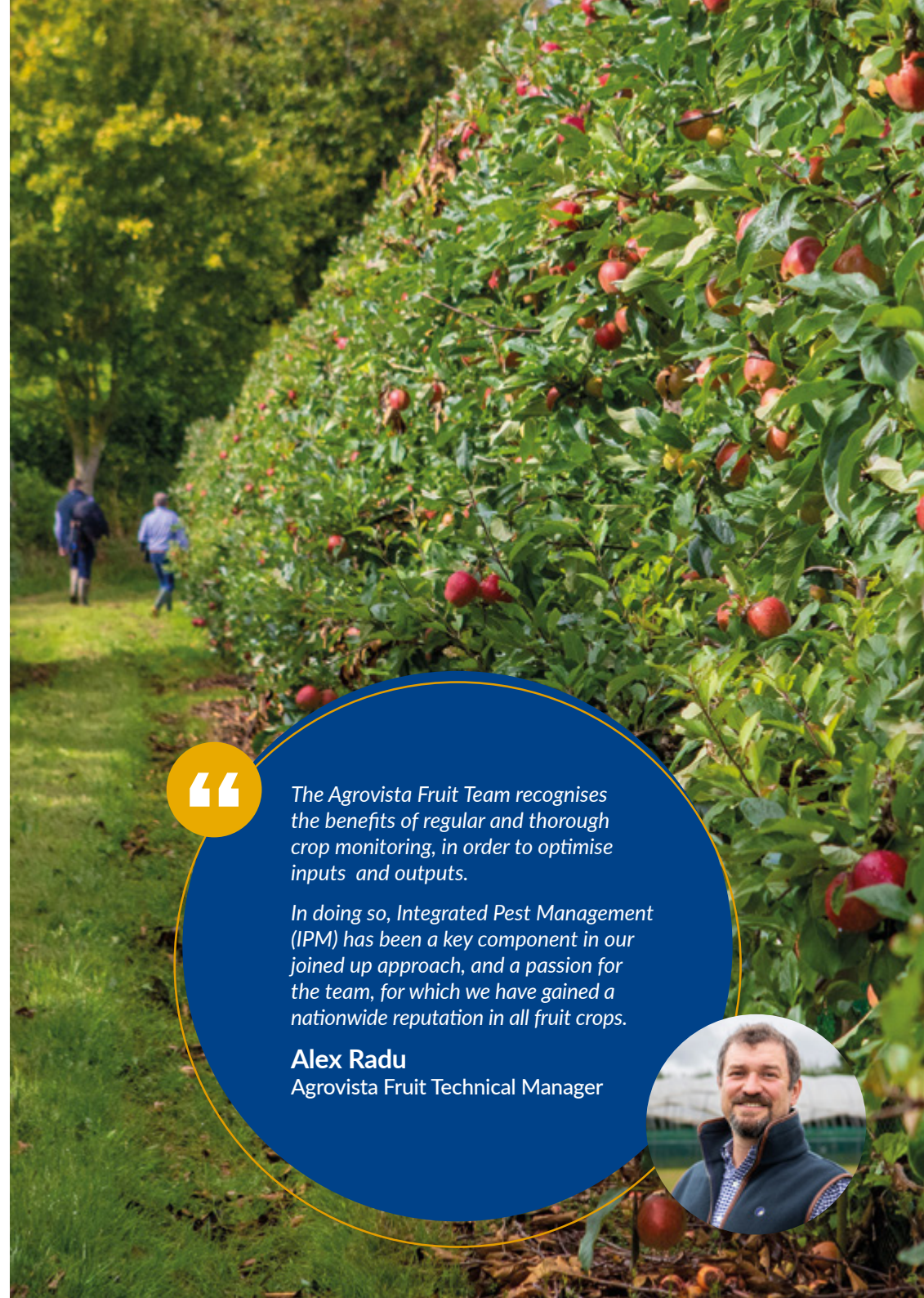
- **Perfect pollination** with Koppert biological solutions
- **Biocontrols** for soft fruits
- **Soil health** and unlocking your soils potential
- **Application machinery** with the Natutec drive
- **Aurea TreeScout** blossom and vigour mapping
- **Fruit Insight**, our online pest and disease forecasting service and weather info portal



The Agrovista Fruit Team recognises the benefits of regular and thorough crop monitoring, in order to optimise inputs and outputs.

In doing so, Integrated Pest Management (IPM) has been a key component in our joined up approach, and a passion for the team, for which we have gained a nationwide reputation in all fruit crops.

Alex Radu
Agrovista Fruit Technical Manager



Perfect pollination

Koppert biological solutions

Without pollinators such as bees, there would be no fruit crops in the first place, but sometimes, we need to give nature a helping hand.

By working with Koppert UK, we provide customers with the highest quality pollinators to supplement natural colonies. This ensures that successful pollination and fruit set is achieved to support indoor and outdoor crop production. We also recommend introductions in pears and cherries too.

Koppert's Natupol *Bombus terrestris* audax colonies are prepared ready

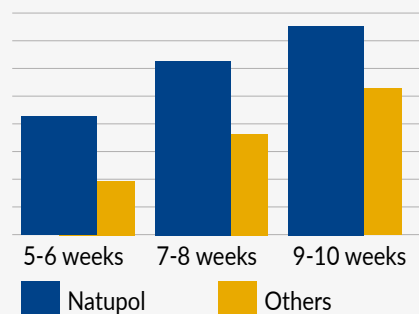
for spring flowering, working a range of indoor and outdoor crops. They work by releasing worker bees to pollinate the crop, supported by more workers born in the weeks after their introduction from a strong brood provided within the hive.

The hives are designed based on the way bumblebees see, making them easier for the bees to find and therefore improving productivity.

Natupol: best value for your money!

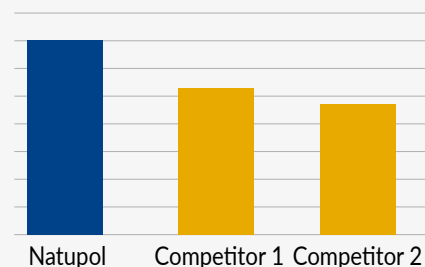
Koppert's flagship pollination product proven to outperform competitors in this field.

Brood volume (litre)



Vitality of colonies

(adults produced in comparison trial)



KOPPERT
BIOLOGICAL SYSTEMS



Natupol Excel: high performance pollination

Specifically developed for crops with a high number of flowers per m², crops grown under artificial light, reduced daylight conditions or in warmer environments.



Natupol booster

Developed specifically for outdoor crops requiring high powered supplementary pollination over a short period of time, this audax hive contains super mature colonies for maximum activity, and a life of 4 weeks.



Biocontrols for soft fruit

To help you control common pests in soft fruit

Biocontrol products use natural mechanisms or 'natural enemies' to control pests, minimising the use of traditional chemical intervention methods.

By working with leading global innovators Koppert UK, Agrovista is proud to offer biocontrol options to customers as part of a commitment to practising the principles of Integrated Pest Management (IPM).

Aphiscout - Controlling aphids

This 'one product' solution from Koppert contains five different parasitoid wasps, helping to combat a wide range of aphid species that affect soft fruit crops.

The product works by releasing parasitoids that then identify aphids

and impregnate them with parasitoid eggs. This concludes the aphid's lifecycle, resulting in the emergence of the next generation of parasitoids.



Because Aphiscout is a biocontrol product, it reduces the reliance on conventional insecticidal products, and with no post-harvest interval, offers growers improved flexibility for application timing.

Benefits include:

- Parasitoid mix including the highly effective Praon volucre to control a wide range of Aphids
- Reduced risk of resistance
- Reliable and consistent quality
- Quick and easy application

Thripex - Controlling thrips

Effectively controlling thrips is becoming increasingly difficult for British growers due to the lack of suitable chemical control options. Therefore, adopting an integrated approach is crucial, including the introduction of biocontrol agents.

Thripex by Koppert contains predatory mite *Neoseiulus cucumeris* - the 'backbone' of thrips control. An initial introduction is recommended for early in the season before flowering, with predatory mites then released over a six week period.

KOPPERT
BIOLOGICAL SYSTEMS

*Biological solutions
to help you control
common pests on
soft fruit crops*

Spidex - Two spotted spider mite control

Two spotted spider mites cause considerable damage - mottled leaves and early leaf loss in strawberry and raspberry crops.

Spidex by Koppert, *Phytoseiulus persimilis*, provides effective control of two spotted spider mites when used preventatively and at the first sign of the pest.

The product works by releasing predatory mites, *Phytoseiulus persimilis*, which then feed on all stages of spider mites. These predatory mites pierce eggs and consume the contents, whilst also attacking adult spider mites.

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Natutec Drive

Application machinery

The Natutec Drive® is Koppert's latest machinery innovation.

This patented system is used to apply **Swirski-Mite** (*Amblyseius swirskii*)®,

Thripex (*Neoseiulus cucumeris*), **Anso-Mite** (*Amblyseius andersoni*)® and **Spidex** (*Phytoseiulus persimilis*)® to polythene tunnel strawberry crops. It is attached to a custom-made frame that can be attached to a tractor, which is driven between the strawberry table-top. The basic system works on a revolving 60 litre drum, which dispenses the predators and carrier material into a hopper, and onwards, via several delivery tubes, to the crop canopy. The application process is controlled from a touch-screen inside the tractor cab, by simply selecting the product name and the rate of application required.

The **Natutec Drive**® is supplied on a lease hire basis.

Soil health

Unlocking your soils potential

As well as integral to the future of our planet, soil health is at the heart of sustainable crop protection - helping plants to achieve their potential, protecting watercourses, and recycling organic matter.

Agrovista Soil Health is for all areas of our portfolio including fruit, and focuses on three key soil properties - chemical, physical, and biological, all of which contribute to the yield potential of a crop.

The service provides a comprehensive soil health report including practical solutions to help growers manage soils for the benefit of farm profitability and soil stability.

Soil health should be a priority for farms and together with Agrovista precision services will have a positive effect on crops.



Precision crop mapping

New services

Aurea blossom and vigour mapping are established services that make use of drones or Aurea's TreeScout to quickly identify areas needing attention, enabling targeted, tree by-tree treatment.

With the help of Aurea Imaging, we can access precision orchard management solutions that enable tree-by-tree applications on farm, improving orchard uniformity and cropping. The orchards mapped using drones or the TreeScout tractor mounted sensor can be treated with precision applications for blossom thinning, fruit set, fruitlet thinning and managing vigour.

The system helps reduce labour, optimise yields and cut costs by enabling management at the individual tree level rather than the field level, addressing localised issues and

avoiding unnecessary applications, which also benefit the orchard environment.

The new Fruit density model was introduced recently to help farms make better yield estimates, optimise harvest planning, logistics, and sales.



Wignest

Wignests boost numbers of orchard predators, including earwigs, which are invaluable in pome fruit orchards.

They prey upon and significantly reduce numbers of damaging pests, such as the pear sucker, codling moth and woolly apple aphid.

Fruit Insight*

A subscription to Fruit Insight costs a fraction of the cost of one spray round on a small farm

Can you afford not to try it?

The most comprehensive online pest and disease forecasting service for fruit growers



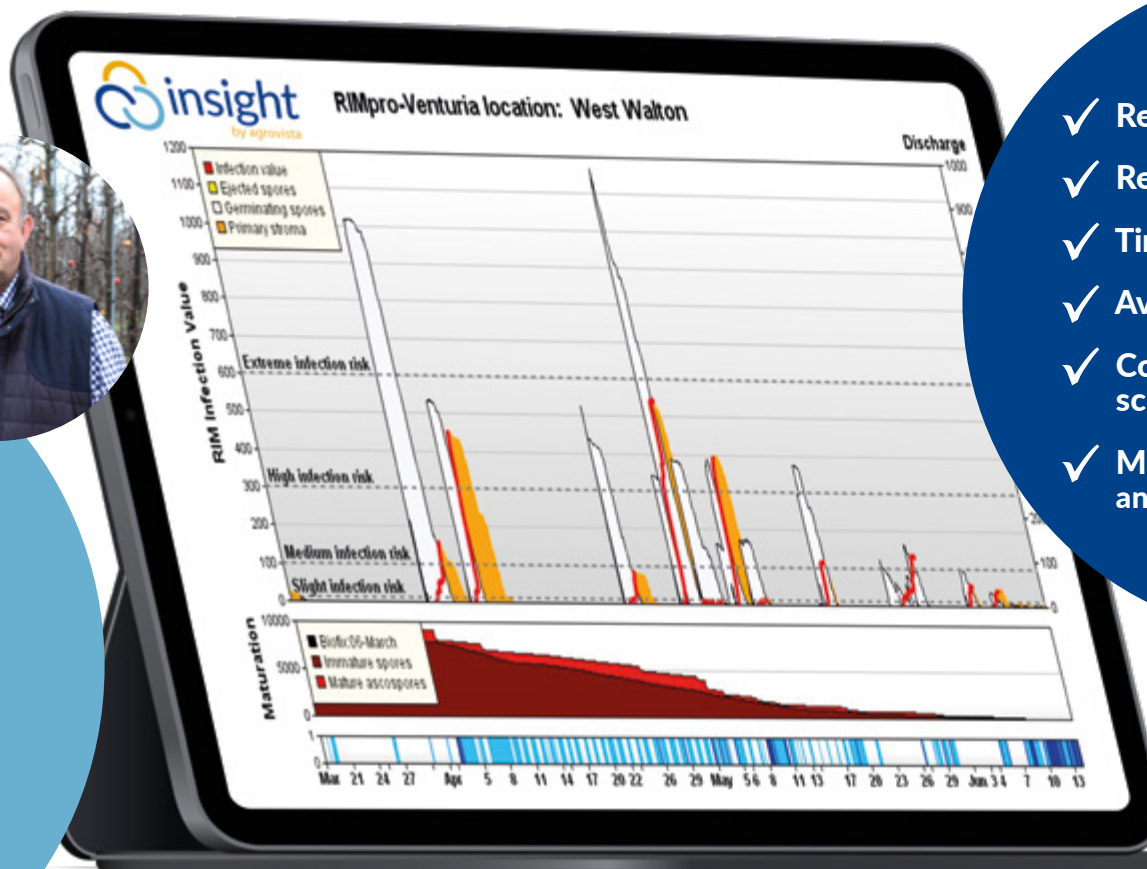
Fruit Insight uses the latest technology to provide live weather data, coupled with Rimpro disease prediction software to gain vital information helping growers take a renewed approach to sustainable crop protection and potential risks.

Available on the Agrovista Insight app. **Updated every 30 minutes** allowing you to maximise control and minimise your costs.



What makes Fruit Insight different to other subscription services?

- Include text alerts to major events
- Telephone access to an Agrovista agronomist
- Low subscription costs
- Free delivery tracking for Agrovista customers



- ✓ Reduce residues
- ✓ Reduce input costs
- ✓ Time applications to perfection
- ✓ Avoid unnecessary applications
- ✓ Comply with assured produce schemes
- ✓ Maximise product efficacy and efficiency

insight.agrovista.co.uk/register-interest



*Fruit Insight, the most
comprehensive online
pest and disease
forecasting service for
fruit growers.*



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