

## Movento tackles scale in kiwifruit

*Bayer CropScience has launched their new 'two-way action' insecticide Movento® in New Zealand, targeting scale insects in kiwifruit.*

"Movento's mode of action is quite different from all other insecticides used in kiwifruit," says Bayer's New Zealand marketing manager Peter Fisher.

"The active ingredient, spirotetramat, acts as a lipid biosynthesis inhibitor (LBI) which addresses a completely new target site never exploited by any other insecticide. This is ingested by juvenile insects such as scale crawlers, and directly after moulting, they appear immobile and, soon afterwards, desiccate completely," says Peter.



"Studies have also shown a significant impact on female adults by reducing fecundity and survival of offspring, providing more effective overall reduction in pest pressure."

The 'two-way action' phrase refers to the systemic distribution of Movento's active ingredient within the plant – both upwards and downwards. Peter says this action helps provide excellent pest control, even in dense crop canopies. "This makes Movento particularly valuable for the control of scale in kiwifruit where it can be difficult to get adequate crop cover."

To maximise leaf uptake and systemic movement of the active ingredient within treated plants, Bayer scientists advise that Movento must be tank-mixed with a spray adjuvant having spreading and penetrating properties, such as the esterified vegetable oil, Partner®.

Peter adds that Movento's low mammalian toxicity and good ecotoxicological profile make it an easy product to work with. "Movento is a good option for integrated pest management programmes as it has been shown to be harmless, or only slightly harmful, to a range of representatives of the most important beneficial groups, e.g. predators (bugs, beetles, hoverflies, lacewings, hoverflies, earwigs and mites) and parasitoids (wasps).

"Movento has given outstanding control of armoured scales in kiwifruit far outperforming the existing standards. Limited field use by New Zealand growers in difficult scale situations in the 2008 season supported the excellent performance of Movento seen in our trial work."

Movento is listed in Group 23 of the IRAC (Insecticide Resistance Action Committee) mode-of-action classification scheme ([www.irac-online.org](http://www.irac-online.org)) as an inhibitor of lipid biosynthesis. It can principally be used in alternation/rotation with any insecticide of other mode-of-action classes and has shown no cross-resistance to any other commercial insecticide.

Movento is approved for use in the Kiwifruit programme and currently has a label claim for two pre-flowering applications in kiwifruit to control armoured scales (greedy, oleander and latania scales).

Bayer CropScience is working to develop New Zealand label claims for other crops for the future, with Movento registered for the control of a range of sucking insects overseas including aphids, whitefly, mealy bugs and psyllids. ⇄

Movento® and Partner® are registered trademarks of Bayer.  
Movento is registered pursuant to the Pesticides Act 1997, No. P7858 and is approved pursuant to the HSNO Act 1996, No. HSR007963.



### HOW TO USE MOVENTO

Apply Movento at a rate of 20 ml/100 litres (minimum 400 ml/ha) plus 2.0 l/ha Partner as a high volume spray without excessive run-off. Make the first application at early leaf expansion with a second application before the start of flowering. Movento is rainfast within approx. two hours under good drying conditions.

- Withholding period: Apply only pre-flowering.
- Compatibility: Movento is compatible with most commonly used fungicides.
- Packaging: 1.0 and 5.0 litre plastic bottles – AgRecovery compatible
- Note: The 1.0 and 5.0 litre Movento packs are supplied with 5.0 and 25.0 litre packs of Partner, respectively.
- Approved handler: Movento has no approved handler or tracking requirements.

NB. Movento formulation: 240 g/ litre suspension concentrate

### LOOK AFTER THE BEES!

As with the application of any crop protection product, observe best practice:

- Read the product label before you spray;
- Mow the sward prior to all spring spray applications to remove flowers attracting bees from outside the orchard. Be aware of flowering shelter;
- Spray when bees are not actively foraging, before 8 am or in the late afternoon/early evening;
- Communicate with your neighbours in case they have bees foraging on other crops;
- Communicate with local beekeepers.

## Fruitfed vegetable group going from strength to strength

*Recently Fruitfed Supplies staff focused on the vegetable sector got together for their annual focus meeting for technical and product training, networking and discussion.*

By bringing together the vegetable-focused representatives from around the country, this annual event creates an important platform to share ideas and experiences, and draw on the collective experience within the company, says Claire Mills, Fruitfed Supplies vegetable category manager.

"This year's meeting was the largest yet, with 15 of the 18 vegetable-focused field staff present. The discussions were very topical, with the tomato potato psyllid (TPP) being covered in detail, highlighting the value of the meeting to share this kind of information. Staff from areas that have been dealing with TPP could share their experiences with those from areas where it has not yet established, and hopefully help to mitigate the impact it may have in these regions."

"While we still have some way to go to develop a sustainable control strategy for TPP, the group knows what has worked in certain areas and what has not, and is well positioned to assist growers in managing TPP as well as possible until new control options come onto the market."

Tim Herman, technical advisor for vegetables, presented research findings by the Fruitfed Technical team. "Our internal trial work allows us to determine efficacy and best placement of products in programmes. A key area of focus for the Technical team in the vegetable market is to help identify and register new products to fill gaps in crop protection programmes. While this can be a slow process due to the workings of the registration body, we have a number of new solutions in the pipeline."

The group also heard of overseas developments in vegetables from Richard Bawden, Fruitfed Supplies Technical manager, following his latest overseas research visits. Several suppliers were invited to present new product updates and developments to the group, enhancing the product information, best control options and management practices group members can share with growers.

Stephen Guerin, Fruitfed Supplies general manager, also attended the meeting this year, saying: "It was rewarding to speak with our vegetable team this year knowing that we have made some significant progress in this market, particularly with the new solutions we have been able to bring to market and the strengthening of relationships within the industry."

Claire adds: "Our focus for the future will be to provide clients with the tools necessary to support sustainable vegetable production. There was a lot of feedback from the group that clients had expressed concerns about soil health and build-up of soil-borne diseases, particularly with increased competition for land for vegetable crops. Increasing restraints on inputs such as fertiliser and water are also driving us to improve efficiencies in these areas. We have a number of products under



Anne Snoxell



Olivia Prouse



Craig Lamb



Rod French



Jason Fraser



Vaughan Redshaw

development to assist in this space, and clients can be assured that we have a long term view to developing tools to support their continued success.

"While we faced a number of challenges last season, with the psyllid, weather and rising input costs, there is a good positive feeling among the group and they are looking forward to the season ahead," says Claire.

Feedback from the staff involved highlights the value of sharing ideas and information, and the collective wealth of knowledge within the group that, in turn, benefits growers nationally in the dynamic vegetable sector. Hastings field representative Vaughan Redshaw comments: "It's great to keep up to date with new innovations that we can pass on to our clients to help them succeed. New fertilisation strategies and spray technology were two areas that we focused on this year that will offer efficiencies for our vegetable growers in the future."

Next year's vegetable focus meeting will be held in Pukekohe. All personnel involved in the vegetable sector contribute to a monthly internal communication to keep up to date with issues and developments in the industry. ➡

## Products to offer a new level of onion neck rot (*Botrytis*) control

*Switch® and Amistar® WG offer onion growers the chance to take control of neck rot to a new level this season.*

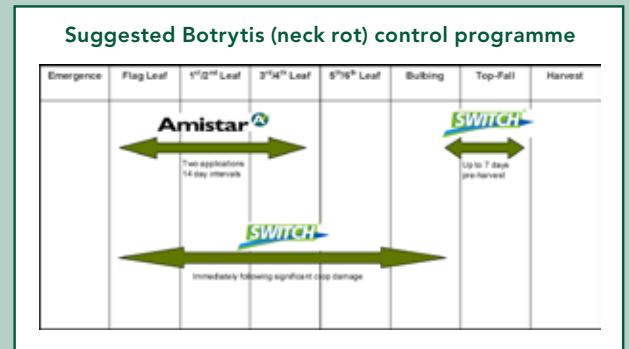
"The recent approval for Syngenta Crop Protection's *Botrytis* specialist Switch to be used in onions adds a new dimension to programmes to control neck rot in onion crops," says Syngenta's horticulture market manager Craig Thompson.

"When used in a programme comprising sanitation, seed quality, cultivar selection, good harvest practices, and good storage practices Switch, plus Amistar, will give onion growers better options for controlling neck rot," says Craig.

*Botrytis* is known to cause bulb rot during storage of onions, leading to significant losses. Plants can be infected at any growth stage in the field, but symptoms will only become evident after several weeks in storage.

In the past, the most commonly used fungicide has been carbendazim. However recent identification of carbendazim-resistant *Botrytis allii* isolates, combined with market access concerns, means alternative products are now required for the onion export industry.

Switch is the market leader in control of *Botrytis* for New Zealand's



grape industry. Using a combination of two active ingredients, Switch is effective against four different stages of the *Botrytis* disease cycle. In onion crops it should be applied immediately following leaf damage, such as that caused by hail or strong winds. Also, with a short 7-day withholding period it is well suited as a pre-harvest treatment, at the time when disease entry to bulbs is a high risk.

Amistar WG is currently a standard treatment for onion growers wishing to prevent downy mildew infection and enhance the green leaf retention of their crops. Recent trials have shown that Amistar also has the ability to reduce *Botrytis* neck rot. Growers wishing to target *Botrytis* infections with Amistar WG can use it in the early part of the season, from flag leaf stage onwards.

As a resistance management strategy, Syngenta recommends no more than two Switch applications and four Amistar applications per crop. ⇨

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## Nunhems: specialist in vegetable genetics

*Nunhems, a global specialist in vegetable genetics and services, is increasingly making their presence felt in the New Zealand market with new product introductions and significant product development underway.*

A subsidiary of Bayer CropScience, Nunhems has globally integrated teams to build unique customer relationships and share products, concepts and expertise with the professional horticultural production industry, says Fruitfed Supplies vegetable category manager Claire Mills.

Nunhems began operations as a standalone business in New Zealand two years ago with the expert assistance of Bruno Cassolino, who worked for the company in Chile, South America. "Initially our key focus in New Zealand has been to identify opportunities in the market and, with the support of our breeders and product specialists, to identify varieties that will suit New Zealand growing conditions and market requirements," explains Bruno.

"We have been working in the lettuce market, mainly with fancy varieties but more recently with iceberg and Cos. Nunhems purchase of Paragon Seeds in California, experts in the breeding of iceberg lettuces, will offer new options for local growers."

Carrots and onions are also key development areas for Nunhems. The first sales of the Nantes carrot varieties Alamada and Romance have led to more variety trials in the main production areas. Bruno says of onions: "This is a very interesting market and we have trials this year with more

Bruno Cassolino, Nunhems New Zealand manager



than 25 hybrids coming from our new breeding programme to try and define the best genetics for different areas around New Zealand."

Nunhems has an internationally-recognised breeding programme for hybrid onions, and their varieties are known for the excellent storage abilities, colour, skin quality and the high percentage of single centres.

Nunhems won the Fruit Logistica 2008 Innovation award for their Intense tomato, the world's first non-leaking tomato. "Intense was first designed to meet the needs of the restaurant and food service industries, but its popularity is growing exponentially. This is an excellent example of our breeders working to find solutions for the industry," says Bruno.

For further information about Nunhems range of vegetable seeds, contact your Fruitfed Supplies representative. ⇨

## Kocide Opti – less copper, less frost in vineyard

*A Marlborough vineyard manager welcomes the opportunity presented by Kocide Opti to apply less copper to the environment.*

Rex Butt, viticultural manager on the 360ha Wither Hills Estate, has used Kocide for frost mitigation and disease control for several years, and Kocide Opti has brought him greater benefits.

"Kocide fits well with our mancozeb programme. We normally do two or sometimes three applications of Kocide Opti at 1kg/ha in 150 litres of water early in the season and up to 250 litres as more canopy appears," says Rex.

The higher bioavailability of Kocide Opti (pink bag) makes it active at a third less the rate of application of the former (blue bag) product, substantially reducing the level of copper released into the environment while providing the same degree of control as the previous formulation at the same cost per hectare.

"We are only mixing 10 kilos of the new formulation per 10 hectares instead of the 20 kilos that we used to, which makes mixing and suspension easier, and there is also a lot less copper going into the environment," says Rex. "We also use the product for spring frost mitigation, applying it when a frost is forecast."

Kocide Opti can reduce the impact of light frosts by controlling the ice-nucleating bacteria, *Pseudomonas syringae*, *Erwinia herbicola* and *Pseudomonas fluorescens*, which damage green tissue. Harnessing this ability is somewhat inexact because a vineyard's topography can affect frost behaviour, but Rex has observed a benefit and he says the disease control makes the application worthwhile anyhow.



Fruitfed Supplies' Blair McLean and Rex Butt of Wither Hills Estate

Wither Hills' Fruitfed Supplies representative Blair McLean calls it a "double hit", adding that September-October frosts are far from unusual in Marlborough. Kocide Opti is widely used in this role in vineyards, he says.

John Smith, Du Pont's upper South Island area manager, says the product is used for a range of fungal problems in many horticulture crops, but this particular application is becoming more popular with grape growers.

"This dual-purpose use of Kocide Opti in the vine market – early spring for control of black spot, downy mildew and a measure of late frost mitigation – is now gaining greater acceptance," says John. ➡

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### DU-WETT OFFERS:

- More efficiency, less down time
- More coverage, less run-off
- More deposition, less spray drift

## Proven ability of Du-Wett

*Apple growers enjoy another successful season of ultralow volume spraying using Du-Wett.*

**Du-Wett**  
SUPER-SPREADER

Du-Wett, a unique organo-silicone blend horticultural super spreader has now been used commercially in orchards around Hawke's Bay and Nelson. Extensive trials and development over the last nine years has seen the concept of using less water and getting better coverage being adopted by many growers in most horticultural crops, says David Langan, regional manager for Elliott Technologies, a leader in adjuvant technology.

"Apple growers using Du-Wett commercially in the last three years have demonstrated the effectiveness of spraying at volumes of 250l/ha for the whole season without compromising pest and disease control," says David.

"These innovative growers want to maximise their work rate, save money and get the best out of their Croplands Quantum Mist sprayers. With more high density plantings of pipfruit on dwarf rootstocks, the traditional method of spraying to run-off is not only wasteful, but not very cost effective.



"There is the perception that using higher water rates achieves better coverage. However, high water volume droplets can shatter, bounce and miss their target completely, due to the surface tension of the spray droplet. High water volumes do not have the level of deposition, coverage, retention and spread compared to low volume spraying using Du-Wett."

Du-Wett improves the spreading ability of the spray droplet by 5-10 times more than that of a normal droplet. "Too much water causes run-off that leads to drip points on fruit that can cause elevated residues. Residues on Du-Wett-treated fruit are consistently equal to or lower than conventionally-sprayed fruit," concludes David. ➡

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## Pristine finds ready NZ market

*The use of BASF's newly registered multi-crop fungicide Pristine® is continuing to accelerate as more growers realise its potential to protect valuable crops.*

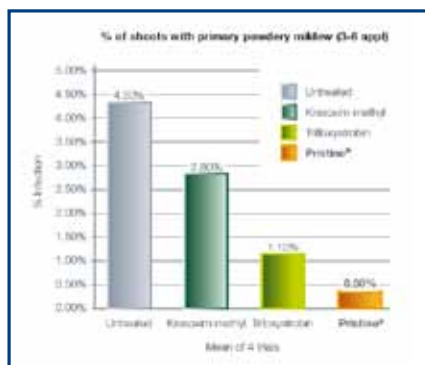
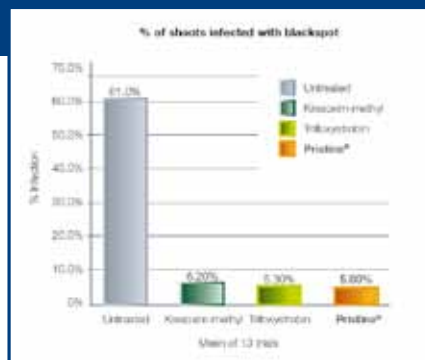
This year stonefruit growers have already latched onto Pristine, says BASF marketing manager Tim Loughnane.

"And currently this top-performing product is being widely applied in the major apple growing regions of New Zealand to protect against both black spot and powdery mildew," says Tim.

"The dual-powered nature of Pristine is a major advantage. Because Pristine contains two active ingredients instead of one, it effectively comes with built-in resistance management."

Extensive trial work in New Zealand has shown Pristine will provide equivalent performance to other strobilurins for the control of black spot, and is has also been shown to be more effective in the control of powdery mildew (see performance charts). Pristine can be mixed with most commonly used insecticides and fungicides or with Regalis® on apples.

Over the coming months, Pristine will continue to be used to protect against a range of fungal diseases in stonefruit, pipfruit, kiwifruit, and grapes. For more detailed information, contact your local Fruitfed Supplies representative. ➔



Pristine® is registered pursuant to the ACVM Act 1997, No P7595. Regalis® is registered pursuant to the ACVM Act 1997, No P7376. ® Registered trademarks of BASF

## TECH-KNOW TIPS

### ASPARAGUS



#### Reminders for September:

- ✓ **Residual herbicides** should be applied prior to spear emergence. Select the appropriate herbicide(s) to control the weeds present in the beds.
- ✓ If **Phytophthora spear rot** was present in the bed last season, Ridomil® Gold EC should be applied before harvest starts.
- ✓ A **root sample** taken now and measured to determine carbohydrate levels will assist in harvest management through the use of AspireNZ. See [www.aspirenz.com](http://www.aspirenz.com) for more information.

- ✓ Continue to watch for **six spotted mite, leaf roller and greenhouse thrips** in spring, especially on blocks carrying a crop ready for harvest. **Six spotted mite** should be controlled pre-flower to reduce the risk of population explosions during flowering. DC Tron Plus (2-3 applications at monthly intervals) is a good option at this time of year, particularly when mixed with other agrichemicals. Alternatively, apply Mit é mec and DC Tron Plus for highly effective control of adults, nymphs and eggs, as the active ingredient milbemectin gives good ovicidal activity, a point of differentiation from other products.

Note that **Proclaim** is now registered for leaf roller control in avocados. The active ingredient emamectin benzoate is very effective on leaf roller larvae even at low rates, as proven through use in kiwifruit and apples over the last few seasons. Success Naturalyte also has a good fit for leaf roller control at this time of year. The short pre-harvest intervals of these products allow flexibility of use around harvest. To ensure you have the best information for crop management decisions, structured **crop monitoring** should be used. Please contact your local branch for information on crop monitoring as various options are available.



Leaf roller larva causing damage to flower truss

### AVOCADOS



#### Reminders for September:

- ✓ Continue to maintain a **fungicide cover** on fruit with copper products such as Kocide 2000LF or the new Kocide Opti, which, in particular, offers fungicidal protection for fruit while resulting in little visible residue, a consideration prior to harvest.
- ✓ **Foliar nitrogen**, e.g. Yara Safe-N or low-biuret (max 0.4%) urea, may be needed to remedy nitrogen deficiencies that often show as yellowing foliage in winter and spring. This is more common on trees carrying a heavy crop, and often exacerbated as flowering approaches. Add magnesium sulphate to improve leaf-greening as required, but do not mix foliar boron products with nitrogen as research has shown reduced fruit-set from this combination. Foliar nitrogen should last be utilised around 2-3 weeks before foliar boron sprays are applied in October.
- ✓ Recommended soil applications of **Fruitfed Avocado Mix** and boron should start during September as trees become more active with increasing temperatures. Consider using Organibor as a slow-release boron option.

#### Reminders for September:

- ✓ The **diamondback moth** resistance management strategy switches windows in September.
- ✓ Apply Delfin® WG, Coragen® or Success® Naturalyte® in preference to an organophosphate or carbamate insecticide, if action thresholds are exceeded.
- ✓ Apply a selective aphicide, e.g. Pirimor® 50 or Chess® WG, if required.

### BRASSICAS



## CITRUS



### Reminders for September:

- ✓ As weather begins to warm in spring, watch for increasing pest populations, particularly **greenhouse thrips** (where fruit are still present) and **armoured scales**.
- ✓ **Monitoring** for these insect pests to determine control requirements allows justified use of agrichemicals without the risk of unnecessary applications. For further details on crop monitoring, contact your nearest Fruitfed Supplies branch.
- ✓ The **fungicide** programme needs to be maintained up to and post-flowering, to protect against scab and melanose infection of young shoots and fruitlets.
- ✓ With cool spring weather limiting nutrient uptake, **foliar fertilisers** such as Citrac should be considered to promote strong flowering and fruit set.

Pruning trees from September onwards, when **lemon tree borer** adults are flying, may result in infestation as the adults are attracted to the fresh cuts (see photo). Chemical control options are largely ineffective against this pest, so pruning should be avoided between September and March as best practice.

Lemon tree borer damage



## GRAPES



### Reminders for September:

- ✓ When **combining oil with insecticides** in a tank mix, remember to add the oil last when the spray tank is nearly full. Also, make sure the spray is agitated throughout the mixing process.
- ✓ Select a narrow range oil and check the unsulphonated residue level to minimise the risk of plant injury.
- ✓ Start spraying for **powdery mildew** soon after bud break (at approximately 2cm shoot growth) to ensure this pathogen does not establish on vine foliage.

**Erinose mite** is a perpetual nuisance in New Zealand's grape growing regions. The leaf-feeding activity of this mite elicits a hypertrophic response in the plant, resulting in the production of unsightly galls on the leaf's lower surface. On upper surfaces blister-like bulges appear. This pest is little more than a cosmetic nuisance most of the time and it is only at very high levels of infestation that it impacts on vine productivity. If warm, humid weather coincides with a period of rapid leaf growth galling may be severe and in rare instances the entire leaf blade may be covered. High levels of infestation can inhibit growth, reduce photosynthetic function and induce premature leaf drop. Economic damage is, however, most commonly associated with young vines. Good field control relies heavily on prudent spray decisions in the very early part of the season. Our research demonstrates that the first two sprays of the season are critical. Aim to apply the first spray cover at around bud burst and follow up again approx. 10 days later, ensuring good coverage of foliage is achieved. When the temperature is substandard for wettable sulphur to work optimally, a narrow-range, high purity oil has a good fit. JMS Stylet Oil® or Organic JMS Stylet Oil® both have 99.2% unsulphonated residue level giving them good crop safety profiles. They have given a high level of control of erinose mite in our trials when used as described above. Be mindful of product



Erinose mite galls on underside of grape leaf

incompatibilities with oil sprays; read the label carefully before use. For further advice, contact your local Fruitfed Supplies branch.

## KIWIFRUIT



### Reminders for September:

- ✓ Beware of **potential frost events** following bud-break. Ideally, overhead water or Orchard-Rite wind machines should be utilised for frost control. If these are not available, consider applications of low-biuret urea (<0.4% biuret) immediately prior to risk-periods, to assist frost control. For further details on frost protection to best suit your situation, please contact your Fruitfed Supplies representative.
- ✓ Foliar fertilisers such as **Tracel Plus** and/or seaweed products such as **Calibra** are often used after bud break, as cold spring soil temperatures suppress nutrient uptake by the roots. Application at this timing promotes healthy leaf growth and early leaf size.
- ✓ **Base fertiliser** applications should be made this month if not already completed.

Following bud-break, growers again need to focus on **pre-flower control of scale**. Try to identify any non-vine sources of scale (shelterbelts, for instance) and spray these before bud break with oil (DC Tron Plus) and an insecticide. To reduce potential hiding places on vines for scale infestations, lichen should be removed by applying Graphic Biocide or lime sulphur after Hi-Cane applications and before bud break, i.e. before any green tissue is present. Insecticide should then be applied to vines at **bud break**, with preference being given to the chloronicotinyl chemistry (Actara or Calypso) as these products have the best efficacy, persistence on bark and systemic activity within the plant, while having greater safety to workers and the environment than most alternatives. Target the leader zone and adding a mineral oil such as DC Tron Plus will help penetration around bark and improve efficacy. The last two seasons have also seen significant use of **Du-Wett**, a specialist adjuvant for greatly increasing spread of applied spray solution on the plant, even at low water rates. Du-Wett has the potential to reduce time involved in filling sprayers and spraying crop, while improving coverage. It's particularly effective at ensuring applied spray penetrates beneath kiwifruit bark to where scale shelter. For further information on best scale-control practices in your situation, please contact your local Fruitfed Supplies branch.



Young, new-season kiwifruit growth damaged by frost

## LETTUCE



### Reminders for September:

- ✓ **Monitor crops** carefully for pests and beneficial insects during the spring months.
- ✓ Natural enemies, e.g. lacewings, ladybirds and hoverfly larvae, can provide effective control of **lettuce aphids** during spring.
- ✓ Cool, humid weather is conducive to **downy mildew** epidemics and all lettuce growth stages are susceptible. Maintain protective cover with Dithane™ Rainshield™, Acrobat® MZ 690 or copper fungicides.

## PIPFRUIT



### Reminders for September:

- ✓ If **mealy bug and/or scale** were a problem last season, early season management will be important for gaining good control in this season.

Applaud, a selective insecticide, plus an oil or surfactant is highly recommended for the control of these pests.

- ✓ If **woolly apple aphid** problems were experienced in the previous autumn, it is useful to apply oil in combination with an appropriate insecticide at late dormant or green tip.
- ✓ Where **overwintering primary mildew** is present, apply the DMI fungicide Systhane 40WP® and Polyram® at around open cluster to provide antisporeulant and eradicant control of this disease pathogen. The uptake of Systhane 40WP® is improved by higher temperatures so to optimise its effect apply on a warm day, or the warmest part of the day.

When rain is forecast, your **black spot control programme** should begin with the first fungicide application timed for green tip (bud burst) for each variety. It is vital to protect new emerging leaves – while small, they are extremely susceptible. Cool temperatures and extended bud break may require repeat applications to ensure newly opening buds are protected. Fruit may also become infected at any stage of development, even as early as green tip. Apical portions of sepals and leaves are the first susceptible parts exposed as the fruit buds open. At this time, new growth is expanding rapidly so spray intervals should be adjusted to weather conditions and aim not to exceed seven days.

Early in the season, with cool conditions and rapid tissue growth, the systemic, cool-weather specialist black spot fungicides have a particularly good fit, such as Syllit Plus® and Chorus®. Syllit Plus is a good option as the first black spot fungicide at green tip due to its translaminar movement in the leaf, which assists spray coverage and provides rainfastness. It also has both curative and protectant activity. Note: Maximum of three applications per season for dodine products. The PHI for dodine in the Apple Futures programme is 30 September.



Chorus, an anilinopyrimidine fungicide, has the advantage of being systemic with the active ingredient taken into plant's leaf tissue and moving acropetally (upwards and outwards) from the point of contact. Like Syllit Plus, its uptake is not limited by cold weather and its systemic action gives it excellent rainfastness. Chorus may be applied up to four times and has a 90% petal-fall PHI.

Flint Star®, a co-formulated product containing actives from the anilinopyrimidine and strobilurin chemical groups, is well suited to the pre-bloom to petal-fall spray window. The individual attributes of the two fungicide partners confer excellent protectant and curative (if required) control of black spot. The strobilurin component also provides effective powdery mildew control. Fruitfed Supplies' Technical team's replicated field trials have incorporated Flint Star, showing it has consistently provided excellent control of these two diseases under high infection pressure.

## ONIONS



### Reminders for September:

- ✓ For control of **broadleaf weeds and Poa annua**, apply Flag® FI, Chloro IPC and Peptoil™ Crop Oil at flag stage and 1-2 true leaf stage.
- ✓ For **Poa annua** and other grasses, apply Gallant® NF from 1-2 true leaf stage.
- ✓ Self-set onions are an important source of **onion thrips**. Remove them now from the crop and surrounding areas before the thrips start moving on to new plantings.
- ✓ Late season frost can damage onions allowing **Botrytis** in. Use Prolific®, Amistar® or Switch® for botrytis control.
- ✓ Three to four applications of Cereous™ at 3-4 week intervals is required for onion white rot control.

## POTATOES



### Reminders for September:

- ✓ Conventional seed treatment fungicides, e.g. Monceren®, or in-furrow applications of Amistar at planting are needed for **black scurf** control.
- ✓ An integrated control strategy for black scurf should include 2-3 year rotation into grasses, cereals or maize and planting clean potato seed no more than 50 mm deep.
- ✓ All seed should be treated with an insecticide, e.g. Gaucho, or have an insecticide applied at planting, e.g. Actara in-furrow spray, or phorate granules for control of sucking insect pests.

Expect the **tomato/potato psyllid** to be present in your crop once the crop has emerged. Numbers through early spring will be low and seed treatments and insecticides applied at planting will help to keep numbers down initially. Crops must be intensively monitored to maintain a clear idea on the situation in each crop.

## SUMMERFRUIT



### Reminders for September:

- ✓ The first fungicide spray should ideally be systemic, e.g. Chorus® (peaches, nectarines and apricots only) or Folicur®, as these products will contribute excellent disease control as flowers are opening.
- ✓ During bloom, the application of Keystrepto (streptomycin) for **blast control** is most effective when used with a suitable adjuvant such as Regulaid and applied in anticipation of favourable infection conditions. Application immediately after frosts, hail or strong wind may also be wise to prevent disease establishment on damaged tissue. To reduce resistance risk, do not apply Keystrepto more than necessary.
- ✓ Monitor for **thrips** during the flowering period, if thresholds are exceeded apply Mavrik Aqua Flo®. Studies have confirmed Mavrik is safe to bees. Limit its use to the flowering period, as it is toxic to beneficial predatory mites.

An effective **brown rot** control strategy starts with the protectant spray schedule over the bloom period. Floral parts are very susceptible to infection and are also efficient spore traps. Wet events during bloom may induce blossom blight resulting in a direct crop loss. When rain is forecast it is important to start fungicide covers as the first flowers are opening. Products that have a systemic mode of action (e.g. Chorus or Folicur) should be favoured for this first spray, as they will contribute disease control even prior to the flowers fully opening. Note: Chorus to be used on peaches, nectarines and apricots only. For optimum brown rot control throughout the season, use Chorus in preference to Folicur during flowering to allow the use of maximum three DMIs in the pre-harvest window.



Anthers exposed at full bloom

The new fungicide Pristine® has an excellent fit in the mid-late bloom window. It offers a high-level of protectant activity against both brown rot and Botrytis, as well as very good persistence and rainfastness (maximum of two applications per season, 100% petal-fall PHI). The interval between spray applications will depend on weather conditions; maintain a 7 day interval when disease infection pressure remains high. For further advice, contact your local Fruitfed Supplies branch.

## OrganiBOR stocks arrive

*New to New Zealand horticulture, the slow release, natural boron source, OrganiBOR®, should be available again at Fruitfed Supplies stores around the country.*



Featured in the June issue of Facts, OrganiBOR has struck a positive note with a range of horticultural growers for its beneficial characteristics in terms of a gradual and consistent boron release says nutrition category manager Rob Lamb.

"Shipments are being delivered around the country with more on the way. It is a new product to the industry, but many growers have already grasped the concept and benefits it offers and we expect this boron form to become an industry standard," says Rob.

"OrganiBOR, or calcium magnesium boracite, is boron-rich sedimentary rock that slowly breaks down and releases boron into the soil. Instead of applying a highly water soluble boron with the potential to leach or cause excessive plant uptake, OrganiBOR is predominantly citric soluble, avoiding the fine line between boron deficiency and toxicity. Applications are made once every two to five years depending on soil type, management practices and application rates making the product another cost effective nutrient management tool for use in orchards or field-grown crops."

The product can be applied any time of year, separately or with other fertilisers. Having slow release characteristics, the sooner the product is applied, the sooner a lift in soil boron levels will occur and become plant-available. As with any micronutrient, applications should be in response to soil and tissue testing.

Visit your nearest Fruitfed Supplies branch for more details and new shipments of OrganiBOR. ➡

## Supplementary pollination worth considering

*The supplementary pollination of kiwifruit crops during the critical upcoming flowering period is an option many growers are embracing.*



There are a number of economic benefits from the investment in supplementary pollination, reminds Steve Saunders of PollenPlus Ltd.

"Ensuring that kiwifruit flowers are pollinated adequately ensures increased seed numbers and this is important because fruit with

higher seed numbers are better at competing for carbohydrates and vine resources, so can accumulate higher levels of dry matter than fruit with low seed numbers. Increased fruit size and larger Class 1 pack-outs also result. Essentially you're getting a higher conversion from flowers to export-quality fruit," says Steve.

Now is the time to start thinking about supplementary pollination. The range of products and services from PollenPlus, including a new innovation for spring applications, is available from Fruitfed Supplies, so talk to your branch representative now to be ready for flowering. ➡

## It's time to think Dionysus

*With the risk of frost passing in many areas, spring is the time to start planting Dionysus cover crops to assist with both pest and disease control, vine management and presentation in the vineyard for the upcoming season, says Fruitfed Supplies category manager Claire Mills.*



Rising ground temperatures and good soil moisture will see most species in the Dionysus mixes establish readily in the spring. However, growers should take care with ground preparation, as poor preparation may result in poor germination and establishment of the cover species, and greater competition from weeds.

Whether your need is leaf roller or *Botrytis* control, invigorating or de-vigorating vines, or vineyard presentation, we have a cover crop from the range below to assist:

- Bio-Ley – selected seeds and blends such as Phacelia, buckwheat and alyssum to provide valuable food sources for predatory and parasitic insects;
- Lo-Gro – low, slow growing blend of NZ-bred ryegrass with good cold temperature activity. A low maintenance blend for excellent presentation;
- Devigour-Max – de-vigorates vines through competition for nutrients and water leading to more open canopy for reduced fungal pressure and better fruit quality;
- Bio-Bulk – provides above-ground biomass that is ideal for mulching under the rows to build up nutrients and organic matter;
- Custom blends – unique blends to your specific requirements.

To ensure you get the correct cover crop to suit your specific requirements, talk to your local Fruitfed Supplies representative. ➡