

# CROPSAFE

AUTUMN 2014

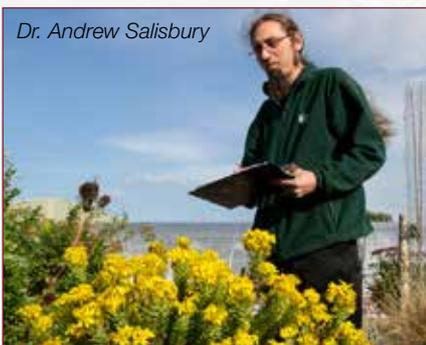
NEWS

## Foreign invasion

Numbers of non-native pests and diseases appearing in the UK are increasing. Whilst the globalisation of plant trade is partly to blame, there is evidence of some natural migration and spread, and this highlights the importance of employing safeguarding measures and awareness throughout the supply chain.

Pests can arrive attached to living plants and plant products from overseas, as RHS Senior Entomologist, Dr. Andrew Salisbury explains. "This is not just a commercial phenomenon.

"Amateur horticulture can aid the arrival of some pests; for example the fuchsia gall mite is said to have come to the UK with plant cuttings rather than via commercial trade."



Dr. Andrew Salisbury

Global trade has contributed to the problem. Asian and other longhorn beetles have reached the UK as larvae hidden inside wooden packaging or with living plants, for instance. Thankfully they have been controlled.

Some new pests can fly or be blown across from the continent. Adults of the box tree moth were found on the south coast long before the caterpillars were 'discovered' in England, suggesting the pest came here independently.

Box tree moth is a potential concern for UK growers, warns Dr. Salisbury. "Its spread could compound diseases already causing problems on box (*Buxus*)



Box tree caterpillar adult ©RHS

such as box blight and we have seen a high level of 'box' destruction in mainland Europe."

Another pest of concern to UK growers is the 'fuchsia gall mite,' he advises, "This is down to the destructive nature of this pest, the popularity of fuchsias and the lack of control measures."

There has also been a rise in oak processionary moth, which was introduced to the UK with the importation of semi-mature oaks. Oak infestations can cause severe defoliation of plants and it is a potential public health issue. However, the rate of spread is relatively low, due to ongoing containment and eradication measures.

“ Raising awareness and improving phytosanitary practice within horticulture is vital. ”

The recent outbreak of Chalara dieback in ash (*Chalara fraxinea*) in the UK and other emerging plant health problems led the government to commission a Tree Health and Plant Biosecurity Expert Taskforce report, the recommendations of which are now being implemented.

The new plan is vitally important according to Dr. Salisbury who views the control of imports as the best way to stop new pests and diseases arriving. "However, to ban imports would be draconian and possibly counterproductive. Within world trade agreements this would be impossible to implement. More import controls may harm the horticultural trade that it aims to protect and may not stop the arrival of non-native pests and diseases, although better regulation may help," he adds.



Fuchsia gall mite damage ©RHS

"Raising awareness and improving phytosanitary practice within horticulture is vital, educating the public is also a fundamental part of plant protection. Many of the new pests and diseases have been spotted for the first time in the UK by private gardeners, who are the end users of many of the imported plants."

He concludes that more research is needed into methods of detection, biology, control and mitigation. "The pathway of introduction is not always known. Also, the effects of climate change on potential new pests and those already present is understudied. Certain practices have been put in place and there are many success stories, but we still have to raise awareness."

## CERTIS

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# Start clean, stay clean the key to protection against myco

Growers are being urged to take particular care when cleaning and disinfecting glasshouses both during harvest and between crops. Despite it being a time consuming task, experts stress it's a key step in the reduction of myco spores and thus disease establishment.

The disease spores can attack protected edible crops and in cucumbers will damage the plant and petioles, making the fruit unsaleable or even kill it entirely.

Derek Hargreaves



Derek Hargreaves, Technical Officer at the Cucumber Growers' Association urges growers to regularly disinfect as a matter of course, not just as part of

the end of season 'spring clean'. "If you can see the floor at any point in the year, apply a treatment," he says.

"To start clean, I would definitely encourage spraying the floor with a disinfectant. Jet 5 is extremely good at reducing the numbers of myco spores; the levels of infection drop significantly after application and it helps remove the threat."

Alan Horgan, Certis' Technical Officer, advocates that Jet 5 (peroxyacetic acid) is ideal for use in an Integrated Hygiene Management strategy.

"It's a powerful and reliable contact disinfectant that breaks down into O<sub>2</sub>, CO<sub>2</sub> and water, so there are no residues left on hard surfaces.

"It's recognised as a food grade sanitiser, with a short persistence, and is extremely user friendly, particularly in protected edible crops."

Explaining the potential for myco to have devastating consequences, Derek Hargreaves explains how the

fungus penetrates the plant tissue and releases new spores at a fairly fast rate. "Myco produces perithecia, which are no bigger than the size of a pin head. Each individual perithecium releases 200,000-300,000 spores throughout its lifecycle, and a single decomposing cucumber fruit can carry several thousand perithecia," he adds.

"Disease is always easier to manage when you haven't got it. Once myco gets inside the glasshouse and begins to build up, it becomes more difficult to control and will only get worse," he notes. "It is important to thoroughly clean the glasshouse at each turnaround, and then apply a disinfectant to ensure the treatment is successful.

"Although this process can take some hours to complete and can be labour intensive - unless you use air fog equipment - it is time well spent to ensure that crops come into a clean and disease free environment. Start clean and stay clean," he concludes.



# New option for powdery mildew control for tomato growers

Certis' powdery mildew fungicide, Takumi SC, has been granted an 'Extension of Authorisation for Minor Use' (EAMU) to allow applications to be made to glasshouse

Dr Phil Morley of the Tomato Growers' Association, believes that the new off-label approval for Takumi SC provides tomato growers with an alternative option for the prevention and treatment of powdery mildew.

"This EAMU is a welcome development for the tomato industry, offering a much needed additional control option for mildew," says Dr. Morley. "The active ingredient cyflufenamid has protectant and curative properties\*, and will offer growers effective and locally systemic control (or translaminar activity), giving long term protection on treated leaves."

He explains that the main control option currently available for use against powdery mildew in glasshouse tomato crops is sulphur. "A significant problem with the use of sulphur based products is their negative effect on the biological control of glasshouse whitefly. As a

result, growers are often required to use a secondary product to reduce pest populations.

"Many secondary products can be very disruptive within the glasshouse 'ecosystem' and are not compatible with existing Integrated Pest Management (IPM) programmes."

Alan Horgan, Certis' Technical Officer notes that Takumi SC has a novel mode of action that provides a much needed solution in the ongoing battle against this damaging disease. "Powdery mildew can be a devastating fungus to treat, causing stunted growth, amongst other problems."

He advises employing the maximum individual dose of 150ml per hectare for tomato production. Growers can make two applications per crop ensuring the maximum total dose of 300ml per hectare isn't exceeded and providing

that the three day harvest interval is observed.

Before use, growers should test Takumi SC on a small area of the crop to satisfy themselves regarding crop safety on the variety requiring treatment.

The extension of the authorised use provides for the use of Takumi SC (M16000) in respect of crops and situations, other than those included on the product label. No efficacy or phytotoxicity data have been assessed and as such the 'extension of use', is at all times done at the user's choosing, and the commercial risk is entirely theirs. Users must be in possession of a copy of the Extension of Authorisation Number: 0800 of 2014 for full details of product extension prior to use. This can be obtained via the via the Chemicals Regulation Directorate (CRD) website <http://www.pesticides.gov.uk/>.

## Revocation for Thianosan DG fungicide

**Certis regrets to announce that the protectant fungicide, Thianosan DG (thiram M13404), is being lost to the UK market.**

Growers are no longer able to purchase the product as the last date for sale and distribution has now passed.

Growers must ensure that all stocks are used up or disposed of in-line with UK legislation by 31 August 2015.

For further information, please contact Certis on 0845 373 0305 or speak to your distributor.

Last purchase date for growers	31 August 2014
Use-up, storage, disposal until	31 August 2015



# Positive result for Takumi SC on tomatoes

Having recently been granted an EAMU for use in tomatoes, Takumi SC (see page 3 for full article), is already delivering positive results, as Eduard Udyanskyy, Growing Manager at Glinwell plc testifies.

Glinwell's have worked with Certis for 10 years, and when a fellow grower advised Eduard that he'd successfully used Takumi SC on his cucumber crops, Eduard contacted Mark Jones, UK Field Sales Manager at Certis BCP.

"This year, for the first time, we had an outbreak of powdery mildew on our tomatoes," he explains. "It is very unusual for us to get this fungus on our crops, but the weather and humidity levels have been extremely conducive to powdery mildew this season."

Eduard has previously employed sulphur burners, but as the nights have been so warm and vents have

remained open, less sulphur has been vaporised and control has not been effective. "We turned to Takumi SC when the sulphur didn't work on the crop of piccolo at our TomWorld nursery, and we've been very pleased with the results.

"We witnessed effective control and the crop is now looking very healthy. Takumi has proven to be a really strong product, and we're now looking to use it in other glasshouses where powdery mildew is causing concern," he says.

"We will continue to use it as part of our armoury against the fungus moving forwards."

TomWorld, in Nazeing, Essex is just one of five nurseries across the UK that make up Glinwell plc. The company bought the site, which was originally a three hectare flower nursery, in 2010. "We adapted it for tomatoes and expanded it by a further three hectares, and are hoping to further expand it by another five hectares in 2015," Eduard notes.

## Apply Phytosure for effective spider mite control in soft fruit



The use of biologicals in soft fruit has the potential to eradicate spider mite (*Tetranychus urticae*) as long as it is applied early, before diapause in October, advises Certis BCP's Colin Govett. "Phytosure is an obligate roaming predator," he says "This means that it has one food source - the spider mite and they will search out every last egg or nymph. There have been instances where the spider mite doesn't return the following year," he explains.

Steve Fauchon, Crop Manager from Little Brook Nursery, a soft fruit farm part of R & V Emery can testify to obtaining effective results with Phytosure and recommends that attention to detail is important in delivering long term results.

"We have seen good results in blackberries. In the crop there is no evidence of spider mite because the predator, Phytosure, is on top of them," he affirms.

In the raspberry crop, spider mite management is of utmost importance according to Steve. "We are seeing positive results in raspberries, although

with the recent hot weather, spider mites breed faster so it is important to keep a close eye on the pest to predator ratio.

"We began putting one dose, of approximately ten Phytosure predators, per four plants. We then doubled and tripled this dose, allowing us to get on top of it. By persevering with the product and getting an effective programme in place, we are seeing a significant reduction in spider mite," specifies Steve.

Going forward he will continue to apply Phytosure to soft fruit as part of an integrated programme. "We will certainly



Adult spider mite

keep applying it to raspberry crops. Spider mite management is something we are becoming better at. It is an effective biocontrol and an important part of our Integrated Pest Management (IPM) programme."

## Ambisure (sw)

Did you know?

*Amblyseius swirskii* will establish quicker if both thrips and whitefly are present in the crop. *Amblyseius swirskii* can also contribute to the control of spider mite and tarsonemids. This predatory mite also feeds on pollen and the more varied its diet, the quicker its establishment on the crop will be.



*Amblyseius swirskii* is produced in the UK

# Mark Jones UK Field Sales Manager BCP



Never a far cry away from the horticultural world, Mark was born into it. The son of a cut flower carnation grower, Mark knew from an early age that horticulture was his preferred path.

In 1990 he followed his brother, Simon's, footsteps and began working with BCP as an account manager. Today, as Field Sales Manager, Mark looks after customers in the protected vegetable, soft fruit and ornamental plant sectors, supporting Certis BCP and the traditional Certis portfolio.

He doesn't know where the last 25 years have gone, but can say that he enjoys helping Certis customers achieve good quality, high yielding crops. He values honesty and respect because in a tight knit industry, reputations are important.

A dedicated Arsenal fan, in his spare time Mark enjoys walking his aptly named dog, Gunner.

## Biological controls meeting year round pest challenge

Growing tomatoes 12 months of the year has its challenges. Nigel Bartle, Managing Director of North Bank Growers, recognises impeccable planning, integrated control measures and maintaining a close relationship with key advisors is vital to supplying a number of major supermarkets with high quality produce all year round.

Certis BCP Field Sales Manager Mark Jones and Account Manager Mark Wilde make fortnightly visits to North Bank Growers' two separate sites, advising on crop protection measures. They bring key expertise, regularly advising Nigel's team, who are equally expert at inspecting the

and diseases from the start of the crop to the end, because another crop is being put in straight afterwards. There also has to be a balance because with pest carry over there are beneficials which pass on from crop to crop as well," explains Nigel.

with extra sachets of Ambisure (sw) (*Amblyseius swirskii*) at peak times to keep on top of the pest," assures Nigel.

Beesure audax, the British bumble bees Nigel uses will also behave differently under artificial lights. Therefore to ensure that pollination levels remain high, he has to check that hive numbers are correct and control the bees' flying times according to when the most natural light is available.

Growing all year round and under lights in the winter means the tomatoes are a higher risk crop but are also higher value. "It's an investment so our Integrated Pest Management programme (IPM) is vital. We don't want any crop set backs from pests and diseases or pollination issues because we have to keep each crop going longer, to remain viable.

"Ultimately, we have to respect what the consumer wants, which is good quality food grown in a sensible and common sense manner. We must be careful not to lose sight of this. It sends a message out about the food we are growing in the UK, our care and attention to due diligence marks us out and means our produce is of a particularly high standard," concludes Nigel.



Nigel Bartle

crop. Nigel explains that the pressures which come with growing fruit all year round, mean that their advice and support is crucial. "There's a difference between a company which wants to sell you biocontrols and a company which endeavours to genuinely support and make the relationship work."

The North Bank Growers all year round tomato crop covers 24,000 square metres, 7 acres of their total 124,000 square metres, and with no seasonal clean up, good hygiene is imperative. "Cleanliness is crucial in terms of pests

From September to March, tomatoes are under lights and this brings with it a number of hurdles. "It's important to enter the lighting period with the right balance of predators and cleanliness, to manage the different environment. It's humid and light, which is perfect for white fly for example. They were present the year before last and we treated them with Macrosure (*Macrolophus*), which got on top of it," he adds.

"Russet Mite is another problem. Eradicoat (*Maltodextrin*) is a very effective product, and may be combined

# EAMU update

Certis have a wide range of products that may also have an off-label use, or Extension of Authorisation for Minor Use (EAMU). When establishing if a product has an EAMU, it is advisable to check the Certis, CRD, Liaison or HDC websites.

Certis: [www.certiseurope.co.uk/products/product-eamus.html](http://www.certiseurope.co.uk/products/product-eamus.html)

CRD: <https://secure.pesticides.gov.uk/offlabels/search.asp>

Liaison (by subscription): <https://secure.fera.defra.gov.uk/liaison/>

HDC (access by levy payers): <http://www.hdc.org.uk/profile-details>

Warning notices about EAMU use: As Extensions of Authorisations for Minor Use conditions will not be given on the product label provided by pesticide manufacturers, it is essential that anyone who needs to use a pesticide product does so in accordance with an Extension of Authorisation. The text of the Extension of Authorisation must be read before commencing any spraying operation.

All Extensions of Authorisation for Minor Use carry date of expiry details. However, they remain in force only whilst the product from which they are derived continues to be authorised.

These uses are not endorsed by Certis and are carried out entirely at the risk of the user.

## Technical Hotline

**01223 894261**

For more information, growers are urged to contact the Certis technical hotline.

## BASIS & NRoSO CPD Points

Reading this publication qualifies the reader for two BASIS Crop Protection points and two NRoSO points

BASIS reference Number: CP/35083/1415/g

To apply for your BASIS points email the code and your BASIS account number to [scott@basis-reg.co.uk](mailto:scott@basis-reg.co.uk)

NRoSO reference number: NO459269f

To apply for your NRoSO points email the code and your NRoSO membership number to [nrososupport@cityandguilds.com](mailto:nrososupport@cityandguilds.com)

## Upcoming industry events

Event	Location	Date	Stand no.
Four Oaks	Macclesfield, Cheshire	2 and 3 September	D 124 & 125
South West Grower	Matford Centre, Exeter, Devon	1 October	73
GroSouth	Roundstone Nurseries, West Sussex	12 November	Not yet confirmed

# Welcome to our 'Certis Interactive' page

This is a chance for you to take part and get in touch via Twitter, engaging with us and other CSN readers.

## Where do you read Cropsafe News?

We're interested to know your favourite spot for reading your copy of CropSafe News - send us your pictures via Twitter, @CertisUK, or email at: [infocertisuk@certiseurope.co.uk](mailto:infocertisuk@certiseurope.co.uk)

## ID the pest

Do you know what the pest in the picture is?

Tweet us at @CertisUK or email [infocertisuk@certiseurope.co.uk](mailto:infocertisuk@certiseurope.co.uk) to be in with a chance to win.

©RHS Picture Courtesy of RHS

### 1. What is the best way to control and monitor spider mite?

Depending on the crop a combination of biocontrols, soft chemistry, conventional chemistry (where appropriate) and thorough monitoring techniques are key to spider mite management.

Spider mite go into diapause in October, during which time, it is untreatable. Apply Phytosure early autumn, before diapause, to the leaves where spider mite are present. This can be followed with applications of Majestic (*Maltodextrin*) or Spruzit (*Pyrethrins*), as a 'clean up' where pest pressure remains.

When mites awaken, they are harder to treat and can potentially cause devastation to the crop the following spring.

Efficiently monitor crops, and check stock as it arrives. Symptoms include white speckles or bleached appearance on leaf surface and undersides. Cleanliness and hygiene is imperative.

### 2. How do we control vine weevil with available options?

Apply natural parasitic nematodes for vine weevil. Use either *Nemasys L (Steinernema kraussei)* which is a low temperature tolerant nematode or *Heterorhabditis bacteriophora* for warmer soil temperatures. These nematodes will seek out and kill vine weevil larvae. This combined with strict hygiene measures will help control a potential outbreak. If an outbreak occurs Spruzit should be applied, and sprayed in the evening.

Crops are damaged when larvae feed on roots. Growers are advised to be vigilant, checking for signature semi-circle shaped notches along the sides of leaves and flowers.

Remove any plants which have been badly damaged and examine the roots and the surrounding soil. Cleanliness is vital.

**#CertisFAQ tweet us your questions**

## Your questions



# CROPTALK “”

In the last edition of Cropsafe News, the problem of resistance to antibiotics and how this resistance was of increasing concern to the medical profession was featured. This problem of resistance is particularly worrying as there have been no significant introductions of new antibiotics for several decades. One of the reasons for the lack of new compounds is the huge cost of research and development in bringing new compounds on to the market. This is certainly a problem not just affecting the pharmaceutical industry but is also very applicable to our own industry.

With costs spiralling to many millions, manufacturers have to think very carefully before they even consider trying to develop new products to serve the horticultural market. Many of the new actives currently used in the horticultural industry are spin-offs from the arable sector, where the actives have a more widespread use and can guarantee the manufacturer a long-term return on their investment.

“ All of these problems can be dramatically reduced by implementing better hygiene. ”

Returning to the analogy between human health and horticulture, it is worth observing how the risk of infections, particularly those like MRSA – especially present in hospital environments – are being tackled. They are being tackled by better hygiene, such as the use of bacterial hand-washes and paying attention to improving the cleanliness of the environment where the infections are most likely to occur.

The prevention and suppression of harmful organisms is one of the important factors highlighted in the Sustainable Use Directive. We are all guilty of occasionally cutting corners when it comes to neglecting hygiene, both in the nursery and on the land. Some serious consequences may well occur as a result of this neglect. Diseases such as *Pythium* and *Rhizoctonia* can be transferred to plants which are raised in unclean

module trays. Big vein in lettuce is a classic example of how disease can be transferred to a seedling from infected containers. Furthermore, once a lettuce crop is infected with big vein, the infection can be transferred into the soil where the crop is planted. Big vein will then remain in the infected field for a number of years.

The transfer of *Sclerotinia* on machinery is yet another example of how poor hygiene can cause a problem in previously unaffected fields. This is one reason why white rot in onions has become such an extensive problem.

All of these problems can be dramatically reduced by implementing better hygiene practices. Cleaning irrigation lines, pots and trays, in addition to disinfection of machinery with a product such as Jet 5 is vital if serious infections - especially from fungal and bacterial disease - are to be avoided.

“ Jet 5 is based on peroxyacetic acid, a highly effective disinfectant. ”

Jet 5 is based on peroxyacetic acid, a highly effective disinfectant and an important preventative measure. In the long run, it is much better to implement good hygiene, than having to find solutions in an attempt to control a problem which could have been avoided in the first place!

## This month on Twitter

**ACT Fruit Grower** @ACTfruitgrower  
Record growth for British raspberry industry over the last ten years  
<http://wp.me/p4ftbK-w3>

**WhartonArboriculture**  
@WhartonArb  
Policy paper - Tree Health and Plant Biosecurity Expert Taskforce: Final report The taskforce present their... <http://fb.me/1f3fcyS32>

**Horti Daily** @hortidaily  
UK: BTGA announces theme for 2014 Conference: 'An invitation to innovation': The 2014 British Tomato Growers ... <http://bit.ly/1rDU91l>

**UK Grower Awards**  
@GrowerAwards  
Call for entry is now open! Check out our new categories and submit your entries! Deadline 10 October @hortweek

**Andrew Salisbury** @AndrewSalisbury2  
Enq. of the week goes to Fuchsia gall mite - can ruin plants, spreading - S. England @The\_RHS  
<https://www.rhs.org.uk/advice/profile?PID=512> ...



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# CERTIS

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USE BIOCIDES SAFELY. ALWAYS READ THE LABEL AND PRODUCT INFORMATION BEFORE USE.

For further information with regard to the warning phrases and symbols for these products please refer to the product labels.

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