Advancements in tackling aphid virus transmission

Protecting the British potato seed industry from increasing disease and virus pressures is extremely important for growers, particularly for a sector where retaining a reputation of high-health status is vital.

Eric Anderson, senior agronomist for Scottish Agronomy and research leader of a recent AHDG Potato study (R499), explains why the threat from aphid virus transmission is one pressure that cannot be overlooked.

“Non-persistent viruses are spread rapidly by aphids due to the pest’s ability to host and pass on infectious particles after feeding on infected plants. These viruses are one of the most significant economic threats worldwide, with the potential to hamper potato yields by up to 50%, from both direct and indirect aphid damage,” he says.

“When an aphid feeds on an infected plant, virus particles usually adhere to the aphid mouthparts, interfering with virus transmission from aphids to plants,” says Martin.

Historically, we used methiocarb and metaldehyde as our mainstay slug protection treatments. But, we’ve now used Sluxx for the past two seasons over the majority of the potato land and still maintained the same level of slug control we’ve always had,” says Martin.

With the farm lying on mainly alluvial silt soils, Martin says that it’s the area of heavy silt soils where most slug pressure is seen. “Growing potatoes, we’re going to be at a greater risk from slugs, and we have to be vigilant throughout the potato growing season, right from tuber growth to maturity.

“This year we’ve seen a mixture of both wet and dry weather, but we’ve consciously applied Sluxx in advance of the rainfall, where possible, which seems to have worked well. We tend to react to the pressures of the season rather than having a programmed approach to slug control that we stick to rigorously.

“We’ve found Sluxx pellets to be durable under changing weather patterns, with an even spread pattern when broadcast. We’re also aware of the pressures facing metaldehyde, which we use on a small area of potatoes, and so always ensure that Sluxx is used on all headlands and buffer zones to reduce the risk of metaldehyde entering water courses,” says Martin.

Mortley Benson, from Certis, adds: “We’ve had good reports back from growers that Sluxx is performing consistently well, and on par with other molluscicides used on potato crops. And, the fact Martin is seeing good results with Sluxx will give other growers the confidence to try this product.”

Martin Goodliffe, farm manager for PJ and AE Godfrey at Dawsmore Farms, South Lincolnshire, explains how he’s made the switch to Sluxx (ferric phosphate) following the loss of methiocarb from the market.

“With the use of an integrated programme with oils we’ve been able to get a greater understanding of how viruses are transmitted and acquired, while gaining a useful insight into how to reduce the overall level of aphid borne viruses.

“For the British potato seed industry this could be a significant advancement in terms of crop protection,” concludes Eric.
Changes to CIPC dose rates for the 2015/2016 season

As part of the ‘Be CIPC Compliant’ stewardship group, Certis are prompting growers to be aware of the reduced maximum dose rates for CIPC this season.

In response to industry concerns surrounding exceedances in stored potatoes, the stewardship group has introduced a five year phased approach to reduce the maximum CIPC application rates.

Now in its third year, growers are reminded that the maximum total dose rates for CIPC have been reduced to 30 g/t of active ingredient (AI) for fresh potatoes, and 50 g/t AI for processing potatoes.

Certis’ key account manager, Morley Benson, explains how Certis are already on track to meet the new, reduced application rates.

“Certis has been a big supporter of Benson, explains how Certis are already on track to meet the new, reduced application rates.

“The total label dose rates of all the Gro-Stop products is set at 30 g/t AI for fresh and 36 g/t AI for processing potatoes which is in-line with the ‘Be CIPC Compliant’ stewardship group guidelines.”

Morley adds that Certis, alongside other stakeholders of the CIPC stewardship group, are recommending that growers using cold stores with holding temperatures of below 5ºC, apply only one application of CIPC up to a maximum individual dose of 16 g/t AI. This should be done during the pull down phase, before the store temperature falls below 7ºC.

“Then you’ve achieved one application. It’s in these stores that we see the greatest risk of a maximum residue level (MRL) exceedance, as CIPC does not disperse as well in cooler temperatures, which can result in localised exceedances occurring.”

“Last season, the maximum individual dose of CIPC was 18 g/t AI but this season we’re recommending growers use a maximum single dose of 16 g/t AI in these stores. Product efficacy is still seen at this lower rate, and it reduces the risk of exceeding the MRL.” says Morley.

For more information on the ‘Be CIPC Compliant’ initiative please visit the website www.CIPCcompliant.co.uk.

<table>
<thead>
<tr>
<th>Total dose of CIPC per season</th>
<th>Maximum individual dose</th>
<th>Certis’ recommendation for maximum individual dose at cooling – below 5ºC</th>
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</thead>
<tbody>
<tr>
<td>Fresh potatoes</td>
<td>30 g/t AI</td>
<td>18 g/t AI</td>
</tr>
<tr>
<td>Processing potatoes</td>
<td>50 g/t AI</td>
<td>18 g/t AI</td>
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Mocap 15G reminder

Growers are reminded that it is now illegal to use Mocap 10G (ethoprophos) on-farm.

Up until 10 June 2015, operators were still able to legally use the 10G formulation if it was already on-farm. But, this date has now passed, and we head into the new season where only the 15G formulation can be used.

The new maximum dose rate of the 15G formulation is 40 kg/ha. This will provide a reduction in spring, and will also give growers the same correct active ingredient for wireworm control as before, but will now only give a useful reduction in potato cyst nematode (PCN) damage.

Look ahead to BP 2015

BP 2015 is to be held on the 12 and 13 November at the Harrogate International Centre. Come and meet the Certis team on stand H2 to discuss innovative crop protection options for growing and storing potato crops.

This month on Twitter

AHDB Potatoes @AHDB_Potatoes

Alison Horgan, @CertisUK enthuses about BP2015 12 & 13 November – have you registered yet? bp2015.co.uk https://youtu.be/7dLYwYeOvH4

ArableFarming @ArableFarming

Important new potato project on greening – read about it here at http://www.fnpighst.com/news/three-year-project-looking-into-ways-to-reduce-greening-in-potatoes-5176 ...

McCain UK @McCainUK

@CropsWklyfact: 1.8m+ tonnes of potatoes are made into chips each year in the UK- the same weight as 14K blue whales

James Hutton Inst @JamesHuttonInst

Euroblight project @AarhusUni & @WageningenUR has published latest #potatoblight #Europe data http://bit.ly/1dFrQzU

Tweet tweet!

If you’re on Twitter follow @CertisUK

For further information please contact the Certis technical hotline on 0845 373 0305.

NSP resonates with farmers

Responses from nearly 1,000 potato growers have revealed 69% are aware of the Nematicide Stewardship Programme (NSP) after just one season.

Performed on behalf of Certis, the survey asked potato growers for feedback in relation to their farming enterprise, crop protection options and awareness of the potato stewardship initiative for a chance to win a pair of tickets to the 2015 Rugby World Cup.

Alan Horgan, Certis’ technical officer, explains the significance of these results to the potato industry. “NSP was launched at the start of this year to help address challenges related to the sustainable control of nematodes.

“As an industry, we must be proactive to ensure nematicide products are used responsibly and in accordance with manufacturers’ recommendations to make sure they remain available to growers in the future.

“The fact that so many growers are already aware and supporting this initiative is a clear sign that keeping on top of nematodes in a safe but efficient manner is high on their agenda,” he says.

www.NSPStewardship.co.uk

Metam 510 label changes

Growers and contractors are advised to be aware of label changes to Metam 510 (metam-sodium).

The new maximum application rate of this liquid soil sterilant now stands at 300 l/ha, and can only be used on the same field once in every three years.

Morley Benson, from Certis, explains that the changes should have no detrimental impact on the industry. “The label changes will ultimately help secure the long-term use of a key product for potato growers.

“This will enable the retention of an important tool in the fight against PCN, allowing for a more integrated approach to overall pest and disease control in potato crops. Trials have also shown that the lower application rate may also result in yield benefits for growers.”

Morley adds that there are several factors growers must be aware of to ensure effective results from Metam 510. “It’s important that soil temperatures are a minimum of 10ºC at a depth of 10 to 15 cm, when the soil sterilant is applied.

“Effectively sealing the soil post application is also vital to ensure the product is maintained in the soil profile to get the most beneficial sterilisation effect. Performing the cress test, prior to planting, will ensure the soils are ready for planting the new crop,” he says.