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Press Release

*For immediate use*

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**Seed potato trials look to science for alternative disease management strategies.**

Chemistry is fast disappearing from farming’s toolbox, but researchers and farmers are working together to trial and demonstrate alternative solutions to protect the high health status of Scotland’s seed potato industry.

The third in a series of case studies, developed as part of the RHASS Presidential Initiative (PI), exploring the science behind food and drink production, will look at how farmer owned-cooperative, Scottish Agronomy, is collaborating with farmers, to develop alternative and more integrated pest management schemes.

Scottish Agronomy has been working with Jim Reid of Milton of Mathers Farm, near St Cyrus, who has been involved with seed potato trials for over a decade.

Together they have been looking at the benefits and practicality of spreading straw mulch and applying mineral oils to the crop canopy and comparing this integrated approach with that of using a pyrethroid insecticide.

Conducting trials, alongside a sister trial in Fife, they found that applying a straw mulch led to a 49% reduction, with mineral oil giving a 54% reduction in Mosaic virus, whereas a pyrethroid insecticide increased Mosaic virus.

Eric Anderson of Scottish Agronomy explained why science is needed more than ever to offer solutions to some of the climate pressures threatening crops, and argued that the need for collaboration with growers and researchers is critical for translating science in to practice.

“It is important that as scientists and researchers, we remain one step ahead of the sector in identifying problems and can create approaches to address these challenges. In doing so, we have a pretty unique relationship where we trust each other, and we complement each other.

“Our skills base is largely complementary but too often scientists are guilty of working in silos, and there is a lack of joining up the dots through practice. Through translational science you can begin to understand technical problems and come up with practical solutions.”

Jim Reid added: “There is a realisation happening in farming, that we have taken a belt and braces approach to protecting our crops, regardless of the consequences and now we are seeing that aphids are becoming more resistant to pyrethroids and the few products we have left are disappearing.

“It is important moving forward that we listen to the science and look at how we can take more of an integrated approach to building our resilience. There is no silver bullet, but thorough some of the work we have been doing in our trials, we have been able to demonstrate scalable, practical techniques which could be more widely adopted by the seed potato industry.”

Vice-president of the RHASS PI, Ewan Pate, concluded: “For decades, the scientific answer to a problem like aphid resistance to insecticides would have been to look to chemistry for a solution. Now the answer is more likely to be biological or even mechanical.

“It is scientific nonetheless and this interesting work at Milton of Mathers fits in very well with the 2023 RHASS Presidential Initiative which highlights the science behind food and drink production.”

For more information on this year’s Initiative and to access past and future case studies, please visit: [https://rhass.org.uk/presidential-initiative/https://rhass.org.uk/presidential-initiative/](https://rhass.org.uk/presidential-initiative/)

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