

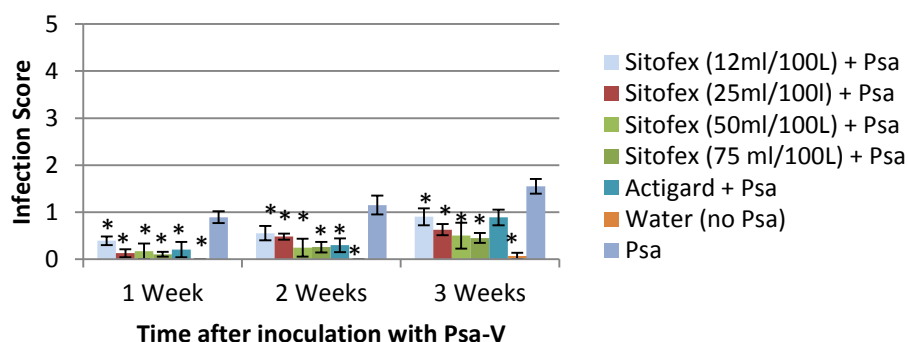
# Product testing report

10 December 2012

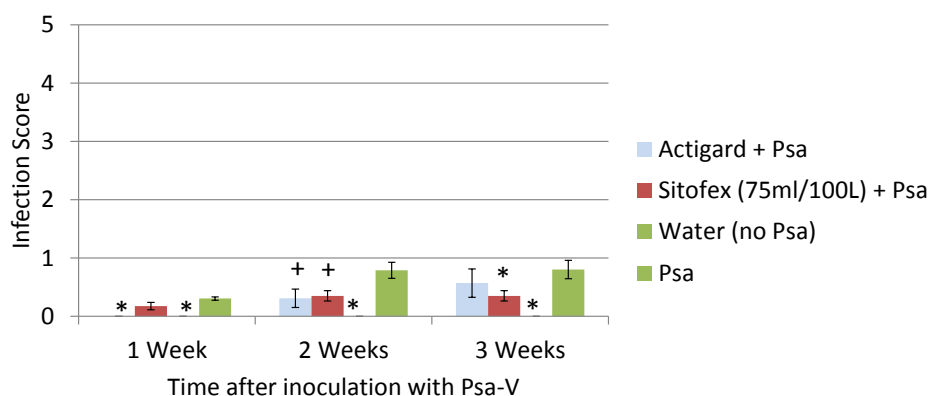
Sitofex		
Supplying company:	Nufarm	
Active ingredient:	N-(2-Chloro-4-pyridyl)-N-phenylurea (CPPU) or forchlorfenuron	
Testing protocol:	Protectant <input checked="" type="checkbox"/>	Biological <input type="checkbox"/> Elicitor <input type="checkbox"/>
Application rate (per 100L):	Various	

Test results	
Test	Greenhouse seedling tests
Method description	<p><b>Experiment 33: Elicitor (November 2012)</b> G3 seedlings were sprayed once with Sitofex 7 days prior to spray inoculating with Psa-V (at <math>10^9</math> cfu ml<sup>-1</sup>). Four concentrations of Sitofex were tested: 12, 15, 50 and 75mL per 100L.</p> <p><b>Experiment 37: Elicitor (Nov/Dec 2012)</b> Hayward seedlings were sprayed once with Sitofex 7 days prior to spray inoculating with Psa-V (at <math>10^9</math> cfu ml<sup>-1</sup>). The concentration of Sitofex tested was 75mL per 100L.</p> <p>Assessments were made at weekly intervals after inoculation. The degree of leaf spotting was determined visually using a 0 – 5 scale and is plotted as an 'Infection Score'.</p>
Results	<p><b>Experiment 33:</b> Sitofex reduced leaf spotting G3 seedlings 1, 2 and 3 weeks following inoculation with Psa-V. Generally, the higher the rate the lower the leaf spotting. The differences were statistically significant.</p> <p><b>Experiment 37:</b> Sitofex significantly reduced leaf spotting in Hayward seedlings 2 and 3 weeks following inoculation with Psa-V.</p>

### G3 (Experiment 33)



### Hayward (Experiment 37)



\* Psa inoculated control and the treatment are statistically significantly different at the 5% level

+ Psa inoculated control and the treatment are statistically significantly different at the 10% level

## Summary

A single application of Sitofex 7 days prior to inoculation with Psa-V significantly reduced leaf spotting in G3 and Hayward seedlings.

## Notes

Standardised screening protocols have been used to test products for efficacy against Psa-V to enable a high throughput of products. Protectant, biological or elicitor protocols may be used, depending on the mode of action of the product. The protectant protocol involves the product being applied to the plant with inoculation following on the same day, once the product has dried. The biological protocol involves the product being applied two to three days prior to inoculation with Psa-V. The elicitor protocol involves the product being applied to the plants seven to ten days prior to inoculation with Psa-V. Assessments of leaf spotting are performed at weekly intervals after inoculation. In most cases, the protocol used is selected by the product supplier. In some cases, a non-standard protocol has been used.

Data are presented for all assessment timings; however, evaluation of results is largely based on the final 'three week' assessment data. Disease symptoms will be better developed by this time and earlier assessments are considered to be less reliable. However, in the case of some elicitors, it is possible that the elicitation effect has been expended and that poor results at the 'three week'

assessment time indicate reduced efficacy as a result of insufficient frequency of application.

Results from greenhouse trials primarily serve as a screening tool to determine products that will progress to field trials. Care should be taken when extrapolating results to field conditions. Results in the field may differ due to different environmental conditions and differences in plant material.

**Note – leaf spotting may not necessarily mean the plant is infected. It simply indicates that the plant has been challenged by Psa.**

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