



## Plant Bio Regulators (Pty) Ltd

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## NONTOX-SILICA™ AND ROSES

### TRAIL SITE AND DESIGN

In the Hekpoort area standard roses are cultivated for the export market. Plants are grown in open fields and fungi control is done by aerial and mechanical spraying from the ground. During the extremely wet conditions in January/February 2006 leaf drop was extremely high due to fungus infection. The standard pest control program is weekly application of a registered fungicide (X).

### TREATMENTS

1. Control with no application of fungicide since 5<sup>TH</sup> January 2006.
2. 150ml Rambo+200ml NONTOX-SILICA™ per 100 litre water as foliar spray. Three applications were done on 05/01/2006, 19/01/2006 and 02/02/2006 with 8 litres per 10m row per site.
3. 20ml NONTOX-SILICA™ per 100 litre water at 25 litres per 10m with a watering can on 05/01/2006 and 19/01/2006.
4. Standard fungi control with X once per week.
5. 200ml NONTOX-SILICA™ per 100 litre water as foliar spray. Three applications on 05/01/2006, 19/01/2006 and 02/02/2006 at 8 litres per 10m row.

Each treatment was repeated thrice on sites of 10m randomly selected.

### RESULTS

Two parameters were used to evaluate the responds on 16/02/2006 by two independent individuals, namely.

1. % Defoliation.
2. % Infection of the 3<sup>rd</sup> and 4<sup>th</sup> leaf from the flower bud by blackspot.

<i>Treatment</i>	<i>% Defoliation</i>	<i>% Infection</i>
<i>Control. No fungicide from 05/01/2006</i>	73	59,56
<i>150ml Rambo+200ml NONTOX-SILICA™ per 100 litre water as foliar spray</i>	5	21,78
<i>5ml NONTOX-SILICA™ per 10m row on the soil between the drippers.</i>	53	46.67
<i>Fungicide X</i>	22	29,33
<b><i>200ml NONTOX-SILICA™ as a foliar spray</i></b>	<b>37</b>	<b>32,89</b>

### CONCLUSION

Although the climatic conditions were conducive to fungal infections, the combination of 150ml Rambo+200ml NONTOX-SILICA™ per 100 litre water as a foliar spray, managed to stop the infection resulting in plant growth reaching production aims. This treatment was only applied every second week compared to weekly applications of X. Without a fungicide, the performance of NONTOX-SILICA™ is poor but still comparable with the weekly application of X.

The conditions did not aid the application of NONTOX-SILICA™ to the soil, and one would expect better results when NONTOX-SILICA™ is applied through the drippers and the treatment starts at an earlier stage.

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