Grower Trial
Vegetable Seedlings

The Seedling Factory
Sayer Road – Hope Valley – WA
October/November 2018
Presentation by: Alan Corke – Seasol International
Introduction

• The Seedling Factory is a significant supplier of seedlings to the vegetable industry in WA.
• Management were happy to trial Seasol alongside their standard procedures.
• Seasol supplied “magenta” jars so that root growth could be easily observed.
• All treatments were carried out by Seedling Factory staff under supervision of the business manager Ben Funnecotter.
• Ben has
“I’m skeptical that many plant root improvers actually contain fertilisers, therefore making it difficult to determine if any beneficial or visual plant response is the result of the fertiliser or the magic product”
First trial

• Initial results were disappointing but not unexpected.

• Seedling Factory were using Seasol plus Calcium at 1:400 dilution compared to their standard fertiliser regime.
The impact of no additional nutrition was obvious in the Seasol+Ca treatment. The plants were effectively starved as Seasol plus Calcium has virtually no nutrient value.
Second Trial

• Seedling Factory agreed to another trial.

• Treatments this time:
  – Seasol Calcium @ 1:400 added to Seedling Factory Standard Fertiliser regime.
  – Seedling Factory Standard Fertiliser regime.

• First pics taken 21\textsuperscript{st} October 2019.
Assessment - 21\textsuperscript{st} October

- Results were reversed compared to first trial in the case of Broccoli and Cos Lettuce.
- Growth of Seasol Ca treated Broccoli & Cos Lettuce was vastly ahead of standard grower practice.

- Melon growth was similar but not ideal in both treatments.

Next assessment 29\textsuperscript{th} October.
2\textsuperscript{nd} Assessment – 29\textsuperscript{th} October

Seasol Ca + Standard Fert

Standard Fert
2nd Assessment - Cos Lettuce – Root Growth

Much denser, more fibrous and greater volume of root growth on the Seasol + Ca.
2nd assessment - Broccoli – Root Growth

Seasol Ca + Standard fertiliser...
Extensive root growth in bottom container

Standard Fertiliser.
No root growth into bottom container.
Final Assessment – 5<sup>th</sup> Nov
Final Assessment – Cos root growth

Denser more fibrous roots system in bottom container of Seasol Ca treated plants
Final Assessment – Broccoli Roots

Well developed roots in bottom container of Seasol Calcium treatment. Almost no roots visible in the standard grower control treatment.
Final Assessment – W.Melon roots

Easily visible root development in bottom container of the single surviving Seasol Ca plant. Very small root development in one of the standard treated plants and none visible in the bottom container of the second standard treatment plant.
## Calcium Treated Plants

<table>
<thead>
<tr>
<th></th>
<th>Cos Lettuce</th>
<th>Broccoli</th>
<th>Watermelon</th>
</tr>
</thead>
<tbody>
<tr>
<td>Much larger plants</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Much bigger leaves</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Greater root size &amp; volume</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Overall more developed plant</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Final Assessment

Compared to Control the Seasol + Ca treated:

• Watermelon appears similar in top growth to the standard grower treated melon.
• Broccoli & Cos Lettuce look like they’ve been growing for 25-30% longer than standard treated plants.
• Leaf volume and leaf size is visibly much greater than on Seasol Calcium treated Cos Lettuce & Broccoli.
• Plant roots on Watermelon, Cos Lettuce and Broccoli are more developed than the standard treatment.
Comments

• Seedling Factory management were impressed with result.

• The first poor trial showed that Seasol + calcium contains no added (NPK).

• On seeing the results of the 2\textsuperscript{nd} trial they clearly saw that they were something other than a fertiliser response with the Seasol + Calcium added.