Disease Management Update: Processing tomatoes

Drip Chemigation Studies

Gene Miyao, UC Coop Extension, Yolo, Solano and Sacramento counties
Evaluation of Chemigation on Tomato Root Health

Mike Davis and Johan Leveau, Dept. of Plant Pathology, UCD
Nilesh Maharaj, grad student, PhD project
Gene Miyao, Cooperative Extension, Yolo Co.
Tom Turini, Cooperative Extension, Fresno Co.

Fruit yield and quality

Root health

Soil microflora
- Pathogens
- Others

Drip additives
- Chemicals
- Biologicaals
- Saline water
More of...

- Buried drip irrigation continues to increase
- Rotations to tomato are more concentrated
- Incidence of soilborne pathogens is increasing

Sclerotium rolfsii  
Southern Blight

Fusarium oxysporum f. sp. radicis-lycopersici  
Fusarium crown and root rot
<table>
<thead>
<tr>
<th>Chemigation Treatment</th>
<th>Woodland Field</th>
<th>Dixon Field</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yield tons/A</td>
<td>Vert %</td>
</tr>
<tr>
<td>Control</td>
<td>34 b</td>
<td>20</td>
</tr>
<tr>
<td>Vapam 15 gal</td>
<td>35 b</td>
<td>15</td>
</tr>
<tr>
<td>Tenet</td>
<td>34 b</td>
<td>18</td>
</tr>
<tr>
<td>Vapam + Tenet</td>
<td>34 b</td>
<td>19</td>
</tr>
<tr>
<td>Quadris + Ridomil</td>
<td>33 b</td>
<td>17</td>
</tr>
<tr>
<td>Vapam + Quad + Ridomil</td>
<td>36 b</td>
<td>15</td>
</tr>
<tr>
<td>Serenade Soil</td>
<td>38 b</td>
<td>18</td>
</tr>
<tr>
<td>Serenade + Quad + Rid</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vapam + Serenade</td>
<td>36 b</td>
<td>13</td>
</tr>
<tr>
<td>Chicken manure</td>
<td><strong>45 a</strong></td>
<td>15</td>
</tr>
<tr>
<td>Tenet + Serenade</td>
<td></td>
<td></td>
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<tr>
<td>SoilGard</td>
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</tbody>
</table>

*significant difference: manure vs non-manure

Fusarium crown: F. oxysporum
2012 Treatments *(tentative)*
Control
Quadris + Ridomil
Vapam highest rate (15 gal in 2011)
Serenade soil
Regalia
Compost tea
Chicken manure - 10 tons
Chicken manure - 20 tons
Chicken manure + Serenade
Potassium - high rate
Summary: Disease Control Evaluations

- No demonstrated effectiveness of chemicals & biologicals through drip irrigation

Value of composted chicken manure?