Clematis
- Cultivar Evaluation
- Cutting Production & Yield
- Phoma Control
- Propagation
- Flowering
- Scheduling

Can Clematis fit into a greenhouse production system?

Clematis
- Cultivar Evaluation
- Rooting pct.
- Stock plant health (cutting production) in SC
- Flower number
- Flower size

Cutting Production
Propagation
Flowering

Cultivar Evaluation
- Rooting pct.
- Stock plant health (cutting production) in SC
- Flower number
- Flower size
Top performers (out of 104 tested)

- Dr. Rupple
- Relman
- Camaby
- Henyi
- Huvi
- Starburst
- Warsaw Nike
- Lady Caroline Nevill
- Inspiration
- Sealand Gem
- Pink Fantasy
- Lincoln Star
- C. armandii ‘Snow Drift’
- C. paniculata (Sweet Autumn)

H.F. Young

Cutting Production & Yield
Leaves per cutting (node)

<table>
<thead>
<tr>
<th>Root Position</th>
<th>Node Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>90%</td>
<td>3</td>
</tr>
<tr>
<td>84%</td>
<td>2</td>
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</table>

~8 weeks from last flush

Root Number/Cutting

Node Position

Root Number/Cutting

Node Position
11/12/2013

<table>
<thead>
<tr>
<th></th>
<th>Tent</th>
<th>Mist</th>
<th>Tent</th>
<th>Mist</th>
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<tbody>
<tr>
<td>Fert Irr.</td>
<td>100</td>
<td>94</td>
<td>100</td>
<td>100</td>
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<tr>
<td>Root %</td>
<td>100</td>
<td>94</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Root#</td>
<td>7.5</td>
<td>5</td>
<td>8.3</td>
<td>6</td>
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<tr>
<td>Root FW</td>
<td>0.73</td>
<td>0.45</td>
<td>0.91</td>
<td>0.55</td>
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</table>
Phoma clematidina

- Very little published information on this pathogen
- Sexual stage has never been found
- Splash dispersal of conidia important for spreading
- Causes root rot in some container plants

- Alternate week applications of:
  - Daconil
  - Pageant
  - Heritage

4 weeks after stick
Phoma clematidina

Flowering

Long Days (16 hr)
Short Days (9 hr)

Vernalization (wks)

Total Plants Flowering (%)

Weeks of Cold (41F)
Days to First Flower

- 9 hr
- 16 hr

Flowers per Plant

- 9 hr
- 16 hr

Scheduling

8 wks in prop + 1 wk after TP

12 weeks after stick
Conclusions

- Cutting maturity is critical to propagation.
- We had 100% rooting with early April cuttings. Perhaps vernalization plays a role in root formation?
- Phoma prevention is critical. Start with clean stock.
- Tenting is sufficient for propagation.
- Long days OR vernalization are required for flowering.
- Long days AND vernalization are beneficial for flowering.
- Clematis production can likely be reduced from a 2 years (cut to flower) to 1 year.

Time of Harvest is critical for cutting postharvest success... but sometimes poor-shiping lantana cuttings still perform poorly (leaf abscission or black shoot tips) with afternoon harvests.

Does the DLI delivered up to the time of harvest matter?
EXPT: DLI (moles/day) delivered to Lantana Stock Plants prior to cutting removal

<table>
<thead>
<tr>
<th>Light Intensity (umol/m2/s)</th>
<th>50</th>
<th>100</th>
<th>200</th>
<th>300</th>
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<tbody>
<tr>
<td>Hours</td>
<td>0</td>
<td>2</td>
<td>4</td>
<td>6</td>
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<tr>
<td>0</td>
<td>0</td>
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<td>0</td>
<td>0</td>
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<tr>
<td>2</td>
<td>0.4</td>
<td>0.7</td>
<td>1.4</td>
<td>2.2</td>
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<tr>
<td>4</td>
<td>0.7</td>
<td>1.4</td>
<td>2.9</td>
<td>4.3</td>
</tr>
<tr>
<td>6</td>
<td>1.1</td>
<td>2.2</td>
<td>4.3</td>
<td>6.5</td>
</tr>
<tr>
<td>8</td>
<td>1.4</td>
<td>2.9</td>
<td>5.8</td>
<td>8.6</td>
</tr>
</tbody>
</table>

Conclusion

- Lantana cuttings should be harvested after 4 moles/day have been delivered to the stock plants.