Review of Strawberry Transplanting

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Introduction

• Review of the strawberry transplant – Quality, size and physiological keys.
• Review of cold conditioning and what it means to the grower.
• How to achieve a successful strawberry plantation.
Review of the Strawberry Transplant - Quality

• What represents a high quality transplant?

• Transplant size—two year study
  
  Big plants, little ones and “slicks”.

  Plant maturity related to size.
Transplant Size
Production of daughter plants.
Transplant Size

• Both years, all varieties smaller plant diameters 1.5 months after transplant.
• Aromas – small crowns = less fruit June and July; significant total yield effect.
• Seascape – No effect slicks, small or large crowns.
• Albion – small crowns, slicks = less fruit June and July; no total yield effect.
Chill requirement

• Chill requirement is the cumulative period, normally measured in hours below a certain temperature, necessary to produce the internal changes in the strawberry plant which result in a normal sequence of growth which follows hibernation.

• In strawberry, hours accumulated from 28 to 45 degrees Fahrenheit are considered to be effective and count towards the chill requirement.
Chill: Two Parts

• Field Chill: What the plant accumulates prior to harvest.

• Supplemental Chill: The accumulation of chill after harvest and the plant is in the cooler.
Chill: Key Points

• Generally, growers should know that a high degree of chill results in more vigor, which means to say more vegetative growth, and less fruit production. Less chill, on the other hand, means a plant with less vigor.
One more point

- The challenge of the grower is to obtain sufficient chill for his or her variety, but still be able to plant early enough so that the plant can establish itself sufficiently.
Supplemental Chill Times for Several UC Varieties

<table>
<thead>
<tr>
<th>Variety</th>
<th>Type</th>
<th>Supplemental Chill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albion</td>
<td>Day neutral</td>
<td>10-18 days</td>
</tr>
<tr>
<td>Monterey</td>
<td>Day neutral</td>
<td>10-18 days</td>
</tr>
<tr>
<td>Camarosa</td>
<td>Short day</td>
<td>0-7 days</td>
</tr>
<tr>
<td>Chandler</td>
<td>Short day</td>
<td>Less than 7 days</td>
</tr>
<tr>
<td>Diamante</td>
<td>Day neutral</td>
<td>10-21 days</td>
</tr>
<tr>
<td>San Andreas</td>
<td>Day neutral</td>
<td>10-18 days</td>
</tr>
<tr>
<td>Portola</td>
<td>Day neutral</td>
<td>10-18 days</td>
</tr>
</tbody>
</table>

From UC publication 3351 “Integrated Pest Management in Strawberries”
Efforts for the day of planting

• Fungicide dip (Abound, Aliette)
• Biological fungicides?
• Management of the plant itself—don’t let it dry!
• Sufficient watering day of planting.
• Sufficient soil preparation and correct fertilizer.
Correct position the plant in the ground.

Figure 1. Plant A is planted at the correct soil depth.
“J- rooting”
“J”rooting
Conclusión