Wrapping Bareroot Interior Spruce 2+0 and Coastal Douglas-Fir 2+0 Roots with Vitafilm

Working Plan

1) Objective: To determine if wrapping the root systems of bareroot stock for frozen and cold storage is advantageous to the quality of stock after storage as well as advantageous to the wrapping and packaging segments of the overall lifting process.

2) Location: Surrey Nursery

3) Trial Stock:

<table>
<thead>
<tr>
<th>Seedlot</th>
<th>Stock ID</th>
<th>Species</th>
<th>Age</th>
<th>Request Key</th>
<th>Agency</th>
<th>Storage</th>
<th># Trees/Box</th>
</tr>
</thead>
<tbody>
<tr>
<td>8302</td>
<td>413</td>
<td>Se</td>
<td>2+0</td>
<td>85K 7028</td>
<td>Evans</td>
<td>Surrey</td>
<td>1000</td>
</tr>
<tr>
<td>8306</td>
<td>417</td>
<td>Sx</td>
<td>2+0</td>
<td>85K 7067</td>
<td>Lytton &amp; MOF</td>
<td>Surrey</td>
<td>900 or 1000</td>
</tr>
<tr>
<td>3925</td>
<td>334</td>
<td>Fdc</td>
<td>2+0</td>
<td>85V10029</td>
<td>Doman</td>
<td>Surrey</td>
<td>250</td>
</tr>
<tr>
<td>2968</td>
<td>318</td>
<td>Fdc</td>
<td>2+0</td>
<td>85V7121</td>
<td>M.O.F.</td>
<td>Surrey</td>
<td>250</td>
</tr>
</tbody>
</table>

4) Trial Design:

A) For each seedlot: 16 boxes with bundles wrapped with vitafilm on the top 15 cm of the root system, 4 boxes with bundles wrapped with vitafilm on the top 25 cm of the root system, and the remainder of the boxes with bundles wrapped with vitafilm around the root collar will be set up.

B) Within each sample approximately one half of the sample will be wrapped using the "homemade" wrapper. It has a thin wire strand of wire to cut the vitafilm, has a GE iron hotplate to heat press the vitafilm, and has a 15 cm x 25 cm x 7.5 cm deep groove for the bundles of seedlings to lay in. The other half of the sample will be wrapped using a commercial meat wrapper made by Clamco. It has a bar to cut the vitafilm, has a hotplate to heat press the vitafilm and has a 17 cm x 54 cm x 4.5 cm deep groove for the bundle of seedlings to lay in.

C) All of the trial stock will be stored in an operationally practical method. No preferential treatment will be given to the seedlots. During storage, daily temperatures will be recorded for the Spruce seedlots for each of the three samples. After the seedlots are frozen the recordings will be reduced to 3 per week. Temperatures will be recorded 3 times a week for the coastal fir. Visual stock inspections will be every two weeks for all four seedlots until planting begins.

5) Summary and Report

A final report will be issued by October 1987.

6) Report Distribution

Nursery Administrative Officers
Nursery Superintendents
Silviculture Branch