SLURRY TRIAL

SX 83110 Q

WORKING PLAN  1983

S. Willis
WORKING PLAN FOR SLURRY TRIAL, SX 83110 Q

1) Objective:
To test the effectiveness of dipping bareroot seedlings in a peat moss slurry for improving survival and performance.

2) Location:
Two dry-belt sites in Kamloops Region - exact locations to be determined in Fall, 1983.

3) Trial Design:
A. Layout - Two locations x 8 replications (rows) x 2 treatments (lines) per row x 50 trees per line = 1600 trees in total.

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</table>

T = Treated (slurried)
C = Control

B. Analysis - Data will be collected in the following format:

<table>
<thead>
<tr>
<th>Row</th>
<th>Planter</th>
<th>Slurried</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Condition</td>
<td>Height</td>
</tr>
<tr>
<td>1</td>
<td>Clarke</td>
<td>Good</td>
<td>12</td>
</tr>
<tr>
<td>2</td>
<td>Willis</td>
<td>Poor</td>
<td>11</td>
</tr>
</tbody>
</table>

The standard contingency tables will demonstrate the effectiveness of slurrying. The null hypothesis is that there would be equal proportions of live and dead trees for both treated and control seedlings.

4) Notes on Planting:
- Dry belt sites are the preferred test locations as survival has traditionally been lowest here.
- The intention is to link up with an operational planting.
- Ministry staff will plant the stock to minimize planter effect.
- To keep conditions similar for both slurried and control seedlings, each planter should carry 2 bags; one for slurried and one for control. By ...

.../2
4) Cont...

planting pairs of trees, slurried and control, the environmental and microsite conditions for both should be almost identical.

- To simulate operating conditions and longer planting runs, tree bags will be loaded and then left for 1 hour.

- In order to put slurrying to the 'full' test it will be desirable to plant on warm, sunny days.

- Details on slurrying, composition, length of dip, etc. will be provided by Kamloops staff. In addition PMS (plant moisture stress) data will be determined, using the pressure bomb, by Kamloops staff.

5) Schedule:

Locate---------- Fall, 1983
Plant------------ Spring, 1984
1st Assessment---- Fall, 1984
2nd Assessment---- Fall, 1985
Interim Report --- Winter, 1985-86
Final Assessment-- Fall, 1988
Final Report------ Winter, 1988-89

6) Report Distribution:

Silviculture Officers, All Regions
Silviculture Branch, Library