SX 80203Q

SEED PITCH REMOVAL - HOT WATER

Working Plan
1980

G. Matthews
Seed Pitch Removal - Hot Water

Certain seedlots are very pitchy, causing difficulties with seeding equipment. Surface pitch increased as seed is handled in processing and in seeding equipment. A hot water treatment prior to stratification may remove surface pitch. In RNX 7977, hot water treatments did not appear to reduce germination.

Experimental Design

Two hemlock seedlots known to be pitchy were chosen. These will not be stratified prior to treatment. After treatment, normal soak and stratification procedures will follow. Seed should be sown in flats or PSB 211's to compare germination rates.

Seedlots to be sown are;

<table>
<thead>
<tr>
<th>Seedlot</th>
<th>Code</th>
<th>Treatment</th>
<th>Germination Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hw (1050)</td>
<td>92G10/B3/3322/0.96</td>
<td>82%</td>
<td></td>
</tr>
<tr>
<td>Hw (1040)</td>
<td>92G5/B2/3090/0.878</td>
<td>97%</td>
<td></td>
</tr>
</tbody>
</table>

Treatment 1: control - 200 seeds. Standard stratification i.e. 24 hour soak, 3 weeks at 2°C.

Treatment 2: 200 seeds. Place dry seed in hot water at 50°C for 15 minutes. Follow standard stratification procedure.

Treatment 3: 200 seeds. Place dry seed in hot water at 50°C for 30 minutes. Follow standard stratification procedures.

Evaluation of Results

Seeds receiving hot water treatment will be subjectively evaluated for pitch removal compared to control. Germination rates will be compared to control.

G. Matthews