

Experiment Summary

Exp.

Treatment:

Strat 29°F H₂O Frozen Plastic cups

Seed - source, name

J Perdue

Treatment details

Date

*Nov 15 9 AM 1972 Seed into 29°F in plastic cups
319 submerged in 3" of water*

Germination record

| Date | Sample No | Treatment (<i>Strat.</i>) | No. of seeds | | Germination ^{1/} | | Germination | |
|-----------------------|-----------|--------------------------------|--------------|------------|---------------------------|------------------|----------------------|--|
| | | | No. of days | Total | Viable | Tips Percents | Complete Percents | in treatment Percent Viability ✓ |
| <i>Dec 14 noon/72</i> | <i>1</i> | <i>29</i> | <i>118</i> | <i>101</i> | <i>Ex</i> | <i>0</i> | <i>0</i> | <i>94</i> |
| <i>Jan 8 " /73</i> | <i>2</i> | <i>34</i> | <i>258</i> | <i>224</i> | <i>etc</i> | <i>3</i> | <i>1</i> | <i>88</i> |
| <i>Febr 16</i> | <i>3</i> | <i>93</i> | <i>173</i> | <i>107</i> | <i>"</i> | <i>0</i> | <i>0</i> | <i>5??</i> |
| <i>Mar 14</i> | <i>4</i> | <i>119</i> | <i>165</i> | <i>144</i> | <i>"</i> | <i>0</i> | <i>0</i> | <i>All dead excise</i> |
| <i>Mar 26</i> | <i>5</i> | <i>131</i> | <i>142</i> | <i>124</i> | <i>"</i> | <i>0</i> | <i>0</i> | <i>" " "</i> |

✓ At end of treatment

All dead in about 3 months

^{1/} In 7 days @ 68°F. Germination complete when root tip through seed coats.

Plastic cups
 These seed sealed in ice to reduce O₂ uptake. Check storage possibilities.

Experiment H₂O strat @ 29°F Cold Rm
 Plastic Cups / Pseudotsuga seed 87% Hainway

| Date | Time of day | Germ. time (days) | Tips | | | Germination | | | No. of days |
|--|-------------|-------------------|--|--------------------------------|---------------|-------------|------|---|----------------|
| | | | No. | Cum. | % | No. | Cum. | % | |
| 1972-73 | | | | | | | | | |
| Germinate 7 days. Then re-strat @ 40°F 60 days | | | | | | | | | |
| Nov. 15 | 9 AM | | Seed into plastic cups with H ₂ O and into 29°F | | | | | | 12 days strat |
| | | | Sample (1) | (118) | (101% excise) | | | | |
| Dec 15 | Noon | 0 | | | 103 calc | 0 | 0 | | 1 = (29 days) |
| 15 | 10 AM | 1 | | | | 0 | 0 | | |
| 18 | 10 AM | 4 | | | | 0 | 0 | | |
| 19 | 1 PM | 5 | | | | 0 | 0 | | |
| 20 | 1 AM | 6 | | | | 0 | 0 | | |
| 21 | 11 AM | 7 | | | | 0 | 0 | | |
| Seed into 40°F strat to determine viability | | | | | | | | | |
| Jan 8 | noon | 0 | | | | 0 | 0 | | 18 days strat |
| 10 | | 2 | | | | 75 | 75 | | |
| 11 | | 3 | (43) Vigorous | | | 10 | 85 | | |
| | | | 1/2 Black strat | | | 9 | 94 | | End |
| | | | Sample (7) | (25) and later (1/2) out strat | (274 calc) | | | | (54) |
| Jan 8 | noon | 0 | | | | 0 | 0 | | |
| 9 | 11 AM | 1 | | | | 0 | 0 | | |
| 10 | | 2 | | | | 0 | 0 | | |
| 11 | 10 AM | 3 | | | | 0 | 0 | | |
| 11 | 10 AM | 4 | | | | 0 | 0 | | Restart No Cum |
| 13 | 9 AM | 7 | | | | 3 | 3 | | Into 40° strat |
| 29 | 9 AM | 0 | | | | 2 | 2 | | Out strat |
| 31 | 9 AM | 2 | | | | 130 | 132 | | Back strat |
| Febr 5 | 9 AM | 0 | | | | 0 | 132 | | Out strat |
| 6 | | 1 | | | | 38 | 170 | | |
| | | | Sample | () | () | | | | |
| 7 | " | 0 | | | | 17 | 187 | | Back strat |
| 9 | 12 noon | 0 | | | | 0 | 187 | | Out " |
| 10 | 5 PM (Hain) | 7 | | | | 9 | 196 | | Back |
| Mar 13 | 2 PM (Lab) | | | | | 2 | 198 | | |

Experiment

H₂O strat @ 29°F Cold Pm
Plastic Cups

| Date | Time of day | Germ. time (days) | No. | Tips | | | Germination | | | No. of days |
|------|-------------|-------------------|-----|------|---|--|-------------|------|---|-------------|
| | | | | Cum. | % | | No. | Cum. | % | |

Strat

Sample

3

(123) (107 calc)

98

| | | | | | | | | | |
|-------------|-------------|---|--|--|--|--|---|---|--|
| Febr. 13/16 | 11 AM | 0 | | | | | 0 | 0 | |
| 21 | 5 PM (Home) | 5 | | | | | 0 | 0 | |
| Mar 13 | 2 PM Lab. | | | | | | 5 | 5 | |

out into germ

(End)

Sample

4

(165) (144 calc)

119

| | | | | | | | | | |
|---------|------|---|--|--|--|--|---|---|--|
| Mar. 13 | 1 PM | 0 | | | | | 0 | 0 | |
| 15 | 1 PM | 1 | | | | | 0 | 0 | |
| 16 | | 2 | | | | | 0 | 0 | |
| 20 | 8 AM | 6 | | | | | 0 | 0 | |
| 23 | 9 AM | | | | | | 0 | 0 | |

out ^{40%} excised All del.

(End)

Sample

5

(142) (127 calc)

131

| | | | | | | | | | |
|---------|-------|---|--|--|--|--|---|---|--|
| Mar. 26 | 10 AM | 0 | | | | | 0 | 0 | |
| 30 | 10 AM | 4 | | | | | 0 | 0 | |

out and into germ
Some excised 1/15/5

All cups out and into germ

Apr 2 7 AM The excised slight curving 10%. 90% gray. dead. The curving about del.

(Finished)

0% Lethal positive