

# Jars

July 23/43

| Treatment                        | % ger |
|----------------------------------|-------|
| Strat @ 41°F for 41 days in jars |       |
| Open to air                      | 96    |
| Sealed air                       | 44    |
| Sealed H <sub>2</sub>            | 72    |
| Sealed O <sub>2</sub>            | 80    |

Feb 12 1945 Exp N

|                               |      |
|-------------------------------|------|
| check                         | 100% |
| { strat seed into             |      |
| { 1/4" H <sub>2</sub> O       | 10%  |
| { Roots 1/8" into             |      |
| { 1/4" H <sub>2</sub> O       | 90%  |
| Roots 1/8" into               |      |
| 1/4" aerated H <sub>2</sub> O | 90%  |

Fully strat seed will not germinate numerous  
in 1/4" H<sub>2</sub>O roots will not break thru  
mucelles unless O<sub>2</sub> continues to be supplied  
O<sub>2</sub> not stored in quantity in embryos in strat.  
Seed needs O<sub>2</sub> for ger from the stratified

Excised embryos will grow in water @  
 70°F roots  $\frac{1}{2}$  to 1" in 8 days.  
                   1 to  $2\frac{1}{2}$  in 15 days  
 In air  
                   1 -  $1\frac{1}{2}$  in 8 days  
                   2 -  $3\frac{1}{2}$  in 15 days.

Aeration @ 41°F for 21 days.

|                 |     |   |
|-----------------|-----|---|
| O <sub>2</sub>  | 64% | } |
| N <sub>2</sub>  | 16% |   |
| CO <sub>2</sub> | 3%  |   |

Enclosed in jars 56 days @ 41°F

|                 |     |               |
|-----------------|-----|---------------|
| O <sub>2</sub>  | 87% | 70%           |
| N <sub>2</sub>  | 14  | 0%            |
| CO <sub>2</sub> | 73  | ← note! → 50% |
| Air             | 25  |               |

Note effect of CO<sub>2</sub> is this a mistake or not?

Proportions in air

O<sub>2</sub> 20.92

CO<sub>2</sub> .04

N<sub>2</sub> 78.14

Argon etc. .90

Pt CO<sub>2</sub> O<sub>2</sub>

Jan. 30/46

Volume ratios (cc)

CO<sub>2</sub>

O<sub>2</sub> or Air

1. 80.0 20.0

2. 40.0 60.0

3. 20.0 80.0

4. 10.0 90.0

5. 5.0 95.0

6. 1.0 99.0

Air 7. 0.2 99.8

8. .0 100.0

Absorb CO<sub>2</sub> with BaCl<sub>2</sub>