

*Julia*  
MANAGEMENT  
RR ~~Supervision~~  
P. PINE RANGES  
✓ Bitterbrush  
Seed germination

December 4, 1942

Experiment No. 3

Object of study

To determine the effect of alternate warming and chilling of bitterbrush seed on its germination.

Materials

Seed

Use approximately 1,000 of the seeds collected at Pilgrim Creek, Shasta National Forest, July 29, 1942 by C. C. Buck.

Plan of experiment

Place approximately 500 unshelled bitterbrush seeds in each of two glass jars. Moisten the seed in one jar and keep the seed in the other jar dry. Store both jars at a temperature of  $-18^{\circ}$  C. After twenty-four moist hours at this temperature remove both jars and plant 20 seed from each in/soil in tarpaper pots in the greenhouse. Leave the two jars in the greenhouse for twenty-four hours and then return to  $-18^{\circ}$  C. After a second period of twenty-four hours in cold storage, remove the jars again and plant 20 seeds from each lot in the greenhouse as before. Repeat the above procedure for a period of 30 to 60 days or until experimental results indicate that some change should be made in the plans.

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