

Step by Step Guide to Cold-Moist Stratification



Cold-Moist Stratification Pretreatment Instructions

Cold-Stratification provides dormant seed a period of ripening in a cold, moist environment, which allows the seed to germinate when temperatures become warm. Typically this period occurs over winter in temperate climates. Cold-stratification can be induced in the lab with the use of a refrigerator.

Instructions:

1. Prepare sand or vermiculite by adding enough water to thoroughly moisten it, but don't add so much water that it puddles at the bottom of the container.
2. Label a plastic bag with the species name, lot number and date. Place about 1/2 cup of moistened sand or vermiculite in the bag and add the seed. Mix thoroughly.
3. **Partially** close the plastic bag to allow for some air flow. Place bag in a refrigerator. Ideally, the temperature should be 40 degrees Fahrenheit.
4. Check once or twice a week to make sure mixture stays moist. Add a little water if it is drying out. Do not add so much water that it puddles in the bottom of the bag. Keep in refrigerator for 4-8 weeks or for the amount of time indicated for the species.
5. Check seed mixture to make sure seeds are not germinating. If seeds have begun to germinate, plant immediately. Do not allow mixture to dry out.
6. Check seed mixture to make sure mold or fungus is not forming. If you see any, open the bag completely and dry down the mixture a bit so that it is not as wet. Do not dry out completely.
7. Remove from the refrigerator right before seeding. Seeds should not be allowed to dry out prior to planting. This may cause the seeds to go back into a dormant phase.
8. Do not allow the cold-stratified seeds to remain at room temperature for more than a few hours. This may cause mold to form in the mixture.

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Place the sand or vermiculite in a sturdy container and add water.



Mix water and the sand or vermiculite thoroughly. Avoid excess water.



Label the plastic bag with the seed name, lot number and date.



Measure out the vermiculite or sand mixture and add it to the plastic bag.

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Add the seed to the bag.



Mix the seed with the moistened sand or vermiculite.



Close the bag partially so that there is still an opening for air flow.



Place the bag in the refrigerator.