

Lesson 5: Stratifying Rose Seed



Texas A&M University Rose Breeding and Genetics Program
Lesson Series in Rose Hybridization

Objectives

- **Identify appropriate stratification medium for rose seeds**
- **Prepare seeds for stratification period**
- **Understand concept of stratification**

What is Stratification?

Stratification is the process of placing seed in a controlled environment to simulate conditions for the purpose of overcoming dormancy and promoting germination.

What does that mean?

It means that we're going to make the rose seed think it has endured a wet winter. Then later, we'll make it think spring has come.

Sometimes seeds can be pretty gullible—and sometimes NOT!

Why do we stratify seeds?

Answer: Dormancy.

Inside many types of seeds, there are certain compounds that inhibit their ability to immediately germinate.

Roses definitely fall in that category.

So, to reap the benefits of our hybridization, we will trick those silly seeds!

Stratifying Rose Seeds

Materials Needed

1. Soil-less media—we use Sunshine Mix 4
2. Water
3. Refrigerator-safe containers
4. Labels (of course!)
5. Powdered fungicide—we use Captan. (Optional)



We often have 1000's of seeds to stratify. To save on containers and refrigerator space, we make labeled cheesecloth or mesh "pockets" for our seeds—so more than one cross can stratify together.

Getting Started

1. The Soil-less Potting Mix

- A good ratio would be 50% peat:50% perlite

2. Water

- To moisten the potting mix

3. Refrigerator-safe containers

- In which to place the potting mix
- Then add your seeds of one cross and cover with approximately $\frac{1}{2}$ inch moist potting mix

4. Labels

- Label the container with the cross it contains.

Fungicide: A Brief Commentary

Don't you hate buying a container of strawberries at the grocery store and opening them only to find that the ones in the middle that you couldn't see look like big fur balls?

The same thing sometimes happens during stratification.

You can dust your seed prior to stratification with a powdered fungicide like Captan to combat the scene reminiscent of "The Trouble with Tribbles". (Any Trekkies in the audience?)

Always follow label instructions if you choose to use!

Getting Started 2

After covering your seeds with moist (NOT WET) medium,

After labeling your containers,

Put them in the refrigerator for 4 months.

Warning:

If you put the seeds in your regular food-containing refrigerator, don't mistake them for leftovers...



Tell your loved ones that this isn't taco meat!