2007 Award of Merit Winner

Hybridizing for Fun

By Gail Trimble

Seed Stratification and Cleaning

As you harvest the hips, you have two options. You can extract the seeds immediately, clean and refrigerate them; or you can refrigerate the hips and clean the seeds later. Most seeds require about 8 weeks of "stratification" – a period of cold storage while the seeds mature.

SEED CLEANING

The seeds inside the hip are surrounded by a fleshy, edible, pulp material which is high in Vitamin C, and can be used to make jelly, jam, tea, candy, and many other recipes. This pulp material inhibits seed germination. In nature, hips are eaten, trampled on, or fall apart with rain and snow, naturally removing the pulp material. This is why seeds seem to germinate more after it rains in the spring.

Seeds showing pulp that must be cleaned off

Hips should be cut into quarters with a pocket knife. Seeds have a very hard shell and are not damaged when the hip is cut. After digging out the seeds, they can then be scraped clean of the fleshy material with a knife or a scrubber. Seeds have to be kept moist at all times. If you are interrupted while hand cleaning them, put a wet paper towel over them. An alternative method to hand cleaning is to put the seeds (with water added) in a blender that has tape on the blades. If you use the blender method, experiment with seeds that you do not care about, as many will be damaged.

FLOAT TEST

Many hybridizers use the float test as they clean their seeds. After cleaning, the seed is dropped in a container of water. If the seed sinks, it is most likely viable. If it floats, tap the seed with your finger several times and many will then sink. If it remains on top of the water after tapping, it is likely that the seed is dead. (A dead seed floats because the embryo inside the seed shrinks as it dies, creating an air pocket.) If you only have a few seeds you can still plant the floaters, as a small percentage of them are viable and will germinate.

The "Float Test"

SEED STORAGE

After you have finished cleaning the seeds, there are several methods you can use to store them in the refrigerator. The seeds can be folded in a moist paper towel and then placed in a zip-lock sandwich bag. If you use paper towels, they must be changed at least every month or mold will grow on the towel and on the seeds inside as in the photo below.

Other hybridizers place seeds on top of moist sand in Petri dishes. Alternative methods include baby

jars or plastic containers with damp cotton balls or damp peat moss. During the 8 weeks of stratification, some hybridizers chill them for a couple of weeks, then leave them out at room temperature for a week, then return them to the refrigerator. They feel that the fluctuation of temperature causes the hard shell to crack and the seed to germinate. Some hybridizers also soak their seeds for 24-48 hours in a mixture of 5 milliliters of undiluted hydrogen peroxide to 95 milliliters of water before storing. This method is said to help prevent “damping-off” – a disease caused by fungi that kills seedlings by rotting or wilting the stem at the soil level.