

The Seed-Cutting

Sheet 1 Preparations

During the preparation of the seed a lot of attention is needed. It's important to work neatly and carefully. But if you check the condition of your seeds daily, nothing can go wrong.

I. Preparing the seed

Materials needed:

- vessels (e.g. plastic cups)
- waterproof pen
- tags
- tea strainer
- fungicide

		
Step 1	Tip the previously <u>dried</u> seed into the vessels <i>Seed of <u>one</u> crossing into <u>one</u> vessel</i>	
Step 2	Label the cups and/or add a labeled tag <i>The tags will be needed later(step 13)</i>	
Step 3	Fill the cups with water <i>The maceration period should be about 4-5 days At the beginning some grains will float on the surface</i>	
Step 4	Change water daily <i>Pour the water with the seed into an old tea strainer Treat the seed with a fungicide, if needed</i>	

II. Preparing the propagator

Materials needed:

- garden propagator(alternate inverted Mason jars)
- disinfectant
- vermiculite (breeding substrate for reptiles)

		
Step 5	Disinfect the propagator <i>Mold is the biggest danger</i>	
Step 6	Fill the propagator with vermiculite <i>Vermiculite can be purchased at any major pet store</i>	
Step 7	Moisten the vermiculite <i>There shouldn't be puddles</i>	
Step 8	Close the propagator <i>Keep it closed until you are embedding the seed</i>	

Find more helpful documents for the use in your garden at

The Seed-Cutting

Sheet 2 Section

The section will probably not succeed from the beginning with every grain. So take the time to practice first on less valuable seed. You might try to examine a grain by transecting it and looking for the components shown at the sketch of an iris grain on this page (Fig. 1). This way you are quickly getting a feeling for the structure of iris grains. Consistently disinfect all tools!

III. The cut

- Materials needed:
- paper towels
 - third hand / magnifying spectacles
 - razor blade
 - tweezers

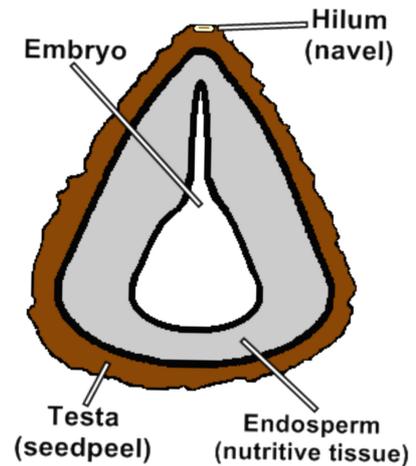


Fig.1 : Components of an iris grain

		
Step 9	Establish a workplace <i>Cut the seed in the middle and collect uncut grains on one side and cut grains on the other side</i>	
Step 10	Take a grain and look for the hilum (navel) <i>The hilum (see Fig.1) is visible as a bright spot or a small tip</i>	
Step 11	Cut off thin slices from the grain <i>Stop cutting if you can see the embryo as small white dot in the grayish endosperm</i>	
Step 12	Collect all grains of one crossing <i>So you won't lose track</i>	
Step 13	Embed the grains in vermiculite <i>Now the tags (step 2) are needed</i>	
Step 14	Close the filled propagator <i>Mold spores in the air could get to the seed</i>	
Step 15	Cull all moldy grains from now on everyday <i>Use disinfected tweezers</i>	

When you have done all these 15 steps, you will soon be able to watch the embryo being “pressed out” of the endosperm. After a first root you will see some tiny leaves. When the seedlings are 2cm and above, you can transplant them into good garden soil.

A more detailed, illustrated description of the Seed-Cutting at