

# 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

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## 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

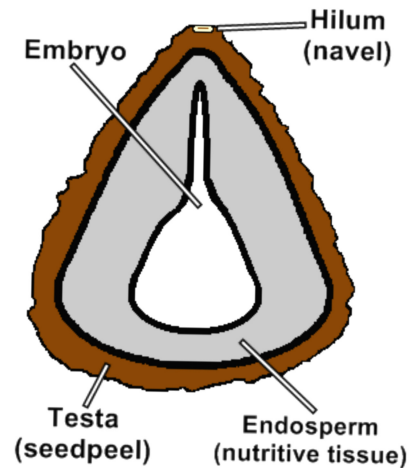



Fig.1 : Components of an iris grain

		
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