Growing tropical plants from seeds

**Germination**
Seeds need water and oxygen to germinate, so are best started in a light, loose soil that will not compact, get soggy, or crust over. Free flow of water & air are a must. Large seeds can be soaked overnight and planted singly. Barely cover small seed, and sprinkle fine seed on the surface and water by misting. Lightly tamp soil to insure good contact with the seed. Keep soil moist, not soggy, and do not allow to dry out.

**Scarification**
It can be even necessary to nick the coat (outer shell of the seeds) with a file or to use sandpaper. Sometimes the coat needs to be cracked or cut in order to let water in and so enable the embryo to break through the coat. All this is not to say that the seeds will not germinate if these measurements are not taken; it will only take longer. These extreme hard seeds have a long shelf life!

**Temperature**
These are tropical seeds we are talking about and they need tropical conditions to germinate! The soil temperature range should be 80-90°F and there must not be much variation in this. The surrounding air should also be no lower than the mid-seventies. When growing of the seedlings occurs, the temperature can be somewhat lower at about 75°F during daytime and 70°F at night.

**Soil**
The best thing to use is soil-less seed starting mixture (item #5374 available from our store); they have the best pH, retain water, have good air penetration and are sterile so that the possibility of attracting fungi is minimized. Use special nursery flats covered with clear plastic or humidity domes (see photo). Those can be home-made from any clear plastic container, or an old fish tank covered with plastic.

**Light**
If you try to germinate seeds indoors, the use of grow lights can be of tremendous help; start positioning these low (8" above the top layer) and when growing occurs raise the lights accordingly. When grown into small plants, reduce the amount of light to 12 hours a day.

**Time until germination**
Average range of time to germinate is usually given in weeks. Seeds that take 2-3 weeks will usually come up fairly evenly; those that take 10-12 weeks will tend to straggle in irregularly. Time varies with temperature, so expect considerable variation. Don't give up too soon - many who have given up and sown another seed in the pot end up with two types of plants in the same pot!

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Plastic bag method
Best for very slow to germinate seeds, very tiny dust-like seeds that can’t be allowed to dry out, and very slow-growing seedlings. Small clean pots are filled with damp, sterile, soilless mix. Milled sphagnum or a light dusting with powdered charcoal discourage fungi & algae. Seeds are sown and the whole pot or tray is sealed in a plastic bag and placed out of direct sunlight. This creates a mini greenhouse and the soil will not dry out and the seeds are protected from mice, etc. Bagged pots may be kept under fluorescent lights without overheating.

Paper towel method
You can germinate seeds in a paper towel. This method is tricky; it’s easy to ruin roots if they dry out, or are planted too late after germinating. Paper towels dry out REAL FAST! Place paper towel in a bowl, saturated with weak nutrient solution (not too much!), and cover with plastic wrap to keep it from drying out. Put bowl in a warm area; top of the gas stove, water heater closet, or above warm lamps. Check every 12 hours and plant germinated seeds with the grow tip up (if possible) in a growing medium as soon as the root coming out of the seed is 1/16” or longer. Use tweezers, and don’t touch the root tip.

If you are sowing seeds in furrows or flats, transplant individual seedlings into cell packs when the first true leaves appear or when they are large enough to handle. Seedlings started indoors should be fertilized regularly with a diluted (1/4 strength) water soluble fertilizer. This will help to produce stockier transplants provided enough light is available.

Before planting in the garden, gradually acclimate transplants to the outdoors. Start by putting them outside on cloudy days or in a shaded location then after a few days work them into more light and exposure. Water immediately after transplanting.

Don’t forget to label!

Seed Guarantees
- We guarantee that we ship FRESH seeds (depending on species, for tropical seeds freshness lasts from a few weeks to a few months).
- We do not take any responsibility on germination rate or germination time.
- We can not guarantee germination even for the freshest seeds. We grow some of our plants from seeds, too. Some fresh, quality seeds never germinate, and there could be many reasons for it which are outside of our control. This is a nature of seeds - you grow from seeds on your own risk. Seed is a live product which depends on many factors and skills such as proper planting time, seed depth, type of soil, irrigation, proper use of fertilizers, weed controls, fungicides, insecticides, disease free soil, and reasonable weather conditions during the growing period. Germination is affected by such factors as temperature, moisture content, light intensity and contamination of planting media. These factors are totally out of our control and are your responsibility and risk. Consequently, we cannot unconditionally guarantee seed to perform properly regardless of conditions or the buyer's methods or mistakes.
- No replacements on refunds on non-germinated seeds. If you are not ready to take that risk, do not spend your money.
- If you received damaged seeds, please contact us within 3 days for replacement.
- Please order only within quantity of packs available in stock! If you order more packs than we have available, we will send substitute of same value.
- Seeds of Exotic Adenium hybrids - do they come true to type? We have grown a few varieties from seeds in our nursery. Those came true colors. Based on other growers experience, the average percentage is close to 60% that flowers come exactly true to the kind. If you have a large collection of different varieties and they all bloom at the same time, cross-pollination may create some interesting hybrids, watch out for seeds and you may create your own named hybrids.

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