

### **Growing Cacti from Seed**

As with the vast majority of other succulent plant seeds the key words when growing cacti from seed are: Warm, Close and Bright. Sow the seeds on the top of a good quality compost and water (spraying is best) with a dilute fungicide solution (Chinosol or a copper based compound). Seal in a plastic bag and place somewhere warm and light (20 – 30 Deg C).

Germination given ideal conditions as listed above should take 5 – 21 days. Initially all that will appear are green blobs that bear little resemblance to a cactus. Subsequent growth can be very slow, although this can be speeded up somewhat by keeping the seedlings growing constantly for the first year or so by keeping them warm and bright year round. Keeping the plants in their plastic bags also helps as it regulates the moisture and prevents drying out at the roots which so often spell death for cactus seedlings. After a few months a more recognisable shape will appear and your plants will look like mini cacti. The seedlings can be left in quite crowded conditions for some time, without undue harm.

When potting on, use small pots, so as to protect from over watering, another cause of failure with cacti seedlings when repotting. Subsequent potting on should involve the whole root ball so as to minimise the disturbance, which can cause problems.

Flowering can occur in some species from the 3<sup>rd</sup> summer onwards, but many, especially the larger types take considerably longer to reach flowering maturity. Some of the true giants may never flower in the grower's lifetime, taking 40 – 50 years or more to reach flowering maturity.

#### **Specifics for Jungle Cacti:**

Epiphyllum, Hylocereus, Selenicereus, Rhipsalis, Wittonia and Zygocactus are slightly different to normal cacti when grown from seed these specifics apply as well as those above.

Germination takes 3 – 5 weeks.

Growing on should be carried out in more shady conditions than for normal cacti, as this mimics the natural conditions that the parent plants grow in. They also require slightly more water than their desert counterparts. Flowering may occur as early as 5 years from sowing.

### **Opuntia (Prickly Pear) From Seed**

Opuntia from seed can be either very easy or extremely frustrating. The reason for the 2 extremes is connected to the dormancy of the seeds which needs to be broken correctly so that the seed germinates when you want it to and not when it feels like it.

In nature Opuntia fruits are eaten, the seed passes unharmed, except that the chemical coating in the seed case has been removed by the process. Now it is possible to buy chemicals which you can soak the seed in to recreate the process, however, there is a much simpler way.

Place the seeds in a ceramic cup (this is important as plastic ones might cause harm to come to the seed). Pour on sufficient BOILING water to just cover the seed ie no more than a few millimetres but sufficient to cover them completely. This treatment breaks down the chemical inhibitors and the seeds survive the contact because you use a ceramic cup which conducts the heat away and very little water – all of which minimises the risk to the seed. After 5 – 10 minutes top up the water to 3 – 5 cm with warm water and then leave to soak for a few days changing the water every 12 hours or so. It is important to change the water as this flushes away the chemicals we are trying to remove. Don't let them dry out, or else you will allow the inhibitors to soak back into the seed.

Now sow the seeds – covering them with their own depth of good quality compost. Water them and now place somewhere warm, close and bright. Sealing the pot in a plastic bag and placing them in a propagator will be best. They need a temperature of 22 – 35 Deg C to germinate and sunlight, so do not place them in the airing cupboard.

Germination will commence in 7 – 10 days and will continue for quite some time. The seedlings look nothing like a prickly pear; they look more like cress with fleshy leaves. Eventually the pads will start to form from the centre of the seed leaves and a more recognisable plant will emerge.

Pot them up when large enough to handle into cactus compost. Do not throw away the pot though as I have seeds germinate as much as three years after they were sown (these are the ones that the treatment did not work on).

*Opuntia* from seed can reach flowering size in as little as three years from seed. Some types will be hardy, others will not. Most can be identified out of flower providing you knew what you had to start with. I attach a reprint of the species list, for those who have bought a mixed packet which should eventually help with this:

aciculata v orbiculata, amyclaea, anacantha, antillana x dellenii, atrispina, balearica, basilaris, basilaris v brachyclada, beckeriana, beckeriana v variegata, boldinguii, brunescens, burbankii v stachellos, cafayatensis, cantabrigensis, cardiosperma, castillae, chakensis, chloroticta, chrysacantha, covillei, crystalenia, curva, curvospina, curvospina v arenacea, deamii, deamii v undulata, durangensis, ellisiana, ellisiana v cyclodes, engelmannii, engelmannii v dillei, engelmannii v elongata, engelmannii v rubriflora, engelmannii v sandia, engelmannii v valida, ficus-indica, ficus-indica v alba, ficus-indica v rubra, ficus-indica v sanguinea, guerrena, haematocarpa, hanburyana, hitchcockii, huajuapensis, hyptiacantha, inaequilateralis, inamoena, ithypetala, joconoxtle, lagunae, lanceolata, lata, leucotricha, leucotricha v fulvispina, lindheimeri, linguiformis, litoralis, lubrica, macdougaliana, macrocalix, macrocentra, macrorhiza, macrorhiza v auricarpa, macrorhiza v riograndensi, macrorhiza v spaerocarpa, maxima, megacantha, microdasys, occidentalis, orbiculata, pachona, pailana, paraguayensis, pendens, phaeacantha, phaeacantha v auranticarpa, phaeacantha v decumbens, phaeacantha v grandis, phaeacantha v longispina, phaeacantha v major, phaeacantha v oklahoma, phaeacantha v pueblitos, phaeacantha v sandiana, phaeacantha v Santa Fe, phaeacantha v silvatica, procumbens, quimilo, quitoensis, rastrera, ritteri, robusta, robusta v maxima, roseiflora, roseiflora v sanguinea, scheeri, schickendantzii, spinulifera, stanley, streptacantha, stricta, stricta v oklahomensis, subarmata, sulphaeocarpa, superba, tardospina, tomentella, tomentosa, tomentosa v campestris, tuna, utkilio, violacea, vulgaris, wentiana, winteriana, zebrina,