

Raising Mammillaria from Seed.

by Mark Masterson, November 2009.

I have been growing Mamm's from seed since I returned to the hobby in 2006. I now grow only documented material and as a result a lot of these collections are only available via seed. There is a huge amount of documented seed available out there when you start looking and I have listed some of the sources I have obtained seed from at the end of this article.

The method I use to sow seed is as follows.....I use a Sankey, electrical heated propagator which does not have a control thermostat and which holds 54 5cm pots. The propagators (I actually have 2 propagators on the go at the same time) are placed on the bench in a position so that they receive shade in the morning and sun in the afternoon.

The compost mix is dependent on what you can source locally. I use a standard compost mix made up of 1 part of loam based compost (John Innes No 3), 1 part washed, sharp sand and 1 part of fine vermiculite. This is mixed and then put through a 5mm sieve.

The 5cm pots are filled to the top with the compost mix and the labels added. The label has both the name and field collection number on one side and the source of the seed and date of sowing on the other. I sometimes may have the same collection from different sources.

The pots are then stood in a tray and boiling hot water is added to just below the rim of the pots and left to stand until the compost in the pot has become soaked through. Each pot is removed one at a time, tapped a few times to settle the compost, the seed sown on the surface of the compost, not covered, and the pot placed into the propagator. A little boiled water is added to the bottom of the propagator and will be topped up from time to time, again with boiled water. I no longer use rain water for my plants the reason being that my rain water tends to be on the acid (low PH level) and encourages moss and Sciara fly in the pots.

I start my seed sowing on the 1st March and I aim to sow the last batch of seed on the 1st July. Last year (2009) I sowed 100 packets of seed each month for 5 months, a total of 500 packets of documented Mammillaria seed.

I have sown seed as early as November but the problem then is that the growing seedlings need a good amount of light. Light levels during winter are poor and while the seedlings will sit there they are not really growing and therefore have a good chance of dying. I have found that seedlings sown in November will be at the same stage of growth as seedlings sown later in following March, by the end of August.

Signs of germination start after about 5 -7 days and after 14 days I would expect most of the 54 pots to have seedlings starting to germinate, although I have had germination after only 3 days. When it get warmer later in the year, June / July, it may be necessary to turn off the propagator and shade it with a piece of newspaper, so as not to overheat the seedlings.

The pots will be in the propagator for only a month then they are removed and stood on the bench in a position where they will be slightly shaded. It is important not to give the newly germinated seedlings direct sunlight so as not to scorch them. They are watered from over head with tap water when required, it's a matter of looking at the pots and deciding if they need a drink.

The germinated pots of seedlings will sit on the bench until they are big enough to handle, seedlings sown in March will normally be of a size to be pricked out in August / September. I prick out into polystyrene trays (old fish boxes) filled with the same compost mix and they will stay in these trays for up to 3 years to grow on.

The only problem that I seem to get is Sciarid Fly. These are small flies which fly over the surface of the compost and lay their eggs just below the surface. The maggots hatch and eat the organic matter including the roots of seedlings. They are more likely to be found if the compost remains wet for any length of time and I try and let the compost dry out between watering, sometimes up to a few weeks between watering. I also use Carnivorous plants and have a number of Pinguicula and Drosera plants dotted in and around the trays to catch the flies with their sticky leaves. I have tried using chemical sprays but have not found anything that will effectively control the flies, also the chemical sprays can do damage to the seedlings.

Source of Mammillaria Seed.

Piltz - Kakteen, Germany. www.kaktleen-piltz.de

Aymeric de Barmon, France. www.adblps-grains-cactus.com/

Jara Dohnalik, Czech. www.cactus-hobby.eu

Succseed, Mats Winberg, Sweden. www.Succseed.com

Steven Brack, USA. www.mesagarden.com

UK Mammillaria Society.

German Mammillaria Society (AfM)

Photos of the Seed Raising Stages

