

Growing euphorbias successfully – in boxes!

By Rikus van Veldhuisen



Fig. 1: Out of direct sunlight, a wall of stacks of transparent boxes has emerged in one corner of my greenhouse: the seedling factory.

In my greenhouse there is still an intensive care area, about which I wrote before in *Euphorbia World* (van Veldhuisen, 2015). The use of these few square metres insulated with plastic sheeting is intensive and much appreciated by me. Without it, I would be missing something. I also still sow my seeds in it without further protection so that they become stronger and more robust. After germination, I don't think the seedlings should grow too luxuriantly. It seems a bit strange that my usual treatment now is to put the seedlings in a closed box after transplanting. In the following I will try to explain this.

What kind of boxes do I use?

I use the storage boxes you can buy in any general shop. They need to be translucent and I prefer the ones without wheels and with lids that close well. These

boxes come in different sizes and can vary greatly in price. It took me some time to find out what kind of box fits well in my greenhouse, and the pots I use have to fit well in the box so that not too much space is left unused (Fig. 1).

When do I use these boxes?

I always sow seeds harvested from my plants or given as gifts immediately, even when autumn is already in full swing. From late autumn to winter I usually store the seeds until spring before sowing them. The seedlings of seeds sown in autumn are usually big enough to survive the winter without much problem if they get no or very little water for a long period.

For many years I have had problems with seedlings from seeds sown in late summer or autumn not surviving the winter. If these seedlings are watered in winter



Fig. 2: Small pots of small seedlings of *Euphorbia ambatomena-hensis* have just survived the winter and start to grow. The pots have a diameter of 5.5 cm.

they rot, and if they are not watered they wither. I must add here that I keep my greenhouse at least 15 degrees Celsius in winter. I am also convinced that additional heating and artificial light will solve the problem, but I have never done this because space and cost prevented me from building such a device.

When I started growing seedlings in boxes, I used the boxes mainly for the smaller seedlings, which were mostly sown late in the season and just transplanted which I assumed would not survive if left unprotected (Fig. 2).

For which species do I use these boxes?

Especially *Euphorbia* species related to *Euphorbia milii* respond very well to this treatment. The closed box prevents the seedlings from evaporating too much water, which they do easily with their low succulence and large leaves. I water the freshly potted seedlings moderately, place them in the boxes, close the lid and place the box in a sun-protected but bright corner of my greenhouse. If direct sunlight gets into the boxes, the internal temperature becomes too high and the seedlings are “cooked”. So it is very important that you find a shady but bright place to store the boxes.

The seedlings will not lose their leaves and will continue to grow until late autumn or even longer. In winter I try not to keep the seedlings too wet, but definitely not dry. The best thing is that they keep their leaves but don't continue to grow.

It is a bit of work to check the well-being of the seedlings in the boxes. Taking the boxes off the stacks,



Fig. 3: Seedlings of *Euphorbia leuconeura* and *E. lophogona* are about to find a place in the greenhouse.

lifting the lids, watering them and removing mould and dead seedlings when necessary is time-consuming and tedious. But I have to say that this way of growing is so successful that I don't pay any attention to them for months.

Taking the plants out of the boxes also requires some care, because if you take the seedlings out of a closed box and put the plants on the tables in the greenhouse, they wilt and often dry out quickly and die. When I think it is time to take the seedlings out of a box, I put the lid on the box at an angle so that fresh air can get into the box but there is still some protection. After a week or two, the plants can be placed in the greenhouse if they are watered abundantly (Fig. 3).

Increased use of the boxes

As a collector of *Euphorbia* species, I also try to grow *Euphorbia* species that are not exactly succulents and suitable for my greenhouse. For example, I can mention some species of the *E. milii* group from Madagascar, such as *E. robivelonae*, *E. mangelsdorfii* and *E. elliotii*. These species are very difficult to cultivate in a succulent greenhouse, but probably quite easy in a greenhouse suitable for tropical orchids. Nevertheless, it is tempting for me to cultivate these *Euphorbia* species as well. I now cultivate these species all year round in boxes without any major problems.

The *E. milii* group of species, which grows on the forest floor in Madagascar, is very well known and appreciated by *Euphorbia* lovers. These are species such as



Fig. 4: An old plant of *Euphorbia boiteau* (formerly known as *E. decaryi* var. *spirosticha*) is on the mend. Note that the new leaves are just starting to grow at the tips of the branches.

Euphorbia decaryi, *E. crassicaulis* and *E. ambovombensis*. A special feature of this group is that they are easy to cultivate, especially indoors on the windowsill. Large plants cultivated in the succulent greenhouse sometimes start to wilt and get fewer and fewer leaves, the plants do not die and the process can last for years, which in the end leads to the death of the plant. The reason for this is that the plants are stressed by too much heat, direct sunlight and periods with too little water. Needless to say, these plants are old, have been lovingly cared for a long time and when in good condition they are true show plants. From my experience I must admit that the recovery of such a plant is difficult and often unsuccessful. I now also put such suffering plants in a box. It takes time, but the plants form leaves again and recover (picture 4).

Positive side effects

Storing your seedlings in stacks of clear boxes is a very efficient way of dealing with the lack of space in your greenhouse. And I still haven't met the first *Euphorbia* lover with plenty of space in his greenhouse.

A visitor who was in my greenhouse recently casually mentioned that it looks like a plant factory, which made

me feel a little uncomfortable. But it saves me plants, space and time. So why should I complain?

Reference

VAN VELDHUISEN, R. (2015): Growing euphorbias successfully – intensive care. *Euphorbia World* 11(1): 11–13



Fig. 5: *E. mangelsdorffii* and *E. elliotii* are not suitable for cultivation in a succulent greenhouse, so these sensitive species grow in a box all year round.