

Our Products

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Plantlet Tissue Cultures

We supply carnivorous plantlets of the genus *Nepenthes* (Tropical Pitcher Plants) and some *Heliamphora* (Sun Pitchers). These plantlets are produced in our laboratories using a process called "in-vitro multiplication" or "microprop" (sometimes incorrectly referred to as "tissue culture"). The microprop process begins when a seed is sterilized and germinated in a sterile environment in a nutrient jelly (or "media") which contains all the minerals and vitamins needed to sustain optimal growth. This is no different than in a nursery, except that under sterile conditions in a laboratory, the plantlet has perfect nutrient, lighting and temperature conditions for growth and there are no pests or diseases to stress the plantlet. This results in growth that is many times faster than is possible in a traditional nursery.

Once the young plant (referred to as a "plantlet") has reached a large enough size, it can be used as mother stock and cuttings can be taken from it and established as plantlets in their own right, still in sterile conditions. Then more cutting can be taken from those and so on. There is no limit to how many new plantlets that can be produced from a single mother stock. Each new plantlet is genetically identical to the parent plantlet and to each other and are referred to as "clones". This is exactly the same as cuttings produced from nursery-grown plants, which are also of the same clone as the parent plant.

You will be receiving plantlets in sterile containers and you will need to plant them out and wean them from this point onwards. Please see our <u>weaning guide</u> for full details.

Packaging

We ship each item in batches of 5 which are sealed in sterile tubs as shown in the two examples below:







Typical tub of the smallest size plantlets we ship







Typical tub of the largest size plantlets we ship

When you receive the parcel, the media will have been shaken up and has probably liquefied, so the plantlets will be loose in the tub. This is normal and nothing to worry about. Please just follow the instructions given in our <u>weaning guide</u>.

Sizes

The size of the plantlets can vary between items and we classify them as 'small' 'medium' or 'large'. The photos below are approximate, but will give you some idea of the size of the plantlets you will receive. Each item on the shopping cart mentions the size of the plantlets for that item.







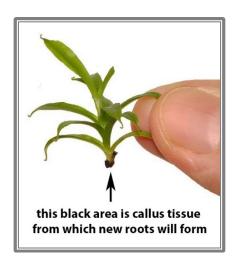
typical small size plantlet

typical medium size plantlet

typical large size plantlet

Roots

In over 40 years of experience with tissue cultured plantlets, we have found that having root systems on the plantlets is not necessary and makes no difference at all to the success rate or speed of weaning. The type of roots that form when the plantlet is in tissue culture are not the same as those the plantlet needs when it is planted out; therefore, they rot off and new roots form after planting out. The important thing is the there is some callus tissue at the base of the plantlet from which the new roots will emerge. This appears as a small area of black tissue at the base of the stem as shown below:



Weaning

This is the process of acclimatizing the plantlets to the growing conditions you are using. It needs to be done slowly, as the plantlets have always had 100% humidity and perfect growing conditions when they were in the laboratory. There are a number of ways this can be done at home and a lot of information is available on the internet. We have produced a detailed <u>weaning guide</u> to help you.

Nursery Grown Plants
Details coming soon