HEAT'n'GROW

HEATED PLANT PROPAGATION PRODUCTS

Propagation Guide 'n' Operating Instructions

Congratulations

Congratulations on your purchase of a Heat 'n' Grow propagation system. This system is guaranteed to increase your gardening pleasure by allowing you to grow plants successfully from seeds and cuttings.

Propagator operation

All models are designed for use with standard seed trays using seed raising, potting mix or other growing medium. Different types of potting mixtures or medium will have a varying affect on heat transmission. Although the propagator may not feel very warm, you must bear in mind that the human body temperature is approximately 38°C and at 25°C the tray will feel cooler than your hand to touch.

Propagator temperature control systems

TPS020: Single tray *(Non-thermostatically controlled).* This model generally operates approx. 10°C above the surrounding temperature and therefore should be used in winter, spring and cooler months.

TPS030: Single tray, TPS040: Two tray & TPS080: Four tray. All these models have inbuilt adjustable thermostat which enables accurate temperature control. Normally the thermostat is set between 20° and 24°C, depending on the types of plants being grown. The thermostat sensor is located at the centre of the tray, close to the thermostat, and detects the temperature at this point. In order for the sensor to work accurately however, it is important that the capillary mat (felt) and soil in the system are moist at all times. The capillary mat should be immersed in water upon first use, and from then on be constantly kept moist, not soaked. It is the moisture in the system that allows the heat to be transferred efficiently to the seeds and roots.

Where to place your propagator

Ideally, the propagator should be located in a sheltered draft free spot close to good natural light, but not in direct sunlight that could burn the plants. The propagator should not be used in the open where it could be subject to rain or abnormal temperature and weather conditions.

Using clear propagator covers

For best results, we recommend that a clear plastic propagator cover, designed to fit over a standard seed tray, is used in conjunction with the heated propagator. This helps to create a warm humid atmosphere once the seeds have sprouted and promotes rapid growth. There are three vents on these tops, which can be opened or closed, depending on the amount of humidity and conditions required for the plants you are growing. These are inexpensive and readily available through your gardening outlets.

Watering correctly

It is very important that the growing medium is kept moist at all times. This is necessary not only for the plants, but also to help conduct the heat to the seeds and roots. As the soil is being heated, water will evaporate at a faster rate than normal so it is wise to check the soil condition on a regular basis. If you are using a clear propagator cover in conjunction with your propagation unit, water will be recycled by condensation and less watering will be necessary.

Setting the right soil depth

The propagator is designed for use with standard seed trays using soil or medium no deeper than 75mm. The unit will not work well with deep pots or deep soil as heat will not be able to travel to the root zone of the plants due to the insulating affect of the soil.

Growing from seeds

Select a good seed raising mix and fill your seedling tray level with the top. Plant your seeds to recommended depth, then water with a fine spray. It is a good idea to use fungicide product and spray the surface of the seed tray to prevent fungus formation. To keep the seed mix moist for good germination, spray the seed tray with water every second day. All seeds are sown at a depth of 3 times seed width, remembering that deeper sowing will stifle emergence of the germinating seed. For further information, reed the instructions on your seed packets.

Hardening off

Just before transplanting, all seedlings should be acclimatised to colder night temperature. This is done by "hardening off", by moving the trays or punnets outdoors for 10 days into a position partly shaded from the hot sun prior to planting. Failure to do this could cause losses, especially with tender annuals. Seed sowing to planting out usually takes 8-10 weeks for annuals and 12-16 weeks for perennials. However, using your Heat 'n' Grow propagator this time will be significantly reduced and greater success rates will result.

Striking from cuttings

Make a propagation mix from 80% perlite and 20% vermiculite or peat moss. Moisten the mix with clean water and then fill the seedling tray. Preparation of cuttings is very important. Sterilise your cutting knife or secateurs by dipping in methylated spirits and allow to dry before use. After you have prepared the cuttings, dip them into a fungicide and dibble the cuttings into the cells of the tray, usually at a depth of 25-40mm.

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