



Fig No 3.

SETTING TUBERS UP

Fig 4. Tubers are placed in a tray on two to three inches of potting compost, usually Levington's and they are bedded in so as the top half of the tuber and the crown stand proud of the compost, the trays are then placed on a hot bed .To encourage the tubers to make new growth they are sprayed lightly with water three to four times per day.

When the tubers have dried off they need the fibrous roots trimmed back to the tuber as these tend to rot and become covered in mould. Fig.2 illustrates a tuber untrimmed and a tuber cleaned and ready for storage. Note that it is in a plump condition and not shrivelled as the tuber untrimmed is showing signs of .fig.3 this shows a pot-tuber and a large field tuber. The pot-tuber had been plunged in the ground in a pot, producing a small compact tuber which enables you to grow more tubers in a confined space. The field tuber, which is much larger and was one of the plants grown for exhibition. These can then be stored in dry material, i.e., dry sand, dry peat or dry garden soil but need to be checked regularly for any deterioration. (When trimming the tubers the stems are cut down to around four inches and labelling attached at all times.)



Fig No 4.



Fig No 5.

HOT BED

To construct a hot-bed which is a bench made from substantial timber and supported by concrete blocks with sides of a depth of six inches, this is then lined with polythene and filled with sand to a depth of three inches and then an electric heating cable with a thermostat laid out evenly. The bench is then completely filled with sand with a thermostat some two inches above the cable ensuring that the bench is level and the sand compacted. The sand is kept moist at all times and the temperature of around 65 degrees Fahrenheit is maintained. With these conditions the tubers will produce cuttings within three to four weeks.

Fig.5.shows the growth on the old tubers which of course are the new cuttings for the coming season.

These are removed with a sharp sterile knife when around two to three inches in height and removed just above the crown so as to encourage more cuttings to grow. If you take a part of the tuber and the crown no further cuttings will grow. This we call an Irishman's cutting as you will only get one cutting and tubers at £5. Plus, even in my time, I would want more than two or three cuttings per tuber, so by taking the cutting correctly in three weeks time a second batch of cuttings would be ready, and normally where you had taken one there would be four more, and if the same method was used this would keep multiplying, but at this time a liquid feed would need to be given to sustain the growth. It is best to take the cuttings for the standard variety of Giants in late March, early April so that the growth is kept soft as plants that have gone hard do not make good exhibition plants, but are ideal for the use of pot tubers. Fig.5 shows three cuttings at different stages. The left hand cutting has just been removed from the tuber. The middle one shows the bottom pair of leaves removed and the third shows roots coming from the cutting. To achieve a good rooted cutting an open coarse compost is needed and living in the Trent Valley the gravel which is open-cast in our area is the finest in the Country



Fig. No 6.

If you have the ideal conditions as seen in Fig.7 which is 'mist propagation'. This is created by an electronic wet leaf sensor, and water is put under pressure to create a fine mist from the jets. This is especially useful if you are away from the greenhouse for any length of time as the cuttings will not wilt at any time, even when there are no roots. If this system is not available, cuttings must be shaded from direct sunlight at all times. The rooted cuttings are then potted on into a three inch pot, i.e.Fig.8, and the aim is to produce a nice short stubby plant. Newly potted plants need to have a shaded position for a few days in order that they are not scorched by the sun due to being soft.

as it is very sharp and, if mixed with pure peat to a ratio of 50/50 makes an ideal medium for rooting. At this time no nutrients are required. There are various containers that the cuttings can be rooted in but the best is in small clay pots. Either one in a thumb pot which has a diameter of around two inches, or three or four cuttings in a three inch pot. The clay pot which is porous encourages rooting to occur and maintains warmth, whereas a plastic pot is only a container and does nothing for a cutting. The pots of cuttings are placed in the hot-bed and will take around three weeks to root according to conditions used.



Fig No 7.



Fig No 8.

The cold frame as you can see was constructed of concrete blocks with dutch light frames placed on the top. These must be kept 'frost-free' and would be covered up with carpet when frost was forecast. At this point let's talk about ground preparation. My dahlia plot was cultivated immediately after the tubers had been lifted by the use of a spade and not a rotovator I would create a trench and all waste material would be placed in the bottom of the trench to rot down and then covered with the next spadeful maintaining a trench at all times and leaving the surface rough as the weather conditions would break it down during the winter.

Retracing our steps slightly, the only variety of Giant Decorative I have mention, is Lula Pattie which needed the longest growing period and the variety needing the shortest growing period was Hamari Girl , and all the other varieties fell between the two. The other variety which was given special treatment was Alva's Supreme and it's white sport which required an early 'stop' like Lula Pattie (stop meaning pinching out the growing point of the plant). In late April plants in five inch pots can be placed in the cold frame (see Fig.9.)and at this time, as I have mentioned, the Plants of Lula Pattie and Alva's Supreme will have been 'stopped' in their pots, whereas other varieties would not be 'stopped' until planted the first week in June.



Fig No 9.



Fig No 10.

A spacing of the plants was two feet by two feet between two rows and then a path of three feet. This enabled me to plant out One hundred and eighty plants on the plot at Oakley Road. This was marked by a single cane and immediately after planting a further two canes were placed around the plant to support it at all times. The last variety to be stopped was Hamari Girl which took place in the middle of June. The plants were kept well irrigated if we had not had any rain and after watering would be followed by a light hoe round so that the ground was not compacted.

It was then left until two weeks before planting when a top dressing of Vitax Q4 was applied at about three to four ounces per square yard and was then forked in. There needed to be a delay from the top-dressing to planting as, if the plants had been put in immediately, the fertiliser could burn the roots. Fig.10. Planting actually started in the middle of May but these plants have to be protected each evening until the fear of frost has passed. These were, of course, Lula Pattie, and were plants of a good size, shortly followed by plants of Alva's Supreme (Fig.10) with breaks already growing from the top of the plant



Fig No11.