

Tuberous Rooted Begonias: Their Growth and Care

Wm. Hunt, O.A.C., Guelph, Ont.

FOR the amateur grower where only a few pots of these showy plants are required, it is best to purchase the tubers in March or April, rather than grow them from seed. When purchasing tubers get them as solid and firm as possible. Soft, pulpy tubers do not give good results as a rule. The tubers should be about one and a quarter to one and a half inches in diameter, or larger, to get good flowering results. Both single and double flowering dormant tubers can be purchased at all large seed stores.

STARTING THE TUBERS

There is no better material for starting the tubers in than pure sand of not too gritty a nature. Tubers can be started in sandy soil, or in chopped moss, but they do not start as readily or as satisfactorily as in sand. The tubers may be started singly in small three or four inch pots, or a number of them may be started in larger pots, seed pans, or in shallow, well drained boxes. A box three inches deep, and ten or twelve inches square, will hold ten or twelve ordinary sized tubers. Be sure and place the tubers the right way up in the sand. Usually the concave, hollow, or the flat side of the tubers should be uppermost, and the round or convex side downward. The top of the tuber should be just under the surface of the sand when set in position. The tubers may be set quite close together if a number are grown, so as to almost touch each other.

Water the tubers with tepid water, temperature of water about fifty degrees. Keep the sand well moist, not too wet. The temperature of the room they are grown in should be from sixty-five to seventy degrees. If a box is used, some half inch holes should be bored six inches apart in the bottom of the box. Artificial drainage, such as broken flower pot, coarse gravel, coal cinders, or lump charcoal about an inch in depth, should also be used in the bottom of the pot or box, to ensure good drainage. Good drainage is very essential at all stages of the growth of begonias. In about a month from starting them, the tubers should be rooted.

CARE AND CULTURE

When the tubers have a good root system started and roots about an inch in length and top growth just started, they may be potted singly in three or four inch pots in rather light soil. A soil made of six parts of good loamy potting soil, one part fine sand and one part of leaf mould well mixed, will make a good compost for the first potting. Water the soil well once after potting, but do not keep it too wet after, for a time. When top growth has well started more

water may be given. When the plants have become well rooted in the small pots they may be re-potted into the flowering pots. Six or seven inch pots can now be used, for very strong plants an eight or nine inch pot is not too large. Use nearly an inch in depth of drainage material, and a soil richer in fertilizers than ever before. Eight or ten parts of loamy, potting soil enriched with cow manure and one part sand, well mixed together, makes a good soil for them. Leaf mould (or black mould) is not good for them as it induces a too rank soft growth. If the soil is of a clayey nature a little leaf mould may be used.

Do not disturb the roots of the plant when re-potting only to remove the old drainage. Disturbing the roots of these plants after starting is often disastrous to them. Water them well once after potting, then keep the soil only barely moist until growth has well started again. Set the pots in a warm window and shade them from the hot sun at all times. Sprinkle the foliage overhead but very seldom, if at all, and only on a fine bright morning, as it will cause the leaves to spot and decay, if they are kept too damp. Water the plants with tepid rain water if possible. Put a stake to support the growth early, as the growth is very brittle and easily damaged.

FALL AND WINTER CARE

When the plants are through flowering and show signs of dying down, give them less water until the foliage is quite yellow, when no more water should be given them. The pots, just as they are, should now be stood away in a cool, not too dry room or cellar, temperature about forty-five degrees, so as to keep the tubers dormant. They will require no water until spring, unless the place they are kept in is very dry, and then only a slight sprinkling. In March or April shake the tubers out of the soil, and start them as before mentioned.

I have kept tubers in the way described for seven or eight years and flowered them successfully. Letting the tubers stay in the soil in pots is much better than taking them out of the soil in the fall and keeping them in sand, if room can be found for storing them in the way I have mentioned.

Tubers may be started indoors and the plants set out about the second week in June. They like a fairly rich, light loamy soil, well drained, and a not too sunny position. They are not very reliable plants for bedding out. The tubers should be dug early in the autumn, before frost, and the tubers packed in dry sand or soil in shallow boxes, and placed away for the winter in the same way as for those grown in pots.

If a large number of plants are required it would be best to get a packet of seed of a good strain and raise them from seed. The tubers will not be large enough to flower the first year from seed started in a window. By sowing the seed in February or March, tubers about half an inch in diameter can be grown. Sow the seed in a shallow, well drained seed pan or box with holes through the bottom to allow of free drainage. Place about an inch of broken flower pot or lump charcoal in the bottom, over this place a layer of moss or fibrous soil. Fill the pan or box nearly level full with finer soil, with half an inch in depth of very fine soil on the surface. A soil composed of four or five parts of loamy potting soil, one part sand, one part leaf mould, one part of fine lump charcoal, will make a good compost for the seed. The surface of the soil should be quite level and fairly firm.

SOWING THE SEED

Sow the seed broadcast, rather thickly on the surface. The seed is very fine and should be barely covered with a very fine covering of light material, put on carefully with the fingers and thumb. I have found a covering of one part of dry leaf mould, one part of fine sand, and one part of dust charcoal mixed well together, a good covering for the seed. A piece of glass whitened over lightly with white wash should be placed over the box. The glass should be tilted just a little to admit a small quantity of air. Later on, when germination starts, more air and light should be given, but the seed must not be exposed to the hot sun at any time. Water the seed very carefully with a very fine spray so as not to rinse. The box or pan may be stood in about two inches of water in a large tub, and watered by absorption if a fine sprinkler cannot be had.

When the seedlings are large enough to handle they may be transplanted into shallow, well drained boxes in a compost of four or five parts loamy potting soil, one part sand, and one part leaf mould. They can be potted later into three inch pots in the soil recommended for the large tubers in pots. The autumn and winter treatment of the small tubers is very much the same as given for the flowering tubers.

Careful attention to the ventilation of hot beds is one of the important means of making plants stocky.

Many house plants suffer from a neglect to water regularly. Some varieties that are kept in sunny windows require water every day.