



The Ordinary Sweet Alyssum Grows Too Tall and Soon Smothers the Begonias. Grow Dwarf Varieties such as "Minimum," "Snow Carpet," or "Little Gem."
—Photo by H. J. Moore

and splendid flowers. Where the atmosphere is not sufficiently humid shade must be afforded, otherwise scorching will result. A surface mulch of well rotted stable manure or leaf soil is also advantageous.

Those who possess a greenhouse may propagate the plants annually by seeds, or by division of the largest tubers. Sow the seeds in January or early February, if desirous of obtaining plants to bed out in June. It is, however, preferable to sow in March or April, and grow the seedlings in pots during the first year. Disappointment will thus not accrue through failure of many to flower satisfactorily out of doors. By pot culture the first year the small tubers may be readily cared for, and after the growth decays they are not so liable to be lost which often happens when planted outside.

Prepare the seed pans by placing cracks in the bottom and on this a layer of fibrous material. Fill to within one inch of the top with finely sieved soil, composed of sand and leaf soil two parts, and hum one part. The mixture should also contain a small quantity of finely broken crocks and charcoal. Press down gently and upon this layer of soil sift through a very fine screen sufficient soil to fill to within one-half inch of the top. Do not leave the surface flat, but convex, so that water may pass to the sides of the pan, and so prevent damping of the seedlings, this damping being caused by the fungus "Pythium." Immerse the seed pans in water without disturbing the surface soil until the soil is thoroughly saturated. Sow the seed evenly and thinly. Do not cover with soil, place in a temperature of 65 degrees Fahrenheit, cover the pans with a piece of glass,

and shade from sunlight. Do not at any time water the seedlings overhead, but partly immerse the pans. The water will thus rise by capillary attraction and the seedlings remain undisturbed.

After germination, afford light (not direct sunlight) until the plants strengthen, and are large enough to handle, then plant singly one-half inch apart into larger pans. When about to crowd each other, pot off into two-inch pots, and finally, ere flower buds show, shift into four-inch pots. Afford occasional applications of Clay's fertilizer or guano, one-half ounce to a gallon of water. Dampen the floors, benches, and other surfaces to create humidity, and to prevent the attacks of red spider, but avoid spraying the plants during sunlight, otherwise scorching will result. Shade from intense sunlight at all times.

Propagate by division during the first week in April. Select large tubers which possess at least two crowns. A sharp knife is essential to sever the tubers directly between these, each portion will thus bear buds, without which they are useless. Expose the cut surface to air for some time until they cease "bleeding," after which dip them into slacked or powdered lime; this will act as an antiseptic, and also check the attacks of slugs, grubs, and other insects which prey upon them. Place the tubers on finely sieved leaf soil in flats, keep the soil moderately moist, spray them occasionally to encourage growth, and maintain a temperature of at least 60 degrees.

When two or three inches of growth has been made pot off into four-inch or five-inch pots, and when well rooted remove to a cold frame to inure to outdoor conditions. Air well during warm days, but close the frames on cold nights. By the first of June the plants will be sufficiently hardened to allow of the sashes being entirely removed, and after a week's exposure to outdoor temperatures, shaded, of course, from direct sunlight, they may be planted in their permanent position.

Tuberous begonias, when massed, are always effective, especially when the singles and doubles are separated, for in their distinctiveness lies their attraction. Effective even to a greater degree are they when arranged in beds of separate colors, the merits of each variety being thus readily seen. Also, when so arranged, it is possible to select and mark desirable kinds, and to eliminate weaklings. As the begonia reproduces itself tolerably true from seed isolation of the varieties it renders seed selection possible, there being little danger of the intervention of foreign pollen through nat-



Dark Tuberous Begonias and Alyssum Minimum in Queen Victoria Park
—Photo by H. J. Moore.