

The Culture of Bulbs

Henry Gibson, Staatsburg

NO garden is complete without narcissus, which include jonquils, and the Chinese sacred lily, or fairy flower. The innumerable positions in which they can be planted to advantage in the garden is in a measure responsible for their popularity. They may be grown in the town lawn or clumped here and there in masses of distinct varieties in the herbaceous border. As a border for a shrubbery they give their full measure of graceful splendor. For natural plantations, outlying portions of the lawn, the wild garden, terrace slopes or the banks of streams, they possess a grace and beauty that is almost indescribable.

DEPTH OF PLANTING

Owing to lack of uniformity in the size of the bulbs it is not advisable to try to give any definite depth at which they should be planted. The simple rule of covering the bulb from two to two and a half times its length, measuring from the base to the neck where it begins to swell out into its rounding shape, is a good one. The distance between the bulbs should be three to four inches for the smaller sizes, and five to six inches for the larger ones. When naturalizing bulbs an effective way of spacing them is to take a handful from the bag and drop them where they are to be planted. In this way a natural grouping is the result.

For the window garden grow narcissus in pots the same as you would tulips and hyacinths. Don't plant single bulbs in a pot; they are not effective. Put five or six bulbs into a six or seven inch pot. The designations, daffodils, narcissus and jonquils, are often misapplied by amateurs, and the result is invariably disappointing. Daffodil is a name applied to all double narcissus. The name "narcissus" calls for the poet's narcissus and its family. Jonquil is a popular name given to all single trumpet narcissi, regardless of any other form or class.

The Chinese sacred lily produces white flowers with yellow cups in bunches of five or six on a stem. Although they do well when grown in pots, like other bulbs, they give the best results when grown in a dish or bowl half filled with water and pebbles.

A covering of some kind is desirable for all bulbs planted outdoors; not so much to keep out the cold as to prevent alternate freezing and thawing, which tears the roots, and frequently lifts the bulbs almost out of the ground. For this purpose nothing is better than nature's covering—leaves. Do not spread them on too thick or they will heat towards spring and send out a prema-

ture growth, which would be followed by disastrous results should frost get near them. Pine boughs, straw and old corn stalks are excellent substitute for leaves, but they, like the leaves, should be removed as early as possible in the spring.

POT CULTURE

Bulbs planted in pots for indoor blooming, and placed in a cool dark place, as suggested, will take from six to seven weeks to root. One can readily ascertain when they are rooted sufficiently by turning one out of its pot. If the soil is well interlaced with young white roots they are ready to bring to the light. This is a process that should be done gradually, as too strong a light at first has a very detrimental effect on the plants.

A good idea is to have a table with three shelves in it in front of the window. Such a table can easily be constructed at home, and the utility of it is too evident to need comment. When the first bulbs are brought in to the light, place them on the bottom shelf. After they have been there in the diffused light for a few days they may be placed on the second shelf, and finally on the table, into full sunlight. Meanwhile the lower shelves can be fitted with other pots to provide a succession of bloom.

Following is a list of seven varieties of bulbs that will provide continuous bloom from Christmas until Easter in the window garden. The first date is when the plants are brought to the light; the other two give the season of bloom:

Chinese Lily, second week in Nov.; bloom, Dec. 23 to Jan. 12; Paper White Narcissus, first week in Dec., bloom, Jan. 9 to Feb. 1; Grand Soliel d'Or Narcissus, first week in Dec., bloom, Jan. 22 to Feb. 13; Garrich Hyacinth, third week in Dec., bloom, Jan. 28 to March 1; Poeticus Cunatus Narcissus, last week in Jan., bloom, Feb. 26 to March 19; Van Siaw Narcissus, second week in Feb., bloom, March 7 to March 25; Princess Manionne Tulip, first week in March. bloom March 23 to April 12.

Fertilizers for Ginseng

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Acid phosphate (treated rock or bone) is a satisfactory fertilizer for it maintains the acidity of the soil and thus prevents conditions favorable to the development of the rust or rot fungus. Acid phosphate should be applied to the beds at the rate of one thousand pounds an acre. Some growers use heavier applications than this.

The digging in of a good forest leaf mulch by some growers is claimed to make an excellent fertilizer and it is thought to keep the soil in the proper acid condition. Experiments are now under way in the United States to test the efficiency of leaf-mulches in maintaining the acidity of the soil and preventing rust.

Nitrate of soda is often applied to ginseng beds, but great care is required in its use as heavy applications often cause a burning or scalding of the foliage. The same is true of heavy applications of barnyard manure especially if applied fresh. A light mulch of farmyard manure, even fresh, applied in the fall of the year, gives good results.



Calceolarias in the Border at the Guelph Agricultural College