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Growing Grapes Under Glass

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GREENHOUSES, in the form of conservatories or forcing-houses are no longer exceptional luxuries. Many of our new country homes and the larger of our suburban residences now possess some such adjunct to the house. These greenhouses are evidence of the increasing appreciation and interest of the public in horticulture. This growth of interest is particularly noticeable in amateur circles. It is responsible for many new and ambitious schemes, which are materially broadening the whole field of horticulture.

One of the recent ideas is that of a fruit or orchard house, or a vinery. It is with respect to this latter phase, namely that of the vinery, that the following remarks have been written. Such suggestions as may be given in this short article have been written in the hope that they may be of some assistance to amateurs who are thinking of growing some of the delicious European grapes (*Vitis vinifera*) for the first time.

The growing of grapes under glass in England is an old, well established, and extensive business. Moreover, it is in the hands of men who as horticulturists are second to none, and whose experience with the varieties they are now growing can be of material assistance to us in our endeavors along this line. The amateur in making a selection of varieties for himself is liable to be misled if his choice is guided solely by the descriptions of the fruit qualities to be found in catalogues, for many of these varieties are little grown but are still maintained because of their marked adaptability to certain conditions.

As this crop is grown under artificial conditions, the matter of climate is not so pronounced as is the case with imported fruits grown in the open; the chief differences, perhaps, being those of less atmospheric humidity, and greater light and heat intensity. Both of these conditions can be greatly modified by more frequent "damping down," and by the use of a light shade sprayed on the glass.

A list of the varieties of *Vitis vinifera* would be legion, but the amateur can console himself with the knowledge that perhaps seventy-five per cent. of the

total glass crop of Great Britain is produced by only six or eight varieties. These varieties have proved themselves to possess in a marked degree the characteristics of vigor, prolificacy, and quality. The varieties in question are:



Alicante Grapes. No. 1

This is a young vine in a twelve inch pot. Note the method of training. It is carrying nine bunches of grapes and is somewhat heavily loaded to obtain the best results.

Black Ramboro or Black Hamburg, Muscat Hamboro, Alicante, Gros Colmar, Gros Maroc, Foster's Seedling, Madresfield Court, and Muscat of Alexandria. The last-named is liable to be somewhat shy in setting fruit under certain conditions.

The best way to grow the European grape is in a thoroughly drained and carefully prepared vine border, built within the greenhouse and along its sides. The young vines should be planted at least twelve inches from the wall, and if two rods are to be grown from each vine, the vines should be planted eight feet apart, to allow two feet on either side of each rod for the growth of the laterals.

From a dormant condition the vines should be induced to break into leaf gradually. Undue haste at this time

often spoils a crop. If budding out is slow or uneven, this may be remedied by laying the rods on the ground and syringing more frequently, or syringing with tepid water.

The average length of time taken to grow a crop of grapes from that of starting the canes into growth till the fruit is ready to cut, is usually from five to six months. It depends upon the time of year the crop ripens, after which the vines require a rest, and an opportunity to ripen the wood made. The grape crop is really a quick crop when compared with the crops of other hardwooded fruits, but it requires continual attention. Successive annual crops are obtained only by experience, often of a most disheartening nature.

The writer spent several years with one of the largest commercial grape growers in England, who had considerably more than twelve thousand linear feet of glass in grapes alone. Annually these vineries would produce crops of perfect fruit, and varying but little in yield from year to year. The estimated standard of yield for such varieties as Gros Colmar, Black Hamboro, and Alicante was one pound of fruit to each linear foot of vine rod. Thus a vine bearing two main rods each eighteen feet in length, making a total rod length of thirty-six feet, would be expected to yield thirty-six pounds of fruit.

During the time of flowering, the setting of the fruit is greatly assisted by gently tapping the canes once or twice a day. Sometimes a rabbit's tail or soft camel's hair brush is used to distribute the pollen, and a third expedient is that of dusting the blossoms with Pampas Grass bloom, and so doing the duty of Nature and the bees; this has been found to produce the desired result.

ENRICH THE SOIL.

The grape is a heavy feeder or, in other words, to produce best results commercial fertilizers require to be liberally used. In connection with the use of commercial fertilizers though, the motto of the amateur should be "festina lente." A little at a time given regularly will produce far better results than liberal applications at distant dates. The grower should bear in mind the different