BAGGING GRAPES.

Within a few years, the bagging of grapes has occupied the attention of many horticulturists. One who has given much attention to this subject, says: "If the application be made in time the paper bag will preserve the cluster in more exquisite perfection than can be secured in any other way. The grapes come forth luscious and beautiful enough to amaze Nature herself."

When to bag.—The only safe rule is to apply the bag as soon as the cluster is formed. If delayed too long, the spore of disease may have attached itself to the berry and result in rot. Some have applied the bag before blossoming has taken place. As the new shoot is very tender and brittle, great care must be exercised not to break it.

How to bag.— Take manila or any other paper bags; cut off the upper corners in order to wrap the upper portion around the cane; place the cluster inside the bag, wrap the bag around the cane, and then pin it.

Size of bag.—This depends upon the usual length of the cluster, and whether more than one cluster is placed in a bag. A two or three pound bag is sufficient for most single clusters.

Results of bagging.—The cluster will average larger, ripen later, color in general better, produce larger berries, and the bloom will be preserved more perfectly than in those not bagged. As to flavor, opinions vary, some think it is better, others that it is not improved.

Bagging as a prevention of rot.—If applied early enough, it is a prevention. Rot is found in some cases in the bags, but mostly takes place after the grapes are ripe.

Bagging as to the splitting of the grapes.—Many of the thin-skinned varieties split badly in the bags. The Elvira, which, out of bags, splits so badly as to be comparatively worthless, owing to the crowding of the berry in the cluster, also does the same in bags.

The Duchess keeps its color when bagged; Delaware, as

a general rule, becomes deeper; Brighton, lighter in color. Niagara improves in color and flavor.

The present summer many will bag grapes by way of experiment. It is doubtful if bagging will become general in vineyard culture, as the extra expense incurred thereby is not made up in the sale of the fruit. To the ordinary purchaser of grapes in the market, fine clusters, large berries, pure color and bloom, and exquisite flavor are secondary considerations. To the amateur, or those who enjoy to sit under the shade of their own vines, however, these qualities are precious; and, as the experiment of a few bunches requires but little time and expense, it is well worth a trial by those who grow grapes for their own use.—J. B. Rogers, in American Garden.

WHAT OTHERS SAY.

Take any paper bag 7x10 inches or thereabouts—cut down the sides a little, slip in the bunch, fold the top over the cane and pin together. Leave it until the first slight frost.—Rural New Yorker.

Acting under the Rural's instructions, I bagged 600 bunches, embracing 30 varieties of grapes. The diference was so marked in comparison with the exposed bunches that I hope to bag 1,000 bunches next year, for in spite of severe frosts the quality of the grapes holds good at this date within the bags upon the vines, and the grapes would have been lost or ruined without their paper covering—G. W. P., in Rural New Yorker.

A correspondent asks for advice on the propriety of bagging grapes. The advantages are, protection from insects and birds; to some extent exemption from rot when that disease prevails; but more particularly in the fine appearance which the bunches present by freedom from external injury and with the undisturbed bloom of the berries. Sorts which sell at high prices pay for the expense of bagging; common grapes do not. Where performed for profit, the work must be systematized, the bags made by wholesale

methods, and the persons who apply the bags must understand the business of applying them rapidly. As the bags retard somewhat the ripening, the grapes keep longer and may be supplied to purchasers for a longer period, and the bags afford some protection from autumn frosts. To prevent rot, the bags should be applied soon after the fruit sets, or before it is half grown; otherwise the operation may be deferred till nearly the time for coloring. Manila paper is the best material, and the upper fold should be drawn over the bunch and pinned, so as to form a roof to exclude rain. Sometimes bagged grapes have been badly injured by long rains through the bags retaining moisture and causing cracking of berries. Time will determine to what extent the practice will ultimately prevail in vineyard culture.—Country Gentleman.

The utility of this practice is not yet settled by grape-growers generally, nor the best time ascertained in the season when the work should be performed. External influences vary, and give diverse results. The operation will hardly pay when the fruit sells at low prices. The same reason does not exist in all localities in favor of bagging. Growers can arrive at the most satisfactory conclusion as to its utility by making a fair trial. Caywood says the bags may be ordered from any paper warehouse, and that two-pound manila bags cost \$1.80 per 1,000.—Country Gentleman.

The common two-pound paper bags, as used by grocers, such as can be obtained in most towns at about \$1.75 per thousand, are suitable for protecting bunches of grapes of the average size. Turn the top down, all but the corner where the stem of the bunch passes in, and one pin will at once make it secure against birds, insects and too easy temptable eyes. Applied early in June, there is little danger left from flying spores. The grapes look fairer, are sweeter, and keep better when thus incased. They can be left longer on the vine to ripen the more fully.— Experience, in New York Tribune.

Simply inclosing the bunch, when fairly formed, in an or-

dinary paper bag, and tying a string loosely around the stem, or fastening with a pin, has decided advantages. Insects are prevented from puncturing the fruit. The berries color and ripen more evenly; the various forms of fungi do not attack, and the owner in most cases is rewarded with a nice crop of fruit when otherwise he might not obtain a perfect specimen.—New York Tribune.

The bagging of grape bunches, and again the unbagging, is too much of a job for the indolent, but it has all the good effects that Mr. Hoopes describes, besides the great merits of protecting the berries from birds, etc., and of allowing of fuller ripening, and making the keeping of the fruit for Christmas use an easy matter—nothing more being requisite than leaving the baskets of grapes in the bags undisturbed in a cool room, dry, yet not sweepingly dry.—Quis Quis, in New York Tribune.

During the discussion of the New Jersey Horticultural Society, it was stated that carbolic acid was an effectual remedy for grape rot, and that an ounce dissolved in five gallons of water, and sprayed over the bunches when the rot appears, will stop its farther progress. In this connection Secretary Williams said he bagged all kinds of grapes with success. Three-pound manila bags cost from \$1.15 to \$2 a thousand, and he paid \$1 a thousand for putting them on. E. P. Beebe said that the bags should be put on as soon as the grapes had formed; but he did not think the operation would pay when the fruit sold for less than ten cents a pound.— Country Gentleman.

Paper Bags and Pins—I am more than ever pleased with the effects of using paper bags on grapes. Not so much on account of their preventing rot in a great degree if applied early in June, or of their wholly precluding the serious loss by bird ravages, as for the perfect condition in which the fruit keeps, entirely free from mould and fresh and beautiful as when picked; and with no trouble at all but that of putting the grapes, while still in the bags, on shelves or in suspended baskets in an airy, cool, dry room. The bags can

be used as effectually a second and often a third season, and so may the pins. These get rough with rust, but if put into a bottle and covered with dilute muriatic acid (about two-thirds water) for ten to thirty minutes, until the rust spots are eaten off, they will be smooth and sharp as ever. Many rinsings with water are necessary to remove the acid, which would otherwise continue to corrode the pins. Its effects while present, will be seen by bubbles of hydrogen forming on the pins and rising through the water with quick ascent. This gas is separated from the water by galvanic decomposition in presence of the immersed tin and iron. The pins may be kept dry, or, better, stored in a bottle of kerosene until wanted again next June.—Hortus, in New York Weekly Tribune.

Paste—A water-proof paste is made as follows: mix rye flour to a thin cream with water and boil it to a paste; add an equal quantity of common glue reduced with water so as to make a thin jelly when cold. Make this hot and mix thoroughly with the hot paste; then stir in it one ounce each of linseed oil, turpentine and common varnish to the pound of glue. The reason why grocers' bags resist moisture is the toughness of the paper rather than the paste used: this is made of rye flour paste to which galbanum dissolved in cold water is added.— Rural New Yorker.

FERTILIZERS FOR GRAPES.

Experiments with commercial fertilizers in vineyards, continued for four years in the Rhine district, have given encouraging results, showing that such manures can be profitably substituted for stable manure, as to effect both on quantity and quality of the fruit; although in general no important advantage over stable manure is gained. Nevertheless it may be comforting to those who cannot get for their vines all the stable manure they would like, to know that by judicious use of superphosphates, potash, salts and nitrogen compounds, they may be able to get with the same