

GARDEN AND ORCHARD.

Unfermented Fruit Juice.

In U. S. Farmers' Bulletin No. 175, are given the following suggestions upon the preparation of unfermented grape juice:

In the making of unfermented grape juice a great deal of judgment can be displayed and many variations produced so as to suit almost any taste by the careful selection of the varieties of grapes from which it is made. From the Mission grape, for instance, when fully ripe, a juice would be obtained that would be delicate and simply sweet, without any other taste; from the Muscat we would get that rich, musky flavor found in our leading raisins; in the Concord that sprightly, foxy taste so well known; and in the Catawba or Isabella that fragrance so peculiarly their own. Equally as pronounced variations in color can be had, as, for instance, almost colorless, yellow, orange, light red, red, and a deep purple. Grape juice can be made from any grape; not only this, but unfermented juice is made from other fruits as well—for instance, apples, pears, cherries—and berries of different kinds yield excellent juices. The richer, sweeter and better in quality the fruit we use, the richer, sweeter and better will be our unfermented juice.

TO PREVENT FERMENTATION.

Grapes and other fruits when ripe have the invisible spores of various fungi, yeasts (ferments) and bacteria adhering to their skins and stems. When the grapes are crushed and the spores immersed in the juice, they begin to multiply, increasing until the juice ferments. The most favorable temperature for fermentation is between 65° and 68° F. Cold checks but does not kill the ferment. Practical tests indicate that the juice may be safely sterilized by bringing to a temperature of 165° to 176° F. At this point the flavor is hardly changed, though a temperature much above 200° F. gives the product a disagreeable, scorched taste.

DIRECTIONS FOR HOME MANUFACTURE.

Use only clean, sound, well-ripened but not overripe grapes. If an ordinary cider mill is at hand, it may be used for crushing and pressing, or the grapes may be crushed and pressed with the hands. If a light-colored juice is desired, put the crushed grapes in a clean cloth sack and tie up. Then either hang up securely and twist it, or let two persons take hold, one on each end of the sack, and twist until the greater part of the juice is expressed; then gradually heat the juice in a double boiler or a large stone jar in a pan of hot water, so that the juice does not come in direct contact with the fire, at a temperature of 180° F. to 200° F.; never above 200° F. It is best to use a thermometer, but if there be none at hand, heat the juice until it steams, but do not allow it to boil. Put it in a glass or enameled vessel to settle for twenty-four hours; carefully drain the juice from the sediment, and run it through several thicknesses of clean flannel, or a conic filter made from woollen cloth, or felt may be used. This filter can be suspended wherever necessary. Fill into clean bottles. Do not fill entirely, but leave room for the liquid to expand when again heated. Fit a thin board over the bottom of an ordinary wash boiler, set the filled bottles (ordinary glass fruit jars are just as good) in it, fill in with water around the bottles to within about an inch of the tops, and gradually heat until it is about to simmer. Then take the bottles out and cork or seal immediately. It is a good idea to take the further precaution of sealing the corks over with sealing wax or paraffin, to prevent mold germs from entering through the corks. Should it be desired to make a red juice, heat the crushed grapes to not above 200° F., strain through a clean cloth or drip bag (no pressure should be used), set away to cool and settle, and proceed the same as with light-colored juice. Many people do not even go to the trouble of letting the juice settle after straining it, but reheat and seal it up immediately, simply setting the vessels away in a cool place in an upright position, where they will be undisturbed. The juice is thus allowed to settle, and when wanted for use the clear juice is simply taken off the sediment. Any person familiar with the process of canning fruit can also preserve grape juice, for the principles involved are identical.

One of the leading defects so far found in unfermented juice is that much of it is not clear, a condition which very much detracts from its otherwise attractive appearance, and due to two causes already alluded to. Either the final sterilization in bottles has been at a higher temperature than the preceding one, or the juice has not been properly filtered, or has not been filtered at all. Properly made and bottled, the juice will keep indefinitely, if not exposed to the atmosphere or mold germs; but when a bottle is once opened it should, like canned goods, be used as soon as possible, to keep it from spoiling.

USES OF UNFERMENTED GRAPE JUICE.

The uses are indeed many. It is used in sickness, convalescence, and good health; as a preventive, restorative, and cure; by the young, by persons in the prime of life, and by those in old age. It is used in churches for sacramental purposes; at soda fountains as a cool and refreshing drink; in homes, at hotels, and at restaurants as a food, as a beverage, as a dessert, and in many other ways. When people become accustomed to it they rarely give it up. When properly prepared, unfermented grape juice can be made to please the eye by its color and attractive appearance, the sense of

smell by its bouquet or fragrance, the palate by its pleasant flavor.

It is a food, drink, refreshment and nourishment, all in one. Not a laxative, but made from fruit going to waste, and the blessings given us, that some are too careless, stupid or ignorant, to make use of.

The Export Apple Market.

Recent reports of sales of Canadian apples in England, says the Trade Bulletin, Montreal, are of a very encouraging nature, Golden Sweeties having sold in Liverpool at prices which net the shippers here \$3.00 per bbl., whilst St. Lawrence have netted over that figure. These returns will, no doubt, stimulate larger shipments, as they show good profits. The exports from this port last week were 77,975 bbls., consisting chiefly of Culverts and Greenings, besides a few other varieties. The market here is quiet for fall varieties, with sales reported at \$2.50 for St. Lawrence, Alexander, Culverts, Imperial, etc., at \$2.00 to \$2.25 for Genetings, Pippins. A few sales of winter stock have transpired at \$3.50 for No. 1 and \$3.00 for No. 2. Regarding the export trade it is feared that the good prices recently realized in England will induce heavier shipments from this side, beneath which it is feared the English market may decline, as it has done so often in former years. In Ontario the market has been somewhat excited, owing to competition amongst buyers who, it is said, have been paying \$1.50 to \$1.75 and over for the fruit on the trees, and are taking all kinds as they run in the orchards. This, of course, refers to winter fruit.

The writer found more than the wholesale price for his honey with very little extra work, and he has the assurance that he is helping the local trade by keeping his crop off the whole market. It is a comparatively easy and efficient method of securing retail cans and glasses to hold the honey deep and to fill them up as the honey is extracted, thereby avoiding the necessity of handling the honey again later on in the season, and to be done when it is put in large cans or barrels first and afterwards into retail packages, as required. Also, when honey is sealed up tight immediately after extracting all the natural flavor and aroma is retained. All that is necessary after the cans and glasses are filled and nicely labelled is to store them in a warm room and send them to the local grocery stores as fast as they can sell them, and keep an eye on the busy grocer to see that he receives a fresh supply when his stock runs low. You can give him a good commission and still get more than enough over wholesale price to pay you for the extra time required to do this work. The last man, who sticks a long knife in the honey market, is the specialist who produces large quantities of honey and generally ships the whole outfit to some of the big cities. Of course, there are exceptions—men who make a specialty of the retail trade—but most of them say they "don't want to be bothered" with the local market, and then wonder what is the matter that honey is so low in price. This class of man has

a very poor excuse—in fact, no excuse at all—for not developing the local trade. While he cannot be expected to sell his whole crop of perhaps ten or fifteen tons locally, that is no reason why he should ship ninety per cent of it to the city, unless he lives in the wilderness. If he doesn't like the honey business well enough, or take sufficient interest in it to do all he can to help it, he should get out of it and give his friends a chance. The writer once heard one of the specialists remark that he had practically nothing to do in the winter months. That man lives close to a town of 1,600 people that use about 1,000 pounds of honey a year, and close to another town more than half as large again, that uses

honey in about the same proportion, probably. He ships nearly all his honey to Toronto, gets from six to seven cents for it, and supplies his own containers, and says he has nothing to do in the winter. E. G. H.



Harvester (Imp.) (11368).

First-prize "aged and sweetstakes" Clydesdale stallion, London, Ont., 1905. Also winner of several prizes in July before leaving Scotland. Imported and owned by Dalgety Bros., London, Ont.

APIARY

Selling the Honey Crop.

The profitable disposal of the honey crop is one of the most important branches of the bee-keeping business, but at the same time it is one that receives very little attention—that is, serious business attention—from the average bee-keeper, and seems to come in for a slap or a kick from nearly every class of honey producer. The man who produces only a few hundred pounds generally disposes of it around home, sometimes at the proper market price—if he knows what that is—but often at a lower figure, and seldom puts it up in shape to bring best results. His excuse for not having things right, and proper information as to price, etc., will probably be that "It isn't worth while" for the small quantity he has to dispose of. But in the interests of the honey business generally, and his own business in particular, it most decidedly is worth while, as he will find out to his own complete satisfaction if he tries it a few times. The next man on the list is the individual who produces from one to five or six thousand pounds a year. He is probably a man who has some other business, and just runs bees as a side line. His excuse for "dumping" his honey in the fall is that he hasn't time to put it up in small packages and retail it; he just runs bees as a side line and has to get what he can out of them in the least possible time. His excuse is a trifle better than the other man's; but if he will go the right way about it, he can get from one to

Indoor Wintering.

For wintering bees indoors a cellar should be so built that a temperature of 42° to 45° F. (the air being fairly dry in the cellar) can be maintained during the greater part of the winter. To this end it should be well drained, furnished with adjustable ventilators, and well protected from cold by banking outside. The colonies, supplied with good queens, plenty of bees, 20 to 25 lbs. stores in each, and with chaff cushions placed over the frames, are carried in shortly before snow and freezing weather come.

Any repository which is damp, or one where the temperature falls below freezing or remains long below 38° F., is not a suitable place in which to winter bees. When in repositories, the bees have no opportunity for a cleansing flight, nor do they, when the temperature rises outside, always warm up sufficiently to enable the cluster to move from combs from which the stores have been exhausted to full ones; hence in a cold repository they may possibly starve with plenty of food in the hive. As a rule, colonies would be better off out of doors on their summer stands than in such places.—[U. S. Farmers' Bulletin No. 59.]

"The Cost is Small, Yet the Returns Are Sure."

THE MAN WHO SAID THAT WAS TALKING ABOUT "WANT AND FOR SALE" ADS. IN THE FARMER'S ADVOCATE AND HOME MAGAZINE, OF LONDON, CANADA.