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(FOR BROADCAST USE ONLY)

Subject: "NEWS NOTES FROM WASHINGTON." Information from the Office of Experiment Stations, U. S. Department of Agriculture.

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This week's letter from Washington, D. C., comes right in the nick of time for listeners interested in putting up strawberry and rhubarb juice this spring. Several State experiment stations have been investigating methods of preparing and preserving fruit juices, among them strawberry and rhubarb juice. This week our correspondent writes of some of the findings of these stations, as reported to the U. S. Department of Agriculture.

She writes: "The national taste for fruit juice seems to be a 'coming appetite.' At least the people of this country are consuming more and more fruit juices and beverages. As the demand for these juices has grown, the interest in ways to preserve them has also increased. Both home canners and commercial canners have been interested in knowing the best ways of putting up the juices from different fruits, so scientists at several State experiment stations have been working on this problem in recent years.

"Last year workers in 4 State stations were studying the preservation and use of juice from some important fruit of their particular localities. At the Tennessee station they were developing methods for putting up strawberry juice while at the New York station they were studying rhubarb juice and grape juice. In Massachusetts they were continuing their research on bottled cranberry juice and in Florida orange juice had their attention.

"The new method worked out at the Tennessee station for preserving strawberry juice, or 'semi-sirup', to use a Tennessee term, is one suited to the home kitchen. The directions are briefly to heat the berries to the moderate temperature of 190 degrees Fahrenheit and hold them at this temperature for about 15 minutes. Then, squeeze the juice or press it through muslin and add sugar at the rate of 2 pounds to 1 quart of juice. Finally, pour the warm semi-sirup into sterilized bottles, cap the bottles, and process submerged in water heated to 175 degrees Fahrenheit for half an hour. Among the ways suggested by Tennessee workers for using this preserved strawberry sirup are sauce for ice cream, an ingredient in fruit punches or in any dish calling for strawberry flavor. During this research on strawberry juice, the investigators found that the Blakemore strawberry gave the best flavor and richest color to juice of any variety of berry they tested. As for the food value of the juice preserved by this method, they reported that it is about half as rich in vitamin C as fresh strawberries.

"The process of making bottled rhubarb juice which the New York station developed last year is still too complicated for home use since it involves pressing the juice from shredded stalks with a hydraulic press, heating to 120 degrees Fahrenheit followed by clarifying with a pectic enzyme preparation and finally precipitating the soluble oxalates from the product. But anyone who enjoys fruit juice will be interested to know that the New York State workers report that rhubarb juice prepared by this method is brilliantly clear and remains clear and holds its characteristic rhubarb flavor for nearly a year in storage. Since the demand for rhubarb is largely seasonal, this gives promise of making rhubarb a profitable crop during the off season. The investigators suggest that when this bottled juice is diluted and sweetened it makes a good drink either plain or carbonated. They also report that it blends well with other juices, especially with a mild juice like sweet or insipid cider, and also with Montmorency cherry juice, Concord grape juice, and with citrus and berry juices. The investigators report that the variety of rhubarb which goes by the name of 'Strawberry' gave a particularly rich-flavored juice and that the 'Ruby' variety gave a redder and more attractive juice.

"The New York State station also published a circular on the home manufacture of grape juice last year, as a result of its chemical and bacteriological research. The circular is called 'Making Grape Juice in the Home' and includes directions for first pressing and heating or pasteurizing the juice, temporary storage in large containers to permit the grape-juice crystals to form and the sediment to settle, then the final pasteurization and bottling. One point which the circular emphasizes is the need for filling the bottles hot in order to drive the air from the juice and from the head-space of the bottle. This precaution is necessary to prevent later deterioration of the juice.

"Bottled cranberry juice is now one of the popular fruit juices on the market largely because of the long research on this juice which workers at the Massachusetts station have carried on. Recently they have improved their method of manufacture. They have found that a pectinous enzyme preparation is very successful for clarifying both the raw-pressed and the hot-pressed juice. By the way, Massachusetts workers also report that in making raw-pressed juice, a barrel of cranberries, or 100 pounds, will give 2 and a half to 3 gallons of juice.

"Orange juice continues to hold the attention of the Florida scientists. As you probably know, companies in many parts of the country have tried to distribute fresh orange juice to homes along with milk. The difficulty has always been that the flavor of the juice deteriorates on standing for any length of time. Several years ago the Florida station began an intensive study of the problem. They now report that they have developed methods of extracting and handling the juice on a commercial scale that avoid the objectionable features of the juice manufactured earlier. To quote the report of these workers, 'when the system is followed, fresh orange juice may be produced in specially equipped cold storage plants, without sterilization, that is of excellent and uniform quality. Distribution can be made in ordinary milk bottles with full assurance that the juice will retain all the desirable attributes for at least 4 days.'"

That concludes the fruit-juice news notes from 4 State experiment stations as reported to the U. S. Department of Agriculture in Washington, D. C.

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