Variety Testing of Grapes For Wine*

R. F. CROWTHER**

Vineland Station, Ontario

The testing of grapes for wine began in the Horticultural Products Laboratory in 1951 with the close collaboration of the Canadian Wine Institute and the Ontario Liquor Control Board. The work includes the testing of about 100 varieties of grapes each year as table wines and about 30 as dessert wines. Basic procedures are a matter of agreement with members of the Wine Institute.

Variety Tests for Table Wines

Harvest of the grape begins approximately during the last week in August and usually continues to the middle of October. Maturity is determined in the laboratory by measurements of sugar and acidity, and in the field, sugar is measured with a refractometer. The checking of maturity is done in close co-operation with Mr. O. A. Bradt, in charge of the experimental vineyards.

White wines are usually made from the juice of white grapes but some white wines are made from the juice of blue grapes. Red wines are made by fermenting the crushed grapes, including the skins, for a period of 72 hours. In both cases the initial sugar content is increased to 28° brix by adding sugar to the white grapes before fermentation, to the red juice after the skin fermentation.

The yeast for the fermentations is prepared before vintage by the microbiology laboratory in charge of Dr. Adams. Uniformity is stressed and the product, in dried form, is stored at a freezing temperature.

Fermentations are conducted under

controlled temperature. The standard fermentation temperature is 50°F. but a promising variety is fermented at four temperatures, namely, 50°, 60°, 70° and 80°F. All promising varieties are tested a minimum of four years.

All the wineries in Ontario and the Liquor Control Board receive 4-oz. samples of the wine of each variety. They are sent out under code for rating. At the same time the Horticultural Products Laboratory assesses the wines and also gives them a descriptive classification. A summary of both findings along with a key to the code numbers is sent to all concerned.

At an annual meeting held at the Products Laboratory, wines of the previous vintage are re-assessed and selections of interest are recommended to Mr. O. A. Bradt for propagation.

A list of interesting varieties to date will be found in Ontario Department of Agriculture Bulletin 487 revised May, 1959 and called "The Grape in Ontario".

Variety Tests for Dessert Wines

This work concerns the production of wines using special methods. The end product may be classified as port, sherry, or muscat or may be merely a dessert type which is usually sweet. This has led to the acceptance of many varieties, which would normally have been passed-up as table wines.

A major contribution has been the development of a method for producing an excellent flor type of sherry and the finding of suitable varieties for its production. A list of these varieties may be found in the Report On-

^{*}A talk given at the Niagara Peninsula Fruit and Vegetable Growers' Convention, Dec., 1959.

^{**}Research Scientist, Horticultural Products Laboratory, Horticultural Experiment Station.

COLLINS BLUEBERRY

tario Horticultural Experiment Station, 1957-58, p. 120.

The following varieties have produced exceptional dessert wines: Port

type—H. E. S. 29143, 35081 and 37069, and Seibel 9549; Sherry type—H. E. S. 37034 and 37022; Muscat type—New York 12997, 17805 and Alden.

Collins, A New Blueberry Variety

D. H. SCOTT, J. N. MOORE, G. M. DARROW and R. J. KNIGHT*

Collins, a new blueberry variety has been released by the Crops Research Division, Agricultural Research Service, U.S.D.A. and the New Jersey Agricultural Experiment Station.

Collins, formerly 18-116, is named in honor of the late Lester Collins, because of his leadership and cooperation in the testing of blueberry seedlings and selections in New Jersey.

The Collins blueberry, which originated as a seedling from a cross of Stanley x Weymouth by the late F. V. Coville, of the United States Department of Agriculture, is one of the last existing selections from crosses made by Dr. Coville. Collins is a sister seedling of Earliblue and resembles this variety in some ways. It ripens midway between Earliblue and Bluecrop and fills a definite gap in the ripening sequence of large-fruited blueberry varieties.

Plants of the Collins are erect, vigorous, and moderately productive. The bushes appear to be somewhat susceptible to winter injury and spring frosts; they have about the same winter hardiness as Berkeley and Pemberton under usual conditions.

The fruit of Collins is borne in medium-sized, rather tight, attractive clusters (See front cover). Fruit is as large as that of Earliblue. The berries are light blue, firm, and highly flavored and to date have not dropped or cracked.

Collins blueberry has been tested for several years in several areas in New Jersey and in Massachusetts, Connecticut, New Hampshire, and Michigan. It has responded favorably in the other areas, particularly in the New England states, where it is well liked.

Collins is being recommended for trial as a second early, large-fruited variety for northeastern United States. Because of its apparent sensitivity to cold and frosts, care should be taken in choosing a site for planting. Known frost pockets should be avoided.

Apricot Bud-Hardiness in British Columbia

Mr. K. O. Lapins has reported that bud survival in an apricot variety planting at Summerland Experiment Station in British Columbia, in 1959, was variable. The survival of blossom buds by variety was as follows:

Sophia-over 50%

Reliable, Tilton, Sunglo and Scout-25 to 50%

Moorpark and Trevatt-12.5 to 25% All others-6%

*Principal Horticulturist, Crops Res. Div., Agr. Res. Serv., U.S.D.A.; Research Associate, New Jersey Agr. Exp. Station; Collaborator, U.S.D.A.; and Horticulturist, Crops Res. Div., Agr. Res. Serv., U.S.D.A., respectively.