

LABORATORY
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GRAPE JUICE

OTTAWA, June 15, 1918.

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Asst. Deputy Minister of Inland Revenue.

SIR,—I have the honour to submit a report upon Unfermented Grape Juice. This report comprises 102 samples, purchased throughout Canada by our inspectors in January, February and March of the present year.

Grape juice is legally defined as follows, by Order in Council of February 8, 1911 (G. 947).

3. Grape juice, grape must, is the fresh fruit juices obtained from grapes (*Vitis* species), has a specific gravity (20° C.) not less than 1.0400 and not exceeding 1.1240; and contains in one hundred (100) cubic centimeters (20° C.) not less than seven (7) grammes nor more than twenty-eight (28) grammes of total sugars, in terms of reducing sugars, not less than twenty (20) centigrammes and not more than fifty-five (55) centigrammes of grape ash, and not less than fifteen (15) milligrammes nor more than seventy (70) milligrammes of phosphoric acid (P_2O_5).

This article was first made the subject of examination in these laboratories in November 1902, and the results of work upon 18 samples are published in Bulletin No. 82. Three of these samples were found to contain above 2 per cent of proof spirit, and 7 samples contained salicylic acid, added as to prevent fermentation. The use of a preservative for this purpose has generally been discontinued in recent years, sterilization of the juice having been found practicable and satisfactory.

Seventy (70) samples of grape juice are reported in Bulletin No. 166 (December 1908). Fourteen (14) of these contained salicylic acid, and most of these contained decided amounts of alcohol, indicating that this preservative had been added to the already fermenting juice to stay further fermentation, rather than as a means of preventing incipient fermentation in the fresh juice.