2206 NO REPRINTS AVAILABLE

REPORT ON METHODS OF ANALYSES FOR MAPLE PRODUCTS*

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The Associate Referee on Maple Flavor has continued the studies on chemical compounds that are associated with or accompany maple flavor. One of these, syringaldehyde, was reported in the 1962 report. The current study has been the development of a quantitative method, based on gas liquid chromatography, for estimating the level of syringaldehyde in maple sirup not as a pure compound but in association with dihydro-coniferyl alcohol from which it is separated with difficulty. The Associate Referee has indicated that this may not be the method of choice and may be superseded by a more sensitive GLC procedure. Collaborative tests will not be conducted until one of the two methods has been shown superior.

The Associate Referee on Methods of Analysis of Maple Sirup developed a modified procedure for measuring the conductivity value of sirup and tested the method collaboratively. The Associate Referee also concurred with the General Referee that the Canadian Lead Number now in the Book of Methods as paragraphs 29.146 and 29.147 be removed from Section 29 and made a surplus method because it is seldom if ever used today. The Referee also recommends that the method for "Ash" 29.135 be kept "Official" and that XX.002 and XX.003 5a or 1b be added. The XX paragraphs indicate

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* Presented, as the report of the General Referee on Maple Products, at the Seventy-eighth Annual Meeting of the Association of Official Agricultural Chemists, Washington, D. C., October 19-22, 1964.

numbers from C. C. Klenin's chapter on ashing.

No work has been done on the microbiology of maple sirup during the past year since the new Associate Referee, who replaced Dr. Aaron Wasserman, has had insufficient time to establish a program of study.

Recommendations

It is recommended that:

(1) Studies be continued on the chemical composition of maple flavor.

(2) Studies be continued on methods for estimating syringaldehyde.

(3) Further study be made of the method for conductivity values of maple sirup to improve the interlaboratory precision and that the method be tested collaboratively using sirups with conductivity values in the low and medium ranges.

(4) The method for Canadian Lead Number (Fowler Modification) with sub-paragraphs 29.146 and 29.147 of the Book of Methods should be kept "Official" and should be removed from Section 29 and put in the surplus section of the new edition of the Book of Methods.

(5) The method for the determination of formaldehyde (Associate Referee Maple Report 1963) should be adopted as Official and included in Section 29 of the Book of Methods.

(6) The method for ash, 29.146 and 29.147 be kept "Official" and that under paragraph 29.135, XX.002 and XX.003, 5a or 1b be added to the current cross reference to methods 29.012 and 29.013. Paragraphs XX are from C. C. Klenin's new chapter on ashing.

(7) The work on the microbiology of maple products be continued.