

METHODS COMMITTEE REPORTS

Committee on Additives, Beverages, and Process-Related Analytes

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Committee Actions

On September 28, 2000, the committee met by teleconference to make a determination for the study C-14, *Moisture in Spices*. The committee recommended that the applicability statement be altered to reflect the matrixes studied. The committee recommended adoption, contingent upon receiving a list of collaborators by December 31, 2001. There were 13 items listed by the committee that needed to be addressed. The chair notes that this has not been done. At this time, the committee recommends adoption, contingent upon

the correction of these 13 items and upon receiving a list of collaborators by December 31, 2001.

Three new members have been recommended for appointment to the committee. The new Chair, Dr. Sumer Dugar, will issue letters of appointment.

The study *Determination of Fluoride in Wine by Ion Selective Electrode* (tracking number C-1) has been sent to William Horwitz for review. Dugar will contact Horwitz to determine the status of this method.

Alcoholic Beverages, M. Abdul Mabud

(1) *Determination of Fluoride in Wine by Ion Selective Electrode*: Study Director Bruno Trombella, E&J Gallo Winery, PO Box 106, Farmington, CA 95230, Tel: +1-209-341-3251, Fax: +1-209-341-4541, has completed the collaborative study and results of the study look very good. The level of fluoride in wine is a health related issue. The United States and European Union will work together to establish maximum levels of fluoride in wine (interim maximum level is 3 ppm for U.S. wines). Tombella has prepared the collaborative study report (tracking number C-1) for review by the Methods Committee. The Methods Committee will review the comments of Horwitz and determine if the study is ready for First Action.

(2) *Alcohol in Distilled Spirits by Near Infrared Technology (NIRT)*: Study Director John Scussel, Bacardi Bottling Corp., PO Box 26368, 12200 N. Main St, Jacksonville, FL 32226-6368, Tel: +1-904-757-1280, Fax: +1-904-751-1397. Technical hurdles prevent establishment of a consistent method across all products and vendors. Discontinue study.

(3) *Determination of Alcohol in Malt Beverages by Near Infrared (NIR) Technology*: John Scussel (*see* 2) also studied determination of alcohol in malt beverages by NIR and mentioned that technical hurdles noted for proofing of distilled spirits were not encountered for malt beverages. Feasibility studies conducted by Scussel for determination of alcohol in malt beverages has been very encouraging. He has expressed an interest in participating in any future collaborative study on NIRT analysis of malt beverages for alcohol. AOAC seeks a Study Director for this project.

(4) *Determination of Alcohol in Wines by Near Infrared (NIR) Technology*: Robert Hale, Anton PAAR USA, 10201 Maple Leaf Ct, Ashland, VA 23005, Tel: +1-800-722-7556, Fax: +1-804-550-1057, E-mail: rhale@apaarusa.com. A comparative study of alcohol determination in various types of wines by NIRT and GC/FID (AOAC **983.13**) was undertaken jointly by ATF and Anton PAAR USA. Decision to initiate a collaborative study on alcohol analysis by NIRT in wine, and the appointment of Hale as the Study Director, will be made after review of the complete set of data. Continue study.

(5) *Determination of Cyanide in Stone Fruit Brandies and Liqueurs by IC with Amperometric Detection*: Study Director Norma Hill, Bureau of Alcohol, Tobacco, and Firearms (BATF), U.S. Department of Treasury, 355 N. Wiget Ln, Walnut Creek, CA 94598, Tel: +1-925-280-3642, Fax:

+1-925-280-3601, E-mail: nrhill@sfdi.atf.treas.gov, has developed and validated the method. Hydrogen cyanide is a naturally occurring contaminant in stone fruit brandies and liqueurs. The levels of free cyanide and the associated cyanide-base compound, lactonitrile, in these distilled spirits has health and safety consequences. The existing AOAC method (973.19) is a qualitative method for the detection of cyanide, not for its quantitative determination. Hill has developed and validated the method. The collaborative study was protocol submitted for review mid-October 2001. Continue study.

(6) *Determination of Organic Acids in Wine by Capillary Electrophoresis*: Considerable interest exists in developing a capillary electrophoresis method for the simultaneous determination of organic acids in wine. Pierre Metra, Lareal, PO Box 234, Vannes Cedex 56006, France, Tel: 33-2-9-754-5455, Fax: 33-2-9-754-5464, E-mail: pmetra@AOL.com, has developed a CE method for the simultaneous determination of wine organic acids. Decision on initiating this collaborative study and appointment of the Study Director will be made after review of the method validation data. Metra has expressed interest in the appointment as Study Director for the collaborative study. Continue study.

(7) *Nitrogen in Beer, Wort, and Brewing Grains, Protein (Total) by Calculation*: Cynthia A. McLinn, Miller Brewing Co., 3939 W. Highland Blvd, PO Box 482, Milwaukee, WI 53201, Tel: +1-414-931-2864, Fax: +1-414-931-4873, E-mail: mcinn.cynthia@mcbo.com, is no longer interested in acting as Study Director for this study. AOAC seeks a new Study Director for this project.

(8) *Vanillin, Ethyl Vanillin, Coumarin, Maltol and Ethyl Maltol in Beverage Alcohol Products*: Study Director, Eshwar Jagerdeo, U.S. Department of Alcohol, Tobacco, and Firearms, National Laboratory Center, Rockville, MD 20850-3188, Tel: +1-301-217-5728, E-mail: ejagerdeo@atfhg.treas.gov, has developed a gas chromatography procedure and it has been validated for vanillin, ethyl vanillin, and coumarin. The method validation for maltol and ethyl maltol is near completion. It was expected that by this fall he would submit the protocol for a collaborative study. Continue study.

(9) *Pesticide Residues in Wine*: Various methods have been developed and are in use for the analysis of pesticide residue in wine. Since pesticide residue in wine has health consequences, it has regulatory implications. It is likely that there could be as many as 2 methods, one GC/MS method and the other LC with post-column derivatization. AOAC has an interest in initiating collaborative studies in these areas. The committee recommends moving this topic to the Committee on Residues and Related Topics.

(10) *Total Sulfur Dioxide in Wine*: George Peterson, BATF, Alcohol and Tobacco Laboratory, 355 N. Wiget Ln, Walnut Creek, CA 94598, Tel: +1-925-280-3626, Fax: +1-925-280-3601, E-mail: gfpeterson@sfdi.atf.treas.gov, has been working on improving the precision and accuracy of the aeration-oxidation method for total sulfur dioxide determination in wine. If desired precision and accuracy are demon-

strated, the method is likely to be recommended for collaborative study. Continue study.

(11) *Quinine in Soda*: Study Director Tomika L. Moore, BATF, 1401 Research Blvd, Rockville, MD 20850, Tel: +1-301-413-5227, Fax: +1-301-413-9463, E-mail: tlmoore@atfhg.atf.treas.gov, has been developing an LC method for the determination of quinine in all types of beverages. This is not an alcoholic beverage topic and should be moved to the Committee on non-alcoholic Beverages.

(12) *Malt Beverages and Brewing Materials*: AOAC seeks a new Study Director for this topic.

(13) *Tannins in Distilled Liquors*: Discontinue topic.

Color Additives, Vacant

AOAC seeks a new General Referee for this topic.

Flavors, Janet M. Scalese

Determination of Site-Specific (D/H) Ratios in Vanillin by ²H-NMR: Study Director Gilles Martin, Eurofins Scientific Laboratories, Rue Pierre Adolph Bobiere BP 42301, Nantes, France, Tel: +33-2-51832100, Fax: +33-2-51832111, E-mail: gillesmartin@eurofins.com. Method proposed from a 1997 publication and collaborative study accepted. Eleven laboratories have agreed to participate. A familiarization sample was circulated to the participants at the beginning of this year (2001), and the analyses are currently being performed. The collaborative study materials will be sent to the laboratories that have reached a sufficient level of proficiency for ²H-NMR analysis of vanillin. Continue study.

Food Additives, James M. Burggraff

No report received.

Gelatins, Wayne A. Turner

No report received.

Nonalcoholic Beverages, James A. Kinsinger

No activity reported.

Spices and Other Condiments, Roman Grypa

(1) *Curcumin in Turmeric*: Study Director Ted Lupina, Kalsec, Inc., PO Box 50511, Kalamazoo, MI 49005-0511, Tel: +1-616 349-9711, Fax: +1-616 382-3060, E-mail: tlupina@kalsec.com. No report received. Discontinue topic.

(2) *Water Activity of Spices*: Study Director, Pierre Metra, Lareal, PO Box 234, Vannes Cedex 56006, France, Tel: 33-2-9-754-5455, Fax: 33-2-9-754-5464, E-mail: pmetra@lareal.com. No report received. Continue study.

(3) *Moisture in Spices, Vacuum Oven Method*: Study Director Louis Sanna, Gilroy Foods, 8180 Arroyo Cir, Gilroy, CA 95020-7305, Tel: +1-408-847-1414, Fax: +1-408-846-3504, E-mail: lsanna@gilroyfoods.com. No report received. The collaborative study report has been submitted and is under review.

(4) *Irradiation of Spices and Herbs, Microbiological Screening Method*: Anna-Maija Sjoberg, VTT Biotech & Food Research Laboratory, PO Box 1504, 02044 VTT, Espoo 02150, Finland, Tel: 358-9-45-65216, Fax: 358-9-45-52028, E-mail: anna-maija.sjoberg@vtt.fi. No report received. Discontinue topic.

(5) *Moisture and Total Fat in Mayonnaise and Condiment Products by Rapid Microwave Drying and Solvent Extraction*: John Brill, McCormick & Co., 204 Wight Ave., Hunt Valley, MD 21031, Tel: +1-410-771-7975, Fax: +1-410-527-8642, E-mail: john_brill@mccormick.com, has

been nominated as Study Director for initiating the collaborative study. Study protocol being written.

(6) *Volatile Oil in Cassia*: No Study Director. No report.

(7) *Change of Extraction Solvent in Peperine*: No Study Director. No report.

(8) *Analysis of B1 and Total Aflatoxins in Spice*: Has been moved to the Committee on Toxins.

This is a general call to readers of this report to send names, suggested topics, and contact information for potential Study Directors to the General Referee at 204 Wight Ave., Hunt Valley, MD 21031, E-mail: roman_grypa@mccormick.com. Through these contacts, it is hoped that a number of topics can be identified and collaborative studies initiated that will benefit the spice and condiment technical community.