

METHODS COMMITTEE REPORTS

Committee on Natural Toxins and Food Allergens

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Committee Actions

Jean-Marc Fremy resigned as Committee chair and remains as a member. Tetsu Goto, former Secretary of the Committee, was elected chair, beginning in September 2004. Chris Maragos was selected as a new member with a term beginning in September 2004, and was appointed Secretary. Hans van Egmond, Joerg Stroka, and Mary Trucksess received awards as Committee Member of the Year, Study Director of the Year, and Harvey W. Wiley Award recipient, respectively. Trucksess, General Referee for the section on mycotoxins, resigned in September 2005. A new General Referee will be appointed in 2006 to this vacant position.

The Committee had 10 ongoing studies. There were 5 collaborative study manuscripts in review (D-4, D-15, Da-040, Da-020, Dd-001) of which 3 are currently on-hold (Da-40, Da-020, Dd-001). There was one method modification undergoing review (Da-044). Manuscript Da-044 (*Analysis of aflatoxin by photochemical reactor for enhanced detection*) is being evaluated as a modification to AOAC Methods **970.45**, **991.31**, and **999.07**. The General Referee and manuscript reviewers have reviewed the results of the study and approved the manuscript. The study is pending approval by the Official Methods Board. Two methods were adopted as First Action Official Methods (**2004.10**, **2005.06**), and 2 methods were approved as Final Action (**2001.01**, **2001.06**). The Committee recommended terminating the appointments of Study Directors after methods have been approved Final Action. Contact information of former Study Directors will be kept in a database at AOAC as "Method Advisors" for possible future consultation. No methods were submitted in the last year to the Safety Advisor.

During the year, AOAC held 2 symposia in the topic area of mycotoxins at the AOAC Annual Meeting in St. Louis and at the Midwest AOAC meeting in Kansas City. The Marine and Freshwater Toxins Task Force and Analytical Community, inaugurated in 2004, currently has over 150 members and was actively involved in multiple international toxin symposia, including the "*Marine and Freshwater Toxins Analysis: 1st Joint Symposium and AOAC Task Force*

¹ Sue Hefle passed away on August 30, 2006.

Meeting" in Baiona, Spain, and a second symposium at the AOAC Annual Meeting in Orlando, FL.

Mycotoxins, Mary Trucksess

(1) *Sampling and subsampling for mycotoxins*: Topic Advisor Thomas B. Whitaker, U.S. Department of Agriculture, Agricultural Research Service, North Carolina State University, 124 Weaver Lab, Box 7625, Raleigh, NC 27695-7625, Tel: 919-515-6731, Fax: 919-515-7760, E-mail: thomas_whitaker@ncsu.edu. Continue study.

(2) *Aflatoxin M₁*: Topic Advisor Hans P. van Egmond, National Institute of Public Health and the Environment, Laboratory for Food and Residue Analysis, Postbak 3, PO Box 1, Bilthoven, 3720-BA, The Netherlands, Tel: 31-30-2742440, Fax: 31-30-2744403, E-mail: hp.van.egmond@rivm.nl. Continue study.

(3) *Aflatoxins*: Topic Advisor Gordon Shephard, PROMEC, Medical Research Council, Francie Van Zijl Dr Parow/PO Box 1907, Tygerberg 7505, South Africa, Tel: 27-21-938-0279, Fax: 27-21-938-0260, E-mail: gordon.shephard@mrc.ac.za. Continue study.

(4) *Alternaria toxins*: Topic Advisor Michele Solfrizzo, Institute of Sciences of Food Production, National Research Council, Viale L. Einaudi 51, Bari 70125, Italy, Tel: 39-080-5912838, Fax: 39-080-5486063, E-mail: michele.solfrizzo@ispa.cnr.it. Continue study.

(5) *Citrinin*: Topic Advisor David Abramson, Agriculture and Agri-Food Canada, Cereal Research Center, 195 Dafeo Rd, Winnipeg MB R3T-2M9, Canada, Tel: 204-984-5536, Fax: 204-983-4604, E-mail: dabramson@em.agr.ca. Continue study.

(6) *Cyclopiazonic acid*: Topic Advisor Joe W. Dorner, U.S. Department of Agriculture, Agricultural Research Service, National Peanut Research Laboratory, 1011 Forrester Dr SE, PO Box 509, Dawson, GA 31742, Tel: 229-995-7408, Fax: 229-995-7416, E-mail: jdorner@nprl.usda.gov. Continue study.

(7) *Ergot alkaloids*: Topic Advisor George M. Ware, U.S. Food and Drug Administration, 60 8th St NE, Atlanta, GA 30309, Tel: 404-253-1160, ext. 2249, Fax: 404-347-4225, E-mail: gware@ora.fda.gov. Continue study.

(8) *Fumonisin*s: Topic Advisor Chris Maragos, U.S. Department of Agriculture, Agricultural Research Service, National Center for Agricultural Utilization Research, 1815 N. University St, Peoria, IL 61604, Tel: 309-681-6266, Fax: 309-681-6689, E-mail: maragocm@ncaur.usda.gov. Continue study.

(9) *Ochratoxins*: Topic Advisor Benedicte Hald, Royal Veterinary and Agricultural University, Department of Veterinary Microbiology, 13 Bulowsvvej, Friedriksberg C, Copenhagen 1870-DK, Denmark, Tel: 45-3528-2760, Fax: 45-3528-2757, E-mail: vetmi@kvl.dk. Continue study.

(10) *Patulin*: Topic Advisor Myrna Sabino, Instituto Adolfo Lutz, Dr Arnaldo 355, 355-CEP, Sao Paulo 01246-902, Brazil, Tel: 55-11-3068-2921, Fax: 55-11-853-3505, E-mail: mysabino@ial.sp.gov.br. Continue study.

(11) *Trichothecenes*: Topic Advisor Gary Lombaert, Health Canada, Health Products and Food Branch, 510

Lagimodiere Blvd, Winnipeg, MB, R2J-3Y1, Canada, Tel: 204-984-2088, Fax: 204-983-5547, E-mail: gary_lombaert@hc-sc.gc.ca. Continue study.

(12) *Zearalenone*: Topic Advisor Winston M. Hagler, Jr, North Carolina State University, College of Agriculture and Life Sciences, Department of Poultry Science, Mycotoxin Laboratory, Box 7608, Raleigh, NC 27695-7608, Tel: 919-515-3228, Fax: 919-515-2625, E-mail: winston_hagler@ncsu.edu. Continue study.

(13) **2001.01** *Determination of Ochratoxin A in Wine and Beer by Immunoaffinity Column Cleanup and HPLC*: Study Director Angelo Visconti National Research Council, Institute of Sciences of Food Production, Viale G. Amendola, 122/0, Bari 70126, Italy, Tel: 39-080-592-9333, Fax: 39-080-592-9373, E-mail: angelo.visconti@ispa.cnr.it. Approved as Final Action.

(14) **2001.04** *Determination of Fumonisin B₁ and B₂ in Maize Flour and Cornflakes by HPLC*: Study Director Angelo Visconti. Continue study.

(15) **2001.06** *Veratox for Fumonisin*s: Study Director Mark Mozola, Neogen Corp., 620 Leshner Pl, Lansing, MI 48912, Tel: 517-372-9200, Fax 517-372-0108, E-mail: mmozola@neogen.com. Approved as Final Action.

(16) **2003.02** *Determination of Aflatoxin B₁ in Cattle Feed by Immunoaffinity Column Cleanup and LC with Post-Column Derivatization*: Study Director Joerg Stroka, European Commission, Institute for Reference Materials and Measurements, Retieseweg, Geel, 2440, Belgium, Tel: 32-14-571229, Fax: 32-14-571343, E-mail: joerg.stroka@cec.eu.int. Recommended for Final Action.

(17) **2004.10** *Determination of Ochratoxin A in Green Coffee by Immunoaffinity Column Cleanup and LC*: Study Director Eugenia Vargas, Laboratory for Mycotoxin Analysis, Avenida Raja Gabaglia, 245 Cidade Jardim, Belo Horizonte 30380-090, Brazil, Tel: 55-31-250-0398, Fax: 55-31-250-0399, E-mail: gena@cldnet.com.br. Adopted First Action. Continue study.

(18) *Determination of Deoxynivalenol in Corn, Wheat, Barley, and Malted Barley, ELISA, D-4*: Study Director Mark Mozola. Study has been completed and report has been submitted to AOAC for review. Continue study.

(19) *Analysis of Aflatoxin by an LC with Activation Using a Photochemical Reactor for Enhanced Detection (PHRED), Da-044*: Study Director Arthur Waltking, Waltking Associates, 482 Rock Rd, Glen Rock, NJ 07452, Tel: 201-444-1307, E-mail: Arthur.waltking@verizon.net. Manuscript under review. This study is being evaluated as method modification of 3 Official Methods, as noted above. Continue study.

(20) *Mycotoxins in Botanicals*: Topic Advisor Bruce Malone, Trilogy Analytical Laboratory, 111 West 4th St, Washington, MO 63090, Tel: 636-239-1521, Fax: 636-239-1531, E-mail: bruce@trilogylab.com. Continue topic.

Marine and Freshwater Toxins, James M. Hungerford

(1) *Anatoxins*: New Topic Advisor Ambrose Furey, PROTEOBIO, Cork Institute of Technology, Rossa Ave,

Bishopstown, Cork, Ireland, Tel: 353-21-432-6701, Fax: 353-21-434-5191, E-mail: afurey@cit.ie. Continue study.

(2) *Animal Bioassays for Phycotoxins*: Topic Advisor Donald J.A. Richard, Canadian Food Inspection Agency, PO Box 5030, 343 Archibald St., Moncton, NBE1C-9B6, Canada, Tel: 506-855-4824, Fax: 506-851-3315, E-mail: Donrichard@phycotoxins.ca. Continue study. *Note*: This topic was renamed from Bioassays for Phycotoxins.

(3) *Azaspiracids*: Topic Advisor Ambrose Furey. Continue study.

(4) *Brevetoxins, Immunochemical Methods for Brevetoxins*: Topic Advisor Jerome Naar, Center for Marine Science-UNCW Research Faculty, 5600 Marvin K. Moss Ln, Wilmington, NC 28409, Tel: 910-962-2367, Fax: 910-962-2410, E-mail: naarj@uncw.edu. Continue study. *Note*: Word order changed in title to place brevetoxins first.

(5) *Capillary Electrophoretic Methods for Marine Toxins*: Topic Advisor Ana Gago-Martinez, Universidad de Vigo, Dpto. Química Analítica y Alimentaria, Campus Universitario de Vigo, 36200, Vigo, Spain, Tel: 34-986-812284, Fax: 34-986-812556, E-mail: anagago@uvigo.es. Continue study.

(6) *Cell Bioassays for Phycotoxins*: Topic Advisor Ronald Manger, Fred Hutchinson Cancer Research Center, PO Box 19024, Seattle, WA 98109-1024, Tel: 206-667-5838, Fax: 206-667-4182, E-mail: rmanger@fhrc.org. Continue study.

(7) *Ciguatoxins by LC/MS*: Topic Advisor Richard J. Lewis, Institute for Molecular Bioscience, The University of Queensland, St. Lucia 4072, Queensland, Australia. Continue study.

(8) *Domoic Acids*: Study Director Michael A. Quilliam, National Research Council Canada, Institute for Marine Biosciences, 1411 Oxford St, Halifax, NS, B3H-3Z1, Canada, Tel: 902-426-9736, Fax: 902-426-9413, E-mail: Michael.quilliam@nrc-cnrc.gc.ca. Continue study. *Note*: This topic was renamed from Amnesic Shellfish Poisoning Toxins.

(9) *Domoic Acids by ELISA*: Study Director Hans Kleivdal, Biosense Laboratories AS, HIB-Thor Mohlensgt 55, Bergen, N-5008, Norway, Tel: 47-5554-3966, Fax: 47-5554-3771, E-mail: hans.kleivdal@biosense.com. Continue study.

(10) *Electrophysiological Methods for Saxitoxins*: Topic Advisor Benjamin A. Suárez-Isla, University of Chile, Dept. Physiology and Biophysics, Av. Independencia 1027 Box 70005, Santiago, 7, Chile, Tel: 562-777-6886, Fax: 562-732-9668, E-mail: bsuarez@conductor.med.uchile.cl. Continue study.

(11) *LC/MS Detection of Marine Toxins*: Topic Advisor Patrick Holland, Cawthron Institute, Private Bag 2, 98 Halifax St East, Nelson, New Zealand, Tel: 64-3-5482319, Fax: 64-3-5469464, E-mail: Patrick.holland@cawthron.org.nz. Continue study.

(12) *Microcystins and Nodularins*: Topic Advisor Geoffrey A. Codd, University of Dundee, Biological Science Institute, Dundee, Scotland, DD1-4HN, UK, Tel: 44-1382-344272, Fax: 44-1382-344275, E-mail: g.a.codd@dundee.ac.uk. Continue study.

(13) *Okadaiates, Assay Methods*: Topic Advisor J. Marc Fremy, AFSSA, 27-31 Avenue du General Leclerc,

Maisons-Alfort, F-94701, France, Tel: 33-1-49772794, Fax: 33-1-49771352, E-mail: j.fremy@afssa.fr. Continue study. *Note*: This topic was renamed from Diarrhetic Shellfish Poisoning Toxins, Assay Methods.

(14) *Okadaiates by LC-Based Methods*: Topic Advisor Philipp Hess, Marine Institute, Galway Technology Park, Parkmore West, Galway, Ireland, Tel: 353 (0) 91-730-400, Fax: 353 (0) 91-730-470, E-mail: Philipp.hess@marine.ie. Continue study.

(15) *Immunochemical Methods for Phycotoxins*: Topic Advisor Lyn Briggs, AgResearch, Ruakura Research Centre, East St, Private Bag 3123, Hamilton, New Zealand, Tel: 64-7-838-5137, Fax: 64-7-838-5189, E-mail: lyn.briggs@agresearch.co.nz. Continue study.

(16) *Saxitoxins, LC Methods*: Study Director James F. Lawrence, 484 Brierwood Ave, Ottawa, ON K1A-OL2, Canada, Tel: 613-729-2205, Fax: 613-954-4674, E-mail: jimlawrence@sympatico.ca. Continue study. *Note*: This topic was renamed from Paralytic Shellfish Poisoning Toxins, Instrumental Methods.

(17) *Receptor Assays for Phycotoxins*: Topic Advisor Frances Van Dolah, NOAA, National Ocean Service, Center for Coastal Environmental Health and Bio., 219 Fort Johnson Rd, Charleston, SC 29412, Tel: 843-762-8529, Fax: 843-762-8700, E-mail: fran.vandolah@noaa.gov. Continue study.

(18) *Sample Pretreatment Methods for Marine Toxin Analysis*: Topic Advisor Ana Gago-Martinez. Continue study.

(19) *Tetrodotoxins*: Topic Advisor Mari Yotsu-Yamashita, Tohoku University, Graduate School of Agricultural Science, 1-1 Tsutsumidori-Amamiyama, Aoba-Ku, Sendai, 981-8555, Japan, Tel: 81-22-717-8922, Fax: 81-22-717-8922, E-mail: myama@biochem.tohoku.ac.jp. Continue study.

(20) *Yessotoxins*: Topic Advisor Aurelia Tubaro, DEMREP, University of Trieste, Via Valerio 6, 34127 Trieste, Italy, Tel: 39-040-558-7910, Fax: 39-040-558-3215, E-mail: Tubaro@units.it. Continue study.

(21) *Ciguatoxin and Related Polyethers in Fish Tissues and Extracts, Membrane Immunobead Assay, D-15*: Study Director Yoshitsugi Hokama, University of Hawaii at Manoa, John A. Burns School of Medicine, Department of Pathology, 1960 East-West Rd, Honolulu, HI 96822, Tel: 808-956-5464, Fax: 808-956-5506, E-mail: hokamay@jabsom.biomed.hawaii.edu. Continue study.

(22) **2005.06** *Quantitative Determination of Paralytic Shellfish Poisoning Toxins in Shellfish Using Prechromatographic Oxidation and Liquid Chromatography with Fluorescence Detection*: Study Director James Lawrence, Bureau of Chemical Safety, Food Directorate, Food Research Division, Research Center 2203D, Ottawa, Ontario K1A-OL2, Canada, Tel: 613-957-0973, Fax: 613-954-4674, E-mail: jimlawrence@sympatico.ca. Adopted as a First Action Official Method. Continue study.

Allergens, Kristina Williams

Determination of Peanut Material in Food by a Sandwich Enzyme-Linked Immunosorbent Assay: Study Director Mark Mozola. Study on hold.