

METHODS COMMITTEE REPORTS

Committee on Natural Toxins and Food Allergens

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Committee Actions

The committee currently has 7 on-going studies. There are 5 collaborative study protocols in review (Da-044; Da-040, on hold; Da-019, on hold; Da-020, on hold; Dd-001, on hold), one collaborative study protocol approved (Da-039) on and one collaborative study report in review (Da-035). However, some of them have an on-hold status pending of the recommendations and policies produced by 2 task forces set up by or related to the committee: (1) Task Force on "Characterization of Antibodies Used for Mycotoxin or Phycotoxin Analysis" issued a final document entitled "*Policy on Characterization of Antibodies Used in Immunochemical Methods of Analysis for Mycotoxins and Phycotoxins.*" This document was approved by the Official Methods Board (OMB) and by the Board of Directors, which suggested to publish the document in the *J. AOAC Int.* The document was slightly reformatted as a manuscript which was submitted for publication, reviewed, accepted and published in the *J. AOAC Int.*, **86**, No. 4, 2003. Study Directors who have their study at an "on-hold" status have now to follow this policy. (2) The Presidential Task Force on "Food Allergens" initiated its work particularly to determine the specific food allergen method needs of the analytical communities, and to make recommendations in this area to the OMB/Board of Directors. The above mentioned document about characterization of antibodies was sent to this task force for consideration of its applicability to antibodies used in immunological methods for the detection of food allergens.

Mycotoxins.—General Referee, Mary Trucksess

(1) *Sampling and Subsampling for Mycotoxins.*—Topic Advisor, Thomas B. Whitaker, U.S. Department of Agriculture (USDA), Agricultural Research Service (ARS), PO Box 7625, North Carolina State University, Raleigh, NC 27695-7625, Tel: +1-919-515-6731, Fax: +1-919-515-7760, E-mail: thomas_whitaker@ncsu.edu. Continue study.

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

(3) *Aflatoxin.*—Topic Advisor, David M. Wilson, University of Georgia, Department of Plant Pathology, Coastal Plain Section, Tifton, GA 31793, Tel: +1-912-386-3368, Fax: +1-912-386-7285, E-mail: dwilson@tifton.cpes.peachnet.edu. Continue study.

(4) *Alternaria Toxins*.—Topic Advisor, Michele Solfrizzo, Institute of Sciences of Food Production, National Research Council, Viale L. Inaudi 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 Daffoe Rd, Winnipeg MB R3T 2M9, Canada, Tel: +1-204-984-5536, Fax: +1-204-983-4604, E-mail: dabramson@em.agr.ca. Continue study.

(6) *Cyclopiazonic Acid*.—Topic Advisor, Joe W. Dorner, USDA, ARS, National Peanut Research Laboratory, PO Box 509, 1011 Forrester Dr SE, Dawson, GA 31742, Tel: +1-912-995-7408, Fax: +1-912-995-7416, E-mail: jdorner@nprl.usda.gov. Continue study.

(7) *Ergot Alkaloids*.—Topic Advisor, George M. Ware, U.S. Food and Drug Administration (FDA), 60 8th St, Atlanta, GA 30309, Tel: +1-404-347-2131, ext. 5215, Fax: +1-404-347-4225, E-mail: gware@ora.fda.gov. Continue study.

(8) *Fumonisin*s.—Topic Advisor, Chris Maragos, USDA, ARS, National Center for Agricultural Utilization and Research, 1815 N. University St, Peoria, IL 61604, Tel: +1-309-684-6266, Fax: +1-309-681-6267, E-mail: maragocm@mail.ncaur.usda.gov. Continue study.

(9) *Ochratoxin*s.—Topic Advisor, Benedicte Hald, Royal Veterinary and Agricultural University, Department of Veterinary Microbiology, 13 Bulowsvej, 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, São 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, Robert M. Eppley, U.S. Food and Drug Administration, 5100 Paint Branch Pkwy, College Park, MD 20740, Tel: +1-301-436-1951, Fax: +1-301-436-2644, E-mail: Reppley@cfsan.fda.gov. 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: +1-919-515-3228, Fax: +1-919-515-2625, E-mail: winston_hagler@ncsu.edu. Continue study.

(13) *Determination of Veratox for Aflatoxins in Corn and Whole Cottonseed*.—Study Director, Mark Mozola, Neogen Corp., 620 Leshner Pl, Lansing MI 48912-1595, Tel: +1-517-372-9200, Fax: +1-517-372-0108, E-mail: mmozola@neogen.com. Discontinue study.

(14) *Determination of Ochratoxin A in Green Coffee by Immunoaffinity Column Cleanup and HPLC*.—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@cdlnet.com.br. Reported that the collaborative study report has been submitted to the AOAC Methods Committee. Continue study.

(15) **2000.16** *Aflatoxin B₁ in Baby Food by Immunoaffinity Column and HPLC*.—Study Director, Elke Anklam, Joint Research Centre of the European Commission, 21020, Ispra, Italy, Tel: +39-332-78-5390, Fax: +39-332-78-5930, E-mail: elke.anklam@jrc.it. Approved as First Action in 2000. Recommended for Final Action.

(16) **2001.04** *Determination of Fumonisin B₁ and B₂ in Maize Flour and Cornflakes by HPLC*.—Study Director, Angelo Visconti, National Research Council, Institute of Toxins and Mycotoxins, Viale Einaudi 51, Bari 70125, Italy, Tel: +39-080-548-6013, Fax: +39-080-548-6063, E-mail: visconti@area.ba.cnr.it. Approved as First Action in 2001. Continue study.

(17) **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 DG Joint Research Center, Institute for Health and Consumer Protection Food Products Unit, TP 260, I-21020 Ispra, Italy, Tel: +0039-0332-785170, Fax: +0039-0332-785707, E-mail: joerg.stroka@jrc.it. Approved as First Action in 2003. Continue study.

(18) **2001.06** *Veratox for Fumonisin*s.—Study Director, Mark Mozola (see 13). Approved as First Action in 2001. Continue study.

(19) **2001.01** *Determination of Ochratoxin A in Wine and Beer by Immunoaffinity Column Cleanup and HPLC*.—Study Director, Angelo Visconti (see 16). Approved as First Action in 2001. Continue study.

(20) *Determination of Deoxynivalenol in Corn, Wheat, Barley, and Malted Barley, ELISA*.—Study Director, Mark Mozola (see 13). Continue study.

(21) *Total Aflatoxins in Corn, Poultry Feed, and Pet Food*.—Study Director, Mark Mozola (see 13). On hold.

(22) *Total Aflatoxins in Almonds and Raw and Roasted Peanuts*.—Study Director, Mark Mozola (see 13). On hold.

(23) *Aflatoxin of Spices by Aflatest Kit*.—Study Director, Mike Jackson, Pert Labs, PO Box 267, 145 Peanut Dr, Edenton, NC 27932, Tel: +1-252-482-4456, Fax: +1-252-482-5370, E-mail: mike.jackson@pert_labs.com. Continue study.

(24) *Analysis of Aflatoxin by an LC with Activation Using a Photochemical Reactor for Enhanced Detection (PHRED)*.—Study Director, Arthur Walkling, Walkling Associates, 482 Rock Rd, Glen Rock, NJ 07452. Study Director will submit single laboratory validation data. This study will be evaluated as a matrix extension (modification) of an Official Method.

(25) *Mycotoxins in Botanicals*.—Topic Advisor, Bruce Malone, Trilogy Analytical Lab, 111 W. 4th St, Washington, MO 63090, Tel: +1-636-239-1521, Fax: +1-636-239-1531, E-mail: bruce@trilogylab.com. Continue topic.

(26) **2000.02** *Determination of Patulin in Clear and Cloudy Apple Juices and Apple Puree by HPLC*.—Suzan McDonald, MAFF-UK/Food Safety Directorate, United Kingdom. Approved as First Action in 2000. Recommended for Final Action.

(27) **2000.03** *Determination of Ochratoxin in Barley by HPLC*.—Catherine Entwisle, Leatherhead Food RA, United

Kingdom. Approved as First Action in 2000. Recommended for Final Action.

(28) **2000.08** *Aflatoxin M₁ in Liquid Milk by Immunoaffinity Column Cleanup and HPLC with Fluorescence Detection.*—Sylviane Dragacci, AFSSA, Maisson-Alfort, France. Approved as First Action in 2000. Recommended for Final Action.

(29) **2000.09** *Determination of Ochratoxin in a Roasted Coffee by HPLC.*—Catherine Entwisle, Leatherhead Foods RA, UK. Approved as First Action in 2000. Recommended for Final Action.

A special recommendation is made to develop analytical methods for mycotoxins in dietary supplements.

The following 5 First Action methods are recommended for Final Action. Consecutively to the Final Action approval, each respective Study Director will be asked to act as "Method Advisor" since the considered topics have already "Topic Advisors":

(1) **2000.02** *Determination of Patulin in Clear and Cloudy Apple Juices and Apple Puree by HPLC.*

(2) **2000.03** *Determination of Ochratoxin in Barley by HPLC.*

(3) **2000.08** *Aflatoxin M₁ in Liquid Milk by Immunoaffinity Column Clean-Up and HPLC with Fluorescence Detection.*

(4) **2000.09** *Determination of Ochratoxin in a Roasted Coffee by HPLC.*

(5) **2000.16** *Aflatoxin B₁ in Baby Food by Immunoaffinity Column and HPLC.*

Phycotoxins.—General Referee, James M. Hungerford

(1) *Amnesic Shellfish Poisoning Toxins.*—Study Director, Michael A. Quilliam, National Research Council of Canada, Institute for Marine Biosciences, 1411 Oxford St, Halifax, NS B3H3Z1, Canada, Tel: +1-902-426-9736, Fax: +1-902-426-9413, E-mail: michael.quilliam@nrc.ca. Continue study.

(2) *Anatoxins.*—Topic Advisor, Kevin James, Cork Institute of Technology, Department of Chemistry, Bishopstown, Cork, Ireland, Tel: +353-21-326317, Fax: +353-21-345191, E-mail: kjames@cit.ie. Because no report has been received for the last 3 years, a new Topic Advisor or a Study Director has to be appointed.

(3) *Bioassays for Phycotoxins.*—Topic Advisor, Donald Richard, Canadian Food Inspection Agency, Biotoxins Unit, PO Box 5030, Moncton, NB E1C9B6, Canada, Tel: +1-506-851-7831, Fax: +1-506-851-3315, E-mail: richarddj@em.agr.ca. Continue topic.

(4) *Cell Bioassays for Phycotoxins.*—Topic Advisor, Ronald Manger, Fred Hutchinson Cancer Research Center, PO Box 19024, Seattle, WA 98109-1024, Tel: +1-206-667-5838, Fax: +1-206-667-4182, E-mail: rmanger@fhcrc.org. Continue topic.

(5) *Immunological Methods for Seafood Toxins.*—Joanne F. Jellett, Jellett Rapid Testing, 4654 Route 3, Chester Basin, NS, B0J 1K0 Canada, Tel: +1-902-275-5104, Fax: +1-902-275-2242, E-mail: jjellett@ns.sympatico.ca, jjellett@jellett.ca. This topic was previously termed *Paralytic*

Shellfish Poisoning Toxins, Immunological Method and is now broadened. A new Topic Advisor is appointed.

(6) *Diarrhetic Shellfish Poisoning Toxins, Assay Methods.*—Topic Advisor, J. Marc Fremy, AFSSA, Laboratoire d'Etude et de Recherche sur l'Hygiène et la Qualité des Aliments, 10 Rue Pierre Curie, Maisons Alfort F-94704, France, Tel: +33-1-4977-2751, Fax: +33-1-4977-2695, E-mail: j.fremy@paris.afssa.fr. Continue topic.

(7) *Diarrhetic Shellfish Poisoning Toxins, Instrumental Methods.*—Topic Advisor, Kevin James. Because no report has been received for the last 3 years, a new Topic Advisor has to be appointed.

(8) *Microcystins.*—Topic Advisor, Geoffrey A. Codd, University of Dundee, Department of Biological Sciences, Dundee DD1 4HN, Scotland, UK, Tel: +44-1382-344272, Fax: +44-1382-344275, E-mail: g.a.codd@dundee.ac.uk. Continue topic.

(9) *Neurotoxic Shellfish Poisoning Toxins.*—Topic Advisor, Steve Musser, FDA, Center for Food Safety and Applied Nutrition (CFSAN), Tel: +1-301-436-1990, Fax: +1-301-436-2624, E-mail: Steven.Musser@cfsan.fda.gov. No report has been received for the last 3 years. A new Topic Advisor has to be appointed or discontinue topic.

(10) *Paralytic Shellfish Poisoning Toxins, Instrumental Methods.*—Study Director, James F. Lawrence, Health Canada, Food Research Division, Banting Bldg, 2203D, Ottawa, ON K1A 0L2, Canada, Tel: +1-613-957-0947, Fax: +1-613-941-4775, E-mail: jim_lawrence@hc-sc.gc.ca. Continue study.

(11) *Pfiesteria Toxins.*—Topic Advisor, John Ramsdell, NOAA, National Ocean Service, Center for Coastal Environmental Health and Biomolecular Research, 219 Fort Johnson Rd, Charleston, SC 29412, Tel: +1-843-762-8510, Fax: +1-843-762-8700, E-mail: john.ramsdell@noaa.gov. Topic Advisor resigned last year. A new Topic Advisor has to be appointed or discontinue topic.

(12) *Receptor Assays for Phycotoxins.*—Topic Advisor, Frances Van Dolah, NOAA, National Ocean Service, Center for Coastal Environmental Health and Biomolecular Research, 219 Fort Johnson Rd, Charleston, SC 29412, Tel: +1-843-762-8529, Fax: +1-843-762-8700, E-mail: Fran.Vandolah@noaa.gov. Continue study.

To extend the field of consideration, it is recommended to change the term "phycotoxins" into "marine and fresh water toxins."

Allergens.—General Referee, Kristina Williams

Determination of Peanut Material in Food by a Sandwich Enzyme-Linked Immunosorbent Assay.—Study Director, Mark Mozola, Neogen Corp., 620 Leshner Pl, Lansing, MI 48912, Tel: +1-517-372-9200, Fax: +1-503-985-5412, E-mail: mmozola@neogen.com. Study on hold.

The committee recommends the appointment of Topic Advisors in particular to cover the question of availability of standards.