

## METHODS COMMITTEE REPORTS

## Committee on Natural Toxins and Food Allergens

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**Committee Actions**

The Committee currently has 8 on-going studies. There are 3 collaborative study protocols in review (Da-040, on hold; Da-020, on hold; Dd-001, on hold), one collaborative study protocol approved (Da-039), 2 collaborative study reports in review (Da-035 and Dc-016), and one method modification in review (Da044). 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) The Task Force on Characterization of Antibodies Used for Mycotoxin or Phycotoxin Analysis has been disbanded after the publication of the final document entitled “*Policy on Characterization of Antibodies Used in Immunochemical Methods of Analysis for Mycotoxins and Phycotoxins*” in the *J. AOAC* **86** (4) (2003). This document has been approved by the Official Methods Board (OMB) and Board of Directors (BOD). 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/BOD.

A new Presidential Task Force on Marine and Freshwater Toxins was recently approved by AOAC to accelerate methods validation. This Task Force consists of world experts and stakeholders and is chaired by the General Referee. As indicated in the terms of reference, the group will establish methods priorities, determine fitness for purpose, identify and review available methodology, recommend methodology for validation, and identify complementary analytical tools. Once appropriate analytical methodology has been identified or developed, the Task Force will be able to identify financial and technical resources necessary to validate the methodology. The General Referee has also appointed several new Topic Advisors.

*Mycotoxins, 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: 919-515-6731, Fax: 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, Postboks 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: 912-386-3368, Fax: 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, Amendola 122/0, Bari 70126, Italy, Tel: 39-080-5912838, Fax: 39-080-929373, E-mail: michele.solfrizzo@ispa.cnr.it. Continue study.

(5) *Citrinin*: Topic Advisor David Abramson, Agriculture and Agri-Food Canada, Cereal Research Center, 195 Dafoe 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, USDA, ARS, National Peanut Research Laboratory, PO Box 509, 1011 Forrester Dr SE, Dawson, GA 31742, Tel: 912-995-7408, Fax: 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: 404-347-2131, ext. 5215, Fax: 404-347-4225, E-mail: gware@ora.fda.gov. Continue study.

(8) *Fumonisin*s: Topic Advisor Chris Maragos, USDA, ARS National Centre for Agricultural Utilization and Research, 1815 N. University St, Peoria, IL 61604, Tel: 309-684-6266, Fax: 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 Bulovsvej, 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 Robert M. Eppley, U.S. Food and Drug Administration, 5100 Paint Branch Pkwy, College Park, MD 20740, Tel: 301-436-1951, Fax: 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: 919-515-3228, Fax: 919-515-2625, E-mail: winston\_hagler@ncsu.edu. Continue study.

(13) *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. Vargas reported that the collaborative study report has been submitted to the AOAC Method Committee. Continue study.

(14) **2000.16** *Aflatoxin B<sub>1</sub> 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. Approved as Final Action in 2004.

(15) **2001.04** *Determination of Fumonisin B<sub>1</sub> and B<sub>2</sub> 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.

(16) **2003.02** *Determination of Aflatoxin B<sub>1</sub> 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.

(17) **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 First Action in 2001. Recommended for Final Action.

(18) **2001.01** *Determination of Ochratoxin A in Wine and Beer by Immunoaffinity Column Cleanup and HPLC*: Study Director Angelo Visconti (see 15). Approved as First Action in 2001 Recommended for Final Action.

(19) *Determination of Deoxynivalenol in Corn, Wheat, Barley, and Malted Barley, ELISA*: Study Director Mark Mozola (see 17). Continue study.

(20) *Total Aflatoxins in Almonds and Raw and Roasted Peanuts*: Study Director Mark Mozola (see 17). Discontinue study.

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

(22) *Analysis of Aflatoxin by LC with Activation Using a Photochemical Reactor for Enhanced Detection (PHRED)*: Study Director Arthur Waltking, Waltking 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.

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

(24) **2000.02** *Determination of Patulin in Clear and Cloudy Apple Juices and Apple Puree by HPLC*: Study Director Suzan McDonald, MAFF - UK/Food Safety

Directorate, United Kingdom. Approved as First Action in 2000. Approved as Final Action in 2004.

(25) **2000.03** *Determination of Ochratoxin in Barley by HPLC*: Study Director Catherine Entwisle, Leatherhead Food RA, United Kingdom. Approved as First Action in 2000. Approved as Final Action in 2004.

(26) **2000.08** *Aflatoxin M1 in Liquid Milk by Immunoaffinity Column Clean-Up and HPLC with Fluorescence Detection*: Study Director Sylviane Dragacci, AFSSA, Maison-Alfort, France. Approved as First Action in 2000. Approved as Final Action in 2004.

(27) **2000.09** *Determination of Ochratoxin in a Roasted Coffee by HPLC*: Study Director Catherine Entwisle, Leatherhead Foods RA, UK. Approved as First Action in 2000. Approved as Final Action in 2004.

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

The following 2 First Action methods are recommended for Final Action: **2001.01** *Determination of Ochratoxin A in Wine and Beer by Immunoaffinity Column Cleanup and HPLC* and **2001.06** *Veratox for Fumonisin*.

#### *Marine and Freshwater Toxins, 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: 902-426-9736, Fax: 902-426-9413, E-mail: michael.quilliam@nrc.ca. Continue study.

(2) *Anatoxins*: Since no new Topic Advisor has been appointed, topic is discontinued.

(3) *Azaspiracids*: Topic Advisor Ambrose Furey, Proteobio, Mass Spectrometry Centre for Proteomics and Biotoxin Research & Safefood Biotoxin Research Network Co-ordinator (Food Safety Promotion Board), Cork Institute of Technology, Department of Chemistry, Bishopstown, Cork, Co. Cork, Ireland, Tel: 353-21-4326701, Fax: 353-21-4345191, E-mail: afurey@cit.ie. This is a new topic and a Topic Advisor was appointed.

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

(5) *Capillary Electrophoretic Methods for Marine Toxins*: Topic Advisor Ana Gago-Martinez, Universidad de Vigo, Dpto. Química Analítica y Alimentaria, Facultad de Ciencias, Campus Universitario de Vigo 36200-Vigo-E, Spain, Tel: 34 986 812284, Fax: 34 986 812382, E-mail: anagago@uvigo.es. Continue topic.

(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@fhcrc.org. Continue topic.

(7) *Ciguatoxins by LC/MS*: Topic Advisor Richard J. Lewis, University of Queensland, St. Lucia, 4072, Qld, Australia, Tel: 617-3346 2984, Fax: 617-3346 2101 E-mail:

r.lewis@mailbox.uq.edu.au. This is a new topic and a Topic Advisor was appointed.

(8) *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.

(9) *Diarrhetic Shellfish Poisoning Toxins, Instrumental Methods*: Since no new Topic Advisor has been appointed, topic is discontinued.

(10) *Domoic acid by ELISA*: Study Director Hans Kleivdal, Biosense Laboratories AS, HIB-Thormøhlensgate 55, N-5008 Bergen, Norway, Tel: 47-5554 3967, Fax: 47-5554 3771, E-mail: hans.kleivdal@biosense.com. This is a new topic and a Topic Advisor was appointed.

(11) *Electrophysiological Methods for Saxitoxins*: Benjamin A. Suárez-Isla, Laboratory of Marine Toxins, Program of Physiology and Biophysics, Institute of Biomedical Sciences, Faculty of Medicine, University of Chile, Av. Independencia 1027, PO Box 70005, Santiago 6530499, Chile, Tel: 562-777-6886, Fax: 562-732-9668, E-mail: bsuarez@med.uchile.cl. This is a new topic and a Topic Advisor was appointed.

(12) *Immunological Methods for Brevetoxins*: Topic Advisor Jerome Naar, Center for Marine Science, University of North Carolina at Wilmington, 5600 Marvin K. Moss Ln, Wilmington, NC 28409, Tel: 910-962-2367, Fax: 910-962-2410, E-mail: naarj@uncw.edu. This is a new topic and a Topic Advisor was appointed.

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

(14) *LC/MS Detection of Marine Toxins*: Topic Advisor Patrick Holland, Cawthron Institute, Private Bag 2, Nelson, New Zealand, Tel: 643-548-2319, Fax: 643-546-9464, E-mail: patrick.holland@cawthron.org.nz. This is a new topic and a Topic Advisor was appointed.

(15) *Microcystins and Nodularins*: 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. The topic area was extended to Nodularins. Continue topic.

(16) *Neurotoxic Shellfish Poisoning Toxins*: Since no new Topic Advisor has been appointed, topic is discontinued.

(17) *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: 613-957-0947, Fax: 613-941-4775, E-mail: jim\_lawrence@hc-sc.gc.ca. Continue study.

(18) *Pfiesteria Toxins*: Since no new Topic Advisor has been appointed, topic is discontinued.

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

(20) *Sample Pretreatment Methods for Marine Toxin Analysis*: Topic Advisor Ana Gago-Martinez, Universidad de Vigo, Dpto. Química Analítica y Alimentaria, Facultad de Ciencias, Campus Universitario de Vigo 36200-Vigo-E,

Spain, Tel: 34 986 812284, Fax: 34 986 812382, E-mail: anagago@uvigo.es. Continue topic.

(21) *Tetrodotoxins*: Topic Advisor Mari Yotsu-Yamashita, Tohoku University, Sendai, 981-8555, Japan, Tel/Fax: 81-22-717-8922, E-mail: myama@biochem.tohoku.ac.jp. This is a new topic and a Topic Advisor was appointed.

*Allergens, Kristina Williams*

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