## Journal of AOAC INTERNATIONAL

VOLUME 104, NUMBER 2 MARCH/APRIL 2021

## Contents

Special Guest Editor (Purcaro & Beccaria) Advanced Analytical Techniques in Food Analysis Giorgia Purcaro and Marco Beccaria	251
Optimization and Validation of HS-SPME-GC-MS for the Determination of Furan and Alkylfurans in Chocolate-Based Products: Impact of Tempering and Laser Printing Zouheir Alsafra, Georges Scholl, and Gauthier Eppe	253
A Fast GC-MS-Based Method for Efficacy Assessment of Natural Anti-Oxidants for Inhibiting Lipid Oxidation Hans-Gerd Janssen, Carmen Gah, Herrald Steenbergen, Ed Rosing, and Martin Spraul	260
On-Line HP(LC)-GC-FID Determination of Hydrocarbon Contaminants in Fresh and Packaged Fish and Fish Products Ana Srbinovska, Chiara Conchione, Paolo Lucci, and Sabrina Moret	267
Exploring the Extra-Virgin Olive Oil Volatilome by Adding Extra Dimensions to Comprehensive Two-Dimensional Gas Chromatography and Time-of-Flight Mass Spectrometry Featuring Tandem Ionization: Validation of Ripening Markers in Headspace Linearity Conditions Federico Stilo, Erica Liberto, Stephen E. Reichenbach, Qingping Tao, Carlo Bicchi, and Chiara Cordero	274
Tutorial for the Characterization of Fatty Acid Methyl Esters by Gas Chromatography with Highly Polar Capillary Columns Pierluigi Delmonte, Andrea Milani, and John K.G. Kramer	288
Animal food, pet food, and plant nutrient methods Validation of the Free Fatty Acid Test Kit for the Measurement of the Free Fatty Acid Content of Vegetable Oils, Fish Oils, Animal Fats (Tallows), Meat and Fish Meals, and Potato Chips and Grain-Based Snack Products: AOAC Performance Tested Method <sup>SM</sup> 052004 Virginia C. Gordon I, Christopher C. Rainey, and Willainia C. Studmire	300
Validation of the SafTest Percent Fat for the Measurement of the Fat Content of Meat Meals, Fish Meal, and Potato Chips, Crackers, and Other and Grain-Based Snack Products: AOAC Performance Tested Method SM #082004 Virginia C. Gordon, Christopher C. Rainey, and Willainia C. Studmire	312
Validation of the SafTest Peroxide Test Kit for the Measurement of the Peroxide Content of Oils, Tallows, Meat Meals, Potato Chips, and Grain-Based Snacks: AOAC Performance Tested Method <sup>SM</sup> 101001 Virginia Gordon, Christopher Rainey, and Wilainia Studmire	325
Drug formulations Application of MEKC and UPLC with Fluorescence Detection for Simultaneous Determination of Amlodipine Besylate and Bisoprolol Fumarate Sohila M. Elonsy, Fawzy A. El Yazbi, Rasha A. Shaalan, Hytham M. Ahmed, and Tarek S. Belal	339

Quantitative Determination of AZD3264, a Selective Ikb-Kinase IKK2 Inhibitor, in Dog Plasma by Solvent-Induced Phase Transition Extraction Coupled with HPLC-MS/MS and its Application to Pharmacokinetic Study in Dogs Gang Li, Shuofu Liang, Kesen Qiao, and Chao Wang	348
Response Surface Methodology for Spectrophotometric Determination of Two β-Adrenergic Agonists-Terbium Chemosensors in Urine and Pharmaceutical Dosage Forms Marwa Sakr, Marwa Fouad, Rasha Hanafi, Hala Al-Easa, and Samir El-Moghazy	355
Environmental chemical contaminants Synthetic Musk Compounds in Human Biological Matrices: Analytical Methods and Occurrence—A Review Guru Prasad Katuri, Xinghua Fan, Ivana Kosarac, Shabana Siddique, and Cariton Kubwabo	
Food chemical contaminants A New Green In Situ Effervescent CO <sub>2</sub> -Table-Induced Switchable Hydrophilicity Solvent Extraction Method of Rhodamine B in Food and Soft Drink Samples Naeemullah Khan and Mustafa Tuzen	384
Determination of Free Bisphenol A in Commercially Packaged Ready-to-Consume Carbonated/ Non-Carbonated and Non-Alcoholic Beverages with Immunoaffinity Column Purification and UPLC with Fluorescence Detector, First Action 2019.07 Jianmin Liu, Justine Yu, Danrey Toth, Jinchuan Yang, and Lingyun Chen	389
Determination of Inorganic Arsenic in Fish Oil and Fish Oil Capsules by LC-ICP-MS Eri Matsumoto, Toshiaki Sugimoto, Toshiyuki Kawaguchi, Naoki Sakakibara, and Michiaki Yamashita	397
Determination and Dietary Intake Risk Assessment of Pesticide Residues in Fritillariae Thunbergii Bulbs and Cultivated Soils Qianke Zhang, Qiqing Ge, Zihan Zhang, Jiajin Song, Shiyu Chen, Houpu Zhang, Yunlong Yu, Bizeng Mao, and Hua Fang	404
Human nutrient methods Single-Laboratory Validation for the Determination of Cocoa Flavanols and Procyanidins (by Degree of Polymerization DP1–7) in Cocoa-Based Products by Hydrophilic Interaction Chromatography Coupled with Fluorescence Detection: First Action 2020.05 Ugo Bussy, Gregory Hewitt, Yusuf Olanrewaju, Brian R. May, Nicholas Anderson, Javier I. Ottaviani, and Catherine Kwik-Uribe.	413
Determination of Ethanol Concentration in Kombucha Beverages: Single-Laboratory Validation of an Enzymatic Method, First Action Method 2019.08 Ruth Ivory, Elaine Delaney, David Mangan, and Barry V. McCleary	422
Determination of Total Proteinogenic Amino Acids and Taurine by Pre-column Derivatization and UHPLC: Single Laboratory Validation, First Action Official Method <sup>SM</sup> 2019.09  George Joseph, Asha Varughese, and Ann Daniel	431
Development of an Assay to Determine the Amount of Ca-Fatty Acid Soaps in Feces Natascha Stroebinger, Shane M. Rutherfurd, Sharon J. Henare, and Paul J. Moughan	447
Microbiological methods Validation of the saniTracers Sanitation Verification Method from Stainless Steel Environmental Surfaces: AOAC Performance Tested Method <sup>SM</sup> 032001 Quin Chou, Nicole Herbold, and Lucia Cerrillo	455

.

An Ecological and Miniaturized Biological Method for the Analysis of Daptomycin Potency Jessica Freitas Richardi, Ana Carolina Kogawa, Eliane Gandolpho Tótoli Belavenuto, Marlus Chorilli, and Hérida Regina Nunes Salgado	466
Natural products Free Radical Scavenging Activity of Some Legumes Hulls Extract and Its Efficacy on Oil Oxidative Stability	
Alaa ElDein El-Beltagy and Salman Alharthi	472
A Simple and Standardized Method for the Determination of Total Solanesol in Potato Leaves and Its Extracts Based on HPLC-MS Tao Lan, Congcong Yu, Ren Li, Zheng Ma, Xingjun Xi, and Qiao Chu	479
Comparative Profiling of Four Lignans (Phyllanthin, Hypophyllanthin, Nirtetralin, and Niranthin) in Nine Phyllanthus Species from India Using a Validated Reversed Phase HPLC-PDA Detection	
Method Jinal Patel, Padamnabhi Shanker Nagar, Kalpana Pal, Raghuraj Singh, Tushar Dhanani, Vyomesh Patel, Sharad Srivastava, and Satyanshu Kumar	485
Simultaneous Quantification of Betulinic Acid, Lupeol, and β-Sitosterol in Madhuca longifolia Methanolic Extract of Bark by Liquid Chromatography-Tandem Mass Spectrometric Method Veena S. Patel, Usmangani K. Chhalotiya, Sandip B. Patel, and Jivani Nuruddin	498
A Rapid and Accurate <sup>1</sup> HNMR Method for the Identification and Quantification of Major Constituents in Qishen Yiqi Dripping Pills Qingling Xie, Limin Gong, Feibing Huang, Mengru Cao, Yongbei Liu, Hanwen Yuan, Bin Li, Yuqing Jian, Caiyun Peng, Shuiping Zhou, Yang Chu, and Wei Wang	506
Evaluation and Comparison of Bioactive Constituents of Artemisiae argyi Folium Collected at Different Developmental Stages Dan Zhang, Limin Yao, Yaqing Chang, Guiya Yang, Zijing Xue, Lei Wang, Yuguang Zheng, and Long Guo	515
Sampling method Sources of Random Variation of Pesticide Residue Analytical Results Árpád Ambrus, Kata Kerekes, Henriet Szemánné-Dobrik, and Zsuzsanna Domák	526
Statistical analysis and chemometric methods Corrigendum to: On the Statistical Testing Methods for Single Laboratory Validation of Qualitative Microbiological Assays with an Unpaired Design Shizhen S. Wang	539
<del></del>	