

CONTENTS

Volume 89, Part 2, November 2016

SPECIAL ISSUE: CoCoTea 2015 – Third International Congress on Cocoa, Coffee and Tea

889 Preface

M.A. Coimbra (Portugal)

The development of analytical methodologies for determination of the antioxidant activity of condensed polyphenols in cocoa

890 An online NP-HPLC-DPPH method for the determination of the antioxidant activity of condensed polyphenols in cocoa

V. Pedan, N. Fischer, S. Rohn (Switzerland, Germany)

The study of cocoa beans during fermentation using a metabolomic approach

901 An untargeted metabolomic assessment of cocoa beans during fermentation

A.L. Mayorga-Gross, L.M. Quirós-Guerrero, G. Fourny, F. Vaillant (Costa Rica, Trinidad and Tobago, France)

The aroma provided by yeasts during cocoa fermentation

910 Contribution of predominant yeasts to the occurrence of aroma compounds during cocoa bean fermentation

M.K. Koné, S.T. Guéhi, N. Durand, L. Ban-Koffi, L. Berthiot, A.F. Tachon, K. Brou, R. Boulanger, D. Montet (France)

The influence of the roasting on the polyphenol content in cocoa products

918 The influence of the roasting process conditions on the polyphenol content in cocoa beans, nibs and chocolates

D. Żyżelewicz, W. Krysiak, J. Oracz, D. Sosnowska, G. Budryn and E. Nebesny (Poland)

The formation of Maillard reaction products during cocoa roasting

930 Effect of alkalization on the Maillard reaction products formed in cocoa during roasting

N.G. Taş, V. Gökmen (Turkey)

The modulation of gene expression by cocoa flavanols when in presence of hypercaloric diets

937 Modulating the expression of genes associated with hepatic lipid metabolism, lipoperoxidation and inflammation by cocoa, cocoa extract and cocoa flavanols related to hepatic steatosis induced by a hypercaloric diet

G.M. Rabadán-Chávez, A. Miliar Garcia, N. Paniagua Castro, G. Escalona Cardoso, L. Quevedo-Corona, E. Reyes-Maldonado, M.E. Jaramillo-Flores (Mexico)

The cytoprotective effect of cocoa phenolics against oxidative stress

- 946** Cocoa bean (*Theobroma cacao* L.) phenolic extracts as PTP1B inhibitors, hepatic HepG2 and pancreatic β -TC3 cell cytoprotective agents and their influence on oxidative stress in rats
D. Żyżelewicz, M. Zakłós-Szyda, J. Juśkiewicz, M. Bojczuk, J. Oracz, G. Budryn, K. Miśkiewicz, W. Krysiak, Z. Zduńczyk, A. Jurgoński (Poland)

The analysis of coffee metals

- 958** The evaluation of the suitability of different alternative sample preparation procedures prior to the multi-elemental analysis of brews of ground roasted and instant coffees by FAAS and ICP OES
A. Szymczycha-Madeja, P. Pohl, M. Welna, E. Stelmach, D. Jedryczko (Poland)

The development of a mass spectrometry approach for screening of coffees roasting

- 967** Mass spectrometry screening of Arabica coffee roasting: A non-target and non-volatile approach by EASI-MS and ESI-MS
J.S.d. Rosa, O. Freitas-Silva, J.R.C. Rouws, I.G.d.S. Moreira, F.J.M. Novaes, D.d.A. Azevedo, N. Schwab, R.L.d.O. Godoy, M.N. Eberlin, C.M.d. Rezende (Brazil)

The technological modulation of antioxidant capacity of espresso coffee

- 976** Effect of roasting and brewing on the antioxidant capacity of espresso brews determined by the QUENCHER procedure
T. Kocadağlı, V. Gökmen (Turkey)

The chemistry and sensory properties of volatile thiols in coffee

- 982** Volatile thiols in coffee: A review on their formation, degradation, assessment and influence on coffee sensory quality
N. Dulsat-Serra, B. Quintanilla-Casas, S. Vichi (Spain)

The chemical composition of espresso from single-dose coffee capsules

- 989** Carbohydrate content, dietary fibre and melanoidins: Composition of espresso from single-dose coffee capsules
G.R. Lopes, A.S. Ferreira, M. Pinto, C.P. Passos, E. Coelho, C. Rodrigues, C. Figueira, S.M. Rocha, F.M. Nunes, M.A. Coimbra (Portugal)

Consumers' preference for the origin and quality attributes of specialty coffees

- 997** Consumers' preference for the origin and quality attributes associated with production of specialty coffees: Results from a cross-cultural study
W.S. Sepúlveda, L. Chekmam, M.T. Maza, N.O. Mancilla (Spain; and Colombia)

The changes of free and nanoencapsulated phenolic acids from green coffee during digestion

- 1004** Changes of free and nanoencapsulated hydroxycinnamic acids from green coffee added to different food products during processing and in vitro enzymatic digestion
G. Budryn, D. Zaczyńska, D. Rachwał-Rosiak (Poland)

The potential of coffee silverskin extract to improve glucose-stimulated insulin secretion and protection of pancreatic beta cells

- 1015** Coffee silverskin extract improves glucose-stimulated insulin secretion and protects against streptozotocin-induced damage in pancreatic INS-1E beta cells
B. Fernandez-Gomez, S. Ramos, L. Goya, M.D. Mesa, M.D. del Castillo, M.Á. Martín (Spain)

The positive effects for control of diabetes of long-term consumption of a coffee

1023 Long-term consumption of a green/roasted coffee blend positively affects glucose metabolism and insulin resistance in humans

B. Sarriá, S. Martínez-López, R. Mateos, L. Bravo-Clemente (Spain)

The phenolic and volatile composition of *Cymbopogon citratus* leaves infusions

1029 Influence of harvesting factors on sensory attributes and phenolic and aroma compounds composition of *Cymbopogon citratus* leaves infusions

M. Coelho, C. Rocha, L.M. Cunha, L. Cardoso, L. Alves, R.C. Lima, M.J. Pereira, F.M. Campos and M. Pintado (Portugal)

The benefits of green tea on interaction with muscle proteins

1038 Effect of green tea on interaction of lipid oxidation products with sarcoplasmic and myofibrillar protein homogenates extracted from bovine top round muscle

N. Stapornkul, T. Prytkova, L. Were (USA)