

INDUSTRIAL CROPS AND PRODUCTS

VOLUME 104

1 October 2017

Contents

Abstracted/indexed in: Agricola; CAB Abstracts; CABS; Chemical Abstracts; Current Contents; AB & ES; EMBASE; Embiology Elsevier BIOBASE/Current Awareness in Biological Sciences; Elsevier/Geobase; Environmental Abstracts. Also covered in the abstract and citation database SCOPUS®. Full text available on ScienceDirect®

Fats and oils

High yielding-high oleic non-genetically modified Indian safflower cultivars

K. Anjani and P. Yadav (India)

7

Improvement of supercritical CO₂ and *n*-hexane extraction of wild growing pomegranate seed oil by microwave pretreatment

S. Đurđević, S. Milovanović, K. Šavikin, M. Ristić, N. Menković, D. Pljevljakušić, S. Petrović and A. Bogdanović (Serbia)

21

Synthesis of biolubricants by the esterification of free fatty acids from castor oil with branched alcohols using cationic exchange resins as catalysts

R.M.A. Saboya (Brazil), J.A. Cecilia, C. García-Sancho (Spain), A.V. Sales, F.M.T. de Luna (Brazil), E. Rodríguez-Castellón (Spain) and C.L. Cavalcante Jr. (Brazil)

Rice bran oil extraction using alcoholic solvents: Physicochemical characterization of oil and protein fraction functionality

M.C. Capellini, V. Giacomini, M.S. Cuevas and C.E.C. Rodrigues (Brazil)

133

Chemical composition and allelopathic, antibacterial, antifungal and *in vitro* acetylcholinesterase inhibitory activities of yarrow (*Achillea millefolium* L.) native to India

R.S. Verma, N. Joshi, R.C. Padalia, P. Goswami, V.R. Singh, A. Chauhan, S.K. Verma, H. Iqbal, R.K. Verma, D. Chanda, V. Sundaresan and M.P. Darokar (India)

144

Acylation of epoxidized soybean biodiesel catalyzed by SnO/Al₂O₃ and evaluation of physical chemical and biologic activity of the product

R.S. Oliveira, P.M.A. Machado, H.F. Ramalho, E.T. Rangel and P.A.Z. Suarez (Brazil)

201

Lipoxygenase-mediated peroxidation of model plant extractives

A.H. Tayeb, H. Sadeghifar, M.A. Hubbe (USA) and O.J. Rojas (USA, Finland)

253

Plasticization effect of epoxidized cottonseed oil (ECSO) on poly(lactic acid)

A. Carbonell-Verdu, M.D. Samper, D. Garcia-Garcia, L. Sanchez-Nacher and R. Balart (Spain)

278

Non-food bioactive products

Mycorrhizal symbiosis increase the level of total foliar phenols and tannins in *Commiphora leptophloeos* (Mart.) J.B. Gillett seedlings

C.S. Lima, H.R.S. Santos, U.P.d. Albuquerque and F.S.B.d. Silva (Brazil)

52

28

Tillage system and organic mulch influence leaf biomass, steviol glycoside yield and soil health under sub-temperate conditions

P.K. Pal and M. Mahajan (India)

33

Nutritional and active ingredients of medicinal chrysanthemum flower heads affected by different drying methods

X.-F. Shi, J.-Z. Chu, Y.-F. Zhang, C.-Q. Liu and X.-Q. Yao (China)

45

(Contents continued on inside back cover)

Gas chromatography–mass spectrometry profile of four <i>Calendula</i> L. taxa: A comparative analysis M.V. Faustino, A.M.L. Seca, P. Silveira, A.M.S. Silva and D.C.G.A. Pinto (Portugal)	91	Homogeneous isolation of nanocellulose from eucalyptus pulp by high pressure homogenization Y. Wang, X. Wei, J. Li, F. Wang, Q. Wang, Y. Zhang (China) and L. Kong (Australia)	237
Valorizing overlooked local crops in the era of globalization: the case of aniseed (<i>Pimpinella anisum</i> L.) from Castignano (central Italy) R. Iannarelli, G. Caprioli, S. Sut, S. Dall'Acqua, D. Fiorini, S. Vittori and F. Maggi (Italy)	99	Genetic diversity and ISSR marker association with the quality of pineapple fiber for use in industry C.P.F. Souza, C.F. Ferreira, E.H. de Souza, A.R.S. Neto, J.M. Marconcini, C.A. da Silva Ledo and F.V.D. Souza (Brazil)	263
Antioxidant activity and chemical composition of the methanolic extract and related fractions of <i>Dracocephalum kotschyi</i> leaves using liquid chromatography–tandem mass spectrometry B. Sharifi, S.A.H. Goli and Y. Maghsoudlou (Iran)	111	Biorefinery, valorization of byproducts Fermentative production of butyric acid from wheat straw: Economic evaluation G.N. Baroi, H.N. Gavala, P. Westermann and I.V. Skiadas (Denmark)	68
Quinoa seed coats as an expanding and sustainable source of bioactive compounds: An investigation of genotypic diversity in saponin profiles K.B. Ruiz (Italy), B. Khakimov, S.B. Engelsen, S. Bak (Denmark), S. Biondi (Italy) and S.-E. Jacobsen (Denmark)	156	Effect of steam treatments on the availability of various families of secondary metabolites extracted from green sweet sorghum E. Eysseric, T. Ghislain, X. Duret (J1 K 2R1 Canada), O. Lalonde (Canada) P.A. Segura and J.M. Lavoie (J1 K 2R1 Canada)	120
Genetic structure of <i>Cannabis sativa</i> var. <i>indica</i> cultivars based on genomic SSR (gSSR) markers: Implications for breeding and germplasm management S. Soler, P. Gramazio, M.R. Figàs, S. Vilanova, E. Rosa, E.R. Llosa, D. Borràs, M. Plazas and J. Prohens (Spain)	171	Lignin cationization with glycidyltrimethylammonium chloride aiming at water purification applications R. Wahlström, A. Kalliola, J. Heikkinen, H. Kyllönen and T. Tamminen (Finland)	188
Valorization of apple tree wood residues by polyphenols extraction: Comparison between conventional and microwave-assisted extraction M.M. Moreira, M.F. Barroso (Portugal), A. Boeykens, H. Withouck (Belgium) S. Morais and C. Delerue-Matos (Portugal)	210	Hydrothermal treatment of Eucalyptus wood: Effects on ion permeability and material removing M.C. Inalbon, Y.N. Solier and M.Á. Zanuttini (Argentina)	195
Acetylsalicylic acid application decreased tobacco-specific nitrosamines and its precursors but maintained quality of air-cured burley tobacco (<i>Nicotiana tabacum</i> L.) X. Chen, L. Liu, Y. Zhang, X. Zhou, T. Lin, Y. Song, J. Li and X. Cheng (China)	221	Selective arabinose extraction from <i>Pinus</i> sp. sawdust by two-step soft acid hydrolysis C. Bravo, D. Garcés, L. Faba, H. Sastre and S. Ordóñez (Spain)	229
Accumulation of saponins in <i>Panax notoginseng</i> during its growing seasons P. Xia, H. Guo, M. Ru, D. Yang, Z. Liang, X. Yan and Y. Liu (PR China)	287	Antioxidant and biocide behaviour of lignin fractions from apple tree pruning residues A. García (Spain), G. Spigno (Italy) and J. Labidi (Spain)	242
Fibres, proteins and carbohydrates Mechanical pretreatment of cellulose pulp to produce cellulose nanofibrils using a dry grinding method H. Lee and S. Mani (USA)	179	Bioenergy - crops and processing Selection strategy for indication of crosses between potential sugarcane genotypes aiming at the production of bioenergy L.A. Silva, K. Gasparini, C. Assis, R. Ramos, V. Kist, M.H.P. Barbosa, R.F. Teófilo and L.L. Bhering (Brazil)	62

(Contents continued from inside back cover)

Bio-based Materials from Crops

- Kinetics of thermal decomposition processes and kinetics of degradation in rumen liquor of glycerin derived from biodiesel production
L.C.V. Ítavo, C.C.B.F. Ítavo (Brazil), H.V. Petit (Canada)A.M. Dias, M. da Conceição dos Santos, A.D.V. de Souza, S.R. Goularte, E.S. Leal, J.A.T. de Mello, M.V.G. Niwa and G.J. de Moraes (Brazil)
- Interconnected open-channel carbon nanosheets derived from pineapple leaf fiber as a sustainable active material for supercapacitors
J. Sodtipinta, C. leosakulrat, N. Poonyayant, P. Kidkhunthod, N. Chanlek, T. Amornsakchai and P. Pakawatpanurut (Thailand)
- Performance of mechanical co-extraction of *Jatropha curcas* L. kernels with rapeseed, maize or soybean with regard to oil recovery, press capacity and product quality
S. Romuli, S. Karaj, S. Latif and J. Müller (Germany)
- The effect of primary sludge on the mechanical performance of high-density polyethylene composites
V. Lahtela, K. Mustonen and T. Kärki (Finland)
- Variation of biochemical and antioxidant activity with respect to the part of *Capsicum annum* fruit from Tunisian autochthonous cultivars
K. Lahbib, S. Dabbou, S.E. Bok (Tunisia), G. Pandino, S. Lombardo (Italy) and M.E. Gazzah (Tunisia)
- Derivatization of castor oil based estolide esters: Preparation of epoxides and cyclic carbonates
K.M. Doll, S.C. Cermak, J.A. Kenar, E.L. Walter and T.A. Isbell (USA)

129

1

164

13

269

81