

Spring International Conference on Agriculture and Food Engineering

(AFE-S 2013)

**Held at the Spring World Congress on Engineering
and Technology (SCET 2013)**

Agricultural Sciences Volume 4, Number 5B

**Wuhan, China
31 May – 2 June 2013**

Editors:

Daniele De Wrachien

ISBN: 978-1-63266-758-8

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2013) by the Scientific Research Publishing Inc.
All rights reserved.

Printed by Curran Associates, Inc. (2014)

For permission requests, please contact the Scientific Research Publishing Inc.
at the address below.

Scientific Research Publishing Inc.
P.O. Box 54821
Irvine, CA 92619-4821

Phone: (408) 329-4591

bookorder@scirp.org

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2634
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

Volume 4, Number 5B, May 2013

Determination of okadaic acid related toxins from shellfish (*sinonovacula constricta*) by high performance liquid chromatography tandem mass spectrometry

H.-Q. Zhang, W. C. Liu, X. He, L.-J. Liang, W. Y. Ding, Z.-Y. He.....1

The effects of ultrasonic irradiation in combination with ozone on the reduction of residual ethion of tangerine (*Citrus reticulata* Blanco cv. Sai Nam Pung) fruit after harvest

K. Whangchai, S. Phiyanalimmat, J. Uthaibuttra, S. Pengphol, N. Nomura.....7

Economic and environmental sustainability assessment of wine grape production scenarios in Southern Italy

A. Strano, A. I. De Luca, G. Falcone, N. Iofrida, T. Stillitano, G. Gulisano.....12

Slight free falling impact test for assessing guava maturity

C.-C. Lien, C.-H. Ting.....21

Biochemical changes during composting of coir pith waste as influenced by different agro industrial wastes

T. Muthurayar, M. S. Dhanarajan.....28

Effect of organic fertilizers used in sandy soil on the growth of tomatoes

Y. X. Hou, X. J. Hu, W. T. Yan, S. H. Zhang, L. B. Niu.....31

Effect of tillage systems on soil properties, humus and water conservation

T. Rusu, I. Pacurar, M. Dirja, H. M. Pacurar, I. Oroian, S. A. Cosma, M. Gheres.....35

Application of ontologies to traceability in the dairy supply chain

L. Maglìulo, L. Genovese, V. Peretti, N. Murru.....41

Physicochemical and radical scavenging activities of honey samples from Malaysia

N. L. A-Rahaman, L. S. Chua, M. R. Sarmidi, R. Aziz.....46

Accumulation of microcystins in water and economic fish in Phayao Lake, and fish ponds along the Ing River tributary in Chiang Rai, Thailand

N. Whangchai, S. Wanno, R. Gutierrez, K. Kannika, R. Promna, N. Iwami, T. Itayama.....52

Superabsorbent polymer for water management in forestry

M. Casquilho, A. Rodrigues, F. Rosa.....57

Amino acid composition of droughtmaster beef at various beef cuts

Z. Samicho, S. R. Ab Mutalib, N. Abdullah.....61

Optimisation of beef tenderisation treated with bromelain using response surface methodology (RSM)

S. Zainal, K. Z. Nadzirah, A. Noriham, I. Normah.....65

Physicochemical properties, vitamins, antioxidant activities and amino acid composition of ginger spiced maize snack 'kokoro' enriched with soy flour (a Nigeria based snack)

F. O. Sade, A. O. Aderonke.....73

Survival of encapsulated probiotics through spray drying and non-refrigerated storage for animal feeds application

N. Abd-Talib, S. H. Mohd-Setapar, A. K. Khamis, L. Nian-Yian, R. Aziz.....78

Omega-3 emulsion of Rubber (<i>Hevea brasiliensis</i>) seed oil	
S. H. Mohd-Setapar, L. Nian-Yian, W. N. W. Kamarudin, Z. Idham, A.-T. Norfahana.....	84
Design parameters for a small- scale batch in-bin maize dryer	
F. A. Bola., A. F. Bukola., I. S. Olanrewaju, S. B. Adisa.....	90
Thermal properties of some selected nigerian soups	
R. A. Olayemi, A. Rahman.....	96
Soil water resources use limit in the loess plateau of China	
T. Ning, Z. S. Guo, M. Guo, B. Han.....	100
Evaluation of pesticide residues in fruit from Poland and health risk assessment	
B. Łozowicka, P. Kaczyński, E. Rutkowska, M. Jankowska, I. Hrynkó.....	106
Effect of heat stress on the MDA, proline and soluble sugar content in leaf lettuce seedlings	
Y. Y. Han, S. X. Fan, Q. Zhang, Y. Nan Wang.....	112
The development of soy sauce from organic soy bean	
S. P. Wan, Y. X. Wu, C. Wang, C. L. Wang, L. H. Hou.....	116
Application of resistant starch in bread: processing, proximate composition and sensory quality of functional bread products from wheat flour and African locust bean (<i>Parkia biglobosa</i>) flour	
A. Sankhon, I. Amadou, W.-R. Yao.....	122
Mulberry fruit as an antioxidant component in muesli	
J. Kobus-Cisowska, A. Gramza-Michalowska, D. Kmiecik, E. Flaczyk, J. Korczak.....	130
Isolation of aromatic yeasts(non-<i>Saccharomyces cerevisiae</i>) from Korean traditional nuruks and identification of fermentation characteristics	
C. J. Ho, S. H. Yeo, J.-H. Park, H. S. Choi, J.-E. Gang, S. I. Kim, S. T. Jeong, S. R. Kim.....	136