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Faiza A. Dali

PROGRAM AND BOOK OF ABSTRACTS

1st INTERNATIONAL CONFERENCE ON BIODIVERSITY, FOOD SECURITY AND HEALTH

22 - 23 November 2016
Universitas Gadjah Mada, Yogyakarta - Indonesia

Organized by :
Center for Food and Nutrition Studies (CFNS) Universitas Gadjah Mada

In collaboration with :
Faculty of Agricultural Technology
Faculty of Agriculture
Faculty of Biology
Faculty of Animal Science
Faculty of Veterinary Medicine
Faculty of Forestry
Faculty of Medicine
Faculty of Pharmacy
Center for Biotechnology Studies
Department of Food & Agricultural Product Technology
Regional Centres of Expertise (RCE) Yogyakarta
The Indonesian Association of Food Technologists

In conjunction with :
10th Global Conference of Regional Centres of Expertise

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Programme

Day 1 (November 22nd, 2016)
Grha Sabha Pramana (GSP) UGM

Time	Activity/Topic	Speaker
07.00 – 08.00	Registration	
08.00 – 08.15	Traditional Dance Performance	
08.15 – 09.00	Opening ceremony	
	- National Anthem	
	- Welcome Address from Head of Center for Food & Nutrition Studies (CFNS) UGM	Prof. Dr. Umar Santoso, M.Sc.
	- Opening Speech from Rector of UGM	Prof. Dwikorita Karnawati, M.Sc., Ph.D
09.00 – 09.30	Keynote speech from the Ministry of Environment and Forestry - Directorate General of Conservation of Natural Resources and Ecosystem.	Dr. Bambang Dahono Adji
09.30 – 10.00	Morning Coffee	
Session 1 **Moderator : Prof. Dr. Sri Raharjo**		
10.00 – 10.30	Traditional Medicine & Medicinal Plant Biodiversity	Prof. Dr. Gerard Bodeker
10.30 – 11.00	Agrobiodiversity Concept, Its Relevance in Farmers Family Welfare (video presentation)	Prof. Dr. Murdijati Gardjito
11.00 – 11.30	Traditional Food to Support Biodiversity and Sustainable Food and Nutrition Security	Prof. Dr. Eni Harmayani, M.Sc.
11.30 – 12.00	Ethno-botany for health	Dr. Unnikrishnan Payyappallimana
12.00 – 13.00	Lunch break	
Session 2 **Moderator: Prof. Dr. Lilik Sutiarso**		
13.00 – 13.30	Rehabilitation of Degraded Forest to Support Food and Wood Security Program in Indonesia	Prof. Dr. Mohammad Na'iem
Technical Paper Presentation Session I **Moderator : Dr. rer. silv. Muhammad Ali Imron, S.Hut, M.Sc.**		
13.30 – 13.45	**[OAA-01]** River Corridor Cultural Ecosystem Services and Urban Well-being in George Town, Pulau Pinang and Kangar, Perlis	Asyirah, A.R. and Mohammad Izzami, M.N.
13.45 – 14.00	**[OAA-02]** Food Insecurity and Ramifications of Desertification in the Sahel: The Case with Nigeria	Usman Muhammad
14.00 – 14.15	**[OAA-03]** Screening wood-rot fungi for antimicrobial property	Tan T. Thai, Ngoc. V.K. Pham, Hoa T. Pham
14.15 – 14.30	**[OAA-10]** Conflicting or Combinative – Human and Natural Values at Kathotiya, Central India	Saurabh Popli

14.30 – 14.45	**[OAA-20]** Agressiveness of *Tabermontanae macrocarpa* upon Sustainability of Two Protected Communities of Acacia auriculiformis and Pinus merkusii at Mangunan Conservation Forest, Bantul Regency, Yogyakarta	Retno Peni Sancayaningsih, Anindyasari Kumalasari, Abi Giusti Wohing Atie
Technical Paper Presentation Session II **Moderator: Dr. Umi Purwandani**		
14.45 – 15.00	**[OAA-13]** Negritos de Cebu : Gender, Livelihood, Resource Management and Social Change	N. Sabuero , R. Villavelez, and H Zanoria
15.00 – 15.15	**[OFS-03]** Community Mobilization and Utilization of Information Technology in Scaling-up, Resource Management and Disaster Preparedness	Huberto C. Zanoria
15.15 – 15.30	**[OTF-01]** The Jackfruit Festival - Reviving Jackfruit based Food cultures to fight Climate Change and Assuring Food Security	Sachin Sathyarajan
15.30 – 15.45	**[OAA-06]** Exploring Diversity and Potency of Endophytic Actinobacteria from Medicinal Plants	Y. Lestari M. Rahminiwati, R. Heryanto, M. Ernawati1, and W.P. Sari
15.45 – 16.00	*Adjournment*	

Day 2, November 23rd, 2016

UC Hotel - UGM Meeting Room

Time	Activity/ Topic	Speaker/ PIC	Moderator
07.30 – 08.00	Registration	*Committee*	
08.15 – 08.30	Opening remarks		
08.30 – 09.00	Integrated Estate Plantation of Tea and Tubers to support Agro-biodiversity	Dr Rachmad Gunadi	Prof Ali Agus
09.00 – 09.30	Searching Bioactive Compounds From Indonesian Medicinal Plants	Prof Subagus Wahyuono	
09.30 – 10.00	Discussion		
10.00 – 10.15	Coffee Break		
10.15 – 12.00	Technical Session I		
12.00 – 13.00	Lunch break		
13.00 – 14.45	Technical Session II		
14.45 - 16.15	Technical Session III		
16.15 – 16.30	Closing	Prof. Dr. Suratman (Vice Rector for Research and Community Service)	

Abstract List

Code	Title	Author (s)
Agrobiodiversity and Agroforestry (OAA)		
OAA-01	River Corridor Cultural Ecosystem Services and Urban Well-being in George Town, Pulau Pinang and Kangar, Perlis	Asyirah, A.R. & Mohammad Izzamil, M.N.
OAA-02	Food Insecurity and Ramifications of Desertification in the Sahel: The Case with Nigeria	Usman Muhammad
OAA-03	Screening Wood-rot Fungi for Antimicrobial Property	Tan T. Thai, Ngoc. V.K. Phan Hoa T. Pham
OAA-04	Lygodium Circinatum: Distribution Pattern and Environment Factors Influencing its Growth in Nature	Eny Faridah, Endah Wahyuningsi, Budiadi
OAA-05	The Role of Local Community in Conserving the Local Biodiversity in Karst Ecosystem Case Study in Kepek Village-Indonesia	Agus Suyanto , Nasirudin, Chafid Fandeli, Dewi Rahyu
OAA-06	Exploring Diversity and Potency of Endophytic Actinobacteria from Medicinal Plants	Y. Lestari M. Rahminiwati, S. Heryanto, M. Ernawati1, and W.P. Sari
OAA-07	The Ethnobotany and Taxonomy Study of the Jamur Selo (*Nostoc commune* Vaucher ex Bornet & Flahault) Potentially as the Source of Single Cell Protein from Gunungkidul, Daerah Istimewa Yogyakarta	Ludmilla F. Untari and Gusti Dewi
OAA-08	Effects of the Botanical Insecticide *Annona squamosa* L. and *Curcuma domestica* Val. on *Spodoptera litura* F.	Siti Sumarmi and Ramadhan Taufika
OAA-09	Application of Natural Dye From Secang Wood (*Caesalpinia sappan* L) on Crust Cattle Leather by Dyeing Method Using Emboss Techniques	Entin Darmawati, Umar Santoso and Sudarmadji
OAA-10	Conflicting or Combinative – Human and Natural Values at Kathotiya, Central India	Saurabh Popli
OAA-11	Analysis Physic ad Chemical Traditional Food Ilabulo Catfish (*Pangasius* sp.) Fortification Seaweed (*Kappaphycus alvarezii*) and Bone Meal Catfish	Rita Marsuci Harmain, Faiza Dali, Nurjanah, Agoes Mardiono Jacob
OAA-12	*Fusarium oxysporum* f.sp.*cubense* Tropical Race 4 and Race 1 Resistance in Indonesian *Musa acuminata* var.*malaccensis* and Self-pollinated Progenies	Fajarudin Ahmad, Yuyu S Poerba, Hans de Jong, Hugo Volkaert, Gert HJ Kema

[illegible]	Negritos de Cebu : Gender, Livelihood, Resource Management and Social Change	N. Sabuero, R. Villavelez, and H Zanoria
[illegible]	Urban Agroforestry for Riverside in Yogyakarta : a Potency of Smart Environment Transformation	Emmy Yuniarti Rusadi, Mazidatun Maftukhah
[illegible]	Traditional Red Rice Grain Characteristics Still Cultivated In Regencies Of South Sulawesi	Muhammad Riadi, Rinaldi Sjahril, Rafiuddin, Tadashi Sato, Kinya Toriyama, Trisnawaty, A.R., Dwi Septiani, Rafiuddin, Tadashi Sato, Kinya Toriyama
[illegible]	Biodiversity Assesment of Mangrove in Pasuruan District, East Java	Muliawati Handayani, Sukandar
[illegible]	Effect of lemongrass leaves (*Cymbopogon citratus*) as an essential oil source on ruminal enzymes activities	Kurniawati, A., Yusiati, L. M., Supadmo, Setiawan, A. R., Zulfa, I. H.
[illegible]	Jack fruit (*Artocarpus heterophyllus*) leaves as inhibitor agents of methane production inruminant by *in vitro*	Anas, M. A., C. Hanim, A. Kurniawati, Z. Barcruddin Muhlisin
[illegible]	The Study of Black Soy Bean *(Glycine max (l.) Merr)* Seed of Mallika Production by Intercropping System with Sweet Corn	Setyastuti Purwanti and Ari Wibowo
[illegible]	Agressiveness of *Tabernaemontana macrocarpa* upon Sustainability of Two Protected Communities ofAcacia and Pineat Mangunan Conservation Forest, Bantul, Yogyakarta, Indonesia	Retno Peni Sancayaningsih, Anindyasari Kumalasari, Abi Giusti Wohing Atie
[illegible]	The Origin of Soybean in Indonesia	Mary Astuti
	Food Security and Safety (OFS)	
[illegible]	Growth Performance and Body Composition of Local Beef	Firmansyah, D., A. M. Fuah, R. Priyanto, and I K.G. Wiryawan
[illegible]	Chemical and Physical Quality of the Meat Magelang Ducks with Feed Addition Shrimp Waste Fermentation	Amrih Prasetyo, Lies Mira Yusiati, Yuny Erwanto, Wihandoyo, and Rusman
[illegible]	Community Mobilization and Utilization of Information Technology in Scaling-up Resource Management and Disaster Preparedness	Huberto C. Zanoria (MCC), A. Diola (UC), M. Pielago (CSWDO-Mandaue City) and R. Villavelez (SWU)

OFS-04	Chemical, Biological Activity and Heavy Metal Content of Sea Cucumbers from Karimunjawa and Lampung's Marine, Indonesia	Ekowati Chasanah, Kustiariyah, Hedi Indra Jan Yusro Nuri Fawzya, Rini Susilowati, Muhammad Nu
OFS-05	Influence of Diameter Die, Binding Matterial, Hot Water Addition and Sliced Oil Palm Frond on the Quality of Feed Ruminants Pellet from Oil Palm Biomass	Giyanto
OFS-06	Nutritional Value and Albumin Content of Merauke's Swamp Fish	Rini Sulistiyowati,Sugiyon and Ekowati Chasanah
OFS-07	Pathogenic Bacteria Contamination of Loin Bali Cattle That Slaughter at Modern and Traditional System	Sriyani NLP, Artiningsih R A.A Oka, Tirta Ariana, Say Yupardi, Linda Anggreni
OFS-08	Food Safety of Bali Beef Reared on Waste Disposal Area	Tirta Ariana IN., NLP.Sriya Gd.Suarta.,AA.Oka, S.A.Lindawati, G.A.M.Kris Dewi
OFS-09	Risk Assessmenton Handling System Small and Medium Enterprises (SMEs): Case Study onTraditional Coconut Sugar Industry in Yogyakarta	Muhammad Prasetya Kurniawan, Wahyu Suparta Anggoro Cahyo Sukartiko, Wildan Fajar Bachtiar, and Sanyoto
OFS-10	Promoting Sustainable Agriculture in Pekalongan, Indonesia : Coastal Farmers Choices	Artiningsih, Suratman, R Rijanta, Su Rito Hardoyo
OFS-11	Development and Validation of a Rapid HPLC-FD Method for the Simultaneous Determination of Serotonin and Its Precursors	Duanti Oktarani Tisadewi, Pargiyanti, Muhammad Kha Widiastuti Setyaningsih
OFS-12	HALAL INDUSTRIAL PARK (HIP): Strategic Movement for Food Security by Building Competency of Khalifah Industry	Ivan Lanovara & P.L. Rika Fatimah
	Food Technology (OFT)	
OFT-01	Effect of Peeling, Sodium Metabisulphite Pretreatment and Drying Temperature on Physical And Functional Properties of Sweet Potato Flour	Elisa Julianti, Herla Rusmar Ridwansyah, Era Yusraini, Syahdian Lestari

[illegible]	Effect of Weather Conditions and Variations of Methyl P-Hydroxybenzoate Concentration to Chemical Properties and Antioxidant Activity of Coconut Sap	Pepita Haryanti, Buana Handa Wijaya, Umar Santoso, Supriyadi and Djagal Wiseso Marseno
[illegible]	Determination of Antioxidant Activity and Phenolic Compounds on Methanolic Extract of Java Plum (*Syzygiumcumini* l. (skeel) Seed	Rohadi, Santoso, U. Raharjo, S. and Falah, I.I.
[illegible]	Effect of Type and Concentration of Herbal Extract Coating on Content of Resistant Starch and Glycemic Index of Chromium Fortified-Parboiled Rice	Wisnu Adi Yulianto, Ch. Lilis Suryani, Mamilisti Susiati, Sri Luwihana
[illegible]	The Effect of Green Betel Leaf Extract, Mangosteen Rind Extract, and Lime Solution Addition as Natural Preservative on Coconut Sugar Quality	Karseno and Retno Setyawati
[illegible]	Enhancing Antioxidant Activity of Indonesian Sesame Oil (*Sesamum indicum*) by Heat Treatment	Aldila Din Pangawikan, Umar Santoso, Suparmo, Pudji Hastuti
[illegible]	Development of Home Industry of *Growol-Oyek* into Artificial Rice in the Village of Kalirejo Kulon Progo	Bayu Kanetro, Dwiyati Pujimulyani, Alimatus Sahrah, Sri Luwihana
[illegible]	Exterior and Interior Egg Quality of Muscovy Duck (*Cairina moschata*) Reared Traditionally in Yogyakarta	Nurliyani, Widodo, Satyaguna Rahmatulloh, Indratiningsih
[illegible]	Chemical Characteristics during the Ripening Process Coconut Sap Became Coconut Sugar Crystals with Addition Variation Preservatives Acid Methyl P-Hydroxybenzoates	Beta Alfisyahri Putri, Pepita Haryanti, Umar Santoso dan Supriyadi
[illegible]	Evaluation on Antioxidant Activity of Beef Liver Protein Hydrolysates	Khothibul Umam Al Awwaly, Yuny Erwanto, Wayan T. Artama, Rusman
[illegible]	The Effect of Porang (*Amorphophallusoncophyllus*) Glucomannan and Carboxymethyl Cellulose (CMC) Addition on Physical and Sensory Characteristics of Wet Noodle with Mocaf (Modified Cassava Flour) Substitution	Silvana Yasinta Putri, Zaki Utama, Sri Rahayoe, Eni Harmayani
[illegible]	The Effect of Edible Coating Materials and Pandan Extract Concentrations on Cooking Quality of Parboiled Rice Fortified with Chromium, Magnesium and Vitamin D	Wisnu Adi Yulianto, Sri Luwihana, Mamilisti Susiati, Arka Jati Laksana
[illegible]	Utilization of Potato Flour from Variety Granola for Potato Chips Production	Condro Wibowo, R. Wicaksono and Erminawati

OFT-14	Variation in Linier Body Measurements of Pasundan Cattle in West Java	N. Erni, R. Priyanto and Jaka
OFT-15	Stability of Serotonin and Its Precursors in Ethanolic Solution and Extract from Black Rice (*Oryza Sativa L.*)	Nalaputi Basoeki, Pargiyanti, Muhammad Khak, Widiastuti Setyaningsih
OFT-16	Characterization of Gathotan Enzyme for Starch Modification	Umi Purwandari, Darimiyya Hidayati, Kufah Nur Afifah, Jayanti, Endry N. Prasetyo
OFT-17	Effect of Gamma Irradiation on Antioxidant Levels of Civet Coffee Using 2,5kgy; 5 Kgy; 10 Kgydoses	Jepri Sutanto, Musaddiq Musbach, Sugiyarto
OFT-18	Extraction of Dry Lutein from Red Spinach's Roots, Stems and Leaves As Functional Food Ingredients	Andi Nur Faidah Rahman, Rindam Latief, Andi Dirpan
OFT-19	Processing of Food Grade Semirefined Carrageenan and Its Quality	Murdinah and Subaryono
OFT-20	Effect of Pretreatment by Microwave on Polyphenol Content and Antioxidant Activity on Fresh Cocoa Beans.	Nurhayati, FMC Sigit Setyabudi, Djagal Wiseso Marseno, Supriyanto
OFT-21	Identification of Sheepmeat Flavour and Odour with Divergent Fat Content in Javanese Fat Tailed	Asep Gunawan, Jakaria, Kas Listyarini, Cece Sumantri, an Muhammad Jasim Uddin
OFT-22	Copigmentation of Anthocyanin Extract of Java Prune (*Kopsia pruniformis*) Fruit with Quercetin to Increase the Colour Stability	Lydia Ninan Lestario, Yosep Panggola, Silvia Andini
OFT-23	Seed Size Reduction Effect on Chemical Characteristic of Sword Bean (*Canavalia gladiata*) Tempeh : Total Phenol, Antioxidant Activity, Dietary Fiber	Dwi Ishartani, Dian Rachmawanti, Edhi Nurhartadhi, Asri Nursiwi, Ardhea Mustika Sari
OFT-24	Characterization of Fucoidan Extracted from Lampung's Brown Seaweeds	Ellya Sinurat, and Rinta K
OFT-25	Preliminary Investigation of the Use of Dried Kefir Culture to Manufacture Fermented Sausages	Juni Sumarmono, Mardiati Sulistyowati, Kusuma Widayaka, AHD Djoko Rahardjo, and Triana Setyawardani
OFT-26	Effect of Autoclaving-cooling Cycle on Resistant Starch Content and Functional Properties of Gayam (*Inocarfus fagifer* Forst.) Flour	Agus Wijanarka, Toto Sudar Eni Harmayani and Yustina Marsono

OFT-27	Characteristics and viability of dry starter prepared from isolated indeginousmicroorganism to improve cocoa fermentation process	Yusya' Abubakar, Heru P. Widayat, Martunis, M. Muzaifa, R. Anggraini
OFT-28	Extract corn silk with variation of solvents on yield, total phenol, antioxidant total flavonoids and antioxidant activity	Haslina and Murtiari Eva
OFT-29	Evaluation of Anthocyanin Stability, Psycochemical Properties and Organoleptic Characteristics in Ketan Tape with Additional Erpa (*Aerva sanguinolenta*) Leaves Extract	Norma Dwi Septian, Umi Noor Rohmah, Andriati Ningrum
OFT-30	Protein Binding Capacity of Three Forages as Tannin Sources and Its Effect on *in vitro* Nutrients Digestibility	Yusiati, L. M., Kurniawati, A., Bachruddin, Z., Supadmo
OFT-31	In vitro Gas Production of Three Forages as Tannin Sources and Its Effect on the Kinetics of Gas Production	Hanim, C., A. Kurniawati, Muhlisin, L. M. Yusiati, I. H. Zulfa
OFT-32	Physicochemical and Functional Properties of Tubers Starches	Fauzan Azima, Novizar Nazir, Hendra Cahya Efendi
OFT-33	Physical Properties and Sensory Effect of Glucomannan Porang (*Amorphophallus oncophyllus*) and Kappa-Carrageenan Addition 0n Ice Cream	Anindhita Dewanti Nareswari, Zaki Utama, Eni Harmayani
OFT-34	Potential Liquid Smoke of Palm's Kernel Shell as Biopreservative to Tuna *(Thunnus sp)* Fish	Musrowati lasindrang
OFT-35	Chemical Properties of Fermented Local White Corn Flour of *Anoman FS* Variety	Rahmawati, Rijanti Rahaju Maulani, Dede Saputra
OFT-36	Soybean and Pumpkin Seed on Pumpkin Seed Tempe	Shanti Pujilestari, Rimma Maria dan Diny A. Sandrasari
OFT-37	Biofilm-forming Ability and Resistance to Disinfectants of Samples Collected from Seafood Processing Plants	Punnanee Sumpavapol, and Dusida Tirawat
	Human Health and Nutrition (OHN)	
OHN-01	Protective Effect of Tropical Fruit Juice on Histopathological Image of Rats Lung Exposed to Cigarette Smoke	Novi Febrianti, Muhammad Ilham

OHN-02	Anticancer Activity of Water Extracts of Tempe Obtained from Different Fermentation Periods	Zatil Afrah Athaillah, Anas F. Devi, Dian Muzdalifah, Wirasuwasti Nugrahani, Linar Zalinar Udin
OHN-03	Hypoglycemic Effect of Sago Starch (*Metroxylon spp.*) and Red Bean (*Phaseolus vulgaris)*-Based Analogueue Rice on Diabetic Rats	Sri Budi Wahjuningsih, Y. Marsono, Danar Praseptian
OHN-04	Food Security Intake Among Neglected Mothers: Exploring Parental Failure in Food Feeding Practice in Mataram	Chairun Nasirin
OHN-05	Water Quality and the Risk of Waterborne Diseases in Teros Village, East Lombok Regency, West Nusa Tenggara Province	Baiq Liana Widiyanti, Ig.L.Setyawan Purnama, Ad Heru Sutomo, Setiadi
OHN-06	Antioxidant Activity of the Ethanolic Extracs of Peel and Flesh of *Coleus tuberosus*	Mutiara Nugraheni, Badraningsih Lastariwati, Windarwati
OHN-07	The Effect of Solvent Extraction on the Antioxidant Properties of Melon (*Cucumis melo* L.) cultivar Hikapel	Puji Wulandari, Budi Setiad Daryono, Supriyadi
OHN-08	A Study of Fatty Acids Profile in Crossbred Chickens between Kampong and Broiler Chicken	Asep Gunawan, Ahmad Fu Kasita Listyarini, Jakaria
OHN-09	Functional Properties of Pigmen Extract of Tamarilo Seed Jelly on Hyperglycemic Sprague Dawley Rats and Application on Traditional Syrup Drink	Gusti Ayu Kadek Diah Puspawati, Gusti Ayu Eka Putu Timur Ina, GP. Ganda Putra
OHN-10	Hypoglycemic Effect Of Dietary Fiber and Resistant Starch from Mocaf, Arrowroot and Kidney Bean Flour Based Analogue Rice on Diabetic Rats	Sri Budi Wahjuningsih, Ha and Sri Untari
OHN-11	Characteristics of Nutrition Content of Nike Fish (*Awaous melanocephalus*) and Manggabai Fish (*Glossogobius giuris*) as Local Raw Material for Food Flavoring Product	Faiza A. Dali, Rita M. Ham
OHN-12	Hair Extract Maize (Corn Silk) with Variation of Solvents on Rendemen, Total Phenol, Antioxidant Activity and Total Flavonoids	Haslina and Murtiari Eva
OHN-13	The Effectiveness of Various Salacca Vinegar as Therapeutic Agent forManagement of Hyperglycemia and Dislipidemia on Diabetic Rats	Elok Zubaidah, Tiara Puspitasari, Umi Kalsum, Dianawati Dianawati

[illegible]	Inhibition Activity of Mangrove Fruit (*Rhizophora mucronata*) Based on pH Against α-Glukosidase	Yunita Eka Puspitasari, Mutiara Warda Syamsyah, Hardoko, Bambang Budi Sasmito
	Traditional Food and Knowledge (OTF)	
[illegible]	The Jackfruit Festival - Reviving Jackfruit based Food Cultures to Fight Climate Change and Assuring Food Security	Sachin Sathyarajan

Poster Session

Code	Tittle	Author (s)
	Agrobiodiversity and Agroforestry (PAA)	
[illegible]	Rehabilitation & Conservation Environmental Based Community : "Darling to Sustainable Forest Area and Disaster Awareness " In the Garut District	Okke Rosmaladewi, Rubi Robana, Lilis Irmawatie
[illegible]	Ulvan from Green Seaweed and its Biological Activity : a review	Subaryono
[illegible]	Optimizing Potencies of Village for Agrobiodiversity Conservation	Whisnu Febry Afrianto, Ardhiyani Kusumastuti
	Food Security and Safety (PFS)	
[illegible]	Development of Thermophilic Spore-forming Bacteria Detection Method for Thermal Processed Food	Punnanee Sumpavapol, and Jaruporn Rakmai
	Food Technology (PFT)	
[illegible]	The Organoleptic Characteristic Properties Formula MP-ASI Instant Baby Porridge with Snakehead Fish Meal and Pumpkin Flour Substitution	Dewi Kartika Sari, Ali Rosidi, Hafni Rahmawati
[illegible]	Effect of Banana Variation (*Musa paradisiaca forme typica* L., *Musa corniculata rumph., Musa normalis* L., and *Musa paradisiaca L. var. typica*) on the Organoleptic and Proximate Content of "Manggulu" (Popular Traditional Food From Sumba)	Helmiati Ndelo, Waluyo, Puspita Mardika Sari
[illegible]	Antioxidant Activity of Melinjo Red Peel Extract Microcapsule That Is Applicated to Sagon	Bambang Kunarto dan Ery Pratiwi
[illegible]	The Quality of *Ronto* with Used Different Salt and Rice Concentration	Rita Khairina, Iryanti Fatyasari

		Nata, Nooryantini,S. Susana Ristiarini
PFT-05	Processing of Shrimp Shell as Sources of Glukosamin by Fermentation Method	Hardoko, Bambang Sasmito, Yunita E Puspitasari, Nugroh
PFT-06	The Effect of Curing Solution on the Gel Strength of Gelatin from Different Animal Skin	Lily Arsanti Lestari Erwanto, Abdul Ro Yudi Pranoto
PFT-07	The Physical Properties of Gelatin from Buffalo Hide by Pretreatment using Citric Acid	S. Mulyani, F.M.C Setyabudi, Y.Pranot U. Santoso
PFT-08	Quality of Gelatin from Buffalo Skin by Pre-Treatment with Alkali-Acid and Its Application in Jelly Candy	J. U. Ghaisani, Y. T Afrianti, S. Mulyani Pranoto, U. Santosa
	Human Health and Nutrition (PHN)	
PHN-01	Development of Black Rice-based Beverage for the management of type 2 diabetes mellitus in elderly	Rianita Pramitasari Astuti, Y. Marsono Suharnadi
PHN-02	Isolation of Melanin from Cuttlefish and Squid Ink, and Analysis Their Activity Against *E.coli*	Yuspihana Fitrial, a Khusnul Khotimah
PHN-03	Knowledge and Attitudes about Reproductive Health (Preliminary Study of a Newlyweds in Brebes District, Central Java, Indonesia)	Nugraheni, S.A, Ma Sulistyowati, E., Joh
PHN-04	Advanced Glycation End Products (AGEs) and the Pathogenesis Chronic Diseases	Dina Aulia Insani, Artanti

OHN-11

Characteristics of Nutrition Content of Nike Fish (*Awaous Melanocephalus*) and Manggabai Fish (*Glossogobius Giuris*) as Local Raw Material for Food Flavoring Product

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ABSTRACT

Food flavoring product that delicious and nutritious need raw material is good. The study focused on Nike fish (Awaous melanocephalus) and Manggabai fish (Glossogobius giuris) as raw material for flavoring aims to analyze the characteristics of nutritional content, especially with regard to water content, protein, ash, fat and carbohydrate. Raw materials used in this study is the Nike fish and Manggabai fish as samples. Based on the research object, the method used in laboratory experiments to explain the characteristics of the nutrients in Nike fish and Manggabai fish. Data analysis using quantitative descriptive analysis. The results showed that the use of raw materials of Nike fish and Manggabai fish are chemically, nutrient content gets a percentage of the amount varies. Nike fish has a water content (81.25% vs 77.94%) and fat (1.81% vs 1.10%) more than Manggabai fish, on the other hand Manggabai fish have high levels of protein (14.95% vs 14 , 13%), Abu (3.39% vs. 2.18%) and carbohydrates (2.63% vs 1.645) more than Nike fish.

Keywords: Flavoring, Nike and Manggabai fish, Nutrient content of fish

PROGRAM AND BOOK OF ABSTRACTS

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CHARACTERISTICS OF NUTRITION CONTENT OF NIKE FISH (*Awaous melanocephalus*) AND MANGGABAI FISH (*Glossogobius giuris*) AS LOCAL RAW MATERIAL FOR FOOD FLAVORING PRODUCT

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ABSTRACT

Food flavoring product that delicious and nutritious need raw material is good. The study focused on Nike fish (Awaous melanocephalus) and Manggabai fish (*Glossogobius giuris*) as a raw material for flavoring aims to analyze the characteristics of nutritional content, especially with regard to water content, protein, ash, fat and carbohydrate. Raw materials used in this study is the Nike fish and Manggabai fish as samples. Based on the research object, the method used in laboratory experiments to explain the characteristics of the nutrients in Nike fish and Manggabai fish. Data analysis using quantitative descriptive analysis. The results showed that the use of raw materials of Nike fish and Manggabai fish are chemically, nutrient content gets a percentage of the amount varies. Nike fish has a water content (81.25% vs 77.94%) and fat (1.81% vs 1.10%) more than Manggabai fish, on the other hand Manggabai fish have high levels of protein (14.95% vs 14.13%), Abu (3.39% vs. 2.18%) and carbohydrates (2.63% vs 0.64) more than Nike fish.

Keywords: Flavoring, Nike and Manggabai fish, Nutrient content of fish

PRELIMINARY

Indonesia with abundant fishery resources concerning capture fisheries and cultivation greatly contribute to the fulfillment of nutrition of Indonesian society. Gorontalo as part of Indonesian territory with the water area of 50.500 km^2 has fishery potential that has not all been utilized. Among the fishery resources living in the waters of Gorontalo are Nike Fish (*Awaous melanocephalus*) and Manggabai Fish (*Glossogobius giuris*).

Nike fish and mangabai fish are local fish that have been consumed in the form of sauce, fried or baked. Both types of fish is potentially used as a raw

material for making a safe flavor and nutritious. Tappers of taste will have nutrients that can meet the nutritional needs of the community when using good raw materials. Fish as one of the fishery products have nutritional content with good chemical composition and beneficial, that is in addition to vitamins and minerals, fish contains many proteins, water, fat, ash and carbohydrates.

Research on the use of nike fish and fresh manggabai fish originating from Gorontalo waters as a flavoring raw material has not been reported. This study aims to analyze the characteristics of nutritional content (nike fish and fresh manggabai fish), especially concerning water content, protein, ash, fat and carborhydrate.

MATERIALS AND METHODS

Materials

The fish species used in this study consisted of Nike fish (*Awaous melanocephalus*) obtained from fish auction in Gorontalo City and Manggabai fish (Glossogobius giuris) obtained from Limboto lake, Gorontalo regency, and tools or chemicals.

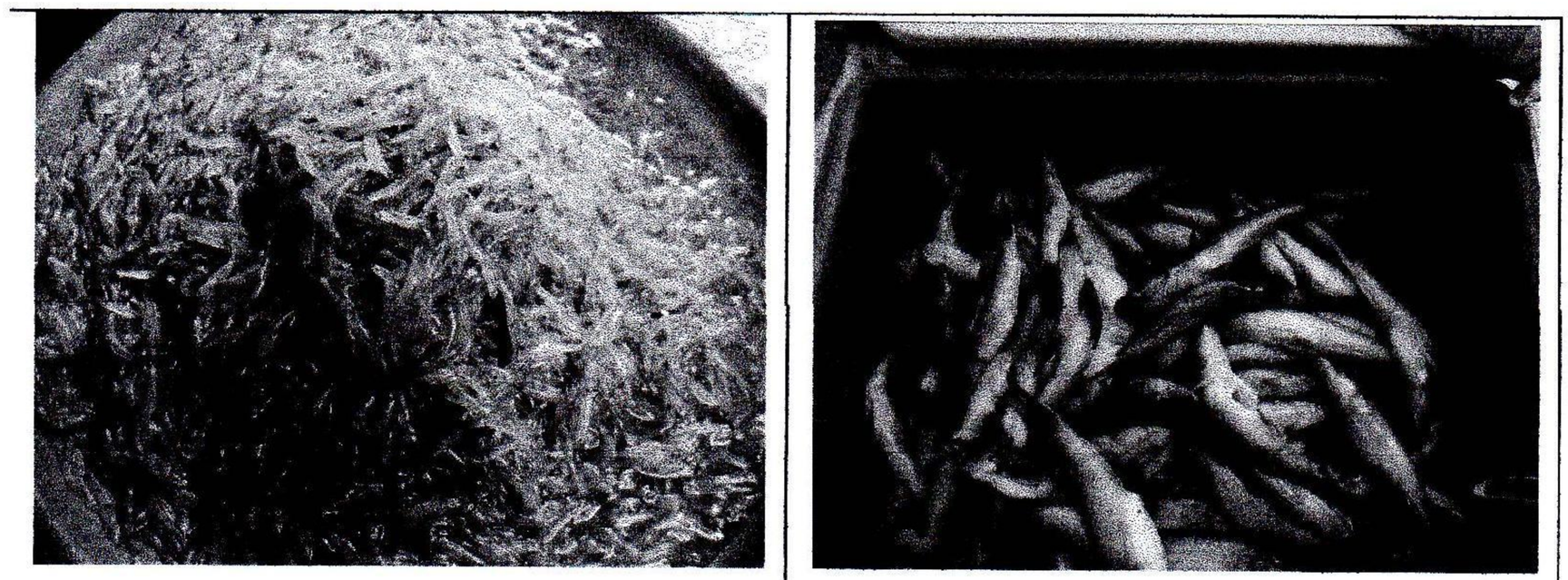
Research Methods

Purchased fish are included in the coolbox and immediately taken to the laboratory for analysis. Chemical analysis of water content, ash, fat and protein refers to AOAC (2012).

RESULTS AND DISCUSSION

Fish raw materials used for flavoring are classified as fresh based on visual observations (Figure 1). Nike fish obtained from fishermen who are in fish auction in Gorontalo City, while manggabai fish obtained from fishermen who are

in Limboto lake. Nike fish measuring ±3cm and manggabai fish measuring ±16cm.



Nike Fish | Manggabai Fish

Figure 1. Nike and Manggabai fish raw materials

Characteristics of fresh Nike and Manggabai fish have nutrient content as shown in Table 1.

Table 1. Nutritional Content of Nike Fish and Manggabai Fish

Samples of fish	Moisture	Protein	Ash	Fat	Carbohydrate
	%				
Nike fish	81.25	14.13	2.18	1.81	0.64
Manggabai fish	77.94	14.95	3.39	1.10	2.63

The use of raw materials Nike and Manggabai fish chemically, especially the nutrient content gets a percentage of the amount varies. Nike fish have more moisture and fat content (81.25%) than Manggabai fish (77.94%), on the other side Manggabai fish have Protein, Ash and Carbohydrate more than Nike fish. Graphically the variation of nutrient content differences on Nike and Manggabai raw materials (fish) to be used for flavoring products is shown in Figure 2.

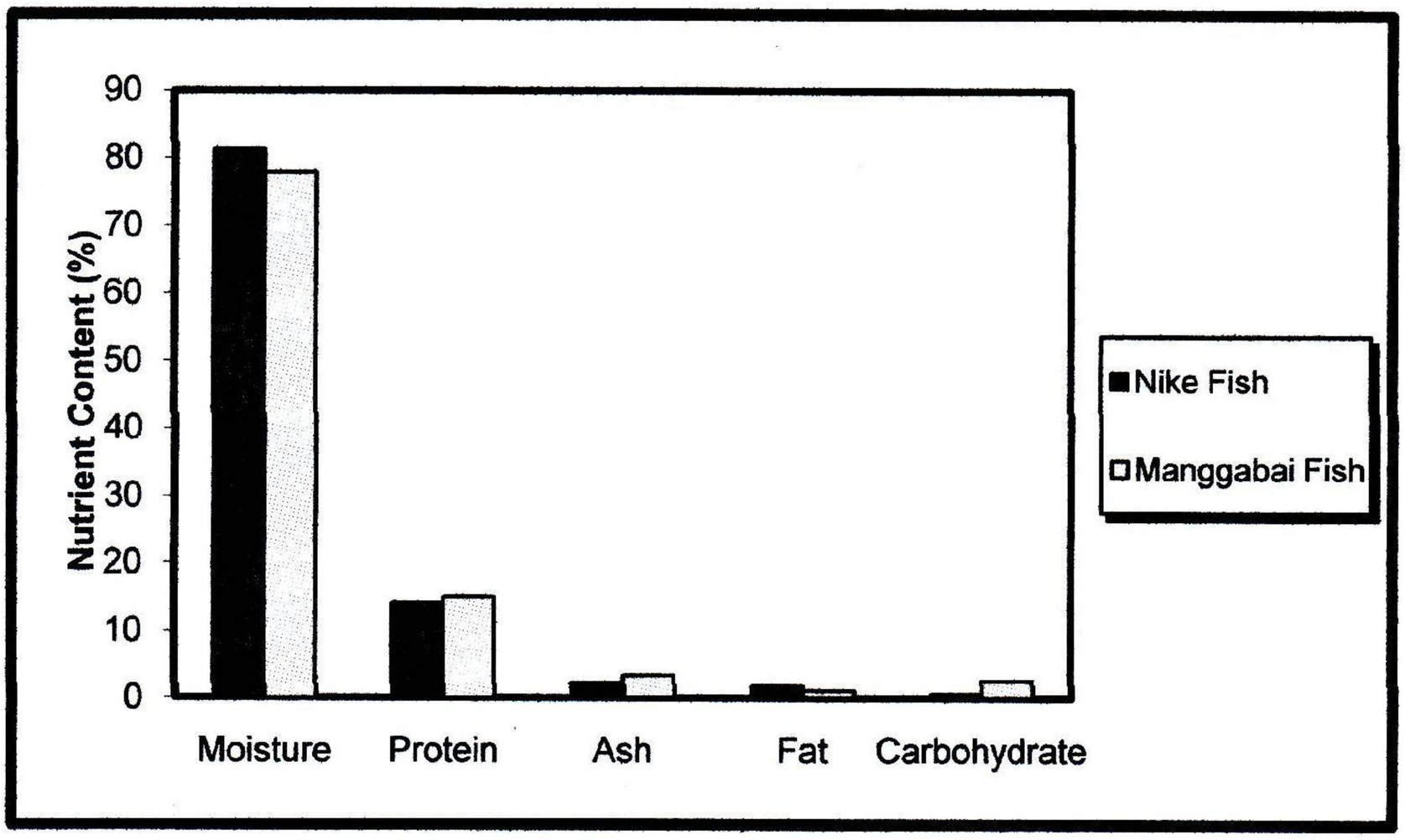


Figure 2. Nutrition Variation in Nike and Manggabai Fresh Raw Materials (Fish)

The moisture content of Nike and Manggabai fishes is the most common among other chemical compositions with a range of 77.94% -81.25%. Bogard et al. (2015), stated that as many as 55 fish samples had moisture content ranging from 60.2 to 85.4 g / 100 g, while Njinkoue et al. (2016) reported, water content in fish results of research between 70% and 80% of the total fish weight.

Protein in Nike fish and Manggabai fish ranged from 14.13 to 14.95%. Both types of fish can be used as a source of high protein foods. Njinkoue et al. (2016), explained that the edible portion of fish protein content was 13.4% and 16.17%. Bogard et al. (2015) reported, the protein content in 55 fish samples ranged from 11.9-20.6 g / 100 g.

The ash content of Nike fish and fresh Manggabai fish was 2.18-3.39%. The ash content in this study sample is similar to that of Bogard et al. (2015) ranges from 0.7-5.3 g / 100 g. Fat content contained in Nike fish 1.81% and Manggabai fish 1.1%, while carbohydrates in Nike fish 0.64% and fish

Manggabai 2.63%. Carbohydrate content in both types of fish is low compared with other nutrients. This value exceeds that reported by Njinkoue et al. (2016) of 0.83-0.9%.

CONCLUSION

Nike fish have moisture content (81.25% vs 77.94%) and fat (1.81% vs. 1.10%) more than Manggabai fish, on the other hand Manggabai fish have Protein content (14.95% vs 14.13%), Ash (3.39% vs. 2.18%) and Carbohydrates (2.63% vs 0.645) more than Nike fish.

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This certificate is awarded to :

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For his/her Participation in The 1st International Conference on Biodiversity, Food Security and Health held at Universitas Gadjah Mada, Yogyakarta, Indonesia, on 22-23 November 2016,

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