

CONFERENCE PROGRAMME PAPERS ABSTRACTS



**6th International Conference on
Sustainable Agriculture, Food
and Energy.
October 19 - 21, 2018 in MANILA,
Philippines.**

Inclusive Agri-food Energy Production for Community Empowerment in a Changing Climate

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Product-02	IDENTIFICATION OF GH GEN POLYMORPHISMS AND THEIR ASSOCIATION WITH BODY WEIGHT IN BAYANG DUCK, LOCAL DUCK FROM WEST SUMATERA, INDONESIA Yurnalis ^{1,2} , Arnim ¹ , Dino Eka Putra ¹ , Zulkarnaini Kamsa ¹ and Tinda Afriani ¹ ¹ Faculty of Animal Husbandry, Andalas University, West Sumatera Indoensia. ² Autor email yurnalisunand@yahoo.com
Product-03	PECTIN APPLICATION EXTRACTED FROM COCOA POD IN EDIBLE FILM PRODUCTION Desniorita ¹ , Novizar Nazir ² , Novelina ² , Kesuma Sayuti ² ¹ Postgraduates Program, Andalas University. Padang. INDONESIA. *email: desniorita@gmail.com ² Faculty of Agricultural Technology, ANDALAS University. INDONESIA
Product-04	UTILIZATION OF LOCAL WEST SUMATRA BAMBOO FOR LAMINATED BAMBOO BOARD WITH DIFFERENT ADHESIVES Sahadi Didi Ismanto and Neswati Faculty of Agricultural Technology-Andalas University. INDONESIA. email: sahadididiismanto@ae.unand.ac.id
Product-05	PYROLYSIS OF CACAO POD HUSKS AND LIQUID SMOKE CHARACTERIZATION BY GC-MS Rahmi Eka Putri [#] , Anwar Kasim [*] , Emriad ^{###} , and Alfi Asben [*] [#] Postgraduate Doctoral Program, Andalas University, Padang, Indonesia. E-mail: rahmistppmedan@gmail.com [*] Faculty of Agricultural Technology, Andalas University, Padang, Indonesia. ^{###} Faculty of Mathematics and Natural Sciences, Andalas University, Padang, Indonesia
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Product-07	WHITE SKIN ORANGE SWEET POTATO GROWN IN LIMA PULOH KOTA DISCTRICT, WEST SUMATRA INDONESIA: MORPHOLOGY AND ELEMENTAL ANALYSIS BY ENERGY-DISPERSIVE X-RAY FLOURESCENCE Wiwik Hardaningsih ^a , Ngakumalem Sembiring ^a , Siti Khatijah M. Saad ^b , Lailatun Nazirah Ozair ^c and Bohari M Yamin ^c ^a Food Crops Study Program, Politeknik Pertanian Negeri Payakumbuh, Jalan Raya Negara 07, Tanjung Pati, Harau, Kabupaten Lima Puluh Kota, West Sumatera 26271. Indonesia. E-mail: wiwikhardaningsih@gmail.com ^b Research and Instrumentation center, Universiti Kebangsaan Malaysia, Bangi, 43600 Selangor. Malaysia ^c Faculty of Science and Technology, Universiti Sains Islam Malaysia, Nilai 71800, Negeri Sembilan, Malaysia.
Product-08	CHARACTERISTICS OF HIGH PROTEIN SNACK BAR MADE OF MODIFIED SWEET POTATO FLOUR Marleen Sunyoto [#] , Robi Andoyo [#] , Euis Masitoh [#] [#] Faculty of Agro-Industrial Technology, Padjadjaran University, Jl. Raya Bandung-Sumedang Km 21, Jatinangor 46000, Indonesia. E-mail: emhaer@yahoo.co.id
Product-09	EFFECT EXTRACT OF BANGUNBANGUN (COLEUS AMBOINICUS, L) LEAVES AS AN ANTI-OXIDANT TO THE PERFORMANCE AND QUALITY OF BROILER CARCASS. NELZI FATI, RAMOND SIREGAR, SUJATMIKO Department of food crop cultivation Agricultural Polytechnic State of Payakumbuh, Jalan Raya Negara Tanjung Pati Km 7 – 26271, Indonesia. E-mail: nelzifati@gmail.com
Product-10	USE OF LOCAL MICROALGAE (CONSORTIUM) AS A NATURAL ANTIMICROBIAL AGENT Salvia. S [#] , Rince alfia Fadri [*] [#] Program Study of Animal Science, Polytechnic of Agricultural, Payakumbuh, West Sumatera, Indonesia Email: salviasani@ymail.com [*] Program Study of food Technology Polytechnic of Agricultural, Payakumbuh, West Sumatera, Indonesia E-mail: rince.alfia@yahoo.co.id
Product-11	UTILIZATION OF COCOA LEAF FERMENTATION WASTE IN FEED TO INCREASE DUCK EGG PRODUCTION Ismet Suryadi, Reni Novia, Suhadi, Nilawati Lecturer of the State Agricultural Polytechnic Payakumbuh. INDONESIA. E-mail: nilanilawati70@yahoo.com , is_metsuryadi@yahoo.co.id
Product-12	EFFECT OF AZOLLA PINNATA USE IN FEED AND PROBIOTICS ON CARCASE PERCENTAGE AND FAT ABDOMINAL BROILER Nilawati Lecturer of the State Agricultural Polytechnic Payakumbuh. State Highway KM.7 Tanjung Pati, District Harau Limapuluh Kota District. E-mail: nikanilawati70@yahoo.com

PRODUCTION

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In poultry breeding business the biggest production cost is feed cost which is about 60 - 70%. For that reason have been sought alternative materials that do not compete with human, cheap price, easy to get and do not neglect nutrient element that is cocoa skin, because agricultural waste is available in large quantity and can be utilized for animal feed because of its nutritional content. The optimal use of cocoa leather as a concentrate material faces constraints of low nutritional value, high coarse fiber, quickly damaged or rotten and not durable to be stored. To increase the value of the benefits of brown skin can be done by cocoa waste skin fermentation. The fermented cocoa skin processing that has been applied here is using urea and starbio with different comparisons. So it can be known the right formula for optimum duck feed utilization. This research has been done in the Laboratory and Coop State Polytechnic Payakumbuh State. The study was conducted in stages, consisting of 3 stages of research: A. Examining the effect of various material comparisons for fermented formulations on brown skin B. Testing of fermented cocoa skin waste for ducks. C. Research to see the production of duck eggs and post-harvest in the form of making salted eggs. From this study, it was found that treatment of both cocoa, starbio and urea (100: 0,2: 0,4) showed the best results for the initial production of laying ducks and decreased levels of coarse fiber, increased protein and fat content. After being applied to duck the best research result is the utilization of fermented cocoa skin as much as 10%, with the average of egg production for 8 weeks highest is 61, 02% and the lowest is 23, 73%. with the highest mean duck egg weight is 75, 82 g and the lowest is 56, 94 g.

Keywords: cocoa sugar fermentation, feed, duck, egg production.

PRODUCT-12

EFFECT OF AZOLLA PINNATA USE IN FEED AND PROBIOTICS ON CARCASS PERCENTAGE AND FAT ABDOMINAL BROILER

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Livestock business is not separated from the cost of feeds issued. Feed is the largest production costs of 60-70% of the total production costs, so it needs to look for and utilize other alternative feed ingredients that do not compete with humans, the price is cheap, easy to obtain and not ignore the content nutrients from the feed ingredients. One of the alternative feed ingredients derived from agricultural waste that is available in large quantities and can be used as animal feed is *Azolla pinnata* with crude protein content ranging from 24 - 30%. *Azolla pinnata* plants or water spikes are the plants that usually live on the water surface, so far the farmers consider *Azolla pinnata* as a weed that disturbs their crops, so *Azolla pinnata* much thrown away by the farmers. In addition to utilizing *Azolla pinnata* as a broiler feed and broilernya optimal growth should be added probiotics. Provision of probiotics are expected to function to maintain the health of chicken digestion as well as a growth spur so that later available food poultry products in the form of good meat, healthy and reduce residual antibiotics. This research has been conducted in Farm State Agricultural Polytechnic Payakumbuh. The data were collected for four weeks using 100 broiler children, with Completely Randomized Design using 5 treatments and 4 replications, with parameters: weight gain, consumption, conversion, carcass percentage and abdominal fat. The results of this study show that there is an increase in body weight and percentage of carcass. The average percentage of carcasses ranged between 59.24% - 67.52% and the abdominal fat percentage ranged from 9.86% to 11.34%. The conclusion of this study besides can reduce production cost also seen that best treatment that is combination in use of *Azolla pinnata* 15% and probiotic 10 ml.

Keywords: *Azolla pinnata*, probiotics, broiler, carcass, abdominal fat

PRODUCT-13

DEVELOPMENT OF ARECA NUT DRYER MACHINE FOR SMALL AND MEDIUM-SIZED ENTERPRISES

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Abstract— The areca nut is commercially available in dried, cured, and fresh forms. The husk of fresh fruit is green and soft while the ripe fruit, it becomes yellow or orange, and as it dries the fruit inside hardens. At the moment, more than 23 countries in the world need large amounts of areca nut supply for medical, industrial and cosmetics material. However, in 50 Kota regency, areca nuts are a commodity that is still managed by small-medium enterprises. Usually, the sliced areca nuts are dried under the sun which sometime have to deal with weather or temperature fluctuation. To overcome the problem and accelerate the process, this dryer, which is 50 x 100 x 50 cm in dimension, utilized heater that is placed on its bottom. Two small blower assisted hot air to flow through the areca nuts to the top of dryer. To control the temperature, the thermocouple sensor was placed inside the dryer. Relay and timer are used do adjust the connection and time of the dryer.

Keywords— Areca Nut, Dryer, Small and Medium-Sized Enterprises



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