

PROGRAM BOOK

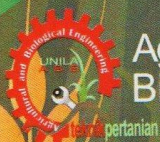
International Seminar Agricultural Engineering 2017

“ STRENGTHENING FOOD SECURITY, FEED, AND
ENERGY SUSTAINABLY TO ENHANCE
COMPETITIVENESS ”



BANDAR LAMPUNG, INDONESIA

AUGUST, 10-12, 2017



Agricultural
Biological Engineering

OPENING AND WELCOME SPEECH FROM CHAIRMAN OF ISAE INTERNATIONAL SEMINAR 2017

Tabik pun...

The Honorable Minister of Agriculture of Republic of Indonesia, Governor of Lampung Province, Rector University of Lampung, Dean of Agricultural Faculty of Lampung University, Prof. Mikio Umeda (Kyoto University, Japan), Prof. Irwandi Jadwir (Islam Antar Bangsa University, Malaysia), Dr. S. D. Filip To, PHD. PE (Mississippi State University, USA), Dr. Rosanna Marie C. Amongo (University of the Philippines Los Baños, Filipina), Prof. Dr. Ir. Lilik Sutiarso, M.Eng (Gadjah Mada University, Indonesia), Dr. Muhammad Dimiyati (General Director of Strengthening of Research and Development, Ministry of Research, Technology and Education of The Republic of Indonesia) and Prof. RA Bustomi Rosadi (Lampung University), delegates and all participants. On behalf of The Chairman of ISAE IS 2017, I would like to express how grateful we are to have you here.

The theme of this seminar is "Strengthening food security, feed, and energy sustainably to enhance competitiveness". We are here to communicate and gather dissemination of information and research results in the field of agriculture as part of planning the development of agriculture in the future towards food and biomass-based energy self-sufficiency. The presentation and discussion in this seminar will be emphasize on nine specific issues of food, energy, agriculture, agriculture technology, agricultural engineering, systems and agricultural management, agribusiness and natural resource. Through this seminar we communicate the problem, discuss about ideas, share knowledge and technology to arrange solutions.

This seminar is attended by 187 participants, 175 oral presentations and 12 poster presentations from many universities and many institutes in Indonesia. I would like to extend gratitude for all of keynotes, participants, Government of Bandar Lampung City, University of Lampung, Faculty of Agriculture of Lampung University, agricultural and Biological Departement of Lampung University, PERTETA member and committee member who help and work together to execute this seminar.

Last, we hope that you will have a great stay in Bandar Lampung then experience the culture and tradition of Lampung.

Best Regard,
Chairman of ISAE IS 2017
Dr. Ir. Sandi Asmara, M.Si

F

F.X. Susilo	: D.20
Febry Darma Putri	: F.5
Fitriani	: B.5

G

Gatot Pramuhadi	: A.16
Gatot Pramuhadi	: A.18
Gatot Tri Mulyadi Rekso	: D.21
Gema Wibawa Mukti	: H.3

H

Hasbi	: D.4
Henik Sukorini	: D.22
Hepi Hapsari	: H.4

I

I Ketut Budaraga	: C.10
I Made Anom Sutrisna Wijaya	: D.23
I Made Supartha Utama	: F.8
I Putu Surya Wirawan	: E.8
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Ichwana	: G.8
Idah Andriyani	: G.22
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Indarto Indarto	: G.10
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Indra Gumai Febriano	: G.24
Indriyani	: E.2
Iwan Setiawan	: H.5

J

Jamalam Lumbanraja	: D.6
Juanda	: B.6
Junaedi Prasetiyo	: D.7

STUDY OF SWAMP LAND VEGETATION AS A CARRYING CAPACITY OF SUMATRAN ELEPHANTS (*Elephas maximus sumatranus*) NATURE FEED IN ELEPHANTS CONSERVATION CENTRE, WAY KAMBAS NATIONAL PARK

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ABSTRACT

The result of this study is to knowing the quantity and the distribution of the feed of the Sumatran elephant (*Elephas maximus sumatranus*) at the Center for Elephant Conservation (PKG) Way Kambas National Park (TNWK) . Sumatran elephant (*Elephas maximus sumatranus*) is an umbrella species that play a role in sustaining habitat. Sustainability of elephant habitat is inseparable from the Sumatran elephant home range which one of the important functions of this habitat is provide feed for Sumatran elephants. This study aims to determine the carrying capacity of swamp land as a natural feed supply Sumatran elephants, using analytical methods of vegetation in swamp land as one of the elephants home range at the Center for Elephant Conservation (PKG) Way Kambas National Park (TNWK). Sampling intensity used is 8% of the area of PKG to obtain the number of 35 plots. The species found in the whole plot is 26 species, the most three species found in this habitat by the relative density are mendong bulat (*Eleocharis dulcis*) 28%, kolomento (*Brachiaria mutica*) 26% and mendong segitiga (*Fimbristylis umbellaris*) 16% and by the value index are mendong bulat 45%, kolomento 48%, and mendong segitiga 27%. Based on the interview with mahout (keeper of the elephant) the most favored feed is mendong bulat (*Eleocharis dulcis*).

Keywords : elephant, natural feed, carrying capacity.