

# International Conference on Biotechnology 2012

*Biotechnology - Bridging Biodiversity to Industry*

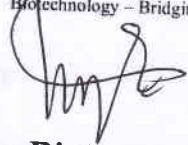


Bogor, 13 - 14 November 2012  
IPB International Convention Center  
Indonesia



MARISI NAPTUPUW

International Conference on Biotechnology 2012  
Biotechnology – Bridging Biodiversity to Industry

 13/11-2012

## International Conference on Biotechnology 2012

*Biotechnology – Bridging Biodiversity to Industry*

Organized by:  
Research Center for Biotechnology  
Indonesian Institute of Sciences (LIPI)

IPB International Convention Center  
Bogor – Indonesia

13-14 November  
2012

HP-13	Mutiya Hardhiyuna	Cytotoxic Activity of Marine Fungi BT 1.1 Against T47D Cell Line
HP-14	Rofiq Sunaryanto	Isolation and Characterization of Antimicrobial Substance from Endophytic Actinomycetes
HP-15	Ira Handayani	Expression of the Fluorescent Protein in Turquoise2 in the Periplasm of <i>Escherichia coli</i> Targeted via the SFC Translocator
HP-16		

**Poster Session I (Day-1, 16.00 – 17.00) Room 2 (Health and Pharmacy Biotechnology)**  
**Moderator: Dr. Desriani**

**Poster Session I (Day-1, 16.00 – 17.00) Room 3 (Energy-Industry-Food)**

**Moderator: Dini Nurdiani, M. Si**

EP-01	Yeti Darmayati	<i>In Vitro</i> Selection of Effective Microbial Strains for Bioremediation on Oil Polluted Sediment from Cilacap coastal
EP-02	Yeti Darmayati	Capability of Selected Consortium Bacteria for Oil Bioremediation in Indramayu Sandy Beach
EP-03	Rumella Simamarta	The Activity of Phosphate Solubilizing Bacteria Isolated from Rhizosfer of Forest Plants on Phosphate Solubility for Supporting the Growth of <i>Parasarianthes fulcataria</i>
EP-04	Sylvia Lekatompessy	Study of the Presence of <i>Rhizobium</i> Bacteria which were Inserted into the Cell Tissue of Soybean Seed
EP-05	Harmastini	The Influence of Acidity on the Growth of <i>Rhizobium</i> BTCC B64 and Its Application on <i>Parasarianthes fulcataria</i>
EP-06	Harmastini	Application and Sustainability of VA-Mycorrhizae from <i>Altingia excelsa</i> , <i>Maesopsis emenji</i> and <i>Enterobolium cyclocarpa</i> Growing at Bodogol Forest, Gede Pangrango National Park
EP-07	Akas Yekti	Study the Use of Pesticides on the Health of Vegetable Farmers in the Village Tulungrejo, Bumiaji District, Malang Regency
EP-08	Tjandra Chrismadha	Growth and Phycoerythrin Productivity of <i>Spirulina fusiformis</i> under Various Light Regimes
EP-09	Eka Triwahyuni	Separated Enzymatic Hydrolysis And Fermentation Palm Oil Empty Fruit Bunches for Bioethanol Production
EP-10	Trisanti Anindyawati	Hydrolysis of Palm Oil Empty Fruit Bunch (EFBs) using Commercial Enzymes for Bioethanol Production
EP-11	Deliana Dahnum	Surfactants Effects on Enzymatic Saccharification of Empty Fruit Bunch for Bioethanol Production
EP-12	Deliana Dahnum	Enzymatic Saccharification of Pretreated Empty Fruit Bunch and Frond Palm Oil for Bioethanol Production

EP-07

## Study the Use of Pesticides on the Health of Vegetable Farmers in the Village Tulungrejo, Bumiaji District, Malang Regency

Akas Yekti Pulihasih

<sup>1</sup> Doctoral Student of Environment Science Program–  
Faculty of MIPA-Airlangga University, Surabaya, Indonesia  
E-mail: akasyekti2009@yahoo.com

### Abstract

Efforts to increase agricultural output, especially horticulture continue to be done, for the purposes of these widely used pesticides intensively. The negative impact would increase; this is due to excessive use of pesticides and tend to ignore the rules of use that has been set. It is expected to affect the health of residents around the area of agriculture. The study was conducted in the village Tulungrejo, Bumiaji District, Malang Regency. The aims to determine levels of Cholinesterase, BUN (Blood Urea Nitrogen) and Creatine in the blood of vegetable farming communities as a result of pesticide use. The proportion of incidence of poisoning in farming communities in Indonesia as a result of environmental pollution due to pesticide use is 35% (0.3), in order to obtain sufficiently accurate data then used a sample of 144 people touched pesticides grouped by activity. The average levels of Cholinesterase in the blood at the lowest active farmer group compared with the group of family farmers and rural communities (63.333%, 72.368%, 85.294%). Land area and a dose of pesticide active influence on farmers' groups. Use of pesticides not affect the levels of BUN and Creatinine in the blood of three groups of vegetable farming communities, generally did not differ significantly and were within normal limits (15.118 mg / dl; 14.368% mg / dl; 15.324 mg / dl) and (1.137 mg / dl ; 1.122 mg / dl; 1.160 mg / dl).

**Keywords:** pesticides, cholinesterase, BUN (Blood Urea Nitrogen), creatine, vegetable growers