

BOOK OF ABSTRACT AND PROGRAM

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"Science Enhancement For Developing Countries"

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ORAL PRESENTATION- ROOM III (WINDFLOWER)

Day 1 - November 19 th , 2014		Moderator: Fahrudin	
Cod e	Name	Title	Time
ES-1	Dewi Yanuarita, M. Rijal Idrus, Irwanto	Communities Vulnerability of Spermonde Islands	13.30 - 13.45
ES-2	Radhiyah Ruhon, Oscar Serrano, Paul Lavcry, Gary Kendrick, Carlos Duarte, Sharyu Hickey, and Kimberly Van Niel	Loss Of Carbon Stocks In Sea grass Meadows Due To Mooring Activities At Rottnest Island, Western Australia	13.45 - 14.00
ES-3	Akbar Tahir, Farid Samawi, Ycis Pairunan, Masrul Jaya	Assessment of Pb Metal Concentrations on Water Column, Sediment and Biota at Khayangan Island of Makassar City	14.00 - 14.15
ES-4	Iradhatullah Rahim, Halima Tusadiyah, Muh. Iqbal Putera, Saherman, Asmaul Husna	The Utilization Of An Agricultural Waste As A Source Of Organic Matter Of Nutrients In Maize	14.15 - 14.30
C-5	Andriani Nasir, Muhammad Lukman, Ambo Tuwo, Hanapi Usman, Nurfadilah	Nutrient Characters In Coastal Waters Of South Sulawesi, Indonesia	14.30 - 14.45
C-6	Lydia Melawaty, Alfian Noor, Tjodi Harlim, Nicole de Voogd	<i>Clathria reinwardtii</i> A Zooremediator of Heavy Metal Manganese (Mn)	14.45 - 15.00
<i>Coffee Break - Poster Session</i>			15.00 - 15.15
Day 1 - November 19 th , 2014		Moderator : Nursiah La Nalle	
			Time



C-7	Firdaus, Dirayah Husain, Hertina Rasyid, Sukarti	Methylation Of <i>p</i> -Coumaric Acid With Dimethyl Sulfate And Sodium Hydroxide As Catalyst	15.15 - 15.30
C-8	Diana Eka Pratiwi, Suriati Eka Putri	Characterization Of Banana Peel Briquettes With The Variation Of Binder Concentration	15.30 - 15.45
C-9	Sitti Nurmah, Irfani Baga, Imran Muhtar, Rahmawati Saleh	Production Of Alkali Treated Cottonii From <i>Eucheuma Cottonii</i> On Pilot Plant Scale Using Response Surface Methodology	15.45 - 16.00
C-10	Asmawati, Abd.Wahid Wahab, Buchari, Paulina Taba	Synthesis and Characterization of a Ion Imprinted Polymer for Cadmium using Quinaldic acid as Complex	16.00 - 16.15
C-11	Isran Asnawi Hasnah Natsir, Nunuk Hariani	Exploration Of Microbes Which Produce Lipolytic Enzymes From Lemo Susu Hot Spring, Piarang, South Sulawesi, Indonesia	16.15 - 16.30
C-12	Hasnah Natsir, Seniwati Dali, Rugaiyah Arfah, Muh. Yusri Karim	Application Of Protease And Chitin Deacetylase From <i>B. Licheniformis</i> HSA3-1a In Isolation Chitin-Chitosan From Crab (<i>Portunus pelagicus</i>) Waste As Antimicrobial	16.130- 16.45
C-13	Syamsidar HS, Nurfaidhah Natsir	Bioremediation and Phytoremediation of Waste Oil Contaminated Soil using Biokompos with Sengon Plants	16.45 - 17.00
C-14	Sitti Chadliah, Andi Wahyu Trifany	Kinetics Delignification of Bagasse with Alkaline Peroxide Process.	17.00 - 17.15
C-15	Imran, Winny Avery, Lilidarlian	Screening the bioactivity of root skin extract of red mangrove <i>Rhizophora apiculata</i> Bl. Towards inhibition power on growth of bacteria <i>Staphylococcus aureus</i>	17.15 - 17.30
Day 2 – November 20th, 2014		Moderator: Hasmawati	Time
C-16	Nunuk Hariani, Firdaus, Nursiah La Nafie, Nur Umriani Permatasari, Ajuk Separ	A preliminary study of sponge species from Kapoposung Island, Spermonde Archipelago and bioactivity test of their methanol extracts	11.30 - 11.45



BIOREMEDIATION AND PHYTOREMEDIATION OF WASTE OIL CONTAMINATED SOIL USING BIAKOMPOS WITH SENGON PLANTS

Syamsidar HS¹⁾, Nurfaikhah Natsir²⁾

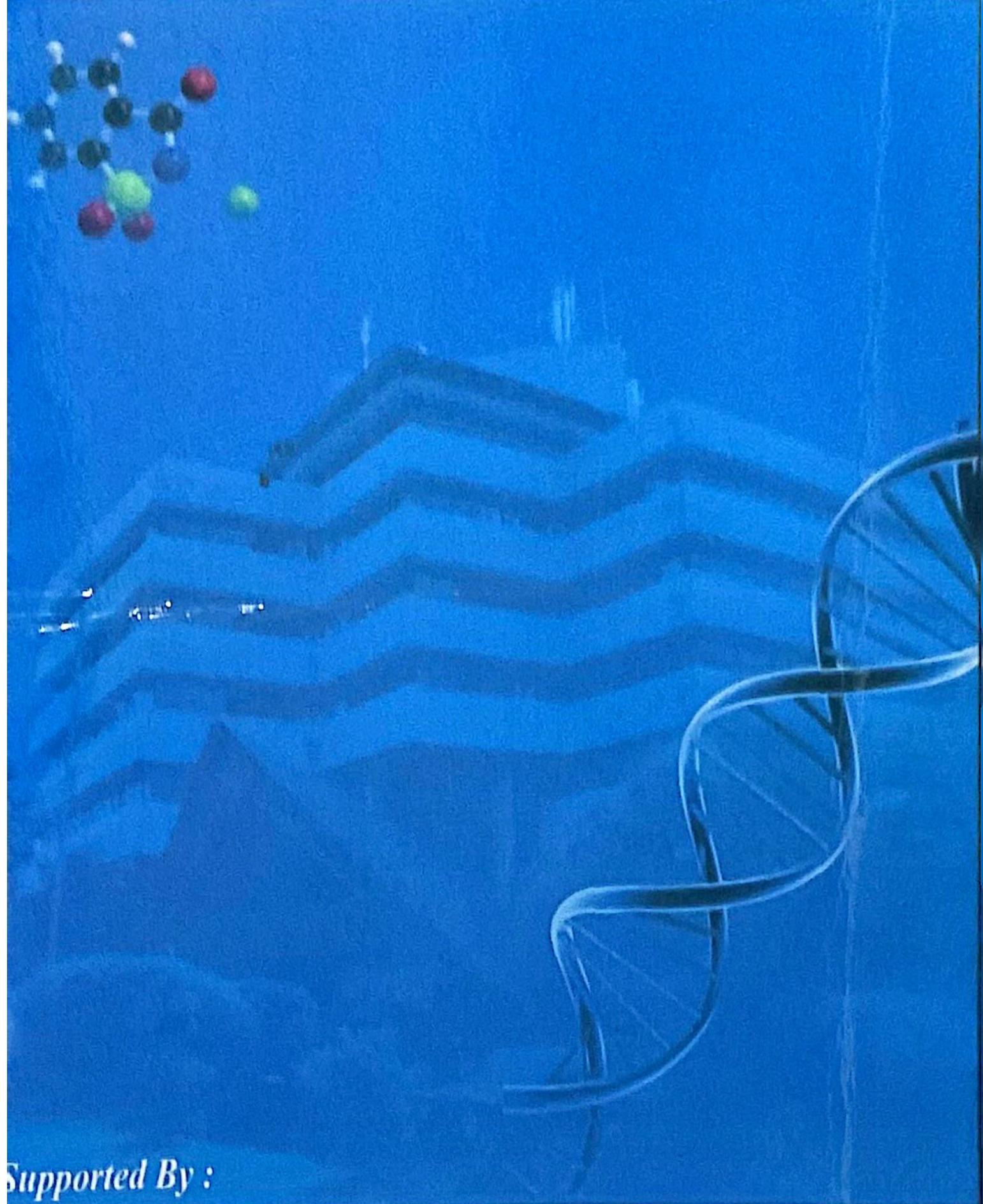
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Abstract

Sengon plants is one of the most important versatile pioneers in Indonesia. Growing very fast and is able to adapt to different types of soil. Similarly biokompos as a source of microbes that can oxidize hydrocarbons in petroleum. So that in this study used sengon plants and biokompos to remediate petroleum sludge.

This research used two methods are bioremediation and phytoremediation. In bioremediation, petroleum sludge mixed with biokompos the ratio of 1:1, 1:2, 1:3, 1:4, and 1:5. Then put on each pot were planted with sengon and incubated for days. The parameter analyzed were Total Petroleum Hydrocarbons (TPH), pH, and Water Holding Capacity (WHC). And research result obtained impaired TPH 0,17% and increase in water content 56,26% and WHC 31,50%

Keywords: *Bioremediation, fitoremediation, petroleum sludge, biokompos, sengon plants*



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