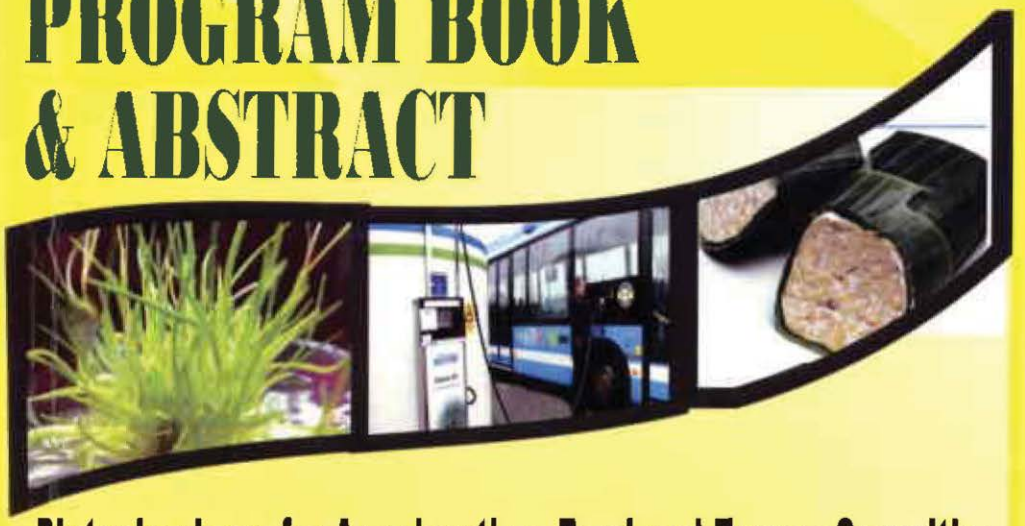
The 6th IBC Congress and Seminar

September 1st - 4th 2014 Palembang, Indonesia

International Seminar on Biotechnology and the 6th Congress of Indonesian Biotechnology Consortium

PROGRAM BOOK & ABSTRACT



Biotechnology for Accelerating Food and Energy Securities

Hotel Aryaduta Palembang
Province of South Sumatera,
Indonesia

Organized by:

KONSORSIUM BIOTEKNOLOGI INDONESIA
Indonesian Biotechnology Consortium

Committee

President	:	Dr.rer.nat. AgusWijaya, M.Si.
Vice President	:	Dr.Ir. Mulawarman, M.Sc.
Secretary	:	Dr. Ir. Suwandi, M.Sc.
Treasurer	:	Ari Hayati, S.TP., M.Sc.
Secretariat	:	Dr. Ir. NuraMalahayati, M. Nutr. Sc. FriskaSyaiful, S.TP., M.Si. TamariaPanggabean, , S.TP., M.Si.
Funding	:	Hilda Agustina, , S.TP., M.Si. ArzunaNeniTriana, , S.TP., M.Si.
Scientific Board	:	Prof. Ir. FilliPratama, Ph.D. (Hons), MSc. Prof. Michael Murkovic Prof. Dr. Philipp Wiedemann Prof. Dr. Bunyamin Tar'an Dr. Basuni Hamzah, M.Sc. Dr. GatotPriyanto, M.S. Dr. Phil. Ir. Arinafril, M.Sc. Dr. Ir. YuliaPudjiastuti, M.S.
Program	:	Dr. Merry Hasmeda, M.Sc. Dr. Andy Wijaya, M.Sc.
Publication&Marketing	:	FarryApriliano, , S.TP., M.Si Sugito, , S.TP., M.Si.
Caterer	:	Ir. SitiNurulAidilFitri, M.Si.
Logistic& Transportation	:	Dr. Budi Santoso, S.TP., M.Si.. Hermanto, , S.TP., M.Si.

Advisory Board

Rector of Universitas Sriwijaya
Governor of South Sumatera Province

Steering Committee
President of KBI: Prof. Dr. Ir. Bambang Prasetya
Vice Rector for Co-operation: Dr. A. Muslim
Dean of Agricutural Faculty: Dr. Erizal Sodikin
Chairman of Food Studies Center: Prof. Dr. Rindit Pambayun

CONTENTS

O 15

Construction of a recombinant plasmid containing *xyn*b gene from *Bacillus subtilis* subsp. spizizeniiW23

Mariana Wahjudi, Catherina and Xavier Daniel

Purification and Molecular Biology, Faculty of Biotechnology, University of Surabaya (Ubaya), Indonesia, Jl. Raya Kalirungkut, Surabaya 60293, Indonesia

e-mail: mariana_wahyudi@staff.ubaya.ac.id

This study aimed to clone the*xyn*B gene from*Bacillussubtilis*subsp. spizizeniiW23,encodinga xylan1,4-beta-xylosidase to pMMB67EH plasmid which then be used to transformed *Escherichiacoli*DH-5α andOrigami host cells. The *xyn*Bgenewas amplifiedby polymerasechain reaction (PCR) technique usinga pair of primers flanking the gene sequence,and chromosomal DNA of the W23 strain as a template. Analyses of the recombinant plasmid were done by restriction analyses, and PCR detection. The result showed that the *xyn*B has been cloned on pMMB67EH vector. The recombinant plasmid contained the *xyn*B gene which was confirmed by restriction analyses and by PCR detection using primers pair's specific for the xynB gene and for the vector. The xylanaseactivityof xynB gene in *E.coli*DH-5α andOrigamihost cells was assayedonLuria-Bertani-xylan plate qualitatively with addition of isopropyl-β-D-thio-galactoside (IPTG) as an inducer.Uponsprayingwith Congored, the cells bearing the pMMB-*xyn*B recombinant plasmid showed a xylan-degrading activity by the appearance ofclear zonearound the colonies whilethe transformant bearing an empty plasmid showed no clear zone. It could be concluded that the cloning process was succeeded.