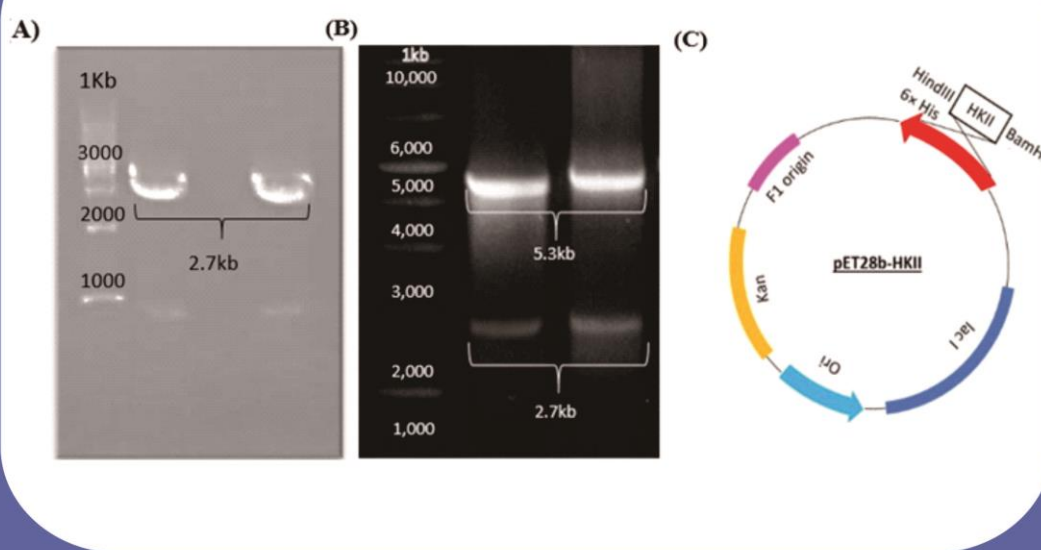


Jurnal Ilmiah Kimia

MOLEKUL

Vol. 16, No. 1, March 2021



Indexed by Scopus

Jurusan Kimia
Fakultas Matematika dan Ilmu Pengetahuan Alam
Universitas Jenderal Soedirman
Purwokerto

Molekul	Vol. 16	No. 1	pp. 1 - 81	March 2021	P-ISSN 1907-9761	E-ISSN 2503-0310
---------	---------	-------	------------	---------------	---------------------	---------------------

EDITOR-IN-CHIEF

Amin Fatoni, M.Si, Ph.D (Universitas Jenderal Soedirman, Indonesia)

EDITORIAL BOARD

- Prof. Dr. Wan Aini Wan Ibrahim (Universiti Teknologi Malaysia, Malaysia)
Prof. Dr. Kristian H Sugijarto (Yogyakarta State University, Indonesia)
Prof. Dr. Hassan Y Aboul-Enein (National Research Centre, Egypt)
Prof. Dr. drh. Maria Bintang (Institut Pertanian Bogor, Indonesia)
Prof. Dr. Hadi Nur (Universiti Teknologi Malaysia, Malaysia)
Prof. Shin-ichiro Suye (University of Fukui, Fukui, Japan)
Assist. Prof. Dr. Apon Numnuam (Prince of Songkla University, Hat Yai, Thailand)
Dr. Arief Cahyo Wibowo (King Fahd University of Petroleum & Minerals, Saudi Arabia)
Dr. Saluma Samanman (Princess of Naradhiwas University, Thailand)
Anung Riapanitra, Ph.D (Universitas Jenderal Soedirman, Indonesia)
Dr. Dadan Hermawan (Universitas Jenderal Soedirman, Indonesia)
Dr. Hartiwi Diastuti (Universitas Jenderal Soedirman, Indonesia)
Dr. Uyi Sulaeman (Universitas Jenderal Soedirman, Indonesia)
Adi Darmawan, Ph.D (Universitas Diponegoro, Indonesia)
Dr. Jas Raj Subba (Royal University of Bhutan, Bhutan)
Mardiyah Kurniasih, M.Sc (Universitas Jenderal Soedirman, Indonesia)
Zusfahair, M.Si (Universitas Jenderal Soedirman, Indonesia)
Irmanto, M.Si (Universitas Jenderal Soedirman, Indonesia)

REVIEWERS

- Prof. Dr.oec.troph. Ir. Krishna Purnawan Candra, M.S. (Mulawarman University, Indonesia)
Prof. Dr. Didik Prasetyoko S.Si., M.Sc. (Insititut Teknologi Sepuluh November, Indonesia)
Prof. Dr. Andri Cahyo Kumoro, S.T., M.T. (Universitas Diponegoro, Indonesia)
Prof. Dr. Madzlan Aziz (Universiti Teknologi Malaysia, Malaysia)
Prof. Dr. Sri Atun, M.Si. (Yogyakarta State University, Indonesia)
Prof. Dr. Adel Zamri, M.S., DEA. (Universitas Riau, Indonesia)
Prof. Dr. I. Sahidin, M.Si. (Universitas Haluoleo, Indonesia)
Dr.rer.nat Nurul Hidayat Aprilita, M.Si. (Universitas Gadjah Mada, Indonesia)
Dr.rer.nat. Rachmat Triandi Tjahjanto, M.Si. (Brawijaya University, Indonesia)
Dr.rer.nat. Antonius R B Ola. M.Sc. (Nusa Cendana University, Indonesia)
Dr.rer.nat. Agustino Zulys, M.Sc. (University of Indonesia, Indonesia)
Dr.rer.nat. Risfidian Mohadi, M.Sc. (Brawijaya University, Indonesia)
Dr. Triastuti Sulistyaningsih, M.Si. (Universitas Negeri Semarang, Indonesia)
Dr. Maria Nur Meinita, M.Sc. (Universitas Jenderal Soedirman, Indonesia)
Dr. Iqbal Musthapa, M.Si. (Universitas Pendidikan Indonesia, Indonesia)
Dr. Wan Siti Atikah Wan Omar (Universiti Teknologi MARA, Malaysia)
Dr. Ponco Iswanto, M.Si. (Universitas Jenderal Soedirman, Indonesia)
Dr. Agustina L. N. Aminin, M.Si. (Universitas Diponegoro, Indonesia)
Dr. Yuniawan Hidayat, M.Si. (Universitas Sebelas Maret, Indonesia)
Dr. Mulyadi Tanjung, Drs., M.S. (Universitas Airlangga, Indonesia)
Dr. Gusrizal, M.Si. (Universitas Tanjungpura, Indonesia)
Mohammad Alauhdin, Ph.D. (Universitas Negeri Semarang, Indonesia)
Yanuardi Raharjo, Ph.D. (Universitas Airlangga, Indonesia)
Suherman, Ph.D (Universitas Gadjah Mada, Indonesia)

PREFACE

I would like to thank the editorial team, authors and contributed reviewers on this volume 16 issue 1 of MOLEKUL. As our consent to report the regional focus, related to the environment or natural product Indonesia and nearby country, I would like to highlight some interesting research including natural extract of porang tuber (*Amorphophallus muelleri* Blume), *Amorphophallus oncophyllus*, *Chisocheton balansae* C.DC. and *Syzygium polyanthum*. There is also interesting bioplastic using the local modifier of cassava and tannia starch. Please read the detail of the results on the website of www.jmolekul.com with fully open access including the PDF full text.

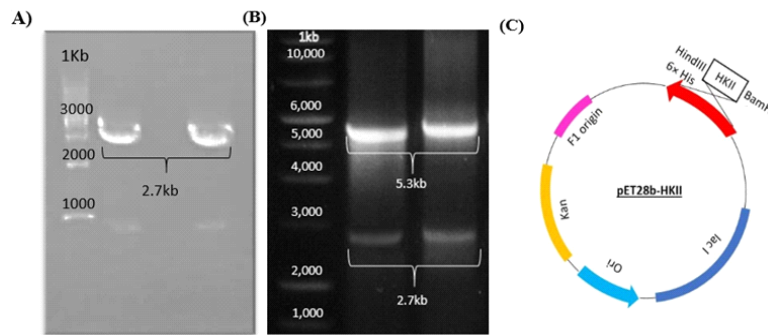
MOLEKUL is one the limited international reputable chemistry journal in Indonesia constantly maintenance the quality of published article with highly competitive submission (acceptance rate of 42% in 2020). Welcome to all author for future edition.

Editor-in-Chief

Amin Fatoni

TABLE OF CONTENT

Characterization of Glucomannan Extracted from Fresh Porang Tubers Using Ethanol Technical Grade Nurlela Nurlela, Nina Ariesta, Dwi Sutari Laksono, Edi Santosa, Tjahja Muhandri	1 – 8
Four Flavan-3-ol Compounds From The Stembark of <i>Chisocheton balansae</i> C.DC. (MELIACEAE) Unang Supratman, Mohamad Fajar, Supriatno Salam, Rani Maharani, Desi Harneti, Nur;lelasari Nurlelasari, Dewa Gede Katja, Agus Safari, Mohamad Nurul Azmi	9 – 15
Purification of Carbon-Based Magnetic Nanoparticles (CMNs) Produced by Submerged Arc Discharge in Liquid Ethanol/Ethylenediamine Oktaviana Dyah Mayasari, Dielsa Eka Kuswari, Witri Wahyu Lestari, Teguh Endah Saraswati	16 – 27
Equilibrium and Kinetic Study of Removal Copper(II) from Aqueous Solution Using Chicken Eggshells: Low Cost Sorbent Mohammad Jihad Madiabu, Joko Untung, Imas Solihat, Andi Muhammad Ichzan	28 – 37
Characterization of Antioxidant Compound from <i>Syzygium polyanthum</i> Leaves Fraction Using UHPLC-HRMS Muhammad Ana Syabana, Nancy Dewi Yuliana, Irmanida Batubara, Dedi Fardiaz	38 – 45
Physical, Thermal Stability, and Mechanical Characteristics of New Bioplastic Elastomer from Blends Cassava and Tannia Starches as Green Material Marcelinus Christwardana, I. Ismojo, Sidik Marsudi	46 – 56
Carboxymethyl Glucomannan from <i>Amorphophallus oncophyllus</i> as an Alternative Heavy Metal Removal from Wastewater: Adsorption of Cadmium and Zinc Hikmat Hikmat, Renta Resdiana, Aprilia Nur Tasfiyati	57 – 66
Isolation, Characterization and Application of Humin From Sumatran Peat Soils as Adsorbent for Naphtol Blue Black and Indigosol Blue Dyes Maya Rahmayanti, Indah Nurhikmah, Feni Larasati	67 – 74
The Influence of ZnCl₂ Activation on Macronutrient NPK Adsorption Simultaneously Using Coconut Shell Biochar for Soil Fertility Improvement Candra Purnawan, Christina Candra Dewi, Syafrudin syafrudin, Bimastyaji Surya Ramadan, Mochamad Arief Budihardjo, Agus Jatnika Effendi, Syarif Hidayat	75 – 81
Enhanced Expression and Purification Strategy for Recombinant Bacterially-Expressed Human Hexokinase II Fazia Adyani Ahmad Fuad, Suriyea Tanbin	82 – 91



Cover figure:

Colony PCR indicating the presence of HKII gene, double digestion with *Hind*III and *Bam*HI of pET28b-HKII construct to pET28b and HKII, and the map of pET28b-HKII recombinant plasmid. (see Fazia Adyani et al., pp 82 – 91)