PROGRAMME & ABSTRACT BOOK

MSAB 2018

THE 15TH SYMPOSIUM OF THE MALAYSIAN SOCIETY OF APPLIED BIOLOGY

Translating Applied Biology For Future Sustainability

29th June - 1st July 2018

HATTEN HOTEL, MELAKA

M.S.A.B

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			Byttnerioideae) In Malaysia
1535	O-PSA-04	Nurulhikma Md Isa	Analysis of The Ethylene Response Factors (Erfs) As Potential Substrates of the N-End Rule Pathway in Tomato
1550	O-PSA-05	Nurul Hidayah Samsulrizal	CRISPR/CAS9-mediated mutagenesis of pectate lyase (PL) locus in tomato fruit
1605	O-PSA-06	Tan Cheng Seng	Kinetic study of Nerol Dehydrogenase, a novel enzyme for Citral production
1620	O-PSA-07	Nur Syauqina Syasya Binti Mohd Yusoff	Anatomical study of selected *Orchidantha* species (Lowiaceae) from Malaysia: Petiole and midrib cross-section aspects
1635	O-PSA-08	Aimi Syazana bt Sedek	Leaf anatomical studies on selected species of genus Amomum in Sarawak

Time	PaperID	**Hatten 3**	**Medical & Health Sciences**
		Chairperson: Dr. Mohd Shukri Bin Baba (IIUM)	
1450	O-MHS-01	Mohd Shukri Bin Baba	*In-vivo* assessment of *Elettaria cardamomum* seeds as potential antiparasitic agent against *Trypanosoma evansi* in mice
1505	O-MHS-02	Shevin Rizal Feroz	Analysis of Fluorescence Quenching Data in Ligand–Protein Binding: A Critical View
1520	O-MHS-03	Mohd Aiman Bin Barudin	Analysis of phosphorylation sites of protein kinases in *Cryptosporidium*
1535	O-MHS-04	Mohammed Abdullah Jainul	Immufluoresence staining and mirna expression of hct8 and ht29 cell lines upon *Cryptosporidium* infection
1550	O-MHS-05	Wan Mastura Shaik Mohamed Mosasadeq	5-(3, 4-Dihydroxyphenyl)-3-hydroxy-1-(2-hydroxyphenyl) penta-2, 4-dien-1-one: an alternative to NSAIDS for pain management?
1605	O-MHS-06	Akma Azmiera Binti Akman	Structural changes and the differential expression of osteoprotegerin (OPG) And receptor activator of nuclear factor kB LIGAND (RANKL) in subchondral bone during the development of osteoarthritis
1620	O-MHS-07	Nadia Binti Hisamuddin	Of inflammation and a synthetic curcuminoid 5-(3, 4 - dihydroxy phenyl) – 3 - hydroxy-1- (2 - hydroxyphenyl) penta - 2, 4-dien-1-one (DHHPD)
1635	O-MHS-08	Rasyidah Ryta Ayumi Binti Mohammad	Is asiaticoside effective against pain?

MEDICAL & HEALTH SCIENCES

O-MHS-01

In-vivo ANTIMALARIAL ASSESSMENT OF *Allium satium* ON *Plasmodium berghei* NK65-INDUCED MICE

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Garlic or *Allium sativum* is widely applied as alternative medicine and in ethnopharmacological studies. This study was done to evaluate the antimalarial properties of aqueous extract of *A. sativum* against *P. berghei* NK65. The groups of male ICR mice were intraperitoneally (i.p) infected with 0.1 mL of 1 x 10^7 parasitized red blood cells before being orally given pre-, concurrent- and post-infection treatments with 0.2 mL of 100 mg/kg body weight (bw) of freeze-drying undergoes aqueous garlic extract. By using Giemsa stained blood smear and examined both under SEM and light microscopy, there was a positive correlation ($p \leq 0.05$, $n = 6$) for all assessed parameters; parasitemia density (%), mice body weight (g), survival time (day) and the ability to inhibit the parasite growth (%) between pre-infected treated mice with the other two groups. However, the value recorded was still lower compared with the mice treated with primaquine and chloroquine. Somehow, the results for biochemical tests were positively situated in the normal ranged level as well as no abnormalities found on the selected vital organs. This study significantly evidenced that garlic could be manipulated as a potential antimalarial alternative drug for the preservation and welfare of human beings.

O-MHS-02

ANALYSIS OF FLUORESCENCE QUENCHING DATA IN LIGAND–PROTEIN BINDING: A CRITICAL VIEW

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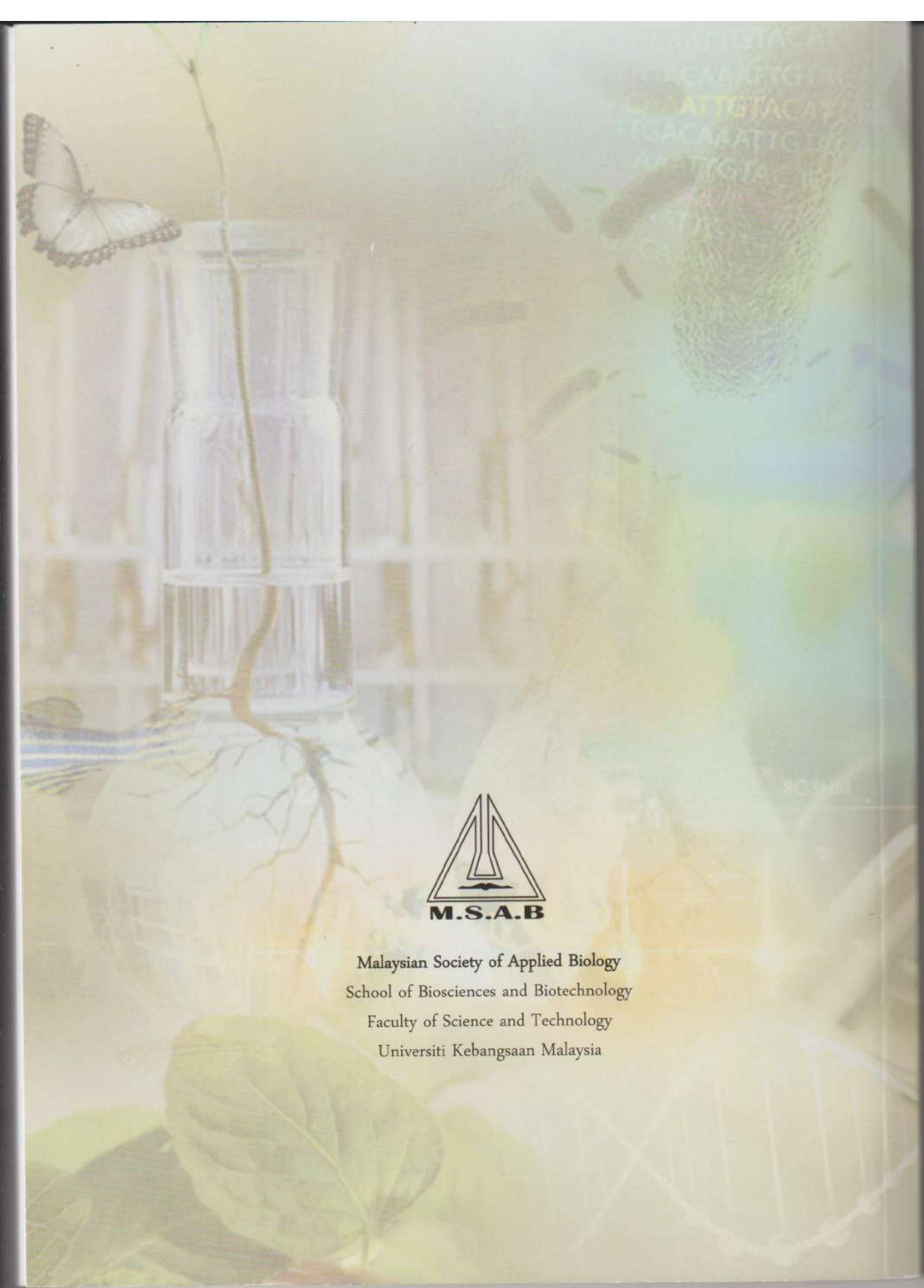
The past decade has seen an increase in the number of research papers on ligand binding to proteins based on fluorescence spectroscopy. In most cases, determination of the various binding parameters is made by analyzing the quenching of protein fluorescence induced by the ligand. However, many such articles, even those published in reputed journals, suffer from several mistakes with regard to analysis of fluorescence quenching data. Using the binding of phenylbutazone to human serum albumin as a model, we consider some of these mistakes and show how they affect the values of the calculated binding parameters. In particular, the failure to correct for the inner filter effect and the use of unsuitable equations



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