



## Contents

Malaysian Journal of Chemistry  
Volume 24(4), 2022

---

- The Effect of Nanofertilizer in Grain Corn Germination and Growth Rate** 1  
Nur Adlina Johari, Nur Izzah Zulaika Zul'idham, Nor'aishah Abu Shah and Sheikh Ahmad Izaddin Sheikh Mohd Ghazali\*
- Synthesis and Development of EMT-Type Zeolite-Mediated Silver Nanoparticles as Antibacterial and Antifungal Agent** 10  
Nur Farhanah Binti Mohd Amin, Phaik Ching Ang, Eng Poh Ng, Joo Shun Tan, Noor Arifah Binti Ahmad Che Hamat<sup>1</sup> and Pandian Bothi Raja\*
- Pentacyclic Triterpenoids Isolated from *Diospyros foxworthyi* Bakh. (Ebenaceae) with its Cytotoxic Activity Against HT-29 Human Colon Cancer Cell** 19  
Muhammad Solehin Abd Ghani, Nurhisyam Zakaria, Norhafiza Mohd Arshad, Ezatul Ezleen Kamarulzaman, Khalijah Awang, Marc Litaudon and Mohamad Nurul Azmi Mohamad Taib\*
- Cytotoxic Activity of Eburnane-type Indole Alkaloids Isolated from *Kopsia terengganensis* Against HT-29 Human Colon Cancer Cell** 26  
Wan Nur Huda Wan Hanafi, Ibrahim Bello, Nurhisyam Zakaria, Norhafiza Mohd Arshad, Pandian Bothi Raja, Mohd Hazwan Hussin, Khalijah Awang, Marc Litaudon and Mohamad Nurul Azmi Mohamad Taib\*
- Desulfurization Performance of Iron Glycerol Activated Carbon** 36  
Maryam Solehah Zulkefli, Nur Nasuha Mohd Ashri, Wan Nazwanie Wan Abdullah\*, Nurul Yani Rahim, Yong Shen Chua, Noorfatimah Yahaya, Norshahidatul Akmar Mohd Shohaimi
- Physicochemical Properties of Chitosan Modified ZnO QDs and its Feasibility for the Photocatalytic Degradation of Oxytetracycline Under Fluorescent Light Irradiation** 46  
Normawati Jasni, Anwar Iqbal\*, Noor Hana Hanif Abu Bakar and Ahmad Fadhli Jusoh

<b>Chemical Profiling and Antioxidant Properties of Leaf and Stem Extracts of <i>Christia vespertilionis</i></b>	<b>59</b>
Nurfirzana Liyana Abdul Jaafar, Soraya Shafawati Mohamad Tahier*, M Maulidiani, Faridah Abas, Vikneswari Perumal and Nurul Huda Abdul Wahab	
<b>Development of Salting-out Assisted Liquid-Liquid Extraction for the Determination of Orange I</b>	<b>68</b>
Siti Suraiya Samsudin and Mazidatulakmam Miskam*	
<b>A Novel Use of Imidazole-based Ionic Liquid as Supporting Electrolyte on the Electrogenative Process of Copper(II) Ions</b>	<b>75</b>
Nora Shahidah Shaharif, Syed Fariq Fathullah Syed Yaacob, Rabia Tasaduq Hussain, Norita Mohamed and Faiz Bukhari Mohd Suah*	
<b>Bioassay-guided Fractionation, LC/MS Analysis and <i>In Vitro</i> Cytotoxic Activity of <i>Eriocaulon cinereum</i> R. Br on T47D Breast Cancer Cells</b>	<b>82</b>
Arde Toga Nugraha, Sista Werdyani, Dian Nida Salsabila, Rollando, Mohamad Nurul Azmi Mohamad Taib and Arba Pramundita Ramadan*	
<b>Synthesis, Characterization and Larvicidal Activity of Nitrile-functionalized Dinuclear Silver(I)-<i>N</i>-heterocyclic Carbene Complexes</b>	<b>89</b>
Puvana D. Selvarajoo, Perumal, V., Silas W. Avicor and Mohd R. Razali <sup>‡</sup>	
<b>Deep Eutectic Solvent Based Dispersive Liquid-liquid Microextraction for the Determination of Azo Dyes in Beverages</b>	<b>99</b>
Nur Nabilah Abdul Rafar, Rania Edress Adam Mohammad, Nurul Yani Rahim, Noorfatimah Yahaya and Mazidatulakmam Miskam*	
<b>Alkaloids and Flavonoids Compositions of Traditional Medicinal Value Plants from Imbak Canyon Conservation Area (ICCA)</b>	<b>110</b>
Fatimah Salim*, Nor Hadiani Ismail, Nurunajah Ab. Ghani, Norrizah Jaafar Sidik, Amalina Mohd Tajuddin and Ahmad Kambali B. Khalil	
<b>Antidiabetic Activity of Wogonin Isolated from <i>Tetracera indica</i> Merr. Leaves Extract in Streptozotocin-Nicotinamide Induced Diabetic Rats</b>	<b>117</b>
Nabilah Zulkefli, Qamar Uddin Ahmed*, Hamidun Bunawan, Hamizah Shahirah Hamezah, Sharida Fakurazi, Siti Nor Zawani Ahmmad and Murni Nazira Sarian*	
<b>Efficient Technique for the Isolation of Oligostilbene from Polar Extract of <i>Dipterocarpus semivestitus</i></b>	<b>127</b>
Nurul Aina Asmadi, Juliana Yusoff and Nurhuda Manshoor*	
<b>Phytochemical Contents and Antioxidant Activity of Selected Brown Seaweeds (<i>Sargassum polycystum</i> and <i>Padina minor</i>) of Sabah, Malaysia</b>	<b>135</b>
Siti Zaleha Abd Tahar, Mohd Marzuk Haikal Marbah, Noumie Surugau*, How Siew Eng and Lum Mok Sam	

<b>Immunomodulatory Effects of Combined Ethanolic Extracts of <i>Begonia medicinalis</i> and <i>Moringa oleifera</i> in Wistar Rats Infected with <i>Staphylococcus aureus</i></b>	<b>144</b>
Muhammad Sulaiman Zubair*, Armini Syamsidi, Evi Sulastri, David Pakaya, Nur Asita, Levana Velincia Tanriono and Jesica Carine Poluan	
<b>Shedding Light on <i>Piper</i>'s Identity via Computational Mass Spectrometry</b>	<b>150</b>
Muhamad Faris Osman*, Siti Munirah Mohd Faudzi, Shamsul Khamis, Shahrul Razid Sarbini and Khozirah Shaari	
<b>Metabolites Annotation of Dichloromethane Extract of <i>Kibatalia maingayi</i> Woods using Orbitrap High-Resolution Mass Spectrometry</b>	<b>161</b>
Hidayatul Atiqah Abd Karim, Nurulfazlina Edayah Rasol, Nor Hadiani Ismail, Christophe Wiart and Che Puteh Osman*	
<b>Mini review on Cyclic Polyketides from <i>Beilschmiedia</i> and <i>Endiandra</i> Species (Lauraceae): Chemical Structures, Biological Activities and Biosynthesis</b>	<b>173</b>
Nur Amirah Saad, Mohamad Nurul Azmi* and Pinus Jumaryatno	
<b><i>In Silico</i> Molecular Docking on Chemical Compounds from Mas Cotek (<i>Ficus deltoidea</i>) as Phosphoenolpyruvate Carboxykinase (Pepck) Inhibitor against Type-II Diabetes</b>	<b>190</b>
Nor Akmalayati Sulong*, Lam Kok Wai, Vannajan Sanghiran Lee, Nur Zahirah Mohamad Zin and Nurul Hidayah Salleh	
<b>Mini Review on Botany, Traditional Uses, Phytochemistry and Biological Activities of <i>Piper amalago</i> (Piperaceae)</b>	<b>201</b>
Wan Mohd Nuzul Hakimi Wan Salleh* and Nurunajah Ab Ghani	
<b>Chemical Components and Anticholinesterase Activity of <i>Piper ornatum</i> N.E.Br Volatile Oil</b>	<b>209</b>
Nik Nur Asyiqin Nik Mohammed Ainul Azman, Wan Mohd Nuzul Hakimi Wan Salleh* and Nurunajah Ab Ghani	
<b>Superabsorbent Interpenetrating Polymer Networks for Adsorption of Organic Dyes from Aqueous Solutions</b>	<b>215</b>
Hikmat Hidayat Muhammad Rapaiee, Cindy Soo Yun Tan*, Dzureen Julaihi, Heather Lambi Apong, Siong Fong Sim, Fui Kiew Liew, Yanti Yana Halid, Chel-Ken Chiam and Leslie Thian Lung Than	