

## CONTENTS

## Original Articles

- 217 - 222 A novel *AUTS2* variant in a patient with global developmental delay and intellectual disability  
*Mohammad A. Shboul, Reem F. Darweesh, Mohammad El-Khateeb, Rajaa Fathallah*
- 223 - 233 Examining the Diversity and Abundance of Zooplankton across Different Gateways in the South-western Estuary of Bangladesh  
*Bhaskar Chandra Majumdar, Md. Ariful Haque, Ilias Ebne Kabir, Md. Foysul Hossain, Md. Nur Amin Mukul, Aslam Hossain Sheikh, Md. Neamul Hasan Shovon and A.S.M. Sadequr Rahman Bhuyain*
- 235 - 246 Overexpression of 3-hydroxy-3-methylglutaryl coenzyme-A reductase-1 (*HMGR1*) enhanced andrographolide accumulation in *Andrographis paniculata* (Burm.F.)  
*Erly Marwani, Juane Plantika Menra, Amanda Nadhira, Tati Kristianti, Karlina Febrianti, Fenny Martha Dwivany*
- 247 - 257 The Role of Artocarpin In Inhibiting Wnt/B-Catenin Signalling Pathway Through Its Binding to Tcf-4/B-Catenin Complex in H460-Derived Lung Cancer Stem Cells.  
*Nik Nurul Najihah Nik Mat Daud, Noor Azlina Abu Bakar, Abdi Wira Septama, Badrul Hisham Yahaya, Norashikin Zakaria, Noor Zafirah Ismail, and Hasni Arsad*
- 259 - 267 Copper Nanoparticles and Culture Media Elicit Biomass, Secondary Metabolites, and Antioxidant Activity in the Cell Suspension Culture of *Momordica charantia* L.  
*Nisreen A. Jdayea and Shamil I. Neamah*
- 269 - 276 The Morphological and Histological Developmental Study of the Gastrointestinal Tract of Peres Fish (*Osteochilus kappenii*) Larvae  
*Dedi Fazriansyah Putra, Fathia Salsabila, Irma Dewiyanti, Agung Setia Batubara, Muhammad Nasir*
- 277 - 285 Infectious Parasites in Coral Reef Fish and Their Potential Use for Habitat Quality Assessment in Jordan's Gulf of Aqaba, Red Sea  
*Mohammad Al-Zibdah, Mohammad Wahsha, Raid Al-Jawasreh, Marouf Khalaf*
- 287 - 291 Exploring the potential of *Ulva lactuca* from the Gulf of Aqaba for Micro-scale Biodiesel Production: Designing a Small-scale Photo-bioreactor  
*Walid Al-Zyoud, Salma Hamzeh, Dana Masri, Munib Saket, Jeanine Abdel Qader, Raghda Al-Qaraghuli and Mohammad Wahsha*
- 293 - 299 An Insight on Potential Role of Glucomannan, Mannan, and Flavonoids in Porang Tubers (*Amorphophallus muelleri* Blume) as Anti-Diabetic Through the Alpha-amylase Inhibition  
*Dwi Gusmalawati, Rodiyati Azrianingsih, Muhamad Agus Wibowo, Yuli Arif Tribudi, Diah Wulandari Rousdy, Didik Wahyudi, Ayu Tri Agustin, Nashi Widodo*
- 301 - 306 Investigation of Quorum Sensing, Biofilm Production, and Detection of Virulence-associated Genes Among Clinical Isolates of *Acinetobacter baumannii*  
*Sayran S. Qader and Aryan R. Ganjo*
- 307 - 313 Assessing the Impact of Air Pollution on Lichen (*Dirinaria picta* (sw.) Schaer: Morphological Characteristics, Magnetic Grain Analysis, and Elemental Composition  
*Taufik Taufikurahman, Rina Ratnasih Irwanto, and Dora Erawati Saragih*
- 315 - 322 Evaluation of Bis-biphenyl Salicylaldehyde Schiff Base Derivatives for Alpha-Glucosidase Inhibition: Anticancerous Activity and Molecular Modelling Studies  
*Taher S. Ababneh, Taghreed M. Jazazi, Mazhar Al Zoubi, Tareq M. Alshboul, Walhan Alshaer, Abd Al-Aziz A. Abu-Saleh, Mansour H. Almatarneh, Mohammed-Jamal A. Shammout, Iyad Y. Natsheh, Majd M. Alsaleh*
- 323 - 333 Community Structure of the Family (Scorpaenidae: Scorpionfishes) in Relation to Habitat and Depth Along the Jordanian Coast of the Gulf of Aqaba, Red Sea  
*Maroof Khalaf, Thaqef Al-Khasawneh, Mohammad Wahsha, Wissam Hayek, Mohammad Al-Zibdah, and Tariq Al-Najjar*

- 335 - 345 Diversity of Bioactive Metabolites Produced by Thermophilic *Bacillus* Strains Isolated from Jordanian Hot Springs  
*Khalid Fandi, Muhanad Massadeh and Abdelrahman Tawaha*
- 347 – 353 Coccolithophore Assemblages from Gulf of Aqaba Sediments and their Response to Climate Change  
*Mohammad Alqudah , Saber Al-Rousan, Albeshr Hussein, Wesam Al khateeb*
- 355 – 361 Carbapenem-resistant *Acinetobacter baumannii* from Jordan: Complicated carbapenemase combinations  
*Esra'a M. AlFaris, Nehaya Al-Karablieh, Nidal A. Odat, Rayane Rafei*
- 363 – 374 *Gymnascella thermotolerans*-GTE-21, an Endophytic Fungus in *Euphorbia geniculata* as a Versatile Producer of Bioactive Metabolites  
*Soad A. El-Zayat, Noha M. Kamel, Fatma F. Abdel-Motaal , Magdi A. El-Sayed, Mostafa Abdelrahman, Mohamed Abou-Ellail, Abou El-Hamd H. Mohamed, Doaa B. Darwish*
- 375 – 388 Valuation and Mapping of Marine Ecosystem Services in the Jordanian Gulf of Aqaba, Red Sea  
*Wissam Y Hayek, Tariq H Al-Najjar, Riyad S Manasrah, Fuad A Al-Horani and Mohammad A Wahsha*