

## CONTENTS

## Original Articles

- 1 - 6 Development of biodegradable poly (vinyl alcohol) /chitosan cross linked membranes for antibacterial wound dressing applications  
*Mohamed E. Hassan, Hassan A. Shehata, Alaa Fahmy, Mohand Badr, Tamer M. Tamer, Ahmed M. Omer*
- 7 - 9 First record of *Lyphira heterograna* (Ortmann, 1892) from the North West of the Arabian Gulf  
*Tariq H.Y. Al-Maliky I, and Anwar M.J. Al-Maliky*
- 11 - 15 Morphology, Histology and Serotonin Immunoreactivity on Salivary Glands of Stick Insect, *Phobaeticus serratipes* (Phasmida: Phasmatidae)  
*Wan Nurul 'Ain, W.M.N and Nurul Wahida Othman*
- 17 - 21 Chemical Composition and Anti-inflammatory Activity of the Essential Oil of *Echium humile* (Boraginaceae) in vivo from South-West of Algeria  
*Hamid Benlakhdar, Nasser Belboukhari, Khaled Sekkoum, Abdelkrim Cheriti, Hatice Banu Keskinkaya, Salah Akkal*
- 23 - 29 Comparison of different solvents for Antioxidant and Antibiogram Pattern of *Bergenia ciliata* rhizome Extract from Shimla district of Himachal Pradesh  
*Kanika Dulta , Kiran Thakur , Amanpreet Kaur Virk , Arti Thakur , Parveen Chauhana , Vinod Kumar and P.K. Chauhan*
- 31 - 39 The one-pot synthesis of some bioactive pyranopyrazoles and evaluation of their protective behavior against extracellular H<sub>2</sub>O<sub>2</sub> and SNP in *T. Thermophila*.  
*Boutaina Addoum, Bouchra El khalfi, Reda Derdak, Souraya Sakoui, Abdelhakim Elmakssoudi, and Abdelaziz Soukri*
- 41 - 49 Antimicrobial Activities of Natural Volatiles Organic Compounds Extracted from *Dittrichia viscosa* (L.) by Hydrodistillation  
*Nafila Zouaghi , Nour El Houda Bensiradj , Carlos Cavaleiro , Boubekeur Nadjemi and Ahmad Telfah*
- 51 – 64 Identification and characterization of antimicrobial peptide genes in *Clarias gariepinus* and *Chelon ramada*  
*Karima F Mahrouss, Dalia M Mabrouk, Mohamad M Aboelenin, Heba AM Abd El kader and Mohamed S Hassanane*
- 65 – 74 Genetic relationship of some *Pisum sativum* subspecies using different molecular markers  
*Samira A. Osman and Hoda B. M. Ali*
- 75 – 82 *In Silico* Screening for Inhibitors Targeting 4-diphosphocytidyl-2-C-methyl-D-erythritol Kinase in *Salmonella typhimurium*  
*Mohammed Zaghloul Al-Khayyat*
- 83 – 90 Nutritional evaluation, Phytochemicals, Antioxidant and Antibacterial activity of *Stellaria monosperma* Buch.-Ham. Ex D. Don and *Silene vulgaris* (Moench) Garcke: wild edible plants of Western Himalayas  
*Arti Thakur, Somvir Singh, Sunil Puri*
- 91 – 95 Assessment of genetic variability among Jordanian tomato landrace using inter-simple sequence repeats markers  
*Mohammad H. Brake , Moath A. Al-Ghraibeh, Hassan R. Hamasha, Nuha S. Al Sakarneh, Ibrahim A. Alshomali, Hussein M. Migdadi, Muien M. Qaryouti, Nizar J. Haddad*
- 97 – 104 *In vitro* antioxidant and inhibitory potential of leaf extracts of *Varthemia sericea* against key enzymes linked to type 2 diabetes  
*Abdelouahab Dehimat Ines Azizi Véronique Baraggan-Montero Bachra Khettal*
- 105 - 110 Protective effect of *Ferula hermonis* root extract against cycram-induced DNA, biochemical and testicular damage in rats  
*Shenouda M. Girgis, Amira Abd ElRaouf and Halima S. Abdou*

- 111 – 119 Genetic diversity of seagrass *Thalassia hemprichii* and *Enhalus acoroides* in coastal area of East Java  
*Hery Purnobasuki, Sucipto Hariyanto and Putut Rakhmad Purnama*
- 121 – 128 Effectivity of Curcumin and Thyroxine Supplementation for Improving Liver Functions to Support Reproduction of African Catfish (*Clarias gariepinus*)  
*Livana D Rawung, Damiana R Ekastuti , Ade Sunarma, Muhammad Z Junior, Min Rahminiwati, Wasmen Manalu*
- 129 – 135 Life History Traits of the Gangetic scissortail rasbora, *Rasbora rasbora* (Hamilton, 1822) in the Payra River, Southern Bangladesh  
*Newton Saha , Mohaiminul Haque Rakib, Md. Mahamudul Hasan Mredul, Md. Arifur Rahman and Ferdous Ahmed*
- 137 – 146 Vegetative Morphological Variations within Some Egyptian *Amaranthus* L. Species  
*Wafaa K. Taia, Azza A. Shehata, Manaser M. Ibrahim and Islam M. El-Shamy*
- 147 – 155 Rapid osmotic adjustment in leaf elongation zone during polyethylene glycol application: Evaluation of the imbalance between assimilation and utilization of carbohydrates  
*Mohamed Mahdid , Abdelkrim Kameli and Thierry Simonneau*
- 157 - 161 Utilization of Agro-industrial wastes as carbon source in solid-state fermentation processes for the production of value-added byproducts  
*Mahmoud W. Sadik, Moustafa M. Zohair , Ahmed A. El-Beih, Eman R. Hamed and Mohamed Z. Sedik*
- 163 - 171 Phytochemical study, nutritional evaluation and *in vitro* antiobesity potential of fruits pericarp and seeds of *Livistona carinensis* and *Thrinax parviflora*  
*Mohamed S. Hifnawy a, Marwa Yousry Issa, Hesham El-Seedib, Amr M. K. Mahrousa, Rehab M. S. Ashoura*
- 173 - 177 New Approach for Biocontrolling Root-Knot Nematode, *Meloidogyne incognita* on Cowpea by Commercial Fresh Oyster Mushroom (*Pleurotus ostreatus*)  
*Mahmoud M.A.Youssef, Wafaa M.A. El-Nagdi*
- 179 - 186 Influence of Static Magnetic Field Seed Treatments on the Morphological and the Biochemical Changes in Lentil Seedlings (*Lens Culinaris* Medik.)  
*Amal M. Harb , Bar'a M. Alnawateer and Ibrahim Abu-Aljarayesh*
- 187 - 189 Prevalence of *Helicobacter pylori* and Its seasonality in Ilam, Iran  
*Saeed Hemati , Arash Rahmatian , Ghasem Talee, Elham Bastani , Aryoobarzan Rahmatian , Morteza Shams , Zahra Mahdavi*
- 191 - 197 Antibacterial and Anti virulence factors of Purified Dextran from *Lactobacillus gasseri* against *Pseudomonas aeruginosa*  
*Jehan Abdul Sattar Salman and Ali Junma Kareem*