

المجلة الأردنية للعلوم الحياتية  
**Jordan Journal of Biological Sciences (JJBS)**

<http://jjbs.hu.edu.jo>

**Jordan Journal of Biological Sciences (JJBS)** (ISSN: 1995–6673 (Print); 2307-7166 (Online)):

An International Peer- Reviewed Open Access Research Journal financed by the Scientific Research and Innovation Support Fund, Ministry of Higher Education and Scientific Research, Jordan and published quarterly by the Deanship of Scientific Research , The Hashemite University, Jordan.

**Editor-in-Chief**

**Professor Abu-Elteen, Khaled H.**  
Medical Mycology ,  
The Hashemite University

**Assistant Editor**

**Dr. Tahtamouni, Lubna H.**  
Developmental Biology,  
The Hashemite University

**Editorial Board (Arranged alphabetically)**

**Professor Amr, Zuhair S.**  
Animal Ecology and Biodiversity  
Jordan University of Science and Technology

**Professor Elkarmi, Ali Z.**  
Bioengineering  
The Hashemite University

**Professor Hunaiti, Abdulrahim A.**  
Biochemistry  
The University of Jordan

**Professor Khleifat, Khaled M.**  
Microbiology and Biotechnology  
Mutah University

**Professor Lahham, Jamil N.**  
Plant Taxonomy  
Yarmouk University

**Professor Malkawi, Hanan I.**  
Microbiology and Molecular Biology  
Yarmouk University

**Associate Editorial Board**

**Professor Al-Hindi, Adnan I.**  
Parasitology  
The Islamic University of Gaza, Faculty of Health  
Sciences, Palestine

**Dr Gammoh, Noor**  
Tumor Virology  
Cancer Research UK Edinburgh Centre, University of  
Edinburgh, U.K.

**Professor Kasperek, Max**  
Natural Sciences  
Editor-in-Chief, Journal Zoology in the Middle East,  
Germany

**Professor Krystufek, Boris**  
Conservation Biology  
Slovenian Museum of Natural History,  
Slovenia

**Dr Rabei, Sami H.**  
Plant Ecology and Taxonomy  
Botany and Microbiology Department,  
Faculty of Science, Damietta University, Egypt

**Professor Simerly, Calvin R.**  
Reproductive Biology  
Department of Obstetrics/Gynecology and  
Reproductive Sciences, University of  
Pittsburgh, USA

**Editorial Board Support Team**

**Language Editor**  
**Dr. Hala Shureteh**

**Publishing Layout**  
**Eng.Mohannad Oqdeh**

**Submission Address**

**Professor Abu-Elteen, Khaled H**  
The Hashemite University  
P.O. Box 330127, Zarqa, 13115, Jordan  
Phone: +962-5-3903333 ext. 4357  
E-Mail: [jjbs@hu.edu.jo](mailto:jjbs@hu.edu.jo)