Current Approaches in Biology

Editors

Dr. Ayşenur KAYABAŞ Assoc. Prof. Betül YILMAZ ÖZTÜRK

© Copyright 2020

Printing, broadcasting and sales rights of this book are reserved to Akademisyen Publishing House Inc. All or parts of this book may not be reproduced, printed or distributed by any means mechanical, electronic, photocopying, magnetic paper and/or other methods without prior written permission of the publisher. Tables, figures and graphics cannot be used for commercial purposes without permission. This book is sold with banderol of Republic of Turkey Ministry of Culture.

ISBN

978-625-7795-33-3

Book Title

Current Approaches in Biology

Editors

Dr. Ayşenur KAYABAŞ Assoc. Prof. Betül YILMAZ ÖZTÜRK

Publishing Coordinator

Yasin Dilmen

Page and Cover Design

Typesetting and Cover Design by Akademisyen

Publisher Certificate Number

47518

Printing and Binding

Vadi Printingpress

Bisac Code

MED52000

DOI

10.37609/akya.1092

GENERAL DISTRIBUTION Akademisyen Kitabevi A.Ş.

Halk Sokak 5 / A Yenişehir / Ankara Tel: 0312 431 16 33 siparis@akademisyen.com

www.akademisyen.com

PREFACE

Based in Ankara in Turkey, the independent academic publisher, Akademisyen Pub¬lishing House, has been publishing books for almost 30 years. As the directors of Akade¬misyen Publishing House, we are proud to publish around 1500 books across disciplines so far, especially in Health Sciences. We also publish books in Social Sciences, Educational Sciences, Physical Sciences, and also books on cultural and artistic topics.

Akademisyen Publishing House has recently commenced the process of publishing books in the international arena with the "Scientific Research Book" series in Turkish and English. The publication process of the books, which is expected to take place in March and September every year, will continue with thematic subtitles across disciplines

The books, which are considered as permanent documents of scientific and intellectual studies, are the witnesses of hundreds of years as an information recording platform. As Akademisyen Publishing House, we are strongly committed to working with a profes¬sional team. We understand the expectations of the authors, and we tailor our publishing services to meet their needs. We promise each author for the widest distribution of the books that we publish.

We thank all of the authors with whom we collaborated to publish their books across disciplines.

Akademisyen Publishing House Inc.

Contents

Chapter 1	As an Extreme Habitat for Plants: Gypsum Soils
Chapter 2	As an Extreme Habitat for Plants: Serpentine Soils
Chapter 3	DNA Barcoding Studies in Plants
Chapter 4	Usage of Plants to Provide Inclusive Design in Urban Areas51 Pelin ŞAHİN KÖRMEÇLI
Chapter 5	Genetic and Ecological Adaptation Mechanisms of Tardigrades 65 Duygu BERDİ Ahmet ALTINDAĞ
Chapter 6	Antimicrobial Resistance Problem: Target and Resistance Mechanisms
Chapter 7	Green Synthesis of Metallic Nanoparticles and It's Biomedical Applications
Chapter 8	Gene Sequencing Strategies
Chapter 9	Phylogenetic Analysis: A Brief Overview
Chapter 10	A New Model Organism for Regeneration, Spiny Mouse (Genus: Acomys)

Contents

Chapter 11 The Place of Opiliones in Habitat	143
İlkay ÇORAK ÖCAL	
Nazife Yiğit KAYHAN	
Chapter 12 The Short Notes on Biology of Solifuges and Taxonom Approaches to Solifuges of Turkey (Solifugae, Arachni	
Melek ERDEK	

AUTHORS

Dr. Ayşenur KAYABAŞ

Çankırı karatekin University, Faculty of Science, Biology Department, Çankırı. ORCID iD: 0000-0003-3555-4399

Dr. Beste Gizem ÖZBEY

Ankara University Faculty of Science, Biology Department, Ankara.

ORCID iD: 0000-0002-9777-6598

Dr. Derviş ÖZTÜRK

Department of Plant and Animal Production, Mahmudiye Equine Vocational School, Eskişehir Osmangazi University, Eskişehir, Turkey.

ORCID iD: 0000-0001-7189-7407

Dr. Pelin ŞAHİN KÖRMEÇLİ

Department of Landscape Architecture, Faculty of Forestry, Çankırı Karatekin University, Çankırı.

ORCID iD: 0000-0003-4772-8202

Research Asistant Duygu BERDİ

Ankara University, Faculty of Science, Department of Biology.

ORCID iD: 0000-0002-1461-3639

Prof. Dr. Ahmet ALTINDAĞ

Ankara University, Faculty of Science, Department of Biology.

ORCID iD: 0000-0002-9900-5914

Prof. Dr. İlknur DAĞ

Eskişehir Osmangazi University (ESOGU), Central Research Laboratory Application and Research Center (ARUM); Vocational Health Services High School, ORCID iD: 0000-0002-7352-8653

Assoc. Prof. Betül YILMAZ ÖZTÜRK

Eskişehir Osmangazi University, Central Research Laboratory Application and Research Center, Eskişehir/Turkey.

ORCID iD: 0000-0002-1817-8240

Asst. Prof. PhD. Filiz SARIKAYA PEKACAR1

Department of Biology, Çankırı Karatekin University,

ORCID iD: 0000-0001-9684-9284

Authors

Dr. Kurtuluş ÖZGİŞİ

Eskisehir Osmangazi University, Faculty of Science and Letters, Department of Biology, Eskisehir, Turkey.

ORCID iD: 0000-0002-7344-6666

Dr. Hatice MUTLU EYİSON

Ankara University Faculty of Science, Biology Department, Ankara ORCID iD: 0000-0002-4637-5268

Assist. Prof. Dr. İlkay ÇORAK ÖCAL

Department of Biology, Faculty of Science, University of Karatekin, Çankırı 18200, Türkiye

ORCID iD: 0000-0003-1479-2697

Prof. Dr. Nazife YİĞİT KAYHAN

Department of Biology, Faculty of Science and Arts, University of Kırıkkale, Kırıkkale 71450, Türkiye

ORCID iD: 0000-0002-8731-3362

Assist. Prof. Dr. Melek ERDEK

Medical Services and Techniques Department, Vocational School of Health Services, Hakkari University

ORCID iD: 0000-0003-1060-4265