

**THE USE OF ARTHROPODS  
AS TEST OBJECTS  
FOR THE DEVELOPMENT  
OF NEW BIOTECHNOLOGIES**

**Monograph**



IZDEVNIECĪBA  
**BALTIJA**  
PUBLISHING

2022

UDC 565.7:606:551.583  
T44

DOI: 10.30525/978-9934-26-267-8

**Authors:**

K. Holoborodko, O. Seliutina, I. Ivanko, S. Sytnyk, V. Lovynska,  
O. Pakhomov, L. Faly, O. Boyko, V. Komlyk, O. Tykhanova, T. Kolombar

**Reviewer:**

Prof. **Olga Khunah** (Oles Honchar Dnipro National University)  
Prof. **Yurii Kulbaschko** (Oles Honchar Dnipro National University)

*Published by the decision of the Scientific Council  
of Dnipro State Agrarian and Economic University  
(Minutes No. 3 dated 01.12.2022)*

**T44 The use of arthropods as test objects for the development  
of new biotechnologies.** Monograph. Riga, Latvia : “Baltija  
Publishing”, 2022. 160 p.

ISBN 978-9934-26-267-8

The monograph studies the matters of the use of arthropods and mites as objects for the development of new biological technologies. The application of biosensor technologies in assessing the influence of miner caterpillars (Lepidoptera: Gracillariidae) on the process of photosynthesis in woody plants was demonstrated. The results of using insects as test objects (Diptera, Chironomidae) for studying the impact of feed additives on the environment were presented. The results of the development of an environmentally safe and cost-effective alternative to agricultural products fumigation with pesticides were shown.

**UDC 565.7:606:551.583**

ISBN 978-9934-26-267-8

© K. Holoborodko, O. Seliutina, I. Ivanko,  
S. Sytnyk, V. Lovynska, O. Pakhomov, L. Faly,  
O. Boyko, V. Komlyk, O. Tykhanova, T. Kolombar, 2022