Special Issue

Artificial Intelligence (AI) and Insect Pests Management: Securing Food Security, Human Health, and Natural Resources

Message from the Guest Editor

In recent years, artificial intelligence (AI) development to support integrated pest management is gaining significant attention for pest identification, detection, monitoring, and management of invasive and established pests. AI technology has the potential to revolutionize food production systems, human health, and natural resources by improving the speed and accuracy of insect pests' surveillance, detection, and management. AI is being incorporated into various IPM programs in agriculture, forests, and urban settings around the world. This Special Issue will include original research articles and reviews by leading research entomologists, plant pathologists, weed control specialists, and associated experts. Papers will focus on designing, developing, improving, and implementing AI-based technologies in sustaining food security, human health, and natural resources. Additionally, articles that outline the integration of effective IPM options for a given pest species using AI under climate change patterns in food crops, forestry, and urban areas are particularly welcome.

Guest Editor

Dr. Muhammad Haseeb
Center for Biological Control, College of Agriculture and Food Sciences, Florida A&M University, Tallahassee, FL 32307, USA

Deadline for manuscript submissions

closed (31 October 2025)

Insects

an Open Access Journal by MDPI

Impact Factor 2.9
CiteScore 5.6
Indexed in PubMed

mdpi.com/si/189687

Insects
Editorial Office
MDPI, Grosspeteranlage 5
4052 Basel, Switzerland
Tel: +41 61 683 77 34
insects@mdpi.com

mdpi.com/journal/insects

Insects

an Open Access Journal by MDPI

Impact Factor 2.9
CiteScore 5.6
Indexed in PubMed

mdpi.com/journal/insects

About the Journal

Message from the Editor-in-Chief

Arthropods are a diverse and abundant group of animals that are important to a variety of research dictates. For example, hexapods act as bio-indicators of ecosystem function and pest status and serve as model systems for questions concerning physiology, embryology, genetics, and social interaction. The editorial board and staff at Insects is committed to providing contributors an open access forum to showcase objective and innovative research as well as succinct review articles. Our journal is dedicated to providing timely and thorough review of qualified submissions and we welcome you to submit a contribution.

Editor-in-Chief

Prof. Dr. Brian T. Forschler
Department of Entomology, University of Georgia, 413 Biological Sciences Building, Athens, GA 30602-2603, USA

Author Benefits

High Visibility:

indexed within Scopus, SCIE (Web of Science), PubMed, PMC, GEOBASE, PubAg, and other databases.

Journal Rank:

JCR - Q1 (Entomology) / CiteScore - Q1 (Insect Science)

Rapid Publication:

manuscripts are peer-reviewed and a first decision is provided to authors approximately 18.9 days after submission; acceptance to publication is undertaken in 2.6 days (median values for papers published in this journal in the second half of 2025).