

WE TRANSFER KNOWLEDGE

for economic & research gains in
insect farming & beekeeping



Communication and dissemination report

Georgia Baliota

Science Communication Coordinator

Cost website

cost.eu/actions/CA22140/

CA22140 - Improved Knowledge Transfer for Sustainable Insect Breeding (Insect-IMP)

[Downloads](#)

[Home](#) > [Browse Actions](#) > [Improved Knowledge Transfer for Sustainable Insect Breeding \(Insect-IMP\)](#)

Description

Management Committee


Main Contacts and Leadership

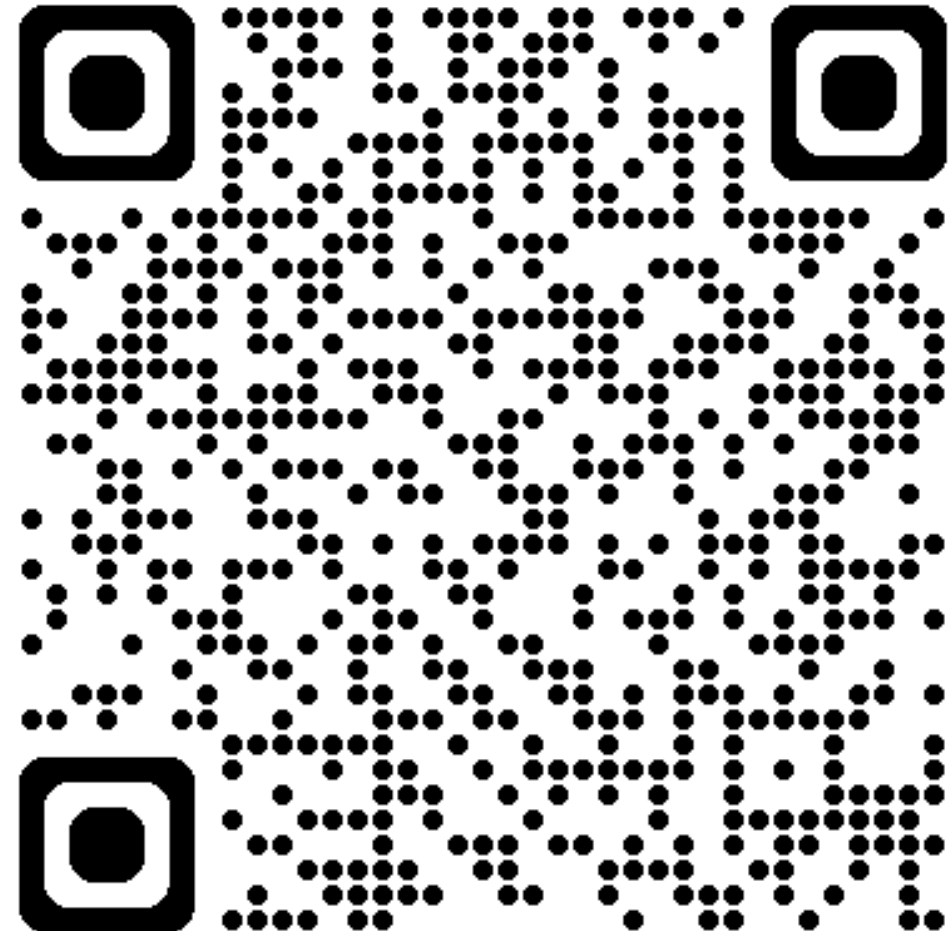
Working Groups and Membership

Description

The global population is expected to increase to 10 billion by 2050, bringing with it an increased demand for food and specifically protein. Insect farming can play a major role in ensuring global food security, reducing the environmental footprint of food production, and increasing sustainability of modern farming systems. However, it is currently relying on insect populations whose genetics are poorly understood and who are not necessarily bred- or even fit-for-purpose. Understanding the genetics of large livestock species has made a big difference to the advancement of farming systems, but little effort and research has been put into developing structured

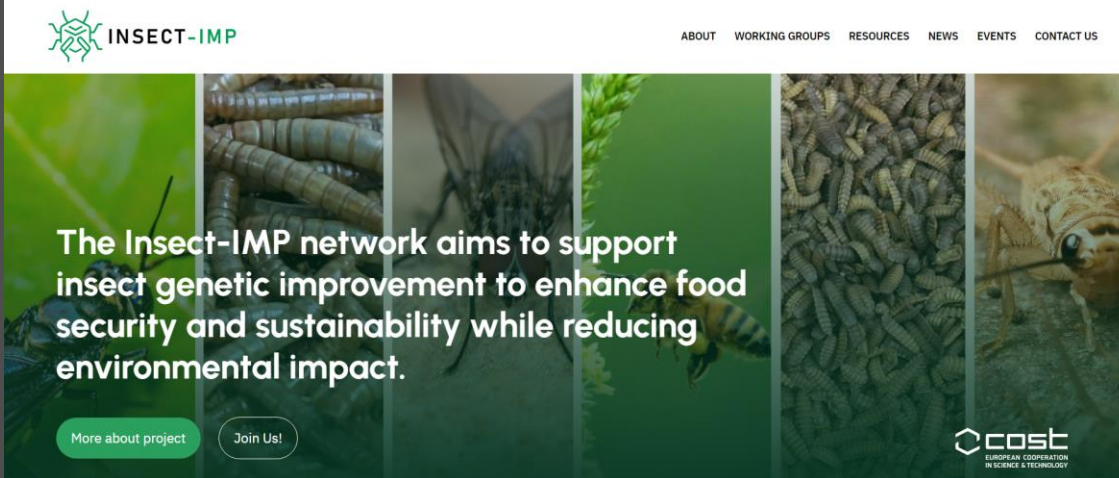
Action Details

-  MoU - 050/23
-  CSO Approval date - 12/05/2023
-  Start date - 21/09/2023
-  End date - 20/09/2027

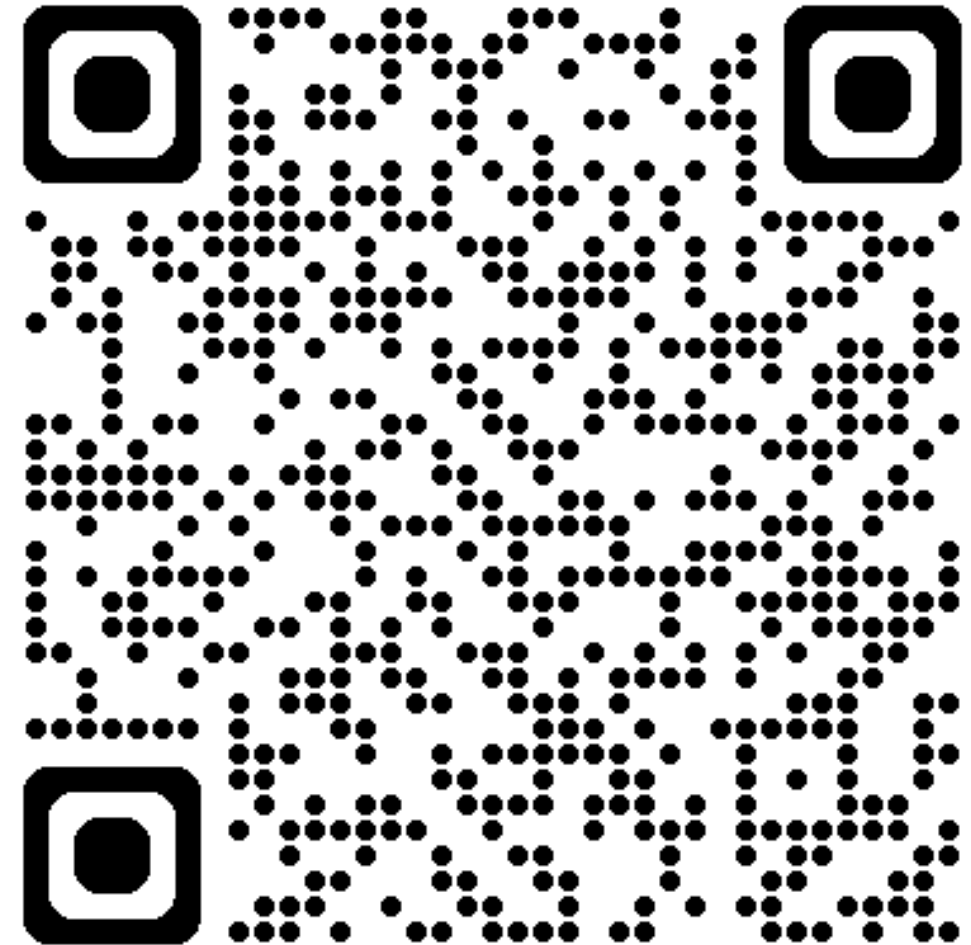


Action website

cost-insectimp.eu



The screenshot shows the top section of the INSECT-IMP website. At the top left is the INSECT-IMP logo, which consists of a stylized insect icon and the text "INSECT-IMP". To the right of the logo is a navigation menu with the following items: ABOUT, WORKING GROUPS, RESOURCES, NEWS, EVENTS, and CONTACT US. Below the navigation menu is a large banner image featuring various insects: a fly, a caterpillar, a wasp, a bee, and a grasshopper. Overlaid on the left side of the banner is the text: "The Insect-IMP network aims to support insect genetic improvement to enhance food security and sustainability while reducing environmental impact." Below this text are two buttons: "More about project" and "Join Us!". In the bottom right corner of the banner is the COST logo, which includes the text "cost" and "EUROPEAN COOPERATION IN SCIENCE & TECHNOLOGY".



X page

x.com/CA22140

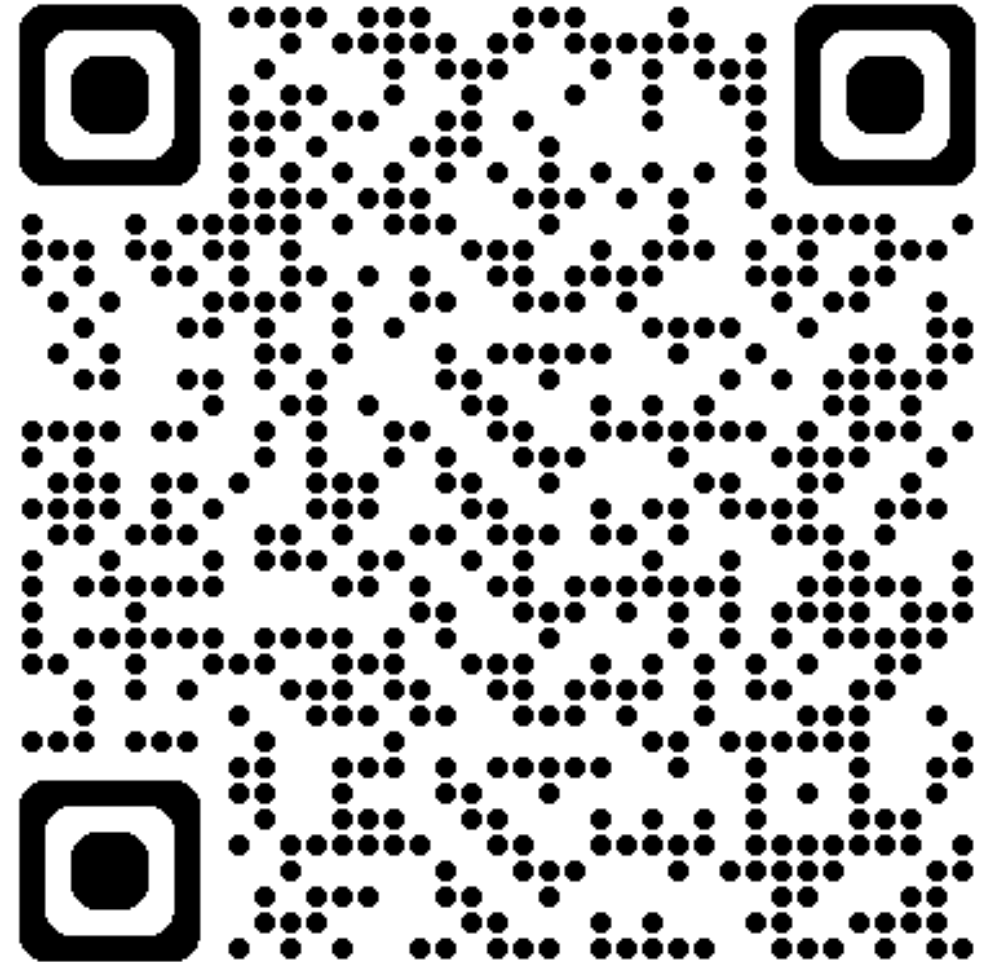
Insect - IMP
@CA22140

Improved knowledge transfer for sustainable insect breeding (COST Action CA22140)

Science & Technology cost-insectimp.eu Joined December 2023

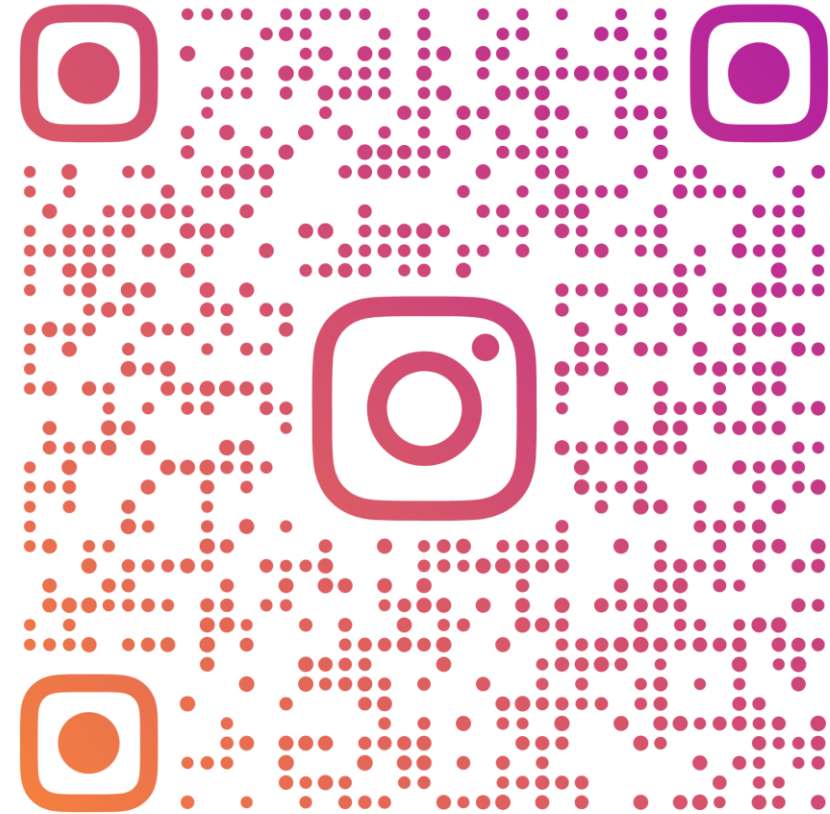
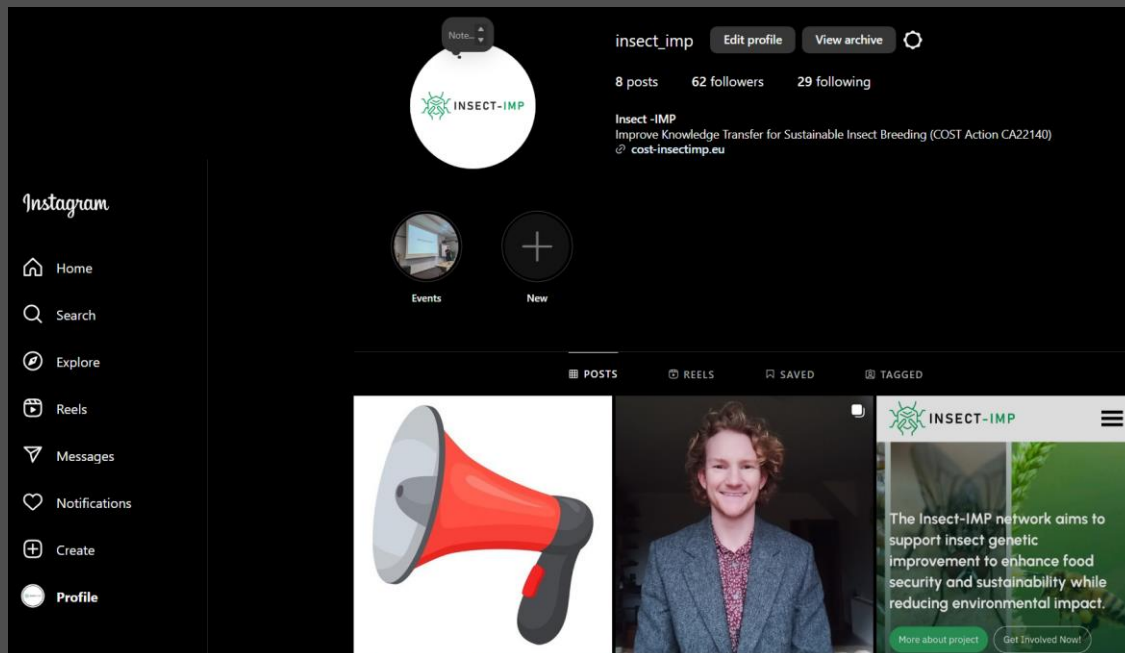
47 Following 67 Followers

Posts Replies Highlights Articles Media Likes



Instagram profile

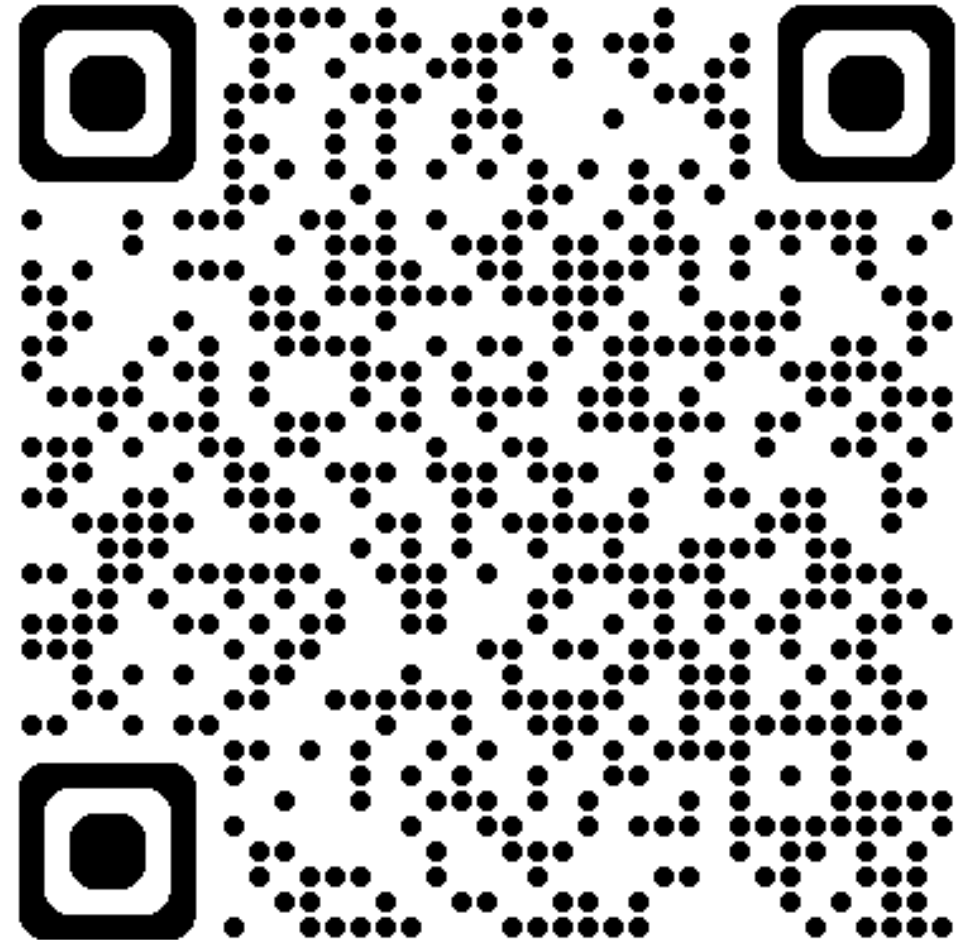
[instagram.com/insect_imp/](https://www.instagram.com/insect_imp/)



INSECT_IMP

Youtube page

[cost-insectimp.eu](https://www.youtube.com/c/cost-insectimp)



YouTube Αναζήτηση

Αρχική
Shorts
Εγγραφές

Εσείς >

- Το κανάλι σας
- Ιστορικό
- Λίστα αναπαραγωγ...
- Τα βίντεό σας
- Παρακολούθηση α...
- Βίντεο που σας αρ...

Insect -IMP
@CA22140 · 26 εγγεγραμμένοι · 2 βίντεο
Given the growing significance of honey bees as pollinators and the ongoing expansion ...ακόμη
cost.eu/actions/CA22140

Εγγραφήκατε

Αρχική Βίντεο Shorts

Shorts

WE TRANSFER KNOWLEDGE

Wageningen website

www.wur.nl/en/show/improved-knowledge-transfer-for-sustainable-insect-breeding.htm



Education & Programmes

Research & Results

Value Creation & Cooperation

About WUR

[Home](#) / Improved knowledge transfer for sustainable insect b...



News

Improved knowledge transfer for sustainable insect breeding

December 19, 2023

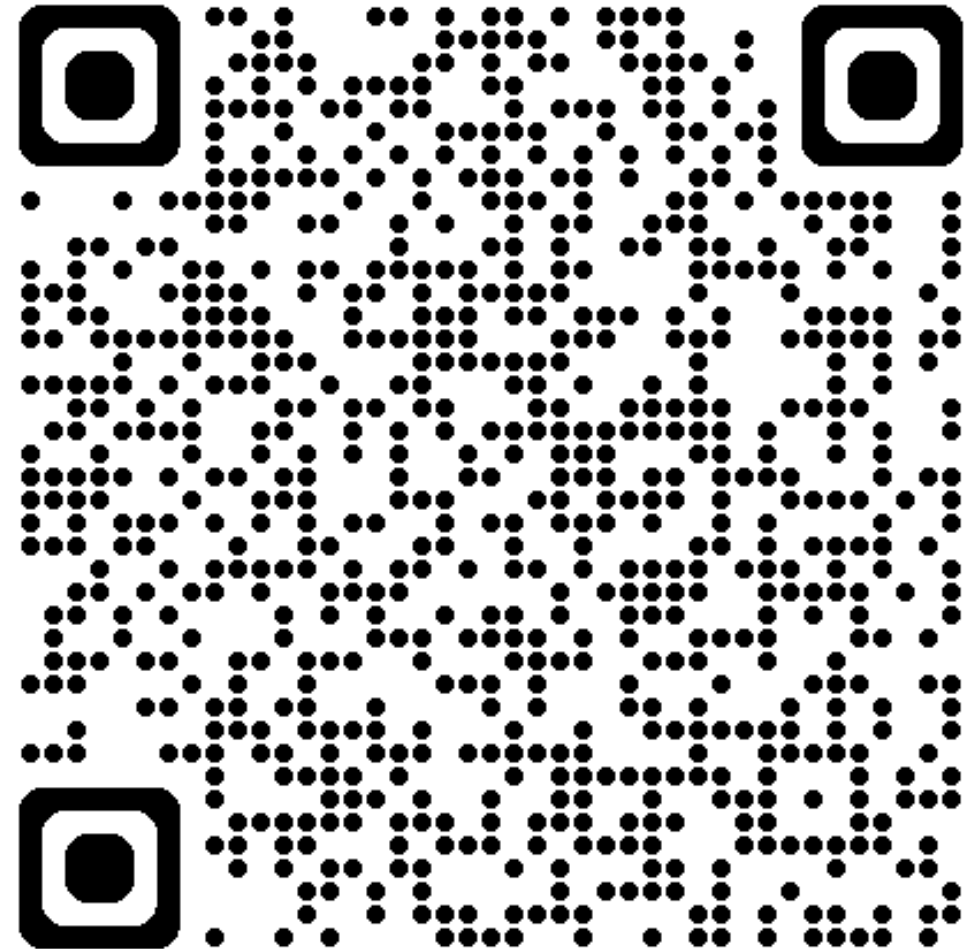


Do you have a question about the Insect-IMP COST Action? Please contact our expert:
dr.ir. AC (Aniek) Bouwman
PhD

[Contact](#)

Read more about this COST Action:

> CA22140 – Improved Knowledge Transfer for Sustainable Insect Breeding (Insect-IMP)



What we can
disseminate -
communicate



2nd CA22140 Insect-IMP Grants Call for Inclusiveness Target Country (ITC) Conference grants

We are happy to announce the 2nd grants call within the [Insect-IMP COST Action](#). We will be awarding one ITC Conference Grants to Young Researchers and Innovators, under the age of 40, to attend international science and technology related conferences not specifically organized by the COST Action. The grants awarded, up to 1100€ each, will be used to support collaboration, knowledge sharing and transfer, research and developments within the Action scope of insect genetic improvement.

Application deadline: April 19th, 23.59 CET

Decision and notification: April 24th

In this document we specify details on the grant call and present the review criteria. To explore all COST definitions, conditions, and details of the application process, including practical information on how to apply, the review and the payment processes, applicants are advised to explore:

- [COST website](#)
- [Grant Awarding User Guide](#)
- [Annotated rules for COST actions \(focus on pages 95-101\)](#)

Eligibility

- Have to be Full/Cooperating Members of [Insect-IMP COST](#).
- For Inclusiveness Target Country (ITC) Conference Grants: only Young Researchers and Innovators (under 40 years old) affiliated in an ITC/NNC are [eligible](#).

The grants contribute to traveling, accommodation and subsistence expenses, registration fees, printing of scientific posters and overall effort. Grantees cannot be double funded for any of the expenses covered by the grant. An ITC Conference grant requires a presentation of own work, within the scope of [Insect-IMP](#) but not necessarily containing action-derived results, given by a Young Researcher and Innovator affiliated with an ITC/NNC for participation at a high-level conference. The presentation can be an oral or poster presentation.



1st CA22140 Insect-IMP Grants Call for Inclusiveness Target Country (ITC) Conference grants

We are happy to announce the 1st grants call within the [Insect-IMP COST Action](#). We will be awarding one ITC Conference Grants to Young Researchers and Innovators, under the age of 40, to attend international science and technology related conferences not specifically organized by the COST Action. The grants awarded, up to 1100€ each, will be used to support collaboration, knowledge sharing and transfer, research and developments within the Action scope of insect genetic improvement.

Application deadline: March 29th, 23.59 CET

Decision and notification: April 3rd

In this document we specify details on the grant call and present the review criteria. To explore all COST definitions, conditions, and details of the application process, including practical information on how to apply, the review and the payment processes, applicants are advised to explore:

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Grants



**INSECTA
2024**

International CONFERENCE on Insects as Food, Feed & Non-Food

May 14-16, 2024 in Potsdam

CALL FOR ABSTRACTS

is open until

March 29, 2024!



TOPICS



Insect Rearing and Production Systems
Insect Processing for Food and Feed
Safety and Environmental Aspects
Non-food Application of Insects
Animal welfare, ethical and legal aspects

HOST

Leibniz Institute for
Agricultural Engineering and Bioeconomy



Upcoming
Conferences

Who can participate?

- **Researchers** in the field of farmed insects looking to make contact with some industry partners
- **Insect producers** looking for inputs into a genetic improvement scheme for their operation
- People who are **looking to attend INSECTA** in Potsdam in May '24, but are short on funds

We might just have the answer to all of these people!



The Insect-IMP team is organizing an industry workshop attached to the INSECTA 2024 International Conference.

We will discuss how targeted breeding can future-proof the insect farming industry and how academia and industry may collaborate.

👉 Fill out this [form](#) to participate!

Join the industry workshop of Insect-IMP in the [INSECTA 2024](#) International Conference.

Find out how targeted breeding can future-proof the insect farming industry!

Powered by  INSECT-IMP  INSECTA International Conference

Workshops



Insect Genetic IMProvement, IMPlimentation, IMPact

Programme Scientific and Organizing Committee Venue Accommodations Contacts



Athens (Greece), 29-31 January 2025

Submit your abstract



Insect breeding is a fast-growing industry that requires a vibrant support community and tailored-to-need genetics research related to everything from genetic diversity and population structure, phenotyping, breeding objectives, to estimation of breeding values in insects. The aim of this workshop is to bring together scientists working on various insect species and aspects of insect breeding, to present state-of-the-art research, spur debate across species and fields, and to train new generation of insect breeders.

The workshop is organized in tight collaboration with Insect-IMP COST Action that strives to connect edible and non-edible insects, academia and industry, as well as insect and livestock breeding to transfer knowledge to support insect genetic improvement to enhance food security and sustainability while reducing environmental impact.



Insect-IMP COST Action

Workshops



Reports
from
Action's
events and
meetings

BREEDING

Phenotype- the visible traits of organisms, including morphology, behavior, and physiological products. Phenotype is influenced by genotype, environmental factors, and interactions between genotype and environment.



Genotype is complete set of genes that characterize one insect.

Genetic value definition
Breeding value definition

BREEDING vs FARMING

Farming (rearing)

The process of keeping, feeding and providing care for targeted insects. The aim of the rearing is to provide one or more insect-derived products that are useful to humans and animals.

Breeding (rearing)

Involves selecting individuals with desired traits to serve as parents, who are then crossed to produce offspring with those desired traits.

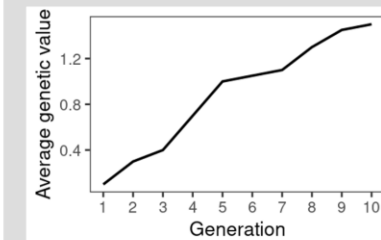
Why would you breed insects?

Using the experience and knowledge gained from breeding programs focused on traditional production animals, insect breeders can significantly enhance their production capacity compared to random mating. Maintaining genetic quality in mass-reared insects is crucial for commercial production in food and feed.

What is needed for successful breeding?

Identification of individuals	
Accurate measurement	
Pedigree keeping	
Estimation of genetic potential (breeding values)	
Parent selection	
Controlled mating	

Definition of genetic gain (and a plot?)



Infographics

(to be made)



Promo
video of the
participants
(to be made)

The background of the image consists of numerous stacks of books, viewed from a slightly elevated angle. The pages are tightly packed, creating a dense, layered appearance. The colors of the pages vary significantly, including bright reds, deep blues, and soft pinks, which are visible at the edges of the stacks. The lighting is soft, highlighting the texture of the paper and the depth of the stacks.

Action's publications

(to be made)

Other ideas?