

WORKING GROUPS

WG1

Population Structure, Inbreeding Management, and Genetic Diversity

Led by Christoph Sandrock (CH)

WG2

Mating Control

Led by Olga Ameixa (PT)

WG3

Interactions between Genetics, Environment and Community (GxExC)

Led by Gertje Petersen (DE)

WG4

Breeding Objectives

Led by David Deruytter (BE)

WG5

Phenotyping Systems

Led by Esther Ellen (NL)

WG6

Estimation of Breeding Values

Led by Sreten Andonov (MK)

WG7

Dissemination and Communication

Led by Jana Obšteter (SI)

WG8

Inclusion and Representation

Led by Mert Kükreer (TR)

Science Communication Officer

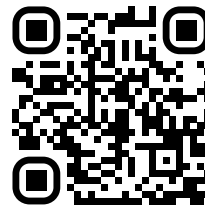
Georgia Baliota (GR)

Grand Awarding Officer

Alexandre Trindade (PT)

JOIN THE INSECT-IMP PROJECT!

Together, we will drive innovation and sustainability in the insect breeding and farming sector.



Website:

www.cost-insectimp.eu

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This publication is based upon work from COST Action Insect-IMP, CA22140, supported by COST (European Cooperation in Science and Technology).

COST is a funding agency for research and innovation networks. Our Actions help connect research initiatives across Europe and enable scientists to grow their ideas by sharing them with their peers. This boosts their research, career and innovation.



INSECT-IMP

BUGS WITH BENEFITS

 **cost**
EUROPEAN COOPERATION
IN SCIENCE & TECHNOLOGY



Funded by
the European Union

INSECTS ARE ESSENTIAL FOR A HEALTHY ENVIRONMENT

Insects are the most abundant group of animals, with around 1.5 million known species - and possibly many unknown! Over 97% of insect species are beneficial or harmless. Insects are consumed as food by approximately 2 billion people worldwide, representing about 25% of the global population, and also provide several essential ecosystem services such as pollination, bioconversion of waste and carrion, and humus formation.

The cultural role of insects

Certain insect species (e.g. cicadas, bees, scarabs) have enjoyed cultural and even religious significance for millennia. While modern humans mainly view insects as a nuisance, ancient Egyptian and Greek societies revered insects for their adaptability and resilience.

The potential of insects for the future

Some insect species are already farmed for the production of food, animal feed, and fibre. While some of them, such as the silk moth, require very specific feed and rearing conditions, others, such as black soldier flies or house flies, can be reared on varied substrates and are well-suited for more circular approaches to e.g. protein production, as they can use waste streams that would otherwise be lost.

ECONOMIC SUSTAINABILITY

Nutrition (Food & Feed)

- Sustainability
- Circular economy - bioconversion
- Climate neutral - greenhouse gas emission
- Nutritional value
- Increasing European market potential for insect protein

Materials



Honey



Propolis



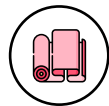
Shellac



Wax



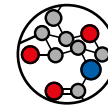
Biofuels



Silk



Carminic Acid



Chitin

SOCIAL AND CULTURAL SUSTAINABILITY

- Scientific models
- Indicators of environmental health
- Forensic science



Music



Religion



Science



Insect Wildlife Observation

ENVIRONMENTAL SUSTAINABILITY

Pollinators

Cross-fertilisation of many crops, fruits, and wildflowers

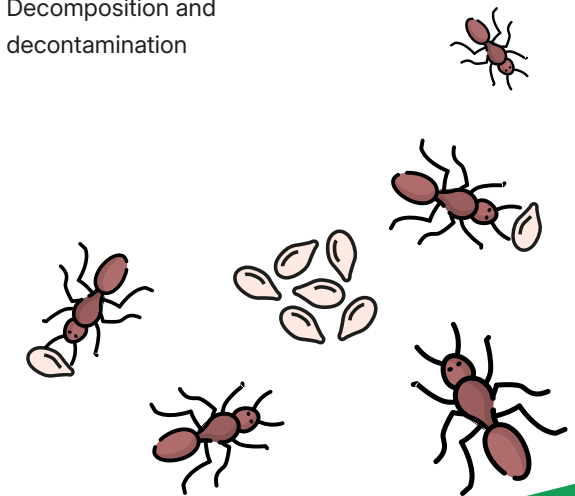
Biological control agents

Less pesticides, biodiversity conservation, ecosystem resilience

Remediation of wastes

Decomposition and decontamination

Seed dispersion



There are 1.5 million known insect species in the world, over 97% are beneficial or harmless