

# “Insects on the plate”

## Edible insects for food and feed



**CIPROMED**

CIRCULAR AND INCLUSIVE UTILISATION  
OF ALTERNATIVE PROTEINS IN THE  
MEDITERRANEAN VALUE CHAINS



This research is supported by the EU-PRIMA program  
project ADVAGROMED (Prima 2021 - Section 2)



The PRIMA programme is supported  
under Horizon 2020 the European  
Union's Framework Programme for  
Research and Innovation.

2013

FAO  
FORESTRY  
PAPER

171

## Edible insects

Future prospects for food and feed security



**WAGENINGEN UR**  
For quality of life



Van Huis et al., 2013. Edible insects: future prospects for food and feed security. FAO Forestry Paper 171. Rome, FAO, Rome and Wageningen University and Research Centre, The Netherlands. 187 pp. Available at: <https://www.fao.org/3/i3253e/i3253e.pdf>

2014

**WAGENINGEN UR**  
For quality of life



## International Conference Insects to Feed the World

Ede  
The Netherlands  
14 - 17 May 2014



### Abstract book

- [Oral presentations](#)
- [Posters](#)
- [List of participants](#)

Silver sponsor:



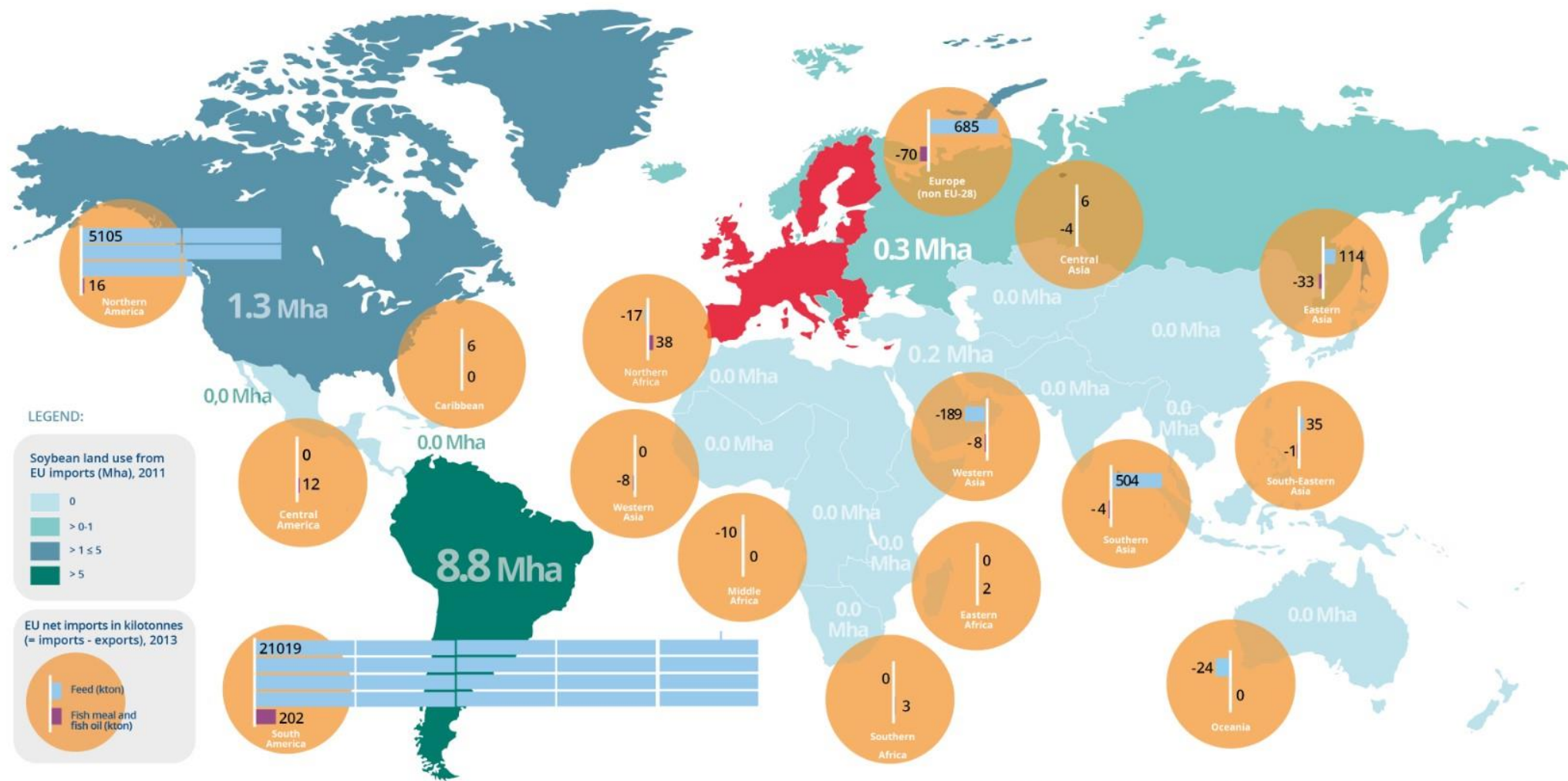
Bronze sponsors:

**KOPPERT**  
BIOLOGICAL SYSTEMS

**Profrix Biosystems BV**  
Helping the world  
to grow its food

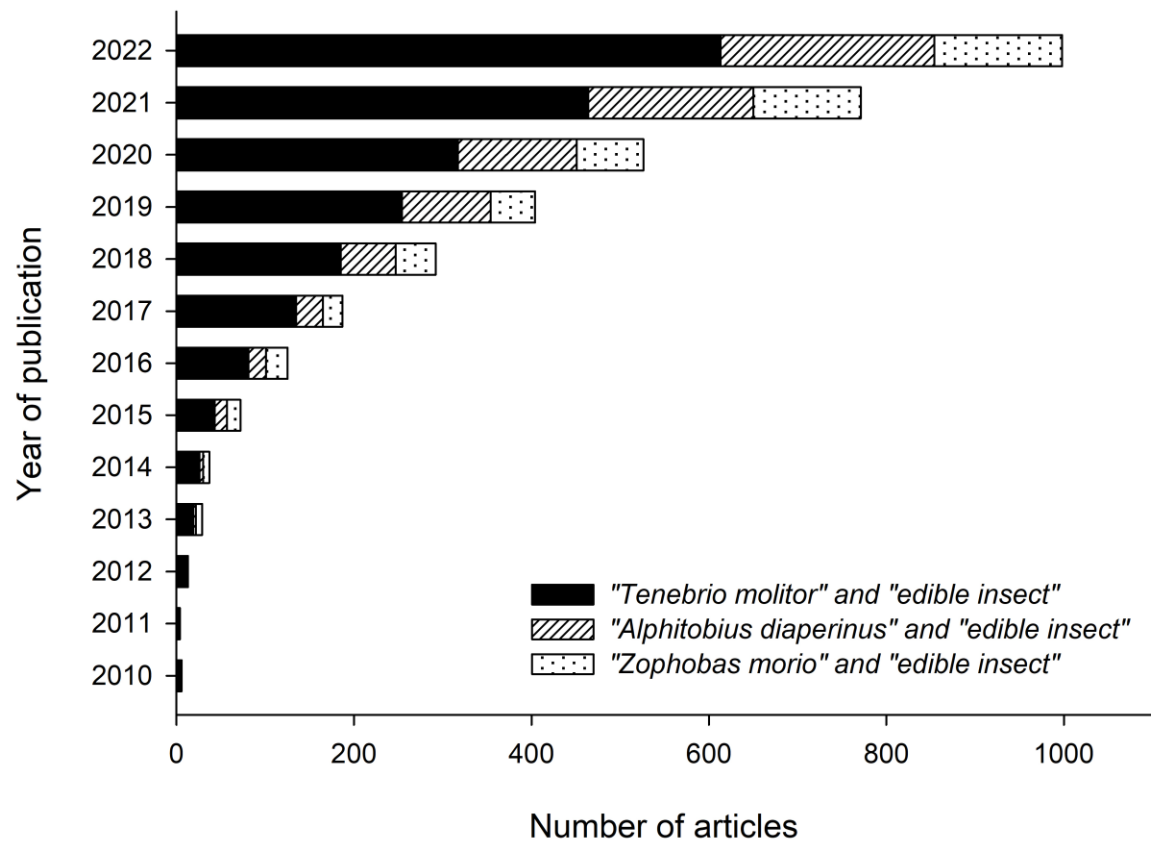
“Insects to Feed the World”, 14-17 May 2014, The Netherlands

# EU is dependent on the import of high protein content feed sources for animal production, i.e., soybean meal, linseed meal, palm kernel expeller etc.



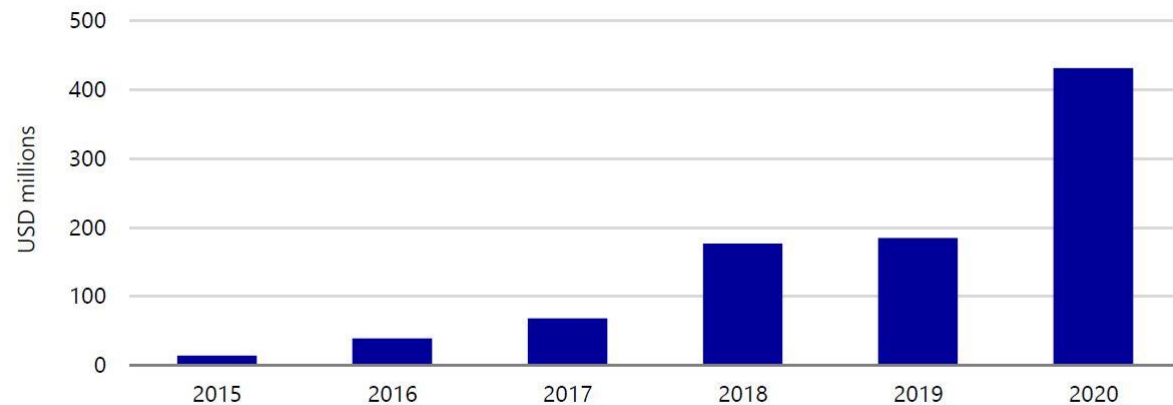
**Note:** 100% of soycake imports were included as feed. Soybean imports for feed were calculated assuming that (1) 1.5% are used directly for human consumption; and (2) the remaining imports were split into oil for human consumption (20%) and soybean cake for feed (80%).





Increased **scientific interest**  
on edible insects

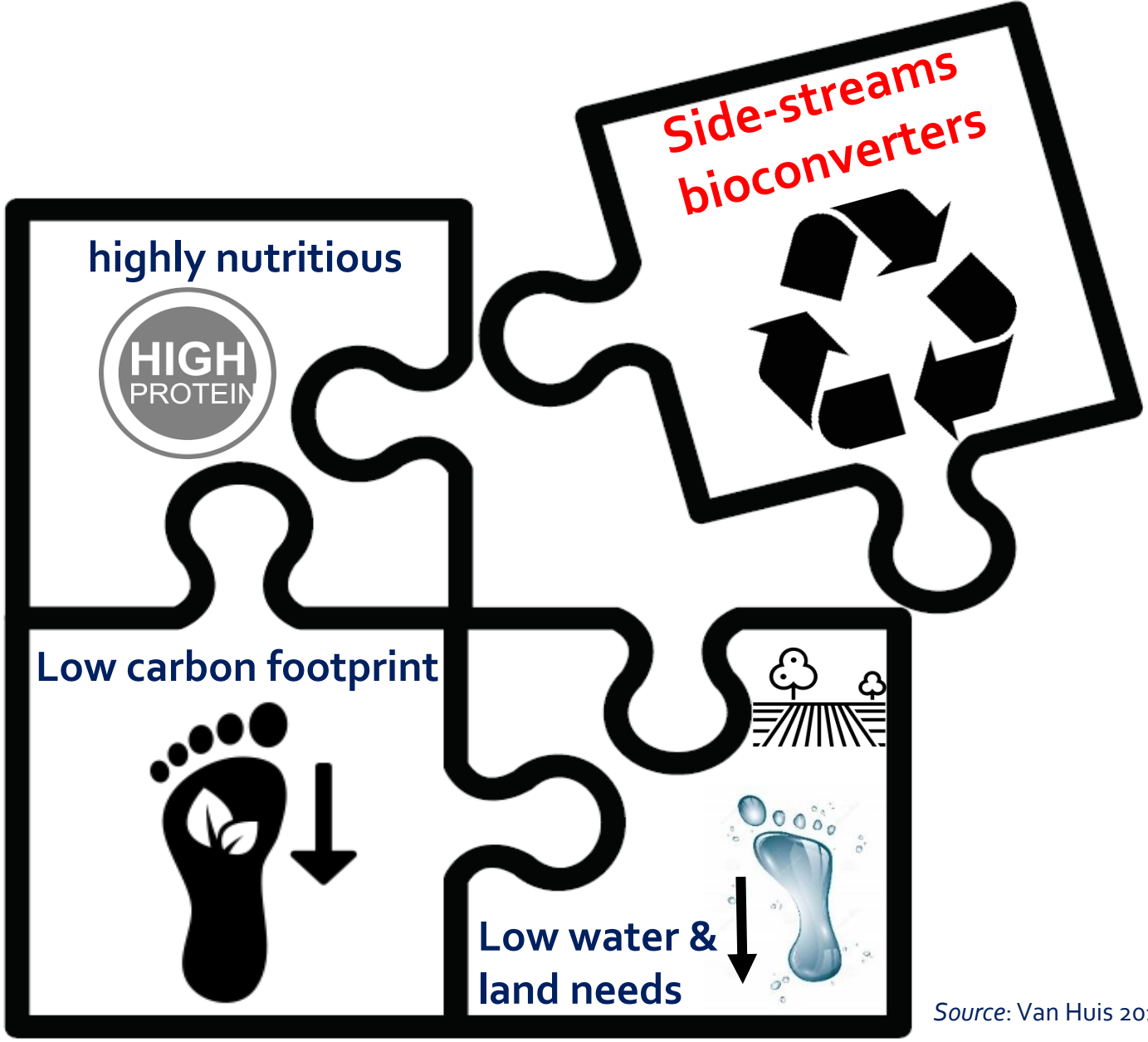
Figure 4: The exponential increase in capital flowing to insect farming companies



Source: Crunchbase, Dealroom, Rabobank 2021

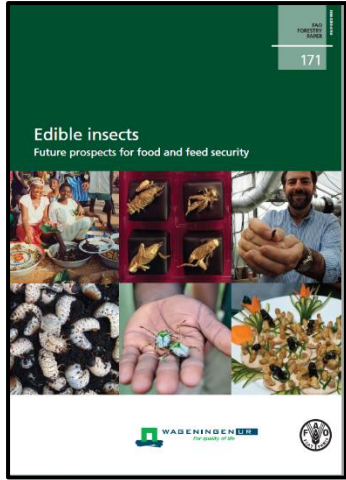
**Investments [in USD millibos]** in insect  
farming companies


# Why insects?





Source: Van Huis 2013, Annu Rev Entomol 58: 563–83

# Milestones for the insect sector



**EU Regulation 2017/893**  
Approval of insect-based  
**aquafeeds** 

**EU Regulation 2021/1372**  
Approval of insect-based  
**poultryfeeds and swinefeeds**  

2013

2017

2021










2022

2023

2024

2025

# EU authorisations

							
Insects as feed - Regulation (EU) No 68/2013 on the Catalogue of feed materials and in accordance with Regulation (EC) No 999/2001 and Regulation (EC) No 1069/2009	Ruminant animals 	Aquaculture 	Poultry 	Pigs 	Pets 	Fur and other animals (e.g. zoo) 	Technical uses (e.g. cosmetic industry, bio-based fuels, production of other bio-based materials such as bioplastics) 
<b>Insect proteins</b> (under entry 9.4.1. 'Processed animal protein')	⊗	⊙**	⊙**	⊙**	⊙	⊙	⊙
<b>Insect fats</b> (under entry 9.2.1. 'animal fat')	⊙	⊙	⊙	⊙	⊙	⊙	⊙
<b>Whole insects (untreated)</b> (under entry 9.16.2. 'terrestrial invertebrates, dead')	⊗	⊗	⊗	⊗	⊙***	⊙***	⊙
<b>Whole insects (treated- e.g. Freeze drying)</b> (under entry 9.16.2. 'terrestrial invertebrates, dead')	⊗	⊗	⊗	⊗	⊙***	⊙***	⊙
<b>Live insects</b> (under entry 9.16.1. 'terrestrial invertebrates, live')	⊗	⊙*	⊙*	⊙*	⊙***	⊙***	⊙
<b>Hydrolysed insect proteins</b> (under entry 9.6.1. 'Hydrolysed animal proteins')	⊙	⊙	⊙	⊙	⊙	⊙	⊙

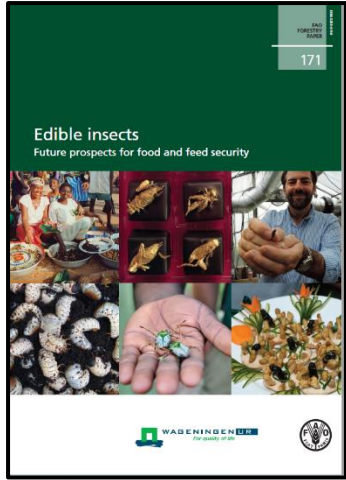
\*if authorised by the national competent authority of the Member State where the product is being commercialised


\*\* Limited to Black Soldier Fly (*Hermetia illucens*), Common Housefly (*Musca domestica*), Yellow Mealworm (*Tenebrio molitor*), Lesser Mealworm (*Alphitobius diaperinus*), House cricket (*Acheta domestica*), Banded cricket (*Gryllodes sigillatus*), Field Cricket (*Gryllus assimilis*) and Silkworm (*Bombyx mori*).

\*\*\* If authorised by the national competent authority of the Member State where the product is being commercialised, under the specific conditions applicable to processed pet food (in case the product is intended for use as processed pet food)

<p>Restriction to insect species (insect PAPs for aqua feed)- Regulation (EU) No 142/2011; Annex X Chapter 2 Section 1, A.(2).                  - Insect PAPs must be produced in <b>processing plants approved</b> in accordance with Article 24(1)(a) of Regulation (EC) No 1069/2009 and <b>dedicated exclusively</b> to the production of products derived from farmed insects; <b>Regulation (EC) No 999/2001; annex IV, chapter IV, Section F, 1 (a)</b>.                  - Insect PAPs must be produced according to <b>processing methods 1 to 5</b> or <b>processing method 7</b> (Regulation (EU) No 142/2011, Annex X, Chapter II, Section 1, B.(2)).</p>	
No restriction as to the insect species (provided that these are not pathogenic to humans and animals)	

# Milestones for the insect sector



EU Regulation 2017/893  
Approval of insect-based  
aquafeeds 

EU Regulation 2021/1372  
Approval of insect-based  
poultryfeeds and  
swinefeeds  

EU Regulation 2022/188  
Approval of *Acheta domesticus*  
as novel food

EU Regulation 2021/882  
Approval of *Tenebrio molitor*  
as novel food

EU Regulation 2021/1975  
Approval of *Locusta migratoria*  
as novel food

EU Regulation 2023/58  
Approval of  
*Alphitobius diaperinus*  
as novel food

2013

2017

2021

2022

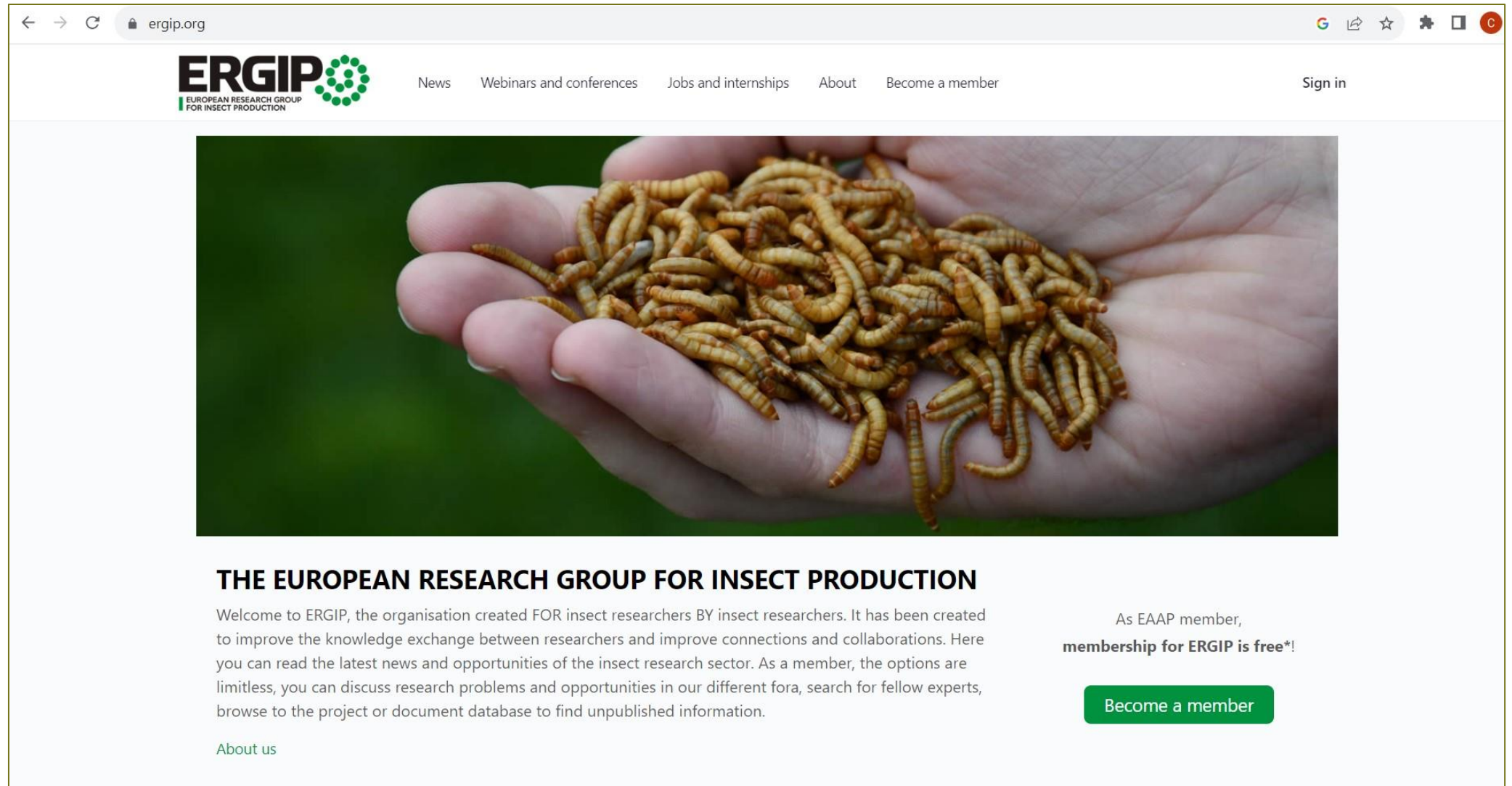
2023







2024

2025




<https://ergip.org>



← → ↻ [ergip.org](https://ergip.org)      

**ERGIP**  
EUROPEAN RESEARCH GROUP  
FOR INSECT PRODUCTION

[News](#) [Webinars and conferences](#) [Jobs and internships](#) [About](#) [Become a member](#) [Sign in](#)



## THE EUROPEAN RESEARCH GROUP FOR INSECT PRODUCTION

Welcome to ERGIP, the organisation created FOR insect researchers BY insect researchers. It has been created to improve the knowledge exchange between researchers and improve connections and collaborations. Here you can read the latest news and opportunities of the insect research sector. As a member, the options are limitless, you can discuss research problems and opportunities in our different fora, search for fellow experts, browse to the project or document database to find unpublished information.

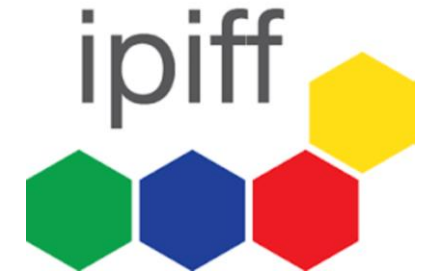
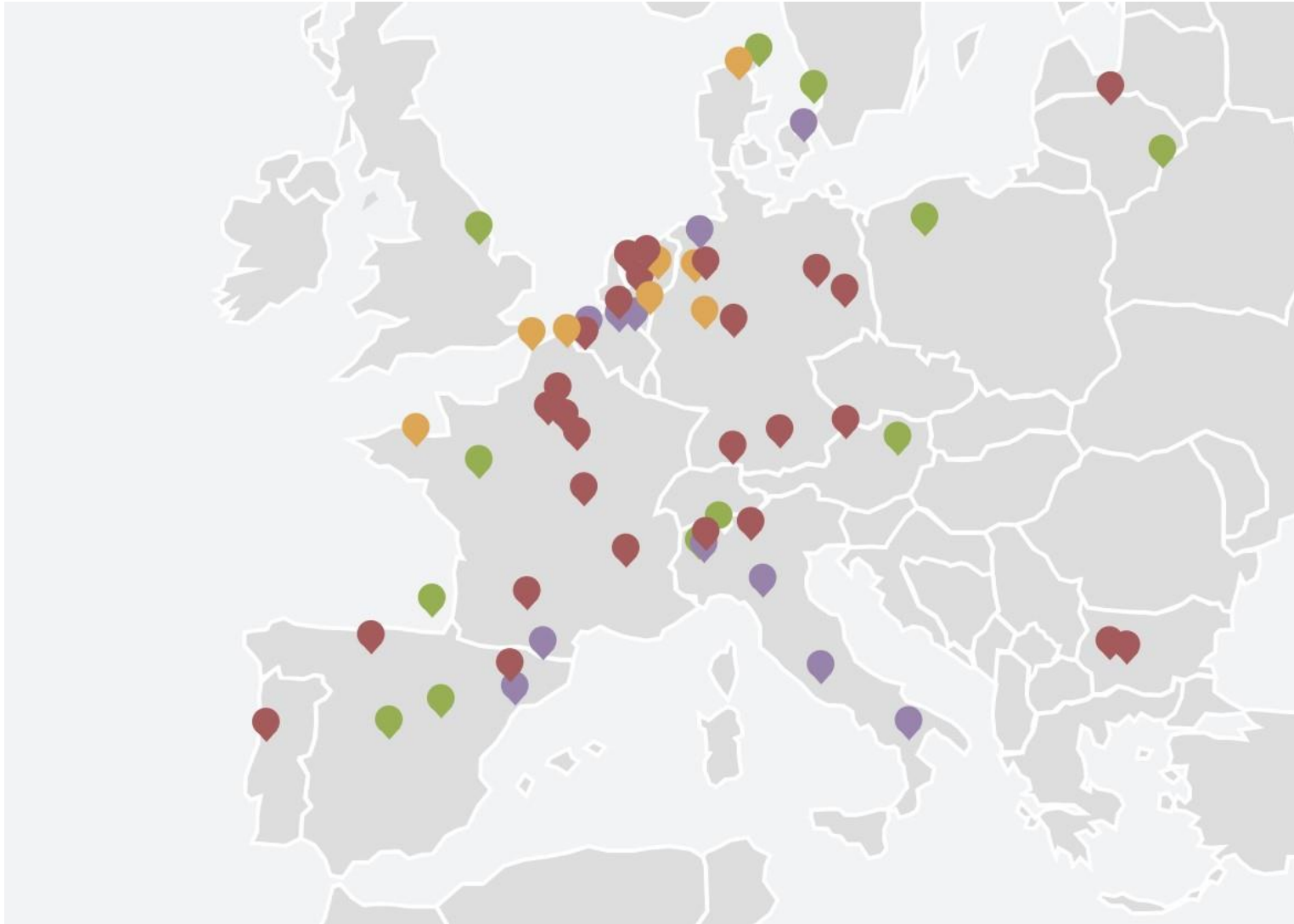
[About us](#)

As EAAP member,  
**membership for ERGIP is free\*!**

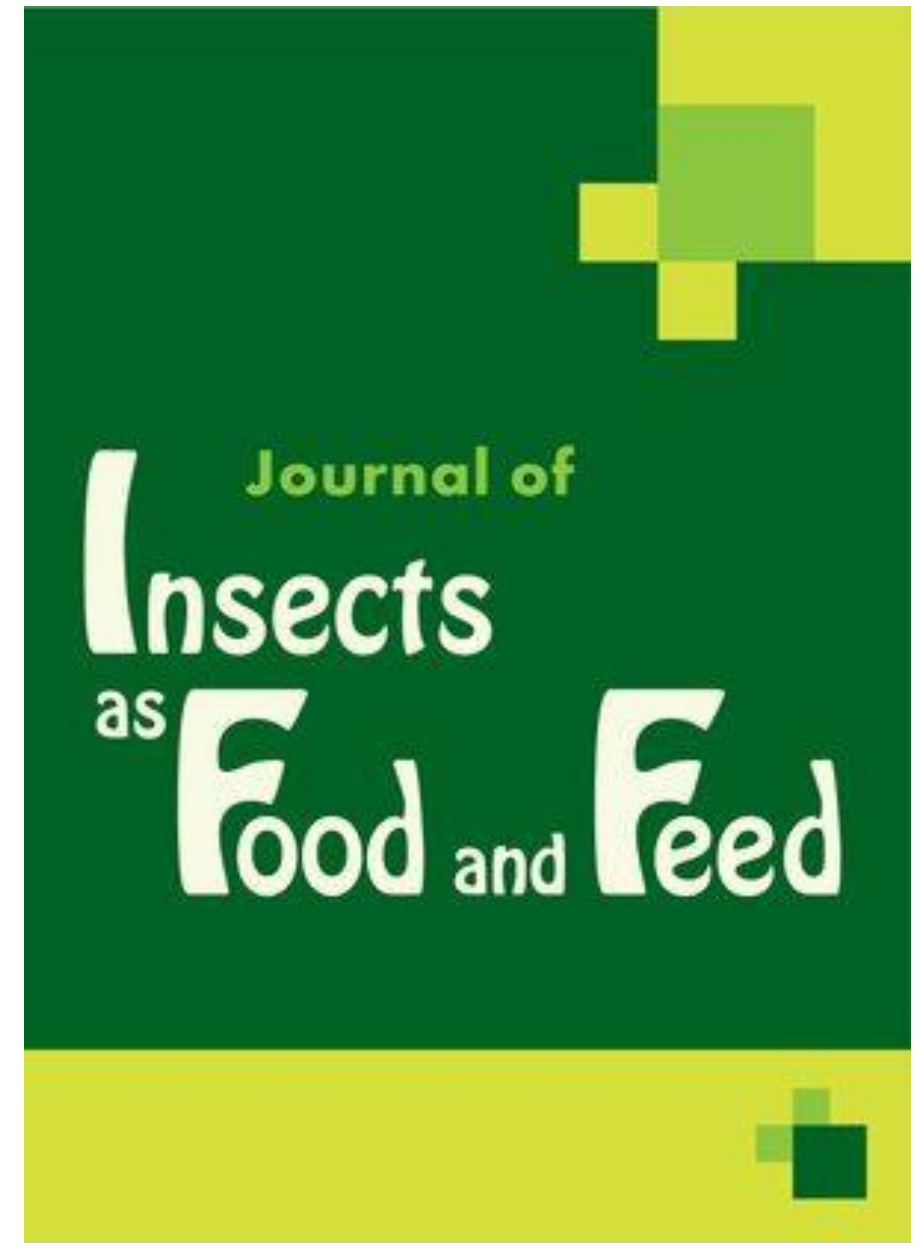
[Become a member](#)

# International Platform for Insects as Food and Feed

<https://ipiff.org>



Impact Factor: 5.1





# INSECTA

International  
CONFERENCE

May 14 – 16, 2024, Potsdam, Germany



# “Insects on the plate”

Edible insects for food and feed

Send your questions:



Join us at [menti.com](https://menti.com)

Enter the following code:

**21 22 58 9**