

FINAL NEWSLETTER



END OF THE FARMYNG PROJECT

CELEBRATING THE MILESTONES OF AN AMBITIOUS JOURNEY

After more than six years of collaboration, innovation, and commitment, the FarmYng project officially concludes at the end of June 2025. Funded by the BBI JU under the Horizon 2020 programme, FarmYng brought together **18 partners from 8 countries**, all driven by a shared goal: **to pioneer large-scale, sustainable insect farming to produce premium proteins, lipids, and fertilizers from Tenebrio molitor (mealworms)**.

This final newsletter takes a step back to revisit the key breakthroughs and highlights that have shaped the project since its launch in 2019.

A major milestone: the construction of YnFarm

One of FarmYng's flagship achievements is the **design and construction of YnFarm, the world's largest vertical insect farm, located in Poulainville, France**.

The construction of the site has been completed, and since late 2023, it has been **producing and delivering YnFrass**, a natural insect-based fertilizer.



Unlocking the genome of Tenebrio molitor

In 2021, FarmYng reached a major scientific milestone with the **sequencing of the Tenebrio molitor genome**, conducted by the CEA. This achievement lays the foundation for further innovation, especially regarding breeding strategies, health optimization, and long-term productivity improvements for insect farming.

Optimizing insect nutrition

By identifying the most effective feed mix of agricultural by-products, and using feed-related innovative technologies, FarmYng optimised the nutritional regime of Tenebrio Molitor at an industrial scale, and for each stage of the insect development. **FarmYng demonstrated how insect production can combine performance, efficiency, and sustainability.**



Horizon2020
European Union Funding
for Research & Innovation

This project has received funding from the Bio Based Industries Joint Undertaking (JU) under grant agreement No 837750. The JU receives support from the European Union's Horizon 2020 Research and Innovation Programme and the Bio Based Industries Consortium.

Regulatory firsts & commercial impact

In 2020, Ÿnsect became the first company in the world to receive marketing authorization from ANSES for an insect-based fertilizer: ŸnFrass. Since then, deliveries have steadily expanded from ŸnFarm, offering an innovative, odorless, and natural fertilizer solution for both hobby gardening and industrial agriculture.

This early authorization was not only a regulatory breakthrough, but a signal of insect-based products entering the mainstream.



Pioneering quality & safety protocols



Throughout the project, FarmŸng has also driven progress in the areas of quality control and traceability, which are essential to support the safe and sustainable scale-up of insect-based production.

Among the key advancements was the **development and validation of Near Infrared (NIR) calibration models**, designed to predict the chemical composition of insect-based products—including moisture, protein, fat, cellulose and chitin. **These models not only allow for fast, non-destructive assessments, but were also implemented in an industrial setting and can be transferred to other organisations for use on similar products.**

In parallel, the CRA-W developed and validated PCR detection methods for five authorised insect species, including *Tenebrio molitor*. These tools enable precise identification and traceability of insect species in feed formulations, supporting compliance with evolving regulations.

Additional methods were also validated to detect microbial risks, such as *Clostridium perfringens*, helping reinforce hygiene and food safety standards in processed insect ingredients.

A policy brief for lasting impact

As the FarmŸng project concludes, one of its key dissemination efforts is a **Policy Brief produced by project partner CLIB**. This document offers a concise overview of the potential of insect farming and the role of insect-derived products in the food, feed, and chemical industries. **It highlights the sustainability and scalability of insect farming as a bio-based solution and outlines the challenges that must still be addressed, from regulation to consumer acceptance.** The Policy Brief is designed to inform policymakers, researchers, and industry

stakeholders, encouraging greater support for innovation in this fast-emerging sector. It reinforces FarmŸng's commitment to building a resilient and resource-efficient food system: one that leverages insects not only as a protein source, but as a strategic tool for a circular bioeconomy.



FINAL WORDS

FarmŸng was built on collaboration, bold ideas, and a shared belief that insects can offer tangible answers to some of the world's biggest challenges: food security, resource scarcity, and environmental impact.

From lab to industrial scale, from regulation to commercialization, every milestone reached during these past five years reflects the strength of our ecosystem and the promise of bio-based innovation.

A heartfelt thank you to all our partners, collaborators, and supporters who made this pioneering journey possible.

