Ynsect to develop world’s largest insect farm in France

French startup Ynsect has raised $224M from investors to construct a second insect farm in Amiens, which it claims will be the largest in the world. The company breeds mealworms that are used for proteins for fertilisers, livestock and pet food.

Temps de lecture : minute

2 November 2020

The indoor farm is set to open in early 2022 and is expected to create 500 jobs. The 40-metre-tall plant will occupy 40,000 square metres, making it “the highest vertical farm in the world”, according to Ynsect CEO Antoine Hubert.

Why does this matter?

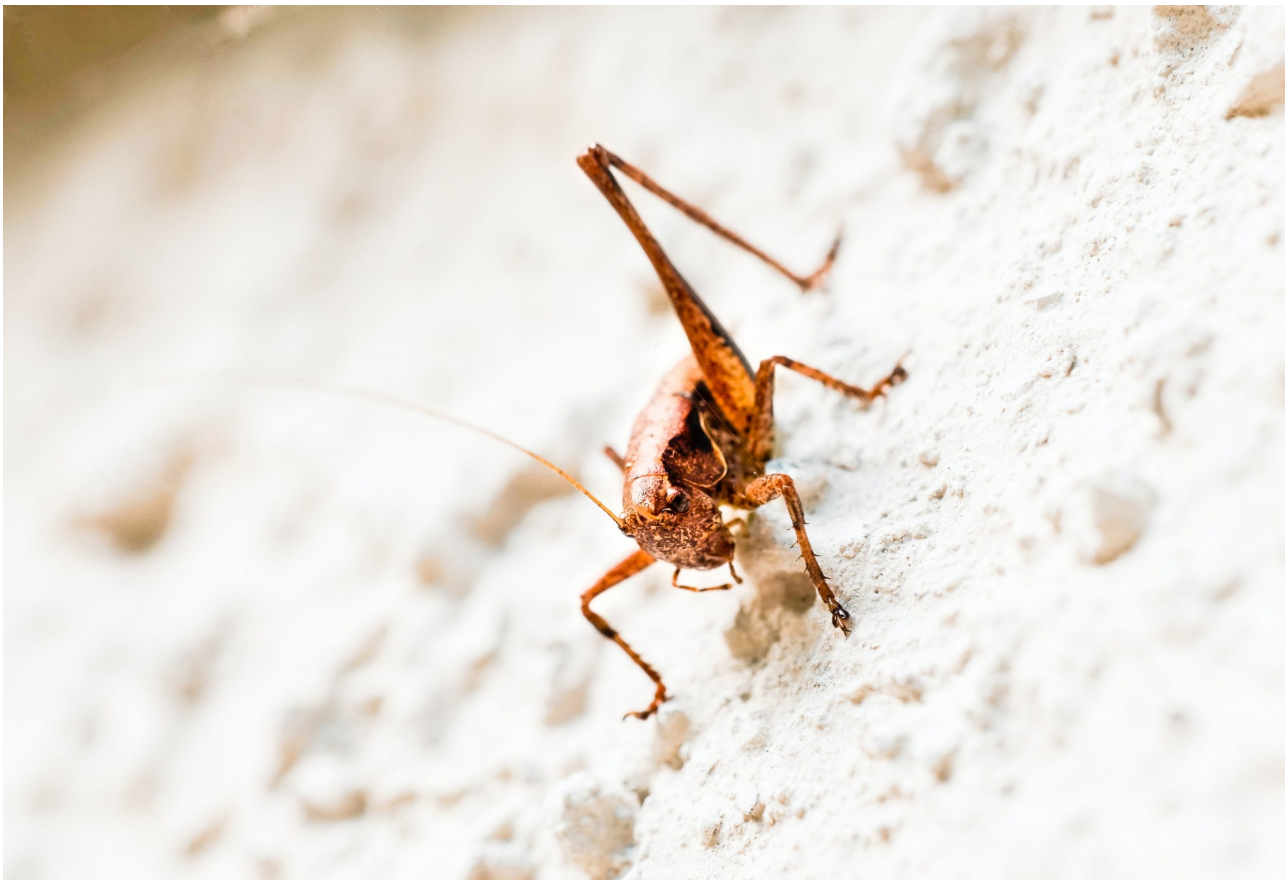
As we’ve previously pointed out, insect farming is emerging as a sustainable alternative to satisfy increasing demand for protein due to its environmental advantages when compared to traditional livestock production. Insect production can offer lower greenhouse gas emissions and a higher feed conversion efficiency while using fewer resources. As such, it could potentially be a means of addressing concerns around climate change and food security.

Ynsect’s industrial-scale project, Ynfarm, will primarily cultivate Tenebrio Molitor mealworms based on a circular economics model aiming to generate zero waste. Independent analysis indicates the project will have a carbon-negative footprint.

Ynsect intends to produce up to 100,000 mt of high-end insect products

annually, including flour and oil, to replace animal proteins. The facility will be fully automated with robots carrying out processes such as feeding, hatching, acidifying and processing. Under Ynsect's own patented technology, the indoor farm will use AI modelling and computer vision to create and monitor optimal growing conditions for insect production. Embedded sensors will collect data to control environmental factors such as humidity and temperature.

Interest in using insects for other purposes is also growing. For instance, researchers have developed a potential solution to manufacture biodegradable plastic by feeding black soldier flies with human waste and then harvesting the biological polymer chitin in a circular process.



Read also
Would you eat a cricket?

Further thought from Curation

It’s not been long since we started being encouraged to eat insects for sustainability purposes but, in the wild, insect populations are declining, with numbers falling by 25% since 1990, and these figures seem to be accelerating.

In this sense, harvesting insects in insect farms as “mini-livestock” could reduce collection of the animals from nature, though cultivation on a scale large enough to see significant progress and as a mainstream feed source will require substantial resources and time.

Many environmental impacts of large-scale insect farming are still unknown. The risk of introducing invasive species, for instance, could be hugely detrimental to regional biodiversity if certain species were accidentally released after being imported. Additionally, little is known about insects’ impacts in reared populations, disease transmission and management compared to domestic livestock. Such questions highlight the need for further developments in understanding the effects of mass-level insect production.

Sign up for Sustt

Article by Katie Chan