

39 Spotlight Freeze-em on insectfarming.mp3

Lukxmi Balathanan [00:00:06] Welcome to this bonus episode of The Food Fight podcast from EIT Food.

Matt Eastland [00:00:10] In these episodes, we want to shine a light on new projects and agrifood start ups and hear about their efforts to fight for a better food future. This week, we're handing over to Yuval Gilad, to tell us about FreezeM, a Start-Up making insect farming more sustainable and scalable.

Yuval Gilad [00:00:36] Hi, my name is Yuval Gilad, and I'm the CEO of FreezeM, and we're fighting for the future of food because we believe that insect can be a powerful tool in order to turn waste into valuable food and feed for animals and for humans. So FreezeM is all about making in-sync farming simple by providing breeding solutions for insect farmers worldwide.

Yuval Gilad [00:00:59] Today, each insect factory has to produce the entire lifecycle. That means to generate the eggs. The reproduction of the adult flies and the larva detached from these eggs are then being fed by masses of organic waste and further processed into protein and oil and other products.

Yuval Gilad [00:01:16] We at FreezeM. We're able to decouple the eggs production, the reproduction from the protein production and by that enable the industry to scale up and make the process much more simple to new players in the market, which are interested on the protein production part.

Yuval Gilad [00:01:34] Black Soldier Fly can be used to create a variety of products. First of all, the larva could be fed directly to animals, for example, to chickens and so on, and also to fish. So this is one application that can also be dried and be fed like this is a supplement. It is being processed into pet food products and also being incorporated into aquaculture feed compounds and other farm animals feeding. And in addition, it's also possible to incorporate that into a human food products directly to be consumed by humans. So it's also a possibility. Not everybody likes it at the beginning in the Western world, but something that is getting a lot of attention and starting to become a reality also.

Yuval Gilad [00:02:24] So our technology is based on two major innovations which share the same features of pausing the life cycle of the black soldier fly the insect that we are breeding in order to be able to stock it and ship it to rearing factories worldwide. And we do that using new technology is one of them is freezing of the eggs of the embryos of the fly and by that extending their shelf life significantly. And the other method is by pausing the neonate stage just right after hatching and extending this step for two weeks. And by that enabling rearing and processing facilities to receive packages of ready to use suspended neonates of black soldier fly.

Yuval Gilad [00:03:11] The world population is growing rapidly and we're actually wasting a third of the food that we generate. It costs a lot of resource and we need to learn how to produce our food in a sustainable manner and also what to do with the waste that we generate.

Yuval Gilad [00:03:27] And insects, especially the black soldier fly, are a great solution for that because they can convert their waste into valuable products such as protein for animal feed, oil and also fertiliser, which is being produced as a residue from this process.

And we're only starting to learn about this amazing creature right now. And people are developing new applications for almost any part of the production process, learning its genetics, learning how to breed it at large scale, and making this process more scalable, more efficient and more sustainable. The challenge is to make this industry move fast as we want and to be able to find partners to grow with them because we're only a provider of one step of the process. But we need to collaborate with other factories or with other companies that are dealing with the rearing and the processing and to create this supply chain that will be able to serve the market demand for a high quality insect protein.

Yuval Gilad [00:04:34] EIT Food was a great experience for us. We participated in their accelerator here and in Israel in the Technion, which is one of the leading universities in Israel. For us, this experience helped us a lot to promote our business, to generate partnerships and collaborations with industry and academia partners in the EU.

Yuval Gilad [00:04:54] It helped us to validate our business model, promote our technology and connections with potential partners and investors.

Yuval Gilad [00:05:03] I think the entire food industry is going through a revolution right now. There are many, many companies that and also the industry is trying to reinvent all the products that we're used to, from milk to meat and also to eggs. There's a lot of innovation in the insect farming industry and also other sectors. So it's crazy and exciting time to be a part of this industry where new products and new solutions are being formed every day. For us, it's an exciting time because we see a growing interest in our solutions.

Yuval Gilad [00:05:35] For us, it's very exciting.

Yuval Gilad [00:05:38] If I could send a message to the food industry, I would say think about the circular economy of your business. Think about what people do not only with your product, but also what is done with your By-Products and what is done with the waste you generate and how you can contribute in order to create and novel products from the waste that you generate along the production pipeline.

Lukxmi Balathasan [00:06:07] Thanks for listening to this bonus episode of The Food Fight podcast.

Matt Eastland [00:06:11] To find out more and to learn how you can get involved in the fight for a better future, head over to EITFood.EU/podcast.

Matt Eastland [00:06:22] For more information on FreezeM, head over to freeze-EM.com.