# Exploring the promise and challenges of edible insects as a sustainable protein source



More than 100 investors, farmers, producers, and researchers from around the globe gathered at the University of Nottingham's Sutton Bonnington campus to explore the potential of edible insects as a future source of farming and protein. The event, held recently at the Hive building, aimed to facilitate discussions on innovations and techniques within this emerging sector, which proponents assert offers numerous health, environmental, and cost benefits.

The conference highlighted the substantial efforts of entrepreneurs and industry experts who have spent years developing insect-based food products. However, they identified major obstacles hindering widespread adoption in the UK, notably strict food regulations and prevailing cultural stigmas. Despite the presence of such barriers, enthusiasm among attendees was palpable.

Among the exhibitors was Nahla Mahmoud, founder of The Insect Cafe, Scotland’s first culinary venture dedicated to insect-based products. Mahmoud showcased a variety of items including mealworm chocolate, cricket cakes infused with blueberry and hibiscus, almond cricket brownies, mealworm lava balls, and cricket muffins. Speaking to Nottinghamshire Live, Mahmoud explained: “We are the first food tech company there making everyday foods with insects, we turn them into flour and then we bake with the flour. Then we can make some wholesome cakes, then we also use them in their whole form, where we roast them, season them and put them on cakes or use them as croutons. We also use them as chocolate.” She added, “We want people to play around with this in the kitchen. Insects naturally have a nutty and earthy taste to them.”

Mahmoud described how her initial experimentation with insects began as a post-workout snack during her long-distance swimming activities, before evolving into a full-fledged business. She expressed optimism about consumer acceptance, stating, “I think that once people try it it will change their minds, as it just has so many benefits.”

The conference was organised by the UK Edible Insect Association (UKEIA) and drew a diverse group of stakeholders, including international participants from Africa and Taiwan. Dr Nick Rousseau MD, UKEIA founder, noted: “It's a really good turnout, it’s a varied turnout as well. There is still a very small industry that needs to learn and grow together.” Reflecting on public perceptions, he said, “I find it really interesting that people have these preconceptions that it's like it is in I'm A Celebrity, and they have done a lot of damage to us. I get people to try these products and often they are blown away as they expect it to be disgusting.”

Several companies are establishing UK operations to develop insect-based products. Among them is Hop Bars, a protein bar start-up whose co-founder Geoffrey Knott highlighted the nutritional advantages of crickets, saying, “Dried crickets have twice the protein found in steak, more calcium than milk, more iron than spinach, more vitamin B12 than salmon, and more fibre than brown rice. They really are a superfood.” Knott added, “We really wanted a product that was highly nutritious and sustainably produced... when we looked for a more sustainable and healthy alternative, we landed on this.”

The event also featured sampling opportunities where attendees tried a range of insect-based offerings, including protein bars, cakes, minced insect products, and roasted, seasoned bugs. The taste was described as nutty and delicious, challenging common scepticism about eating insects.

Yet, despite the promising products and growing interest, significant hurdles remain before edible insects become a regular sight on UK supermarket shelves. Brexit has slowed progress by delaying the alignment of UK food safety approvals, whereas other European countries have advanced closer to approving edible insects for mass consumption. The UK currently treats edible insects with cautious regulation, akin to a "temporary visa" status under the Food Standards Agency.

The Nottinghamshire Live reported that while cultural stigma remains a factor, the main impediment to growth in the UK insect food sector lies within governmental legislation and regulatory framework. The conference's consensus was that, given time and adjusted policies, edible insects could become a sustainable and nutritious addition to diets in the UK, as they already are in various cultures globally.

Source: [Noah Wire Services](https://www.noahwire.com)

## Bibliography

1. <https://www.nottingham.ac.uk/science/schools-centres-and-institutes/food-systems-institute/news-and-activities/news/uk-edible-insect-association.aspx> - Supports details about the University of Nottingham hosting the farmed insect protein conference in April 2025, including its aims to unite industry and regulators on topics like insect farming integration, health/welfare standards, and nutritional benefits.
2. <https://www.newprotein.net/news/grub39s-up-edible-insect-craze-swarms-uk-as-industry-conference-approaches> - Corroborates the UK Edible Insect Association's 30% membership growth pre-conference and the event's focus on sector challenges/opportunities, including regulatory barriers and entrepreneurial presentations.
3. <https://www.feedandadditive.com/uk-sees-growing-interest-in-insect-protein-sector/> - Verifies the conference dates (24-25 April 2025) and confirms discussions on technical, commercial, and regulatory aspects of the UK's rapidly expanding insect protein industry.
4. <https://www.nottingham.ac.uk/global/partnerships/featured/adelaide-nottingham-alliance/research-themes/case-studies/putting-insects-on-the-menu.aspx> - Supports claims about academic research at Nottingham addressing sensory properties of insects (flavor, texture) to improve consumer acceptance and product development strategies.
5. <https://www.newprotein.net/news/grub39s-up-edible-insect-craze-swarms-uk-as-industry-conference-approaches> - Confirms the 60+ UK companies in the sector, new monthly startups, and the conference's international networking components including insect-based meals.
6. <https://www.nottingham.ac.uk/science/schools-centres-and-institutes/food-systems-institute/news-and-activities/news/uk-edible-insect-association.aspx> - Aligns with UKEIA's role in organizing the conference and its emphasis on regulatory collaboration, particularly regarding post-Brexit food safety alignment challenges.
7. <https://www.nottinghampost.com/news/local-news/ate-crickets-farmed-insect-protein-10131984> - Please view link - unable to able to access data