

## Combining entomophagous tradition with modern farming and innovative, yet traditional foodstuffs in Thailand and Cambodia (IFNext project presentation)

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Traditional entomophagy includes insect collecting, processing, consumption, and preservation. The latter is typically practiced in dry and warm areas. In humid, tropical regions, this is not the case, possibly because many species may be obtained always fresh. Still, there is a long history of preserving foodstuffs in regions where, drying is not an option.

Cambodia and Thailand are affected by malnutrition, particularly of mothers and children in rural areas. IFNext ("Bringing insect farming to the next level") is a project that started in 2019 and seeks to improve the nutrition of mothers and children in those countries by designing insect farming starter kits so that families may rear their own insects, consume them, and sell surpluses on local markets. During the project, kits will be adapted to the specific needs of the farmers. The consortium agreed on the Mediterranean field cricket (*Gryllus bimaculatus*) to be reared by everybody, and another species with local importance, i.e. the silk worm (*Bombyx mori*) for Thailand, the Cambodian field cricket (*Teleogryllus mitratus*) for Cambodia, and the mealworm (*Tenebrio molitor*) for Germany. Farmers will be involved directly when choosing a novel preserved insect product, using traditional, low-energy techniques, e.g. fermenting, smoking, krupuk-style crackers, and home canning. Products will be developed and their compositional, microbiological, and sensorial quality monitored. Results will be published in scientific and popular magazines and on social media in English, Khmer, Thai, and German.

The project is supported by funds of the Federal Ministry of Food and Agriculture (BMEL) based on a decision of the Parliament of the Federal Republic of Germany via the Federal Office for Agriculture and Food (BLE).

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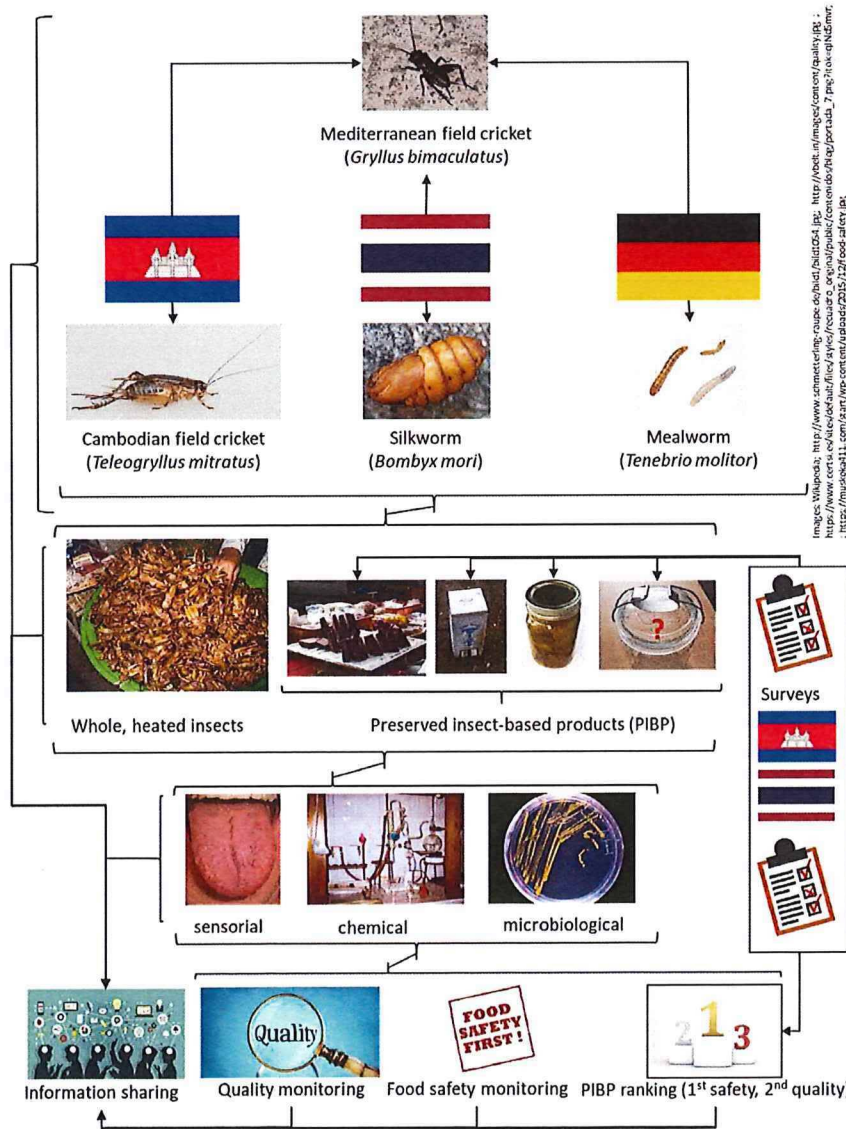
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## Introduction

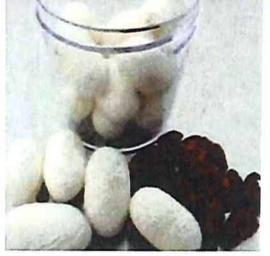
- Entomophagy is common practice in Cambodian and Thailand and starts to get more attention in Germany.
- Rearing insects with agricultural sidestreams by small farmer families can contribute to their nutrition (particularly that of mothers and their children) and to their income by selling (processed) surplus on local markets.
- The project IFNext contributes to this condition by designing locally-adapted insect rearing starter sets and developing novel insect products by using traditional low-energy preserving techniques after having consulted with the corresponding communities.
- Start in April 2019, duration three years
- The project is supported by funds of the Federal Ministry of Food and Agriculture (BMEL) based on a decision of the Parliament of the Federal Republic of Germany via the Federal Office for Agriculture and Food (BLE).

## Material and methods



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