Labeling of food insect products in the European Union

Laura Schiel, Christine Wind

Introduction
The only regulation regarding edible insects is Regulation (EU) 2015/2283 (Novel-Food-Regulation), which has been fully applicable since 1st January 2018 and contains rules on the placing on the market of food insect products in the European Union.

There are currently no other specific regulations for food insect products - for example with regard to labeling. Only the general requirements set out in Regulation (EU) 1169/2011 concerning the provision of food information to consumers are applicable on food insect products. In order to facilitate the handling of edible insects, some countries of the European Union have published guidelines on this topic, which contain additional recommended labeling elements based on risk assessments.

Recommended labeling information
In Germany, the labeling is based on the indications given in the Austrian guideline for cultivated insects as food [1].

Therefore the following additional information are recommended:

- Common and scientific name
- Allergen warning
- Indication „cultivated“
- Instructions for use

For example:
- Our ingredients: 45% rehydrated buffalo worm soy protein (60% buffalo worms Alphitobius diaperinus), 40% soy protein concentrate, water, rape, oil, onions, egg white (dried), tomato paste (tomatoes, salt), soy sauce (water, soy beans, wheat, salt), mustard (water, mustard seed, vinegar, salt, sugar, spices), potato starch, spices, salt, lemon say, persely

- Allergen warning: In the case of an allergy to crustaceans, molluscs or dust mites, there is also the possibility of an allergy to food insects. Product may contain traces of celery.

- Made from buffalo worms, species-appropriate cultivated, without the use of antibiotics

- Attention! Only consume fully cooked. Do not refreeze after defrosting.

Samples at the CVUA Freiburg
In 2019 (to date August 22nd), 36 samples were analyzed at the CVUA Freiburg.

- Common and scientific names of the species were given on 36 samples (Fig. 1, 1).

- Allergen warning, especially for food insects, could be found as well on 36 samples (Fig. 1, 2).

- On 29 products it was indicated, that insects may cause allergic reactions if there is a cross-reactivity to crustaceans, molluscs and/or dust mites (Fig. 2, a).

- Two mentioned only molluscs (Fig. 2, b), four crustaceans and molluscs (Fig. 2, c), on another sample only crustaceans and dust mites are indicated as possible allergens (Fig. 2, d).

- Ten out of 36 products were also labeled as cultivated insects (Fig. 1, 3).

- An instruction for use (consumed only fully cooked) was given on eight out of 36 products (Fig. 1, 4).

According to Regulation (EU) No 1169/2011, Article 36 (2) (a), food information provided on a voluntarily basis must also comply with the requirement not to be misleading the consumer, as referred to in Article 7 of Regulation (EU) 1169/2011.

Article 7 (1) states, that “food information shall not be misleading, particularly:
- as to the characteristics of the food and, in particular, as to its […] identity […]”

The labeling of the product therefore did not comply with the requirements of Article 36 (2) (a) of Regulation (EU) No 1169/2011.

Results and Discussion
So far, only the generally applicable labeling requirements according to Regulation (EU) 1169/2011 have been mandatory for the 36 food insect samples already evaluated at the CVUA Freiburg. Nevertheless, the proposals for additional, recommended labeling information according to the Austrian guideline for cultivated insects have been applied to a large number of samples.

The fact, that the allergenic potential of food insects poses a particular health hazard, was highlighted in a risk profile related to production and consumption of insects as food and feed. EFSA Journal 2015. 13(10):4257-4317

A revision of Regulation (EU) 1169/2011 is so required to regulate the recommended labeling information by law and to ensure the food safety of food insect products.

References:

Contact:
Chemical and Veterinary Investigation Office, Freiburg, Germany, Corresponding author: laura.schiel@cvua.freiburg.de