

Policy Brief: Insects as food and feed in the EU

ValuSect aims to strengthen the development of insect-based products in North-West Europe. The success of introducing entomophagy in Western societies strongly depends on legislation. This policy brief presents policy aspects of the production and marketing of insect-based foods and feeds in the EU.

1. Insect production regardless of purpose

❖ General food law and hygiene requirements

Producers of insects for food and feed operate within a legislative framework which primarily consists of rules that apply to producers of any type of food or feed.

This EU-level framework is set by the [General Food Law](#) and the Regulations on [feed hygiene requirements](#) and the [hygiene of foodstuffs](#), which lay down general principles, safety standards and rules regarding the registration of activities.

Insect producers are also required to ensure that their animals are kept in good health so as to prevent the spreading of diseases among their production flock, according to the [EU Animal Health Regulation](#).

❖ Feed for farmed insects

The EU regulates which type of feed may be given to farmed animals —which includes insects. The [Regulation on Animal Feed Marketing](#) allows insects to be fed with materials of vegetal origin (if they are not defined as waste), as well as some materials of animal origin such as milk, eggs, honey, rendered fat, and blood products from non-ruminants. However, insects may not be fed with other slaughterhouse or rendering-derived products, manure, catering waste, or unsold products from food industries or retailers that contain meat or fish.

❖ Prohibited species

The breeding of certain species is prohibited under the [EU Regulation on Invasive Alien Species](#). The only species included as of 2020 is the *Vespa velutina nigrithorax* — or Asian yellow-legged hornet.

2. Insects produced for feed

Since insects and derived products (excluding live insects) used to produce feed fall within the scope of the [EU Animal By-Products Law](#), producers have to comply with a series of obligations, such as:

- Insects must be processed in establishments specifically approved for that purpose.
- Specific processing methods must be used, defined by either the EU or by Member States.

These rules do not apply to either insect fats, whole insects, or insect meal obtained through hydrolysis.

❖ Farm animals

Insect-derived proteins may not be fed to either pigs, poultry, or cows and other ruminants, under what is commonly known as the [EU feed ban](#), adopted following the outbreak of mad cow disease in the 2000's.

❖ Fur animals and pets

However, insect-derived protein may be used to feed fur animals and pets (e.g. dogs, cats, birds or reptiles), but can only be obtained from house crickets, yellow mealworms, and black soldier flies.

❖ Aquaculture animals

Insect protein may be used in feed for aquaculture animals since the 2017 [revision of the EU feed ban](#). Three types of cricket, two types of mealworm, and two fly species are currently authorised.¹

❖ Ongoing discussion for poultry and pigs

The European Food Safety Authority (EFSA) reported in 2015 that it expects insect protein sources to be as safe as other non-processed animal protein sources, in terms of microbiological hazard. Since then, the European Commission has been considering a revision of the feed ban in order to authorise the use of insect proteins for poultry and pig feeds. Member States are expected to approve the measure by 2020.

¹ *Hermetia illucens*, *Musca domestica*, *Tenebrio molitor*, *Alphitobius diaperinus*, *Acheta domesticus*, *Gryllobates sigillatus*, *Gryllus assimilis* are authorised for use in feed for aquaculture animals.

3. Insects produced for food

❖ Legislative patchwork under the Novel Foods Regulation

In addition to general food hygiene requirements, the production and marketing of insects as food is regulated by the now repealed [EU Novel Foods Regulation of 1997](#). Under this law, foods that were not consumed to a significant degree in Europe before 1997 may only be placed on the market if a specific authorisation has been granted, following a positive safety assessment.

The law's vagueness regarding insects resulted in a patchwork of national approaches.² Some countries allowed only certain species to be produced and sold as food, some authorised all species, while other countries completely prohibited the production and marketing insect-based products as novel foods.

❖ Insects authorised as novel foods

The vagueness regarding insect products was tackled by the 2015 revision of the legislation. It confirmed insects are indeed novel foods, and harmonised authorisation requirements across the EU. Producers of insect-based foods can now obtain EU-wide authorisation to produce and sell their products.

- The standard procedure requires the applicant to submit scientific proof of safety and lasts a minimum of 18 months, but has the advantage of granting the applicant with 5 years of market exclusivity.
- The secondary procedure allows applicants to submit a notification of the introduction on the single market of a traditional food from a third country. The safety of the food is assessed based data and experience of continued use for at least 25 years. This procedure can be as short as 4 months, but provides no company data protection and allows both Member States and EFSA to make safety objections.

Several dossiers for insects have been submitted, including species of mealworms, grasshoppers and house crickets, which EFSA is expected to endorse as being safe for human consumption in 2020.

❖ Existing insect-based foods

Species that have obtained authorisation are added to the EU list of Novel Foods. Since the absence of insect species on the 1997 list constituted a *de facto* ban on insect-based foods, transitional measures were included in the Regulation.³ This allowed existing producers to continue marketing their insect-based foods in Member States where it had already been

² Member States disagreed on whether a novel food category in the original law ('food ingredients isolated from animals') included insects or not. The revision provided clarity by changing this to 'food consisting of, isolated from or produced from animals or their parts' and by including a recital confirming 'those categories should cover whole insects and their parts'.

³ In order to qualify, producers were required to submit their dossiers for authorisation by 1 January 2019.

authorised under the 1997 Regulation. This explains why some insect-based food products are already sold in Belgium, United Kingdom, France, Germany, the Netherlands, Denmark and Finland — ahead of their EU-level authorisation.

❖ **Specific hygiene rules for insects as food**

In 2019, the European Commission published a [draft regulation](#) that would introduce food hygiene standards for insects intended for human consumption, similar to those already laid down for use in feed. This could help close existing regulatory loopholes.

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