

Summary of the dossier

Applicant: Belgian Insect Industry Federation (BiiF), 15 rue Fernand Bernier, 1060 Saint-Gilles, Belgium

Food category: *Acheta domesticus* for consumption as a food and as an ingredient in additional food groups The application of this novel food is submitted pursuant to Regulation (EU) 2015/2283 of the European Parliament and of the Council of 25th November 2015 on novel foods By introducing this dossier, the BiiF is requesting a EU authorization for the following product categories including heat-treated house cricket adults for human consumption: - 100% packaged whole heat-treated *A. domesticus* - 100% dried *A. domesticus* - 100% *A. domesticus* powder - 100% fresh *A. domesticus* paste - Pasta (40% of dried *A. domesticus*) - Protein products excluding dairy analogues (70% of fresh *A. domesticus*) - Confectionery (70% of fresh *A. domesticus*) - Salads and savoury based sandwich spreads (70% of fresh *A. domesticus*) - Bakery wares (80% of dried *A. domesticus*) - Nut spreads (70% of fresh *A. domesticus*) - Ready-to-eat savouries and snacks (100% of *A. domesticus*).

House cricket (*Acheta domesticus* (L.1758)) is an *Orthoptera* belonging to the *Gryllidae* family. *Acheta domesticus* is a cosmopolitan and omnivorous insect which can be reared under confined conditions. The stage of maturation used for human consumption is the adult stage. House cricket, in particular in the dried form, is a foodstuff of high nutritional value. It presents high amounts in polyunsaturated fatty acids, including linoleic and α -linolenic acids, vitamins B2, B12, C and E and essential amino acids, without leading to deficiency in other nutrients. Microbiological, chemical and heavy metal analyses have demonstrated the compliance of this insect species with guidelines proposed by FASFC (Federal Agency for the Safety of Food Chain in Belgium), EU food safety regulations and criteria defined by FAO respectively.

The production system put in place ensures the safety of the commercialized products by respecting Good Hygiene and Good Manufacturing Practices, traceability, compulsory notification and labelling requirements as well as a management of chemical and microbiological hazards and a self-checking system based on the HACCP-principles.

Moreover, the traditional consumption of house crickets in developing countries as well as the growing commercialization in Europe of food products containing *A. domesticus* adults (thanks to transitional authorizations given by some European countries for the commercialization of this insect species under certain conditions) with no negative consumer health impact reported support the absence of detrimental effects on human health. No negative effect from chitin has been reported after the consumption of house crickets. However, the recommendation of not exceeding a consumption of 54g of dried *A. domesticus* can be made in order to comply with the amount daily consumed reported as safe for human health by EFSA (5g of chitin/day). Even if this value does not represent a maximum, as the maximum is not yet defined, it can be used to mitigate the risk to its minimal. Likewise, no obvious allergic reaction due to house cricket consumption has been reported. Nevertheless, people allergic to shellfish, crustaceans and mites should avoid consuming products containing *A. domesticus*. This warning has to be clearly mentioned on the labelling of products containing this insect species.