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For immediate use

French Scientific Opinion on Insects (12 February 2015)

The French Agency for Food, Environmental and Occupational Health & Safety (ANSES) has provided an opinion on "the use of insects as food and feed and the review of scientific knowledge on the health risks related to the consumption of insects."

The University of Liège-Gembloux on behalf of ANSES has undertaken a literature study to review existing scientific knowledge and provide an opinion addressing issues relating to health hazards (biological, physical, chemical, allergy related, etc.) in insects and products derived from insects intended for human food and animal feed. The opinion also covers the nutritional and environmental aspects in brief.

The review has highlighted the lack of scientific data and information on:

- environmental impact of insect production compared to other protein sources
- nutritional value of the different insect species and insect products
- specific hazards related to insects and safety in consumer countries

The opinion highlights the need for research that would enable a full assessment of the health risks associated with the consumption of insects. The report has recognised the work of [PROteINSECT](#) as improving scientific knowledge on the analysis of the hazards associated with the consumption of insects.

ANSES has identified hazards related to:

- endogenous substances specific to certain categories of insects possessing venom or antinutritional factors;
- the rearing and production conditions for which a specific framework should be defined to guarantee the control of health risks;
- specific sensitivities in certain consumers, taking into account the presence in the insects of pan-allergens common to all arthropods (mites, crustaceans, molluscs, etc.).

ANSES recommendations include:

- intensifying the research effort on these topics;
- establishing, at EU level, positive and negative lists of the different insect species and stages of development that may or may not be consumed;
- exploring on a scientific level the question of animal welfare for these categories of invertebrates;

- defining a specific framework for rearing and production conditions for insects and their products to guarantee the control of health risks; Page 27 / 38 ANSES Opinion Request No. 2014-SA-0153
- establishing measures for the prevention of allergy risk both for consumers and in the workplace.

Pending the establishment of specific standards and a suitable framework, ANSES calls for caution among consumers, especially those susceptible to food allergies. ANSES also emphasises the major challenges surrounding knowledge related to the social acceptability of these new foods or the associated challenges of development and environmental impact.

PROteINSECT is focusing on five key areas (below) in order to further the scientific evidence base on insect as a novel source of protein for animal feed. The PROteINSECT research will address a number of the scientific gaps identified by the ANSES Opinion:

1. The development and optimisation of fly larvae production methods for use in both developed and developing countries at small and large scale.
2. Determination of safety and quality criteria for insect protein products.
3. Evaluation of processing methodologies and the evaluation of crude and refined insect protein extracts in fish, chicken and pig feeding trials.
4. The determination of the optimal design of insect-based animal feed production systems utilising the results of a comprehensive life cycle analysis.
5. To build a pro-insect platform in Europe to encourage adoption of sustainable production technologies to include examination of the regulatory framework.

Full OPINION of the French Agency for Food, Environmental and Occupational Health & Safety on "the use of insects as food and feed and the review of scientific knowledge on the health risks related to the consumption of insects" can be found [here](#).

ENDS/ Contacts & Notes follow

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press@proteinsect.eu Interviews available with Elaine Fitches, PROteINSECT Co-ordinator/FERA

Notes for Editors:

1. PROteINSECT survey on production and use of insect protein for animal feed can be accessed [here](#)
2. PROteINSECT's summary report on current European legislation concerning insect protein and animal feed is available to view and download [from the project website](#)
3. Partners in the PROteINSECT project are:

- FERA - Food & Environment Research Agency, UK Tel +44-1904-462564
Dr. Elaine FITCHES - Coordinator, expertise in entomology and Dr Adrian Charlton expertise in food safety
- CAB International UK - Expertise in entomology
- Nutrition Sciences NV Belgium -Global producer of feed concepts and functional feed ingredients (FFIs)
- Katholieke Universiteit Leuven Belgium - Expertise in Life Cycle Analysis (LCA)
- Minerva Communications Ltd, UK - Expertise in Food Policy and Science Communication
- Eutema Technology Management GmbH & Co KG Austria - Expertise in Science Communication
- Grantbait Ltd UK - Maggot Farmer
- Guangdong Entomology Institute China -Expertise in Entomology, especially rearing of insects
- Huazhong Agricultural University China -Expertise in Entomology, expertise in fly rearing and prepupae collection
- Fish for Africa - Ghana Limited by Guarantee Ghana -NGO promoting sustainable Aquaculture in Africa
- Institut D'Economie Rurale Mali - Expertise in sustainable Agriculture in Africa
- The University of Stirling UK - Expertise in Fish feeding trials

Notes/end

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