



- Press Statement -

The International Platform of Insects for Food and Feed Brussels, 29th of November

The International Platform of Insects for Food and Feed (IPIFF) – the focal point of the European insect sector in EU’s capital, Brussels - welcomes the entry into force of the [Commission Regulation \(EU\) 2021/1925](#). This act amends [Regulation \(EU\) No 142/2011](#) by including a definition for ‘frass’ derived from farmed insects. In line with the applicable EU rules, this entry into force follows the ‘green light’ given by the EU Member States on [May 25th this year](#).

Note: On this occasion, the Secretariat of IPIFF is publishing a [factsheet](#) covering subjects such as the benefits of insect frass for soil and plants, as well as the implications of this legislative reform. More information can be found in the document below.

Fact sheet on insect frass

1. What is frass?

The recent reform of the **European Union (EU)** legislation on animal by-products of significant relevance for the European insect sector and it introduces the **first standards for insect frass** as fertilising product in agriculture. Building on the latest technical knowledge, these new norms should facilitate the development of a **level playing field** across the Member States (MS) of the EU by harmonising the processing conditions used for insect frass. In parallel, the EU legislator has **created a definition for insect frass** – an element of crucial importance in this process.

01 Frass means a mixture of excrements derived from farmed insects, the feeding substrate parts of farmed insects, dead eggs and with a content of insect farmed insects of not more than 5% in volume and not more than 3% in weight.

source: Commission Regulation (EU) 2021/1925.

Regulatory context

The first EU standards for the placing on the market of processed insect frass follow the discussions between Member States experts and EU Commission officials. One legal text was then formally endorsed by the Council of the European Union and the European Commission in accordance with applicable EU procedures. The recently adopted piece of legislation amends the Annex I and Annex XI of Regulation (EU) No 142/2011, by aligning the standards for the placing on the market of frass with those applying to processed animal manure from specifically frass treated at 70 degrees Celsius for at least 1 h, complying with the microbiological and the relevant microbiological standards from Annex XI Chapter 1 section 2) as well as allowed on the markets of EU Member States, in line with the national authorisation procedures.

While frass was already subject to certain authorisation procedures at national level (i.e. before the entry into force of this text), the EU legislator foresees a transitional measure in order to assist operators in complying with these new norms at Union level (more information in section 10).

What is the objective of this factsheet?

This document aims at presenting an overview of the latest regulatory changes related to the use of insect frass as fertilising product in agriculture. Consequently, this document will also present an overview of the **benefits of insect frass (section 2)**, the **implications of the first legislative reform (section 10)**, as well as a quick summary of **manufacturing practices** followed by insect producers (section 10).

2. What are the benefits of insect frass?

Similar to compost or other types of animal manure, frass is a valuable by-product derived from insect farming activities. The **application of frass on agricultural lands** is consistent with the principles of circular economy, closing the loop of insect farming by **reintroducing nutrient elements and organic matter** in the soil. The valorisation of frass as fertilising product **improves farming sustainability**. Moreover, frass has proven benefits on soil and plant health, such as those listed below:

- 01 ...provides macro- and micro-nutrients to the soil:** from a chemical point of view, frass has concentrations of N, P, K and Ca similar to those found in animal manure (e.g. poultry manure). Studies and trials confirm its high potential as fertiliser material, providing nutrients that are easily absorbed by the plants. Thanks to the presence of nutrients in a readily available form, insect frass is an efficient natural NPK fertiliser. It increases the biomass and the nutritional content in crops such as **vegetables** (e.g. lettuce), **grains** (e.g. barley, wheat, maize, sorghum) and **specialty crops** (e.g. vineyards). The addition of frass provides for a slow release of nutrients ensuring the long-term use of macro- and micro-nutrients.
- 02 ...supplies organic matter that enhances microbiological activity in soil:** as frass consists primarily of organic matter, its application improves the soil organic carbon content – as well as other relevant soil parameters, such as water holding capacity. In addition, the use of insect frass as organic fertiliser in agriculture adds beneficial microorganisms and biomolecules relevant for soil and plant health.
- 03 ...increases plant tolerance to abiotic stresses and resistance to pathogens:** due to the presence of insect compounds and microorganisms, the application of frass promotes the benefits of the beneficial *rhizome* areas (also known as rhizosphere) and activity. In addition, several studies highlight the role of frass in activating plant defence responses – while also enhancing the growth of certain pathogenic fungi. Such mechanisms are believed to be linked to the presence of chitin (i.e. the main chemical from the exoskeleton of insects – and the second most abundant biomolecule in the world, after cellulose). Lastly, it has been hypothesized that frass showed insecticidal qualities because it was proven to reduce wireworm populations.

Control sample **Fertilised with frass**

For more information, please contact the IPIFF Secretariat

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Interested to know what 'insect farming' is about? Check our updated

'Frequently Asked Questions' on the [IPIFF website!](#)

If you wish to hear more regarding the development of the European insect

sector, follow us on our social media platforms!



The International Platform of Insects for Food and Feed (IPIFF) is a non-profit organisation which represents the interests of the insect production sector towards EU policymakers, European stakeholders and citizens. Composed of 83 members, most of which are European insect producing companies, IPIFF promotes the use of insects and insect-derived products as top tier source of nutrients for human consumption and animal feed.