

**PRESS RELEASE**

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## **Protix takes sustainability to a new high**

**DIL Life Cycle Assessment confirms Protix's products have a considerably lower environmental footprint compared with common alternatives**

**Protix, the leading company in insect ingredients for feed and food, has released impressive comparative sustainability figures for its products following a Life Cycle Assessment (LCA) conducted by the Deutsches Institut für Lebensmitteltechnik (DIL e.V.). The analysis shows outstanding scores for four insect-based ingredients from Protix, which food, feed and fertilizer manufacturers can use to reduce their ecological footprint, while addressing demand for more sustainable nutrition.**

Highlights of the LCA, a commonly accepted way of evaluating the effects that a product has on the environment over the entire period of its life, include:

- The CO<sub>2</sub> footprint and impact on global warming is up to 24 times lower with insect-based PureeX<sup>®</sup> (at 0.439 CO<sub>2</sub> equivalent per kilogram product) than with poultry meat (10.33 kg CO<sub>2</sub> equivalent) which is commonly used in pet food as a high moisture protein source
- ProteinX<sup>®</sup> insect meal (at 1.149 kg CO<sub>2</sub> equivalent) has almost a seven-fold lower CO<sub>2</sub> footprint than the soy protein concentrate (at 7.5 kg CO<sub>2</sub> equivalent) often found in livestock and aqua feed
- Flytilizer<sup>®</sup>, Protix's insect-based fertilizer, shows only 0.02 kg CO<sub>2</sub> equivalent per kilogram of product
- Each kilogram of ProteinX<sup>®</sup> reduces water consumption by 330 litres (190 litres vs 520 litres for soy protein concentrate)
- Replacing coconut oil with LipidX<sup>®</sup> in pet food and livestock feed returns over 12m<sup>2</sup> of arable land to nature for each kilogram of fats. LipidX<sup>®</sup> uses 0.898 m<sup>2</sup> of land compared with coconut oil at 12.98 m<sup>2</sup>.

As people become increasingly aware of environmental issues such as deforestation, water scarcity, global warming and loss of biodiversity, and demand more sustainable products, the challenge facing feed, pet food and plant producing companies is to lower their environmental footprint while maintaining the taste and health benefits of their formulations. Protix's insect-based ingredients are delivering on their promise to provide a more sustainable solution with outstanding palatability and performance. The DIL study shows that land and water use, as well as CO<sub>2</sub> emissions, are considerably lower for Protix's insect-based ingredients than common ingredients such as soy protein concentrate, palm kernel oil or fish meal.

Protix is on a mission to bring the food system back in balance with nature. The company's ingredients already scored better than alternative ingredients in the company's first peer-reviewed LCA in 2019, and even better scores can be expected in the future. This spells good news for the insect sector as a whole as it demonstrates that insects have huge potential to address the challenges facing the industry both now and in the future.

Kees Aarts, CEO and joint founder of Protix, says, "We are delighted that these LCA findings confirm the sustainability of our products. Following the opening of our first-in-world 14,000 m<sup>2</sup> production facility in the Netherlands in 2019, we are now in a position to build on our results and expand internationally. With new international production plants, we are confident of achieving even better sustainability results."

Insects are interesting as a source of nutrients in many ways. The black soldier fly in particular is one of nature's most efficient composting 'machines'. The flies have a voracious appetite, and can turn organic waste into valuable biomass very fast, and with a low impact on resources: one tonne of insects can be grown in 14 days using a land area of only 20 m<sup>2</sup>. Because the mature black soldier fly does not eat, as larvae they are very efficient at storing nutrients. Finally, they can be farmed in a local and circular production process close to where they are needed, thus reducing transport. Protix successfully harnesses the power of these extremely efficient natural upcyclers.

The use of insects, and specifically the black soldier fly, as a sustainable source of protein and other nutrients is a relatively new, yet natural concept. Protix is at the forefront of the use of insects and is the only company in the world producing on an industrial scale. Replacing the current animal or plant-based proteins or fats with insect-based proteins or fats is a logical step in creating a positive footprint, and is also very promising in terms of health benefits.

As the leading company in insect ingredients for feed and food, Protix serves customers in the pet food, livestock, aquaculture and plant sectors, including the world's best-loved pet food brands and largest global feed manufacturers. The company is now targeting further growth, and will create a broader scientific basis for its portfolio through collaboration with its customers, scientific and academic institutions and other stakeholders.

For full details of the DIL study, including comparisons with other alternatives used in the market such as palm kernel oil or soy oil and fish meal, reach out.

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**About Protix**

Protix breeds larvae from the black soldier fly and is the market leader in insect-based nutrition for healthy and sustainable feed and food. Organic waste from the food industry serves as feed for the insects. In turn, the insects are processed into sustainable ingredients such as proteins and lipids. These nutrients are used by Protix's customers as nutritious high-added value ingredients in pet food and animal feed. Protix has built the first-in-the-world industrial insect facility, has laid the basis for a broad range of certified applications in feed and food. Protix contributes to a food system that is in balance with nature.

[www.protix.eu](http://www.protix.eu)

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