BioBoost
Accelerating biobased horticulture

Feed for farmed fish with insects fed with potato waste

Crop	Potato *Solanum tuberosum*
Croppart	Roots / Tubers
Application area	Food & feed
Status	Commercial stage
Public availability	Non-public
Relevant plant compounds	proteins

Description

The aquaculture sector is expanding rapidly worldwide, but this sector depends largely on the production of unsustainable fishmeal. Therefore, there is a shift towards alternative protein sources. Insects are hereby very interesting and are preferred over plant proteins by carnivores fish (e.g. salmon and trout).

InnovaFeed is a French company producing black soldier fly larvae. These larvae are by nature converters of various kinds of organic waste streams.

By partnering with Tereos, a potato starch producing company also based in France, InnovaFeed will use agricultural by-products as feed for rearing its larvae, without generating any additional pressure on natural resources. By integrating their industrial processes, the two companies are also contributing to minimising the impact on climate change**.** The operation of this unit will specifically enable the avoidance of 25,000 tons of CO2 per year.

The reared larvae are being processed into fish feed by the Norwegian company Skretting. In this feed at least 50% of the fishmeal has been replaced by insect meal. This meal is fed to trouts which are produced and processed by Truite Service in France. Auchan, a leading French retailer committed to responsible aquaculture, has made the insect-fed trout available in 52 supermarkets in the North and Ile-de-France, with plans to sell throughout France by the end of 2019.

Examples of end products

Protinova

Insect protein meal (https://innovafeed.com/produits/#proteines)

Nourrialinsecte

Trout reared on insect meal

Research topics

Rearing insects on by-products
Rearing farm animals on insects

Market topics

Pros and cons

- Sustainable insect production
- Sustainable farm animal production
- Upgrading the value of a very important residual stream in Europe

Resources

https://www.allaboutfeed.net/New-Proteins/Articles/2018/12/Insect-fed-trout-now-available-to-French-consumers-370736E/ Initiative website

https://nourrialinsecte.com/ Article

https://innovafeed.com/ Article