

## Dog biscuits made from brewer's spent grain and insects



Crop

Barley  
*Hordeum vulgare L.*  
Miscellaneous  
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Croppart

Seed

Application area

Food & feed

Status

Start-up stage

Public availability

Non-public

Relevant plant compounds

proteins





fibres

## Description

The dog snacks of the Belgian start up company Protimal contain larvae of the black soldier fly for a higher content of proteins and they contain brewer's spent grain for a higher content of fiber, which is beneficial for the gut health. The black soldier fly larvae can be reared very efficiently on various by-products originating from food and agricultural production. At the moment there is also liver in the biscuits for the smell and taste. The intention is to optimize the sustainability even more by ensuring that the liver is removed and that the larvae are the only animal protein source left.

Protimal was founded by students of VIVES University of Applied sciences in Roeselare. They were listed in the top 10 of the small bussiness projects competition of Vlajo in 2020.

### Pros and cons

-  Circular economy
  -  Creating a sustainable and healthy snack
  -  Upgrading of residual flows
  
  -  Insects are still expensive and production needs upscaling
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### Used conversion methods

#### Biochemical processes

Aerobic/ Anaerobic fermentation

#### Bioconversion

Insects

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## Resources

<https://www.facebook.com/protimal.kwispelkoek/> Initiative website