

The research and education center for innovation and sustainability in the feed industry



PROJECTS



EDUCATION



FACILITIES

WORKSHOP INSECTS IN THE PICTURE

Welcome and introduction by Trudy van Megen

Why now? Developments in regulations by Jason Kiem

Results of FDL research by Ageeth van der Lee

Opportunities of using insects in feed by Seppe Salari

Processing of insects by Jason Kiem

Break: ask questions in the chat

Questions and answers

Interested in starting a project?



Results of FDL research:

Reports by interns:

- Report TIM vitro testing algae and BSFL
- Opportunities and risks of using insects in the European feed market
- Market opportunities for insects in dog food

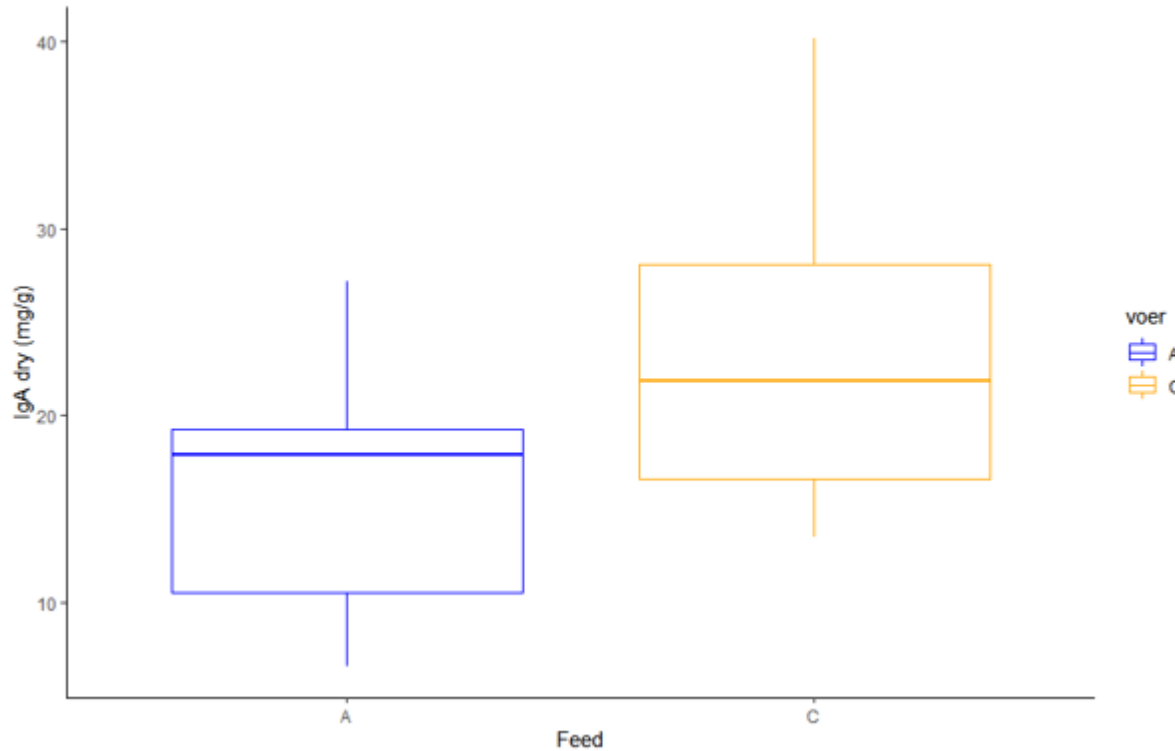
Health promoting effects in animals from bioactive components:

INTERREG NWE IDEA project:

Effect of micro algae in feed on immune system in dogs

Show improvement on the immune system by measuring IgA in manure of dogs

Results of IgA measured in manure of dogs



Average IgA in dry manure

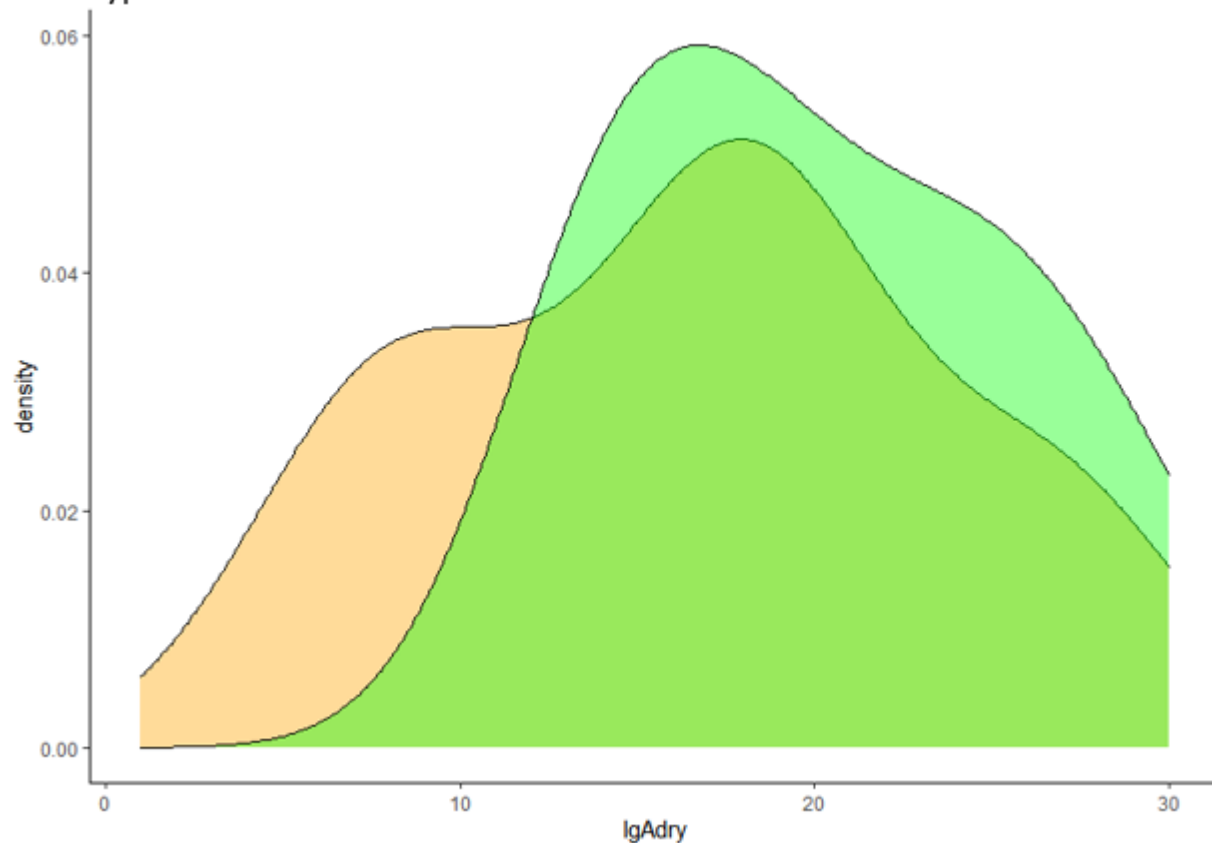
Control feed: 16,2 mg/g

C+ 0,5% algae: 20,5 mg/g

P=0,07

Results of IgA measured in manure of dogs

Densityplot



13 dogs used

Feed C: 0,5%
Chloromonas

voer
A
C

Improvement in
dogs on control feed
level 6-9: 85%
level 14-19: 53%
level 26-27: 1%

Recent articles on BSFL effects in livestock


Black soldier fly larval meal in feed enhances growth performance, carcass yield and meat quality of finishing pigs

S.Y. Chia , C.M. Tanga , I.M. Osuga , A.O. Alaru , D.M. Mwangi , M. Githinji , T. Dubois ,
S. Ekesi , J.J.A. van Loon , M. Dicke 

Black soldier fly (*Hermetia illucens*) larvae enhances immune activities and increases survivability of broiler chicks against experimental infection of *Salmonella Gallinarum*

Jina Lee ^{1 2}, Yun-Mi Kim ¹, Young-Kyu Park ³, Young-Cheol Yang ³, Bock-Gie Jung ⁴,
Bong-Joo Lee ¹

A bioinformatic study of antimicrobial peptides identified in the Black Soldier Fly (BSF) *Hermetia illucens* (Diptera: Stratiomyidae)

Antonio Moretta, Rosanna Salvia, Carmen Scieuzo, Angela Di Somma, Heiko Vogel, Pietro Pucci,
Alessandro Sgambato, Michael Wolff & Patrizia Falabella 

Study on effect of BSFL in feed on immune system



Proposal study in dogs:

Produce dog feed without BSFL (control) and with ...% BSFL

20 dogs are fed in a kennel

Feed Intake and manure scoring

Manure sampling for IgA measurement

Reporting

Cost indication: 18 k€

Study on effect of BSFL in feed



Application of BSFL in feed on health promoting effects:

Feed Design Lab joined partner project:

1A: dogs

1B: poultry/pigs

2: Which insect product is needed by feed companies?

Experiments on processing

Challenge experiment in broilers or piglets: 80-100 k€

If method of IgA in manure is also working for pigs and broilers no blood sampling is needed: less complex experimental plan

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HUSKY FOR KNOWLEDGE



ABOUT US

INDUSTRY PARTNERS

-                       

FOUNDED

RESEARCH AREAS

-                       



Question to answer for participants



Application of BSFL in feed on health promoting effects:

Feed Design Lab joined partner project:

1A: dogs

1B: poultry/pigs

2: Which insect product is needed by feed companies?

Experiments on processing

Question to answer in the chat before closing:

- A. I am (your company) interested to participate in a FDL project
- B. I am interested in this topic, keep me updated
- C. I am not interested in a FDL project



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HUNGRY FOR KNOWLEDGE

Thank you for your attention!

HUNGRY FOR = HONGER NAAR / HUNKEREN
NAAR

KNOWLEDGE = KENNIS

Feed Design Lab is hét (inter)nationale centrum waar de slimste mensen uit de Feed Industrie (NETWERK en EDUCATIE) samen komen om te werken aan continue verbetering van diervoeders. Door middel van ONDERZOEK en PROJECTEN wordt voortdurend kennis verzameld die bijdraagt aan een gezonde en duurzame toekomst voor deze sector.

