



Workshop

**Animal feed production from biowastes:
A roadmap for research on insect based
feed**

7 September 2017, 09:00 - 18:30

STIAS, Stellenbosch, South Africa

Invitation to workshop

Animal feed production from biowastes: A roadmap for research
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Animal protein produced from insects has the potential to provide a sustainable feed for the increasing global animal production. However, the relative sustainability will largely depend on the substrate used for the insect production. For example, it may be more sustainable to use cereals, oil crops (e.g. soya) or food waste directly as animal feed. Urban biowastes such as kitchen waste or animal and human manures that are poorly managed may be suitable, economic and sustainable substrates for insect production. This could ensure the sustainability of future food production along the lines of urban circular economy.

The workshop will present state of the art of research on processing of biowastes with the black soldier fly larvae (*Hermetia illucens*) into animal protein and will explore the research priorities moving forward.

In particular, the program will spend time in a multidisciplinary setting exploring the research needs for the industrial scale rearing of insects on urban biowastes.

Please note: this workshop will take place directly following the South African Association for Food Science and Technology Annual International Congress, which you may be interested to attend: <http://www.saafofost2017.org.za/>

In light of your previous work and expertise we would like to kindly invite you to participate in this full day workshop. If you would like to join us we kindly ask you to register following the link below.

<https://goo.gl/forms/QbjHmFrNtJg3CCm93>

Participation in this event is free of charge. Participants are responsible for their own travel and accommodation to the event.

Session Topics:

Session 1: Sustainability principles and environmental life cycle assessment, Prof. Dr. Alexander Mathys, ETH Zurich, Chair of Sustainable Food Processing.

Session 2: Biowaste sourcing and processing, Dr. Stefan Diener, Eawag/Sandec.

Session 3: The role of microbes in organic waste bioconversion by insect larvae, Prof. Dr. Jibin Zhang, Department of Bioengineering and Microbiology, Huazhong Agricultural University.

Session 4: Insect processing and safety, Dr. Elsje Pieterse, Department of Animal Sciences, Stellenbosch University.

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ETH Zurich Sustainable Food Processing Laboratory

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Workshop programme

Facilitation: Michelle Grant, World Food System Center ETH Zurich

08:30 - 09:00 Arrival and registration

09:00 - 09:30 Opening remarks

09:30 - 09:45 Session 1: Sustainability principles and environmental life cycle assessment

09:45 - 10:00 Session 2: Biowaste sourcing and processing

10:00 - 10:15 Session 3: The role of microbes in organic waste bioconversion by insect larvae

10:15 - 10:30 Session 4: Insect processing and safety

10:30 - 11:00 Questions and answers panel with session speakers

11:00 - 11:20 Coffee break

11:20 - 11:30 Introduction to dialogue sessions: Participants will split into four groups, rotate between the session topics and explore the session topics in more detail.

11:30 - 12:45 Dialogue sessions: Round 1 and 2

12:45 - 14:00 Lunch

14:00 - 15:15 Dialogue sessions: Round 3 and 4

15:15 - 15:30 Coffee break

15:30 - 16:30 Synthesis and debriefing

16:30 - 16:45 Closing remarks

16:45 - 17:00 Walk to reception

17:00 - 18:30 Reception in Stellenbosch