

Insect Production

*Food – Applications
New industries*

Programme

Tuesday, October 10th 2017

9:00 *Opening coffee*

9:25 **Welcome address, Manuel GEA, AdebioTech ; Samir MEZDOUR, AgroParisTech**

9:30 **Keynote address**

Paul VANTOMME, Senior Forestry Officer, FAO

Opportunities and Constraints of Farming Insects for Food: a global overview

10:15 – 3:10 SESSION 1 – Insect rearing from research to industrial production

Coordinators: Philippe LE GALL, IRD et Frédéric MARION-POLL, AgroParisTech

10:15 **Philippe LE GALL, IRD et Frédéric MARION-POLL, AgroParisTech**
Domesticating insects? How, why do it?

10:45-11:15 *Coffee break / Posters on display / Exhibition*

11:15 **Longyu ZHENG, State Key Laboratory of Agricultural Microbiology, Huazhong Agricultural Univ. China**
Insect mass breeding and biorefinery technology to produce protein and by-products

11:45 **Fogoh John MUAFOR, Living Forest Trust, Cameroon et Mélanie RAMNUTH, Experts-Solidaires**
Insect production chain in Cameroon and setting-up cricket rearing in Benin

12:15 **Valéry BONNET, Delta Neu**
Ventilation and heat-elimination system for insect rearing

12:35 **Franck LAUNAY, IPSB**
The constraints of the scale up of insect production

12:55 **Anne DEGUERRY, Entofood**
From research to industrial insect production: Difficulties and Challenges of moving to scale

1:15-2:30 *Buffet / Posters on display / Exhibition*

Gold



Silver



- 2:30 **Jérôme COSTIL**, Mutatec
Which types of biomass can be valorised by ento-conversion? Stockpiles, regulatory, technical and economic constraints
- 2:50 **Damien MOREL**, APPI
Different production systems for insect rearing

3:10-6:00 SESSION 2 – Insect health and health safety

Coordinator: **Christina NIELSEN-LEROUX**, INRA

A) Insect health

- 3:10 **Jørgen EILENBERG**, University of Copenhagen
Natural enemies of insect production systems: where are risks and how can we address the risks?
- 3:30 **Christina NIELSEN-LEROUX**, INRA
Role of food and microbiota on insect health
- 3:50 **Anne-Nathalie VOLKOFF**, DGIMI and **Mylène OGLIASTRO**, INRA
Metagenomics: a tool to develop the health diagnosis of insect breeding
- 4:10 **Claire BEAUVAIS**, Bee-keeping Veterinarian
Biosafety applied to insect rearing for human and animal food

4:30-5:00 Coffee break / Posters on display / Exhibition

B) Health safety

- 5:00 **Christophe TRESPEUCH**, Mutatec
Insects, a safe and healthy raw material for animal feed: example of the CertiFLY project
- 5:20 **Jean-Philippe DESLYS**, CEA
Ensuring health safety for organic wastes fed to insects and for end-products
- 5:40 **Justine COURTOIS**, ASBL CRIG
Entomophagy: what about allergies ?
- 6:00 Photo-op with posters**
- 6:00 **Pascal SAINT-VAL**, Green Technologies
QUALISTA® cereal products: an innovative solution for the safety of insect breeding
- 6:05 **Michel SAUVAIN**, Institut de Recherche pour le Développement
*Isolation of microorganisms with antimicrobial activity from the digestive tract of *Hermetia illucens* larvae*
- 6:10 **Kevin HIDALGO**, INRA
Evaluation and control of chemical risk for the valorisation of insects in animal feed
- 6:15 **Isabelle LERICHE**, VIRBAC NUTRITION
Assessment of the palatability and digestive tolerance in dogs of a new diet based on insect as the protein source
- 6:20 **Camille LOUPIAC**, AgroSup Dijon, Equipe PCAV, UMR PAM
*Structural studies on soluble insect proteins extracted from *Tenebrio Molitor* larvae*
- 6:25 **Samir MEZDOUR**, AgroParisTech
Insect biorefinery - Insects as animal feed- PROJECT DESIRABLE

6:30 Photo-op with stands

APPI
Flottweg France
Haarslev Industries
HF Group
Micronutris
Monts

7:00 Cocktail / Posters on display / Exhibition

Wednesday, October 11th 2017

8:30 *Opening coffee*

9:00-12:00 SESSION 3 – Prospects in human and animal food

Coordinator: **Samir MEZDOUR**, *AgroParisTech*

- 9:00 **Samir MEZDOUR**, *AgroParisTech*
Transformation processes of insect larvae for ingredients preparation
- 9:20 **Grégory LOUIS**, *Entomo Farm*
Insect-based materials and their markets
- 9:40 **Guillaume GRAS**, *InnovaFeed*
Worth and relevance of insect proteins for feeding salmonids
- 10:00 **Christine BUREL**, *INRA* et **Michel LESSIRE**, *INRA*
Feeding value of insect meals in trout and poultry: digestibility and effect on quality of products
- 10:30 **Nicolas CÉSARD**, *MNHN* et **Esther KATZ**, *IRD-PALOC PARIS*
Changes and acceptability in food consumption

11:00-11:20 *Coffee break / Posters on display / Exhibition*

- 11:20 **Charlotte FLORET**, *AgroParisTech-JIMINI'S*
Texturization of insect proteins and explanation for choosing the insteak
- 11:40 **Maylis RADONDE**, *Micronutris*
Quality system for the edible insect industry

12:00-4:00 SESSION 4 – Environmental, economic and societal approach in order to assess the relevance of each sector

Coordinators: **Philippe SCHMIDELY**, *AgroParisTech* et **Sandrine DEREUX**, *Pôle de compétitivité IAR*

- 12:00 **Patricia LE CADRE**, *Céréopa*
Protein autonomy of livestock farms: sustainability first
- 12:30 **Philippe SCHMIDELY**, *AgroParisTech*
Economic approach to the valorization of insect meal in animal feed
- 12:40-2:00 *Buffet / Posters on display / Exhibition*
- 2:00 **Marc BARDINAL**, *ADEME*
Insects: from production to consumption, an assessment of the industry
- 2:20 **Lars-Henrik HECKMANN**, *Danish Technological Institute*
inVALUABLE: Insect Value Chain in a Circular Bioeconomy
- 2:40 **Catherine MACOMBE**, *IRSTEA* et **Joëlle AUBIN**, *INRA*
Valorisation scenarios for insect rearing designed in the DESIRABLE project
- 3:10 **Leen BASTIAENS** and **Maarten UYTTEBROEK**, *VITO*
Direct and indirect biorefinery technologies for conversion of organic side-streams into multiple marketable products – BBI-InDIRECT project
- 3:30 **Florian NOCK**, *JIMINI'S*
The insect in all its forms; a marketing and didactic approach of new protein sources
- 3:50 **Sylvaine PORET**, *INRA*
Consumers' acceptability of insect meal in animal feed

4:10-4:30 Coffee break / Posters on display / Exhibition

4:30-5:40 Round table – Regulatory challenges for the industry: valorisation, the use of by-products for a circular economy

Coordinators: **Maelenn POITRENAUD**, *Veolia* et **Jean-Philippe DESLYS**, *CEA*

Brigitte HEIDEMANN, *DGAL*

Antoine HUBERT, *IPIFF*

Philippe LE GALL, *IRD*

Frédéric MARION-POLL, *AgroParisTech*

Philippe SCHMIDELY, *AgroParisTech*

Ariane VOYATZAKIS, *BPI France*

5:40 Closing conference

6:00 Conclusions

Samir MEZDOUR, *AgroParisTech*

Thursday, October 12th 2017

9:00-1:00 Workshops

CycleFarms

How to set up and start off one's own black soldier fly farm?

- Hermetia's reproduction / Breeding larvae / Use and transformation
- Construction and demonstration to learn how to run this farm

JIMINI'S

How to consciously incorporate insects into our nutrition?

- Come and test insects in all their forms and discover how to make oneself familiar with insects in order to make them accepted in our daily food
- Simple and quick cooking workshop

Micronutris

Qualitative study of the development of a new food product

- Presentation of market opportunities and technical constraints with the development of a new insect-based food product
- In this workshop, you will be part of a focus group whose aim will be to realistically determine the next product to be launched by Micronutris