

Insectinov3



BIOCITECH ROMAINVILLE-GRAND PARIS

Insect Production for Human and Animal Nutrition

Is industrial scale rearing taking off?



Ynsect



BIOLOGICAL
SOLUTIONS
FOR ANIMALS

AgroNutris



MUTATEC

AgroParisTech

MONT'S
WE MAKE THE WORLD CLEAN

Tuesday, November 26, 2019

8:30 Welcome coffee

9:00 **Welcome address from the organizers**
Sylvio BENGIO, Adebitech, Samir MEZDOUR, AgroParisTech

9:10-10:00 Introductory Lectures

9:10 **Keynote**
Marcel DICKE, UWR University Wageningen, The Netherlands
Insects as feed: developing a sustainable value chain

9:40 **Introduction**
Philippe LE GALL, IRD (French Institute of Research for Development)
The main insect species typically selected for industrial rearing and their physiology

10:00-12:35 Session 1 - A worldwide overview of insect rearing from traditional farms to industrial plants

Chair: Sylvio BENGIO, Adebitech

10:00 **Antoine HUBERT**, IPIFF (International Platform of Insects for Food & Feed)
Insect rearing and markets in Europe

10:25 **Keith DRIVER**, NACIA (North American Coalition for Insect Agriculture), USA
An overview of insect industry for feed and food in the United States and Canada

10:50-11:35 Coffee break / exhibitions / posters / networking

11:35 **Anne DEGUERRY**, AFFIA (Asian Food & Feed Insects Association)
Insect rearing in South East Asia

11:55 **Fogoh-John MUAFOR**, Living Forest Trust, Cameroon
Africa: traditional approaches and early stage industrial approaches

12:15 **Marc-Antoine LURASCHI**, Cycle Farms, Ghana
Example of insect production in tropical conditions

12:35-14:00 Buffet lunch / exhibitions / posters / networking

www.adebiotech.org/ins3/

14:00-17:00 Session 2 - Hygiene, Safety, Allergy and Risks Prevention

Chairs: **Jean-Philippe DESLYS**, CEA and **Christina NIELSEN-LEROUX**, INRA

14:00 **Keynote: Dominique PARENT MASSIN**, Agricultural Academy and French Toxicology Society, France
Toxicological aspects of human consumption of insects and insect proteins

14:20 **Christophe TRESPEUCH**, Mutatec, France
Hygiene and risks prevention: example of the CertiFLY program

14:40 **Christina NIELSEN-LEROUX**, INRA (French National Institute for Agronomic Research)
Insects health and risks of pathogen transmission to humans

15:00 **Lars-Henrik LAU HECKMANN**, DTI (Danish Technological Institute), Denmark
An introduction to the IPIFF Guide on Good Hygiene Practices for the insect sector: Ensuring best practice for feed and food

15:20-15:50 *Coffee break / exhibitions / posters / networking*

15:50 **Antoine LECOCQ**, University of Copenhagen, Denmark
Identification and management of diseases in insect production systems and building a European collaborative network on insect pathology

16:10 **Romy GADISSEUR**, CHU Liège, Belgium
Risk of allergenic transmissions linked to human insect consumption

16:30 **Round table discussion Hygiene, Safety, Allergy and Risk prevention**

17:00-18:20 Session 3 - Academic Research findings (part 1)

Chair: **Samir MEZDOUR**, AgroParisTech

17:00 **Frédéric MARION-POLL**, AgroParisTech, France
Insect nutrition needs and behavioural aspects

17:20 **Camille LOUPIAC**, AgroSup Dijon-Université de Bourgogne Franche Comté, France, (collaboration AgroParisTech)
Impact of extraction on soluble insect proteins from Tenebrio Molitor larvae

17:40 **Hédi ROMDHANA** and **Samir MEZDOUR**, AgroParisTech
Valorization of Insects and larvae into high-value functional proteins: Optimization of drying conditions

18:00 **Daylan-Amelia TZOMPA SOSA**, Ghent University, Food technology and Engineering, Belgium
Perspectives of insect oils and fats as food ingredients

18:20 **Short presentations of exhibitor innovations**

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PROVISUR TECHNOLOGIES

REINARTZ

19:00 **Flash Posters**

19:00 **Nathalie BAREILLE**, Oniris INRA UMR BIOEPAR

Development of a risk assessment method for biological hazards in the insect production process in Europe - Application to two farmed species and three consuming targets

19:05 **Bader MAHAMAN**, Action contre la Faim

État des lieux de la collecte, commercialisation et consommation d'insectes comestibles en république centrafricaine

19:10 **Rodolphe RABOT**, Phileo by Lesaffre

Effect of baker live yeast inclusion in feed substrates on growth performance and body composition of yellow meal worm and black soldier larvae

19:15 **Abir BOUKIL**, Université Laval

Effect of high hydrostatic pressure on the hydrolysis and the allergenicity of cricket and mealworm proteins

19:20 **Carlotta TOTARO FILA**, Start upper

2019 Italian survey on intention to taste food products containing insect flour

19:25 **Michel SAUVAIN**, IRD

Tasty Peruvian insects: from traditional food to gastronomic innovation

19:30 *Cocktail and networking*

Wednesday, November 27, 2019

8:30 *Welcome coffee*

9:00-10:00 Session 3 - Academic research findings (part 2)

Chair: **Samir MEZDOUR**, *AgroParisTech*

- 9:00 **Houcine MHEMDI**, *ESCOM Chimie*, (collaboration *AgroParisTech*), France
*Selective extraction of intracellular compounds from the *Tenebrio molitor* by mechanical pressing assisted by pulsed electric field treatment*
- 9:20 **Nicolas POLLET**, *EGCE (Evolution Genomes Comportement Ecologie)*, CNRS, France
*Characterization of *Hermetia illucens* genome and metagenome*
- 9:40 **Alain DOYEN**, *Université de Laval*, Québec, Canada
Emerging processing for the production of edible insect ingredients

10:00-13:00 Session 4 - Industrial Issues, Regulatory Aspects, Markets

Chair: **Anne DEGUERRY**, *AFFIA (Asian Food & Feed Insects Association)*

- 10:00 **Christian RABIN**, *Dalkia*, France
Industrial challenges and solutions for construction of large-scale insect rearing plants
- 10:20 **Chloé PHAN VAN PHI**, *InnovaFeed*, France
Insect in animal nutrition: leverage consumer perception as a value creation lever for all players of the value chains
- 10:35 **Louis LESUR**, *Le Gouessant*, France
Insect based raw materials: aquafeed outlook
- 10:50 **Eva PAMPOUILLE**, *ITAVI*, France
Insect use in poultry: from protein intake to animal welfare
- 11:05-11:25 *Coffee break / exhibitions / posters / networking*
- 11:25 **Paola TEULIÈRES**, *Tomojo*, France
Insect components in pet food
- 11:40 **Patricia LE CADRE**, *Céréopa*, France
Can insect meal contribute to the protein supply of French poultry?
- 11:55 **Questions to previous speakers and discussion**
- 12:15 **Christophe DERRIEN**, *IPIFF (International Platform of Insects for Food and Feed)*
Global overview of European Regulatory aspects of insect applications for Food, Feed and Fertilizers
- 12:30 **Damien MOREL**, *APPI, KOPPERT GROUP*, France
Tools and guidelines for the total quality management in insect production
- 12:45 **Questions to previous speakers and discussion**
- 13:00 -14:30 *Buffet lunch / exhibitions / posters / networking*

14:30-17:30 Session 5 - Circular Economy Perspectives and Economic Support to Entrepreneurs

Chair: **Maelenn POITRENAUD**, *SEDE Environnement, Veolia*

14:30 **Maelenn POITRENAUD**, *SEDE Environnement, Veolia, France*

Introduction to circular economy and inclusion of bioconversion in this context

14:40 **David Wilco DREW**, *ITG AgriProtein, South Africa*

Feeding Larvae or Using Larvae? Substrates and maggot feeding issues and opportunities

14:55 **Raphaël SMIA**, *NextAlim and IPIFF*

Opportunity of insect industry in circular economy

15:10 **Claire LHOUTELLIER-KASPRIK**, *SEDE Environnement, Veolia, France*

Diversities of frass, and issues related to their valorization

15:25 **Heinrich and Kirsten KATZ**, *Hermetia, Germany*

Valorization of insect lipids

15:40 **Joël AUBIN**, *INRA, France*

Environmental performances of insect meal and value chain perspectives

15:50 **Questions to previous speakers and discussion**

16:00-16:35 *Coffee break/ Exhibition / Posters*

16:35 **Nadège ADOUARD**, *Pôle IAR, French Bioeconomy Cluster*

Towards Bioeconomy Development: the keys to successful innovation !

16:50 **Ariane VOYATZAKIS**, *Bpifrance (bank supporting innovations)*

Supporting technology transfer and industrial development

17:05 **Questions to previous speakers and discussion**

17:20 **INSECTINOV'3 CONFERENCE GENERAL CONCLUSIONS**

Samir MEZDOUR, *AgroParisTech* and **Antoine HUBERT**, *IPIFF (International Platform of Insects for Food & Feed)*

17:30 End of Plenary Conference

Thursday, November 28, 2019 Workshops


Choice Workshops


At Conference site in Romainville or at MUSEE DE L'HOMME in Paris

in partnership with the National Natural History Museum, Les Criquets Migrateurs
TOMOJO, and Chef Laurent from Inoveat

Maximum 20 participants per workshop! Please pre-register early by mail to
colloque@adebiotech.org

Workshop 1. 9H30-13H00	
Content	<i>"Insect Gastronomy Workshop for Humans"</i> (insects tasting with specialized Chef) followed by an <i>"Insect Pet food hands on workshop"</i> organized by Tomojo where you will be guided to prepare yourself an insect protein containing dry croquette food for your dog!
Location	Adebiotech, Biocitech Romainville – (Plenary Conference site)

Workshop 2. 11H00-13H00	
Content	<i>Interactive role plays Workshop and videos</i> led by "Les Criquets migrateurs" https://lescriquetsmigrateurs.com
Location	MUSEE DE L'HOMME IN PARIS (https://www.mnhn.fr/), Metro station Trocadero (travel time from Biocitech Romainville to Museum approx. 60 minutes)
	 MUSÉE DE L'HOMME

Workshop 3. 14H00-15H30	
Content	<i>Guided free private tour of the museum hosted food and feed exhibition</i> <i>"je mange donc je suis"</i> http://www.museedelhomme.fr/fr/programme/expositions-galerie-lhomme/je-mange-je-suis-3970
Location	MUSEE DE L'HOMME IN PARIS
	 MUSÉE DE L'HOMME

Contact colloque@adebiotech.org for more information - please register early since seats are limited to 20