

Insect Mass-rearing Workshop

9 – 13 Sept 2019

Department of Animal Sciences
Stellenbosch University

A workshop will be presented to facilitate the mass-rearing of insects for feed, food and biocontrol.

Cost: R 7 800 (excl vat) per delegate (R800 student discount)(Limited space available)

Content:

- Breeding and genetics
- Nutrition
- Insect physiology
- Pathology
- Health and safety
- Biosecurity
- Housing and ventilation
- Process management
- Insect processing for feed and food



SPECIAL GUEST:
Prof Jeffery Tomberlin
Texas A&M University
Insects mass rearing expert

Cost includes:

- Course material
- Field trips
- Tea, coffee and Lunches
- Happy hours on Monday and Thursday

Contact Adele Smith-Carstens: 021 808 4916 / ab@sun.ac.za (Subject IMRW)



MASS-REARING OF INSECTS WORKSHOP

Department of Animal Sciences
Stellenbosch University
9 – 13 September



Monday, 9th September 2019 - Venue: Mike De Vries Building Room 2002

| Time | Talk title/Speaker |
|---------------|---|
| 08:30 – 09:30 | Participant introductions |
| 09:30 – 10:30 | Introduction to workshop and principles of mass-rearing and rearing systems Des Conlong, South African Sugarcane Research Institute |
| 10:30 – 11:00 | <i>Tea/Coffee Break</i> |
| 11:00 – 12:00 | Mass rearing for biocontrol, waste management and feed / food - comparison Jeffery Tomberlin, Texas A&M |
| 12:00 – 13:00 | Insect breeding and genetics for high quality insects Minette Karsten, Stellenbosch University |
| 13:00 – 14:00 | <i>Lunch Break</i> |
| 14:00 – 15:30 | Insect nutrition, feeding and artificial diets Elsje Pieterse, Stellenbosch University |
| 15:30 – 16:00 | <i>Tea/Coffee Break</i> |
| 16:00 – 17:00 | Developing farming systems for insects – the common sense factor Elsje Pieterse, Stellenbosch University |
| 17:00 – 19:00 | Braai - Animal Science quad (Mike de Vries building) |

Tuesday, 10th September 2019 - Venue: Mike De Vries Building Room

| Time | Talk title/Speaker |
|---------------|--|
| 08:00 – 09:00 | Insect pathology, microbial contamination and entomopathogens (lecture) Justin Hatting, Agricultural Research Council |
| 09:00 – 09:45 | Practical session 1 Group A: Identification of common pathogens and microbes – J Hatting Group B: Influence of diet preparation methods on acceptability of feed for insect mass rearing– M Woods |
| 09:45 – 10:30 | Practical session 2 Group A: Influence of diet preparation methods on acceptability of feed for insect mass rearing– M Woods Group B: Identification of common pathogens and microbes – J Hatting |
| 10:30 – 11:00 | <i>Tea/Coffee Break</i> |
| 11:00 – 12:00 | Ventilation and odour control for Insectaries Paul Watson, Riverby Consulting |
| 12:00 – 13:00 | Health and safety of workers Denise Gillespie, South African Sugarcane Research Institute |
| 13:00 – 14:00 | <i>Lunch Break</i> |
| 14:00 – 15:30 | Insects for feed and food production – Overview Jeffery Tomberlin, Texas A&M |
| 15:30 – 16:00 | <i>Tea/Coffee Break</i> |
| 16:00 – 17:15 | Insects for biocontrol – Overview Des Conlong, Sout African Sugarcane Research Insitute |
| 17:15 | Evening at leisure |

Wednesday, 11th September 2019 - Venue: Mike De Vries Building Room 2002

| Time | Talk title/Speaker |
|---------------|--|
| 08:00 – 10:00 | Process management (Video presentation) Koot Pieterse, Nelson Mandela Metropolitan University |
| 10:00 – 10:30 | <i>Tea/Coffee Break</i> |
| 10:30 – 11:30 | Biosecurity and management of diseases and contamination Elsje Pieterse, Stellenbosch University |
| 11:30 – 12:30 | Practical session GROUP A: Chill coma recovery time of insects reared on different diets – M Karsten GROUP B: Processing of insects for high quality feed and food – E Pieterse and M Woods |
| 12:30 – 13:30 | Practical session GROUP A: Processing of insects for high quality feed and food – E Pieterse and M Woods GROUP B: Chill coma recovery time of insects reared on different diets – M Karsten |
| 13:30 – 14:00 | <i>Lunch Break</i> |
| 14:00 – 17:00 | Field trip to Fruit fly Africa, Stellenbosch |
| 17:00 – 21:00 | Dinner at “The Insect Experience” Woodstock |

Thursday, 12th September 2019 - Venue: ProtiCycle / Mike De Vries Building Room 2002

| Time | Talk title/Speaker |
|---------------|--|
| 08:00 – 12:00 | Field trip to ProtiCycle, Worcester / Mariendahl BSF production facility |
| 13:30 – 14:30 | <i>Lunch Break</i> |
| 14:30 – 15:30 | Insect quality – perspective for IPM Neville Boersma – XSIT Citrusdal |
| 15:30 – 16:00 | <i>Tea/Coffee Break</i> |
| 16:00 – 17:00 | Insect quality – perspective for waste management, feed and food Michael Woods – Stellenbosch University |
| 17:00 - | Social - Animal Science quad (Mike de Vries building) |

Friday, 13th September 2019 - Venue: Mike De Vries Building Room 2002

| Time | Talk title/Speaker |
|---------------|--|
| 08:00 – 09:00 | Artificially manipulating field performance of insects John Terblanche, Stellenbosch University |
| 09:00 – 10:00 | Economics of Insect rearing. Jeffery Tomberlin, Texas A&M |
| 10:00 – 10:30 | <i>Tea/Coffee Break</i> |
| 10:30 – 11:30 | Barriers to establishing insects as food – an industry perspective Leah Bessa – Gourmet Grub |
| 11:30 – 12:50 | Focused discussion on specific quality control issues, legislation and stumbling blocks Des Conlong, Elsje Pieterse, Jeffery Tomberlin, Leah Bessa and others Questions and feedback session |
| 12:50 – 13:00 | Closing remarks Elsje Pieterse – Stellenbosch University |
| 13:10 – 14:00 | <i>Lunch Break</i> |



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Stellenbosch University



Faculty of
AgriSciences

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| Delegate 1: | | | |
| Title: | _____ | Initial: | _____ |
| Affiliation | _____ | Surname: | _____ |
| Telephone: | _____ | Dietary preference: | _____ |
| Invoice address: | _____ | Mobile: | _____ |
| | _____ | Email: | _____ |
| | _____ | | |
| Delegate 2: | | | |
| Title: | _____ | Initial: | _____ |
| Affiliation | _____ | Surname: | _____ |
| Telephone: | _____ | Dietary preference: | _____ |
| Invoice address: | _____ | Mobile: | _____ |
| | _____ | Email: | _____ |
| | _____ | | |
| Delegate 3: | | | |
| Title: | _____ | Initial: | _____ |
| Affiliation | _____ | Surname: | _____ |
| Telephone: | _____ | Dietary preference: | _____ |
| Invoice address: | _____ | Mobile: | _____ |
| | _____ | Email: | _____ |
| | _____ | | |

| Type of registration | Amount per delegate | Number of delegates | Total |
|--|---------------------|---------------------|-------|
| Early bird (Before 31/07/2019) | R 7 500 | _____ | |
| Early bird student (Before 31/07/19) | R 6 900 | _____ | |
| Delegate | R 7 800 | _____ | |
| Student | R 7 000 | _____ | |
| A 10% discount applies for institutions enrolling 3 or more delegates | | | |

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| Banking details: Standard Bank Acc no: 073006955 Branch code: 050610 | Proof of payment: Reference IMRW(your name) Email: ab@sun.ac.za |
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Stellenbosch Accommodation and Transport

Stellenbosch university accommodation:

<http://www.stayatstellenboschuniversity.co.za/www/index.html>

Accommodation in Stellenbosch:

De Oude Meul Guest House: <https://www.deoudemeul.com/rooms/rates/>

Hunneyball House: <http://hunneyballhouse.com/rates-2/>

Roosenwijn Guest House: <http://www.roosenwijn.co.za/rates/>

Summerwood Guest House: <http://summerwood.co.za/>

Fynbos Villa (<https://www.fynbosquesthouse.co.za>)

Life and Leisure apartments (<https://www.lifeandleisure.co.za/guesthouse/luxury-rooms/>)

Eendracht Apartments & Hotel (<https://www.eendracht-hotel.com/>)

Under the Oak tree (<https://www.airbnb.com/rooms/15244961>)

#Rest my case (<https://www.airbnb.com/rooms/21870004>)

Search for your own accommodation:

Booking.com: <http://www.booking.com/>

SafariNow: <http://www.safarinow.com/destinations/stellenbosch/hub.aspx>

Stellenbosch Tourism: <http://www.stellenbosch.travel/>

TripAdvisor: <http://www.tripadvisor.co.za/>

Airbnb: <http://www.airbnb.com>

Lekkeslaap: <http://www.lekkeslaap.co.za>

Shuttle services: Cape Town International Airport – Stellenbosch:

- Bettina Shuttle Services
Tel: (0)21 887 0702
Cell: +27 (0) 82 076 2958
E-mail: info@bettinashuttle.co.za •
Web: www.bettinashuttle.co.za
- Inflight Shuttle
Tel: +27 (0)79 881 2735
Email: info@inflightshuttles.co.za
Web: www.inflightshuttles.co.za
- Go! Shuttle
Tel: +27 (0) 72 368 3455
Email: info@goshuttle.co.za
Web: www.goshuttle.co.za
- Shuttle Up
Tel: +27 (0)72 246 4592
Email: info@shuttleup.co.za
Web: www.shuttleup.co.za



STELLENBOSCH WINE ROUTES

A

PLACES OF INTEREST

- A Botanical Gardens
- B Die Braak
- C Eikestad Mall
- D Heritage Garden
- E Grosvenor House
- F Jan Marais Nature Reserve
- G Library
- H Moederkerk / Church
- I Oom Samie se Winkel
- J Rhenish Complex
- K Sasol Art Gallery
- L Town Hall
- M Toy and Miniature Museum
- N Village Museum
- O VOC Kruithuis
- P Rupert Museum

B

C

D



MIKE DE VRIES BUILDING

Stellenbosch Town Centre

- | | |
|--------------------------|-------------------------------------|
| ■ Traffic Intersection | 📍 Tourism Info / Wine Routes Office |
| ● Traffic Circle | 🅇 Public Parking |
| 🚉 Railway Station | 🛢 Petrol Station |
| ✉ Post Office | 🎭 Theatre |
| 🚓 Police Station | ✝ Church / Place of Worship |
| 🚔 Traffic Department | 🕌 Mosque |
| 🏥 Hospital / Health Care | ✡ Synagogue |