

Fruit Fly 101: Basic Training in Fruit Fly Identification

Department of Conservation Ecology and Entomology
Stellenbosch University
20 - 24 November 2023

Basic course (general introduction with focus on species of economic concern to South Africa)

Monday 20 November - Venue: JS Marais Room 2025

Time	Activity
8:30-9:30	Introduction to Tephritidae: Economic & ecological significance (Aruna Manrakhan)
9:30-10:30	Fruit fly monitoring (Aruna Manrakhan)
<i>Tea break</i>	
11:00 – 12:30	Record keeping and databasing (Gulu Bekker); App demonstration (Anro Redelinghuis)
<i>Lunch break</i>	
14:30 – 15:00	Introduction to fruit fly morphology (Pia Addison)
15:30 – 16:30	Introduction to various morphological ID tools – APP demonstrations (Marc de Meyer)

Tuesday 21 November – Venue: JS Marais Room 2025

Time	Activity
8:30 – 9:00	Major Pest Groups occurring in South Africa & how to recognize them – theory (Pia Addison)
9:00-10:30	Introduction to molecular tools (Massi Virgilio, online & Marc de Meyer)
<i>Tea break</i>	
11:00 – 12:30	Ecology and Management of fruit flies (Luis Bota)
<i>Lunch break</i>	
14:00 – 16:30	Practical to recognize major pest groups occurring in South Africa – pictorial key

Intensive course (focus on species of broader geographic distribution and use of multi-entry keys)

Wednesday 22 November - Venue: JS Marais Room 2025

Time	Activity
9:00 – 9:30	Terminology used in morphological identification (Pia Addison)
9:30-10:30	Preservation methods (Luis Bota)
<i>Tea break</i>	
11:00 – 12:00	Identification of major pest species in <i>Ceratitis</i> , <i>Dacus</i> , and differentiation from related genera – theory (Luis Bota)
<i>Lunch break</i>	
14:00 – 16:30	Practical – identification fruit flies using multi-entry key

Thursday 23 November - Venue: JS Marais Room 2025

Time	Activity
9:00 – 9:30	Spatial modelling from genetic/landscape/climate data (Minette Karsten)
9:30-10:30	Practical training: how to handle sequences (Minette Karsten)
<i>Tea break</i>	
11:00 – 12:00	Identification major pest species in <i>Bactrocera</i> , <i>Zeugodacus</i> and differentiation from related genera – theory (Aruna Manrakhan)
<i>Lunch break</i>	
14:00 – 16:30	Practical – Identification fruit flies using multi-entry keys

Friday 24 November - Venue: JS Marais Room 2025

Time	Activity
9:00 – 9:30	Larval identification – basic introduction (Welma Pieterse)
9:30-10:30	Other information sets available on the internet (Marc de Meyer)
10:30 – 11:30	Discussions (all)
<i>Lunch break</i>	
	<i>Departure</i>