

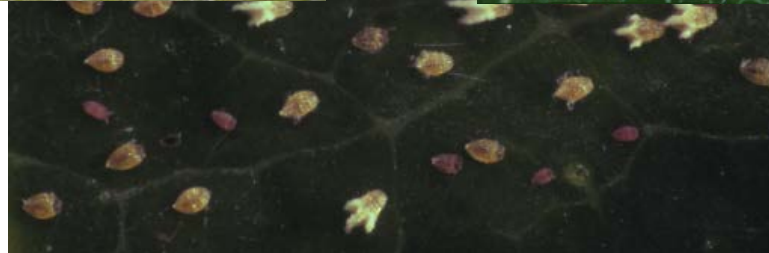
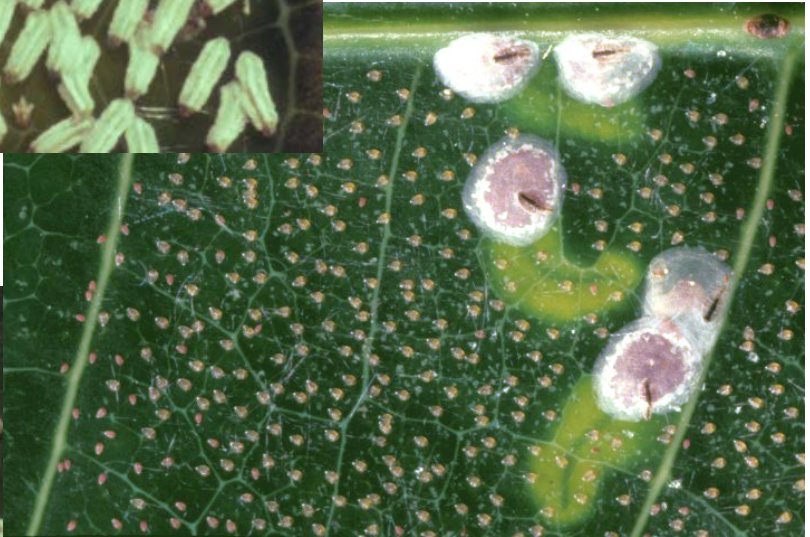
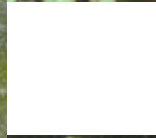
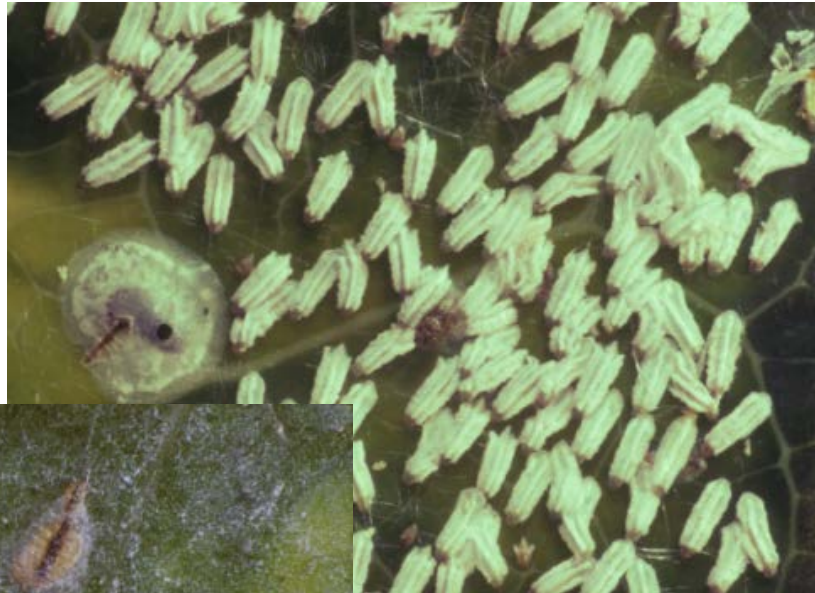
IPM in Mangoes

Mango Scale and Mango Planthopper
Stef De Faveri

What is IPM

The integration of several methods to control pest with the aim of reducing reliance on pesticides

Mango scale



Aphytis wasps



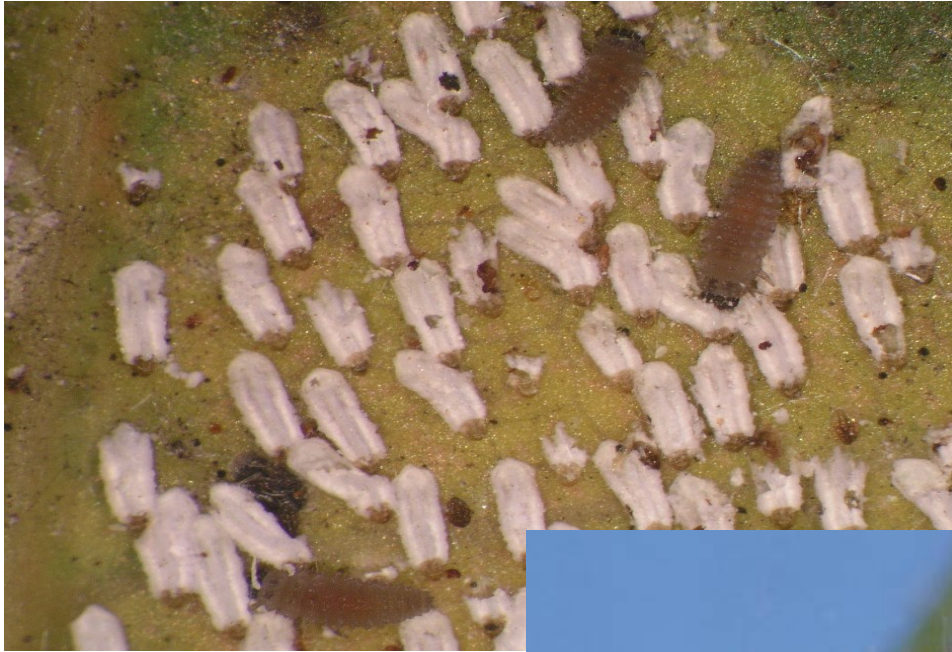
Encarsia wasp



Male parasitoid



Rhyzobius ladybird



Ladybirds



Cybocephalus beetle



Green Lacewing



Predatory midge



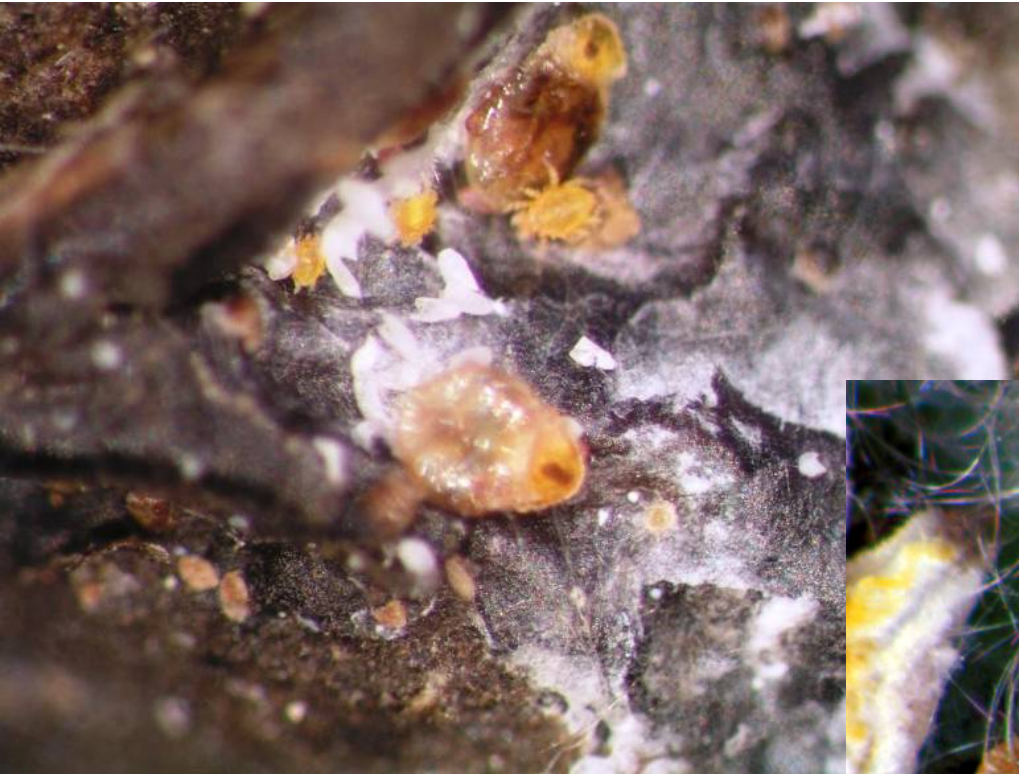
Predatory thrips



Predatory moth



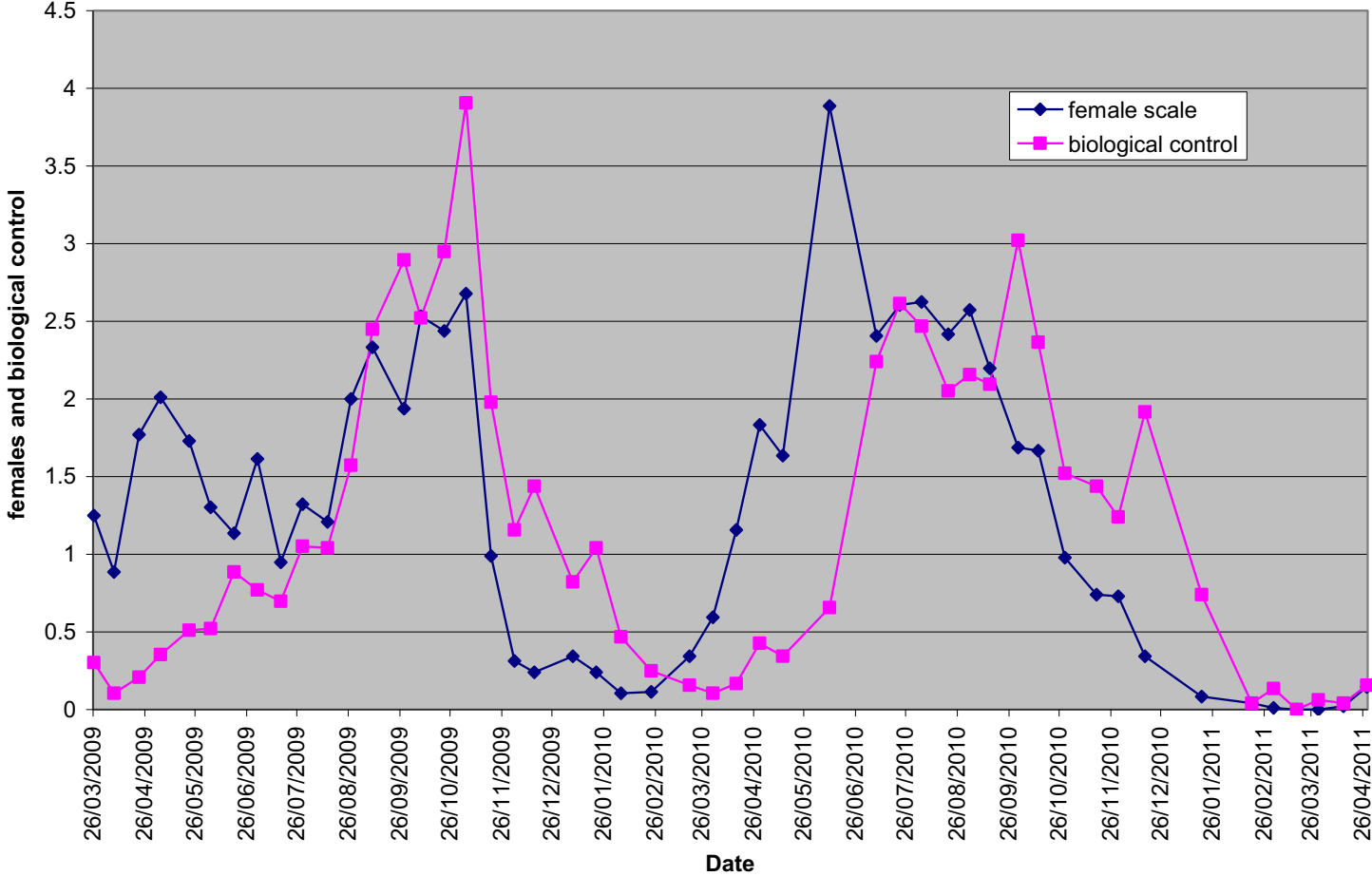
Predatory mites



Fusarium fungus



No. female scale and biological control per leaf



Mango scale biological control trials

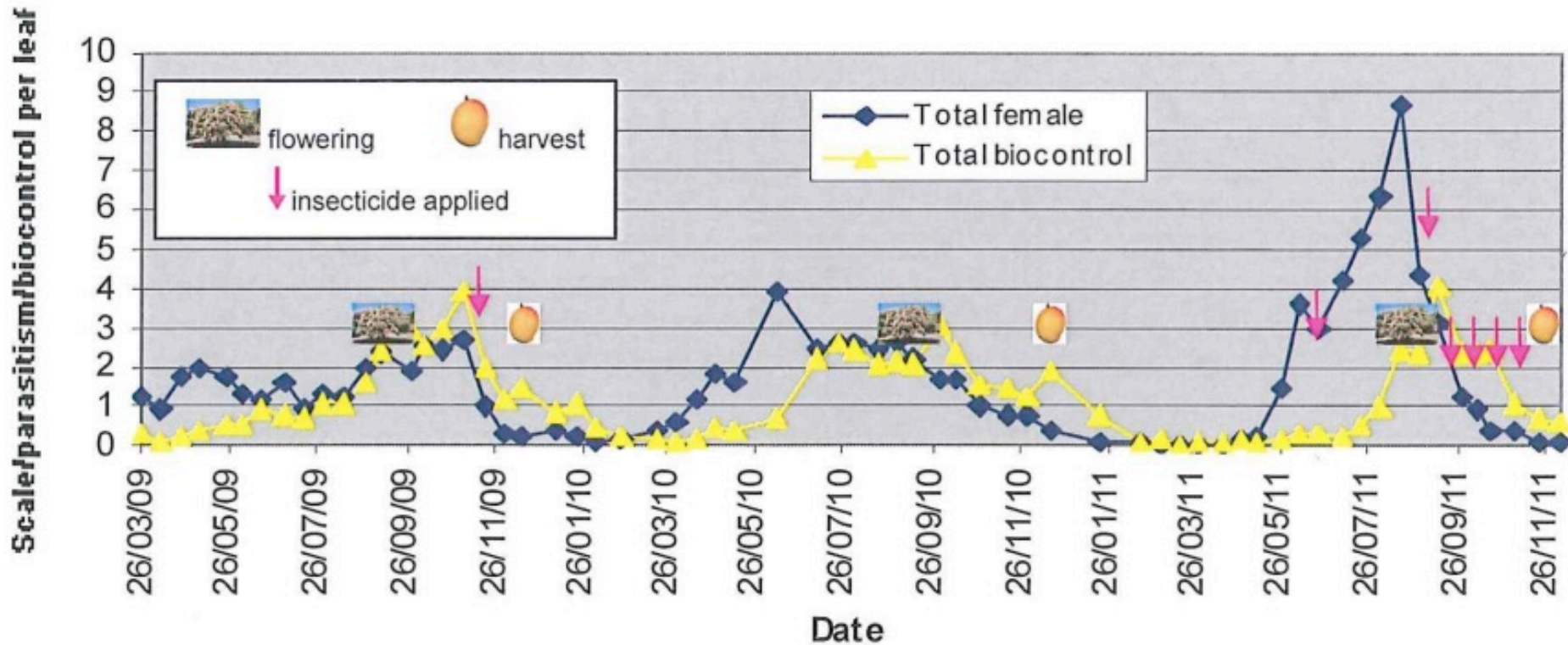


Figure 14. Number of female scale and total biological control at Mutchilba in 2009, 2010 and 2011.

Insecticides that cause issues for IPM

- **Nasties**
 - methidathion
 - carbaryl
 - Chlorpyrifos
 - Beta cyfluthrin
 - dimethoate



- **Less disruptive Insecticides**

- pyriproxifen
- buprofezin
- spirotetramat
- petroleum oil

Take Home Message

- Look out for the 'Goodies'
- Provide shelter and food for 'Goodies'
- Monitor regularly
- Spray immediately if warranted (good coverage)
- Avoid the nasty chemicals for all pests

