

Workshop title: Gall midges (Diptera: Cecidomyiidae) of mango

Tutor: Dr Peter Kolesik, Australia

Aim: Introduction to taxonomy of mango-feeding gall midges

Duration: Half a day

Programme:

Theoretical part

- Review of gall morphology
- Taxonomy of world species
- DNA based taxonomy
- Rearing methods
- Insect sample preparation for morphological study

Practical part

- Microscopy of mounted specimens of larvae, pupae and adults

Currently there are 21 formally described and more than 10 undescribed gall midge species that feed on mango, *Mangifera indica* L. (Anarcadiaceae). Several of these species are serious pests in India, Pakistan, East Asia and mango-growing regions worldwide. Despite the profound economic damage they cause the taxonomy of mango gall midges remains ambiguous. It is not unusual that a particular species is referred to under different names or that the infestation attributed to a particular species differs between authors. The lack of clear classification makes it currently difficult to assess the true geographical distributions, life histories and damage to tree and fruit. Consequently, without the knowledge of basic biology it is not possible to develop successful control measures for these pests of one of world's most important fruit.

The workshop will introduce the participants to methods of rearing mango gall midges, specimen preparation for morphological study and explain the basics of their taxonomy.