Poster Presentation 4

P4-13

Comparison of fungal flora in female adults of an ambrosia beetle, *Euwallacea interjectus* (Scolytinae), among wild and rearing populations

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Purpose: The aim of this study was to identify and compare the fungal symbionts among wild and rearing *Euwallacea interjectus*, the fig tree-boring ambrosia beetle.
Methods: Dispersal female adults of *E. interjectus*, which were collected from logs of infested fig tree (51 individuals) caused by the plant pathoganic fungus, *Ceratocystis ficicola*, and from artificial diets (54 individuals), were used for fungal isolation. After surface sterilization, head, thorax and abdomen of the adults were placed on PDA plates at 25°C. Isolated fungi were identified based on morphological characteristics and DNA sequence data.
Results: In total of the tested female adults, 13 filamentous fungi were detected in the body of wild population. Specific fungus, *Fusarium* sp., was dominant in head, probably because of its oral mycangia (fungus-carrying organ). By contrast, 9 filamentous fungi and 1 yeast were found in rearing population, showing that *Fusarium* sp., *Fusarium* cf *solani* and *Meyerozyma guilliermondii* (yeast) were more frequently isolated from head than thorax and abdomen.
Discussion: Regardless of wild and rearing populations, *Fusarium* sp. is closely associated with female adults of *E. interjectus*. The present investigation also showed *C. ficicola* is not transmitted via mycangia of *E. interjectus*.