

II-4 HOST SPECIFICITY OF FRUIT-FILES (*TEPHRITIDAE*) IN LOWLAND RAINFORESTS IN PAPUA NEW GUINEA

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Studies of tropical fruit-files (Diptera, *Tephritidae*) are focused almost entirely on the species of agricultural importance, while their much more diverse natural populations remains virtually unknown. In order to describe the distribution among host and host specificity of rainforest fruit-files, we surveyed more than 500 kg of fruits from 169 species of rainforest trees. From them, we have reared more than 7,900 fruit-files representing 38 species.

Fruit-files have been reared from only 54% of plant species with ≥ 1 kg of fruits, but this proportion increased to 100% for plants with ≥ 10 kg of fruits.

We found low fruit-fly species richness in respect to host species. Modal number of species in equalised samples was one, maximum was three.

The host specificity was relatively low on the generic level host. On the other hand in respect to higher taxobomical levels it was rather high, as all but one fruitfly species were restricted to a single genus within particular family.

