

Distribution patterns of *Diaphorina citri* Kuwayama (Hemiptera: Psyllidae) eggs, nymphs and adults in a Malaysian citrus orchard

ABSTRACT

Spatial distribution of eggs, nymphs and adults of *Diaphorina citri* (Hemiptera: Psyllidae) was studied in a commercial orchard in SW Sarawak, Malaysia, using mean–variance test, the index of dispersion, and the negative binomial distribution. To further ascertain and confirm the distribution pattern in the population of the psyllid, dispersion indices (index of mean crowding, Lloyd’s index of patchiness, Taylor’s power law and Iwao’s patchiness regression) were calculated. Measurable tests showed that distribution of eggs and nymphs in naturally occurring psyllid populations was highly aggregated, resulting from initially aggregated migration of adults and a contagious dispersion of them on flushes as the population density increased of metals in the present study can be used as suitable reference for future studies.

Keyword: Asian citrus psyllid; *Diaphorina citri*; Honey tangerine; *Citrus aurantium*; Spatial distribution; Statistical analysis