

A review of the current knowledge on *Zeugodacus cucurbitae* (Diptera: Tephritidae) in Africa

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Abstract:

We hereby review all available information regarding the occurrence and biology of the melon fly, *Zeugodacus cucurbitae*, in the Afrotropical region. Its invasion history in Africa is briefly presented and the African populations compared with other populations worldwide. The African populations show very low intraspecific variability with regard to DNA barcoding and adult morphology. Although there are some differences observed in host range throughout the continent, these appear to be the result of other factors like interspecific competition, host availability, and ecological niche partitioning, rather than an indication of different cryptic species with specific host preferences. From the results obtained and reviewed in this study, there seems to be no indication that *Zeugodacus cucurbitae* represents a species complex. Its relationship with regard to other cucurbit feeding fruit flies in Africa is briefly discussed.