

POLLINATION

Am I attractive or not? A case study of *Thunbergia grandiflora* in Amani Nature Reserve, Tanzania

Abstract

This study was used to determine the usefulness of *T.grandiflora* as a resource to floral visitors. Two patches of *T.grandiflora* were used to observe the floral visitors; data was collected on the frequency, time of visitation and the presence of nectar. All the insects and other animals, which visited the flowers, were identified. The study revealed that the needs of the floral visitors varied among different groups. The most frequent was family Drosophilidae. Among the floral visitors recorded was the pollinator of this plant, *Xylocopa* spp. which was previously thought to be absent locally, since the plant was an introduced species.

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Mao Angua, Moi University, Kenya

2002

Plant-insect interactions in a liana species: A case study of *Thunbergia alata* at the Amani Nature Reserve in East Usambara, Tanzania

Abstract

Flowers attract insects for a multiplicity of reasons. In this study, we sought to establish the insect orders that visit the flowers of *Thunbergia alata* to determine the potential pollinators, investigate the relationship in number of insects visiting to the time of day and temperature and to analyse flower use differentiation by the visitors. The results indicate that temperature has a positive relationship to visitation by Hymenoptera and an inverse relationship to visitation by Diptera and Mollusca. Variation in use of flower by the different insect orders ranging from breeding, nectar collection to herbivory were observed. Evidence from the study suggests that Hymenoptera is the likely potential pollinator of *T. alata* plant. Special attention was paid to the close relationship between

highly specialised flower breeding *Drosophila* (Sub-genus *Hirtodrosophila*) which appeared to exploit *T. alata* flowers as a main breeding site. Four levels of adaptive changes were observed as compared to fruit breeding *Drosophila*: special tarsial features in both males and females; modified egg morphology (lack of respiratory filaments); modified ovipositor morphology in females; and modified pharyngeal structure in larvae.

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2002

Aspects of the pollination biology of *Lantana camara* (Verbenaceae)

Abstract

The research showed that butterflies are the main pollinators of *Lantana camara* in Amani Nature Reserve, Tanzania. The time of the day and relative humidity had a significant effect on the number of butterflies that visited the flowers. Afternoons had more visitors than mornings suggesting that the butterflies become active as the day warms up. Flower colour and nectar sucrose concentration had a positive influence on the number of visitors. A disturbed forest edge, adjacent to farmland, showed higher pollinator visiting frequencies than a gap in undisturbed forest.

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2005
