

## ABSTRACT

## Autecological studies of web-building spiders

Jo-Anne Nina Sewlal

In this series of studies on the autecology of web-building spiders, the major focus is the pholcid *Mesabolivar aurantiacus* (Mello-Leitão), which is often found in the semi-open space between two buttress roots (buttress notch). This species share this microhabitat with conspecifics, the orb-weaving spider *Azilia vachoni* (di Caporiacco), and the nabid bug *Arachnocoris trinitatus* (Bergroth) found in *M. aurantiacus* webs. The relationships between *M. aurantiacus* and its microhabitat, conspecifics, *A. vachoni* and *A. trinitatus* are examined, through observational studies, removal experiment and noting the number of each species found in the notches.

Notes on the web structure of the pholcid *Physocyclus globosus* (Taczanowski) and an aggregation of the mygalomorph *Ischnothele caudata* (Ausser) in an *Ixora coccinea* (Rubiaceae) (Linnaeus) bush are also included.

It was found that the size classes of the spatial dimensions examined, namely angle, depth and height of a buttress notch did not influence occupation by *M. aurantiacus*. *A. vachoni* and *A. trinitatus* did not prefer to share a buttress notch and web respectively with *M. aurantiacus*. However when they did, the relationship appeared kleptoparasitic in nature.

*M. aurantiacus* conspecifics appeared not to prefer to share buttress notches. However, web-sharing between male and female conspecifics appeared only to occur for mating purposes. Since few web-sharing pairs were observed, the role of each gender in web-sharing could not be concluded.

*P. globosus* utilised four different web designs, the most frequently being a triangular sheet. More *I. caudata* webs were observed to cover the exterior of the *Ixora* bush during the dry season compared to the wet season. A probable reason is that the heavy rains may destroy their flimsy webs. Another reason could be the high number of support structures provided by the bush, as well as the abundant prey supply shown by swarms of fruit flies observed near the bush.

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