



**PREADULT MORTALITY OF *Tetranychus ogmophallos* (ACARI: TETRANYCHIDAE)  
ON PEANUT CULTIVARS (*Arachis hypogaea*)**

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The life table parameters are powerful tools for analyzing and understanding the impact of an external factor (e.g. host plant) on the growth, survival rate, reproduction, mortality and increase rate of an arthropod population. Thus, quantify patterns of mortality within a cohort and identifying variations in age-stage mortality among cultivars are necessary. The overall goal of our research is to better identify *Tetranychus ogmophallos* Ferreira and Flechtmann (Acari: Tetranychidae) mortality through its preadult developmental stages on two peanut cultivars. The experiments were initiated with 120 mite eggs (experimental units with 120 replicates per treatment) on each peanut cultivar (Granoleico and OL 3), under laboratory conditions at  $25 \pm 1^\circ\text{C}$ ,  $60 \pm 5\%$  relative humidity and a photoperiod of 12:12 (L:D) h. These experimental units were checked twice a day (at 08.00 am and 08.00 pm) in immature stages, and the mortality of different preadult stages were recorded using a stereomicroscope. The computer program TWOSEX-MSChart was used for the raw data analysis. The standard errors of the stage mortality and age-stage distribution were estimated by using the bootstrap method, with 100,000 resampling to estimate the variances and standard errors. We used the paired bootstrap method to compare differences. Total preadult stage mortality (egg to adult stage) of *T. ogmophallos* was higher on Granoleico (60%) than on IAC OL 3 (29.6%). The larval stage is the most susceptible stages and suffer the highest mortality and the peak of age-stage distribution mortality occurred on the ninth day on both Granoleico and IAC OL 3.

Keywords: peanut red mite, two-sex life table, age-stage distribution mortality.

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