

Life table and demographic parameters of the tiger moth, Atteva sciodoxa Meyrick (Lepidoptera: Yponomeutidae) fed on Eurycoma longifolia Jack.

ABSTRACT

Age-specific life and fertility tables of the tiger moth, Atteva sciodoxa Meyrick were constructed under controlled environmental conditions. The highest apparent mortality (qx), real mortality (RM) and indispensable mortality (IM) values were recorded in the 1st instar larvae whilst the lowest in the fifth instar larvae. The longest lifespan of female moth was 19 days with 50% natural mortality (NM50) on day 15 and that of male was 16 days with NM50 on day 11. The mean number of eggs female-1 was 106.2 and oviposition period was 13.3 days. Values for the net reproductive rate (RO), mean generation time (TC), intrinsic rate of increase (rc), innate capacity of increase (rm), finite rate of increase (λ) and doubling time (DT) were 42.03 female offsprings female-1, 11.41 days, 0.33 day-1, 0.37 day-1, 1.39 female offsprings female-1 day-1 and 2.12 days, respectively.

Keyword: Life table; Atteva sciodoxa; Tiger moth; Eurycoma longifolia; Yponomeutidae.