

## عنوان مقاله:

Biological and Two-Sex Life Table Parameters of the Carob Moth, *Apomyelois (=Ectomyelois) ceratoniae* (Zeller, ۱۸۳۹) (Lep.: Pyralidae) at Various Constant Temperatures

## محل انتشار:

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## خلاصه مقاله:

Biological parameters and life tables are the most appropriate criteria for measuring a population's adaptation to environmental and dietary circumstances. The effects of temperatures ۱۰، ۱۴، ۲۰، ۲۵، ۲۷، ۳۰، ۳۳، and ۳۵ on biological and life table parameters of the carob moth *Ectomyelois ceratoniae* (Zeller) [a ۱۰:۱۴ hour (D: L cycle) and ۶۵±۵% RH] were experimentally studied. Based on the age-stage, two-sex life table theory, data were analyzed at different temperatures. The findings indicated that by increasing temperature, the mean incubation period of eggs, larvae, pupae, total immature development time, and adult longevity change significantly. The Adult Pre-Oviposition Periods (APOP) were ۱.۷۵، ۱.۹۳، ۱.۱۴، ۱.۰۶، ۱.۰۶، ۱.۰۹، ۰.۶۸، and ۰.۶۸ days, with Total Pre-Oviposition Period of (TPOP), ۱۱۰.۵۶، ۹۳.۸۲، ۸۱.۵۹، ۴۲.۸، ۳۹.۳، ۳۳.۹۶، ۳۰، and ۲۷.۹۶ days at the experimental temperatures of ۱۰، ۱۴، ۲۰، ۲۵، ۲۷، ۳۰، ۳۳، and ۳۵، respectively. At the study temperature, the total life span was ۱۲۱.۲۲، ۱۰۱.۱۵، ۸۸.۸۲، ۴۸.۰۲، ۴۴.۵۵، ۳۹.۵۳، ۳۴.۸۳، and ۳۲.۷۳ days, respectively. The intrinsic rates of increase ( $r$ ) were  $-۰.۰۰۱۶ d^{-1}$  at ۱۰ and  $۰.۰۰۸۵ d^{-1}$  at ۳۰. The highest finite rate of population increase ( $\lambda$ ) was ۱.۰۰۸۶ at ۳۰، and the minimum finite rate was ۰.۹۹۱۵، at ۳۵. At ۳۵، the minimum mean generation Time ( $T$ ) was ۲۸.۸۷ days. The net Reproductive rates ( $R_0$ ) were ۰.۸۳، ۱.۰۸، ۱.۱، ۱.۰۳، ۱.۰۳، ۱.۳۵، ۱.۰۲، and ۰.۷۸، at the experimental temperatures

## کلمات کلیدی:

.Cohort-based life tables, Pomegranate, Rate of population increase

## لینک ثابت مقاله در پایگاه سیویلیکا:

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