

## عنوان مقاله:

Suitability of different egg ages of *Ephestia kuehniella* (Lep.: Pyralidae) for the development, reproduction and life (table parameters of *Trichogramma evanescens* (Hym.: Trichogrammatidae)

## محل انتشار:

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## خلاصه مقاله:

*Trichogramma evanescens* Westwood is an important biological control agent of lepidopteran pests and is widely distributed throughout Iran and neighboring countries. Laboratory studies were conducted to determine the influence of *Ephestia kuehniella* Zeller eggs age on the number of parasitized eggs, development time, sex ratio, progeny longevity and fecundity. Understanding this influence is important for developing biological control programs. Mated female parasitoids (۲۴ h age) were provided with ۱, ۲, ۳, and ۴-days-old *E. kuehniella* eggs in no-choice experiments, individually. *T. evanescens* developed on *E. kuehniella* eggs of all ages tested, while showing a better adaptation to younger host eggs with significantly faster developmental time, higher survival and more female progeny on ۱-day-old eggs. Progeny emerged from ۱-day-old eggs had also higher longevity and fecundity than those emerging from other host ages tested. The intrinsic rate of increase ( $r$ ) values of *T. evanescens* reared on ۱, ۲, ۳ and ۴-days-old *E. kuehniella* eggs were ۰.۳۴۵, ۰.۳۲۲, ۰.۲۸۱ and ۰.۲۳۳ day<sup>-۱</sup> and the mean generation time ( $T$ ) was ۱۲.۱۹, ۱۲.۱۳, ۱۲.۰۱ and ۱۱.۸۲ days, respectively. The current study provides useful information to use suitable host age of *E. kuehniella* for mass production of *T. evanescens*.

## کلمات کلیدی:

egg parasitoid, host age, development time, sex ratio, the intrinsic rate of increase, the mean generation time

## لینک ثابت مقاله در پایگاه سیویلیکا:

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