

عنوان مقاله:

(Bottom-up Effect of Two Host Plants on Life Table Parameters of *Aphis gossypii* (Hemiptera: Aphididae)

محل انتشار:

مجله علوم و فناوری کشاورزی، دوره 18، شماره 1 (سال: 1394)

تعداد صفحات اصل مقاله: 12

نویسندگان:

Z. Tazerouni - *Department of Entomology, College of Agriculture, Tarbiat Modares University, P. O. Box: 14115-3336, Tehran, Islamic Republic of Iran*

A. A. Talebi - *Department of Entomology, College of Agriculture, Tarbiat Modares University, P. O. Box: 14115-3336, Tehran, Islamic Republic of Iran*

Y. Fathipour - *Department of Entomology, College of Agriculture, Tarbiat Modares University, P. O. Box: 14115-3336, Tehran, Islamic Republic of Iran*

M. SoufbaF - *Agricultural, Medical and Industrial Research School, P. O. Box: 31148/491, Karaj, Islamic Republic of Iran*

خلاصه مقاله:

Aphis gossypii Glover is one of the most important pests of greenhouse cucumber and pepper in the world and Iran. In this research, life table and biology of *A. gossypii* were investigated on cucumber (*Cucumis sativus* cv. Super Sultan) and pepper (*Capsicum annum* cv. Marqueza) in a growth chamber at $25 \pm 1^\circ\text{C}$ and $60 \pm 5\%$ RH and a photoperiod of 14 L: 10 D hour. The results showed that developmental time of *A. gossypii* on pepper was significantly longer than that on cucumber. The survival rates of *A. gossypii* on cucumber and pepper were significantly different based on Kolmogorov-Smirnov test results. The survival rates (l_x) at the beginning of female emergence were 94 and 66% on cucumber and pepper, respectively. Life expectancy (e_x) of the newly-born nymphs of *A. gossypii* were obtained as 26.37 and 14.4 days on cucumber and pepper, respectively. The highest age-specific daily fecundity of *A. gossypii* was at the 5th and 6th days of female adult age on cucumber and from first to 4th days of female adult life on pepper. Furthermore, two mathematical models (Analytis and Enkegaard) were fitted to age-specific fecundity data (m_x). Adult longevity of *A. gossypii* on cucumber was significantly higher than that on pepper. The R_0 , r_m and λ -values of *A. gossypii* on cucumber were significantly higher than those on pepper. The cotton aphid exhibited longer mean generation time (T) on pepper than that on cucumber. According to the growth index and life table statistics, cucumber was the suitable host plant for *A. gossypii*.

کلمات کلیدی:

Aphid, Cucumber, Demography, Iran, Pepper

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1826475>



