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Effect of Temperature on Development, Sexual Maturation Time, Food Consumption and Body Weight of *Schistocerca gregaria* Forsk. (Orthoptera: Acrididae)

N. Eylem AKMAN GÜNDÜZ, Adem GÜLEL

Ondokuz Mayıs University, Faculty of Science and Arts, Department of Biology, 55139 Kurupelit,  
Samsun - TURKEY

 [Keywords](#)  
[Authors](#)



[zool@tubitak.gov.tr](mailto:zool@tubitak.gov.tr)

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**Abstract:** This study was carried out to determine the effect of temperature on the development, sexual maturation time, food consumption and body weight of *S. gregaria*, Forsk., at 25 and 30°C. The insects were fed on fresh wheat sprouts (FWS) and bran (B). When the temperature was increased, both developmental time and attainment time to sexual maturation were shortened. Total nymphal developmental time at 25 and 30°C was 32 and 22 days, respectively. Similarly, the average attainment time to sexual maturity was 33 days at 30°C, whereas it was 52 days at 25°C. The food consumption of the insects increased at higher temperatures until the end of the first week of adult life and decreased thereafter. From the first nymphal stages to the end of the first week of adult life, each animal consumed 23.82 g FWS and 4.27 g B at 25°C, and 25.41 g FWS and 4.27 g B at 30°C. However, from the second week of adult life to sexual maturation, the food consumed by each insect reared at 25°C was 10.81 g FWS and 1.01 g B, whereas at 30°C it was 6.97 and 0.84 g, respectively. At the end of experimental period, the final weight of the insects reared at 25 and 30°C was about the same.

**Key Words:** *S. gregaria*, development, sexual maturation, food consumption, body weight

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