

The responses of adult solitary desert locust to odors from a host plant were evaluated in a two-choice wind tunnel. Solitary desert locusts collected from the field (Red Sea Coast) were more attracted to volatiles from potted *Heliotropium ovalifolium* in scotophase than in photophase. The attraction towards the host plant odors rather than to clean air, in both photophase and scotophase, concurs with previous observations on oviposition preferences near these plants. Diel behavioral activity patterns of adult solitary desert locusts *Schistocerca gregaria* (Forsk.) that were collected from the field in Port Sudan were investigated by monitoring, scanning, resting, taking off, and walking/running in a wind tunnel. Solitary locusts that had been propagated in the laboratory for 20 generations were also observed for comparison. In both groups of locusts, insects were significantly more active after sunset and this activity attained peak level at 1-2 hours after dusk. Of the two groups, solitary locusts collected from the field were significantly more active. In the scotophase, the former traversed distances that were about seven times those covered by laboratory-reared locusts. Overall, the results show that the repertoire of behavioral activities of solitary locusts is maintained in laboratory-reared insects, albeit at a lower level. The implications of these observations in the behavioral ecology of the desert locust are discussed.