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A Perceptive Study on Oviposition Behavior and Selection of Host Plant for Egg Laying in Schistocerca gregaria

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Abstract : Desert Locust is a critical pest of crop and non-crop plants throughout the old world including Pakistan. Geographically, this pest invades 31 million km2 in about 60 countries during the gregarious phase which may bring calamity. The present study is carried out in order to conduct field observations on oviposition behavior from Thar Desert, Pakistan. Females preferred loose soil for oviposition rather than packed or hard soil. The depth of egg pods inside the soil was measured up to 8.996 ± 1.40 cm, and duration of egg laying was measured up to 105.9 ± 26.4 min. Besides this, an insightful recognition has been made that the solitary females oviposited predominantly in the vicinity of pearl millet (Pennisetum glaucum) and guar or cluster bean (Cyamopsis tetragonoloba) crops in cultivated fields while in uncultivated land preferred the surroundings of bekar grass (Indigofera caerulea) and snow bush (Aerva javanica). It was also observed that nymphs preferred to feed on these host plants. Furthermore, experimental outcomes indicated that gravid females oviposited on the bottom of perforated plastic cages while, they did not find suitable soil for oviposition.

Keywords: calamity, cultivated fields, desert locust, host plants, oviposition behavior

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