Environmental studies morphology driller in Egypt

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Certain aspects of the morphology and ecology of the mostcommon species of Gryllotalpa in Egypt were studied in the presentinvestigation and the results showed the following:1- Different species of mole-crickets could be easily identifiedby means of the fore-wings. These differ in measurments and inthe position and number of teeth of the sound production organon Cu2 vein. The fore wings were also proven to be the simplestmeans for sorting out the sexes within each mole-cricketspecies anrl sub-species.2- Gryllotalpa gryllotalpa (L.) adults were attracted to lighttraps in large numbers during the period extending from Marchto September or October. The highest monthly catches occurredduring August and September at all five regions of this study(Giza, Sharkia, Gharbia, Dakahlia and Beheira) where trappingwas conducted for 3 years, {1985, 86 and 87}.The insects activity was affected in varying degrees by the prevailingenvironmental factors of the day maximum, night minimumtemperature, soil temperature (at 10 and 20 em deep), the day meanrelative humidity and rainfall. Analysis of variance has shownthat 85.4 % - 97.2 % of the variability in trap catches, henc theactivity of mole crickets, could be accounted for by the testedfactors.3- The ”new” type of pitfall-traps (devolped in this investigat ion) was superior to the Willcocks type (used by Willcocks,1925) in sampling mole-crickets.4- Pitfall traps caught more mole-cricket individuals and speciesthan light traps. Species of mole-crickets sampled at Giza fora whole year (1987) using pitfall traps were G. gryllotalpa, G.gryl10talpa ssp. cophta. G. africana and G. Africana ssp.cophta.5- Winter crops are less infested by mole-crickets than autumn,spring and summer crops. The level of infestation within acertain crop differs according to the kind of crop growing beforeit in the rotation system.