

Thompson, 1981b) and *Tarentola mauretanic* (Cloudsley-Thompson, 1984), *C. scaber* exhibits Stamps' (1977) Type 3 spacing pattern.

DAY-TIME REFUGES

During the daytime, *C. scaber* was found in irrigated oases and agricultural stations underneath rocks and in the axils of palm fronds. Presumably they passed the day in similar situations in the grounds of the Doha Sheraton, but I felt that destruction of the ornamental trees in the interests of herpetology would not be regarded with approval by the hotel authorities. The rocks were all rather small and I did not discover any geckos beneath them.

SUMMARY

Maximum densities of *C. scaber* recorded in Doha were 83ha⁻¹ on walls, and 25ha⁻¹ on pathways. These compare with densities of *A. agama* of 78.3 and 16.2ha⁻¹ on walls, and of 40 and 56.7ha⁻¹ on pathways at Nsukka and Ibadan respectively. *C. scaber* exhibits Stamps' (1977) Type 3 spacing pattern.

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SHORT NOTE:

NOTES ON THE DIETS OF SOME LIZARDS IN THE STATE OF QATAR

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INTRODUCTION

The diet of free-living lizards has been recorded by numerous authors (Angelov, et al. 1966; Itamies and Koskela, 1971; Sadek, 1981; Quayle, 1983; Arnold, 1984). In contrast, relatively little has been published about the diet of lizards of the Arabian desert (Arnold, 1984). Qatar State is a Peninsula, projecting in the north western central coast of the Arabian Gulf. It is an extension from the Arabian Peninsula measuring exactly 11, 437km². The land is mostly pale desert approaching sea level in most places, and the highest peak is 103m above sea level (Clavelier, 1970).

The present work records the diet of 10 lizard species from 4 families. The diet was determined by analysis of alimentary canal contents.

MATERIALS AND METHODS

100 lizards were collected from the desert and from areas of lush vegetation comprising plantations and gardens, virtually all of which were dependent on artificial irrigation. These lizards were collected during August and September 1985. The alimentary canal contents were extracted and stored in 90 per cent ethanol. They were analysed under 120X, 140X and 400X magnifications. The formula of Quayle (1983) was used to calculate the percentage of prey in each category, for every lizard species. The percentages have been rounded off to the nearest whole number.

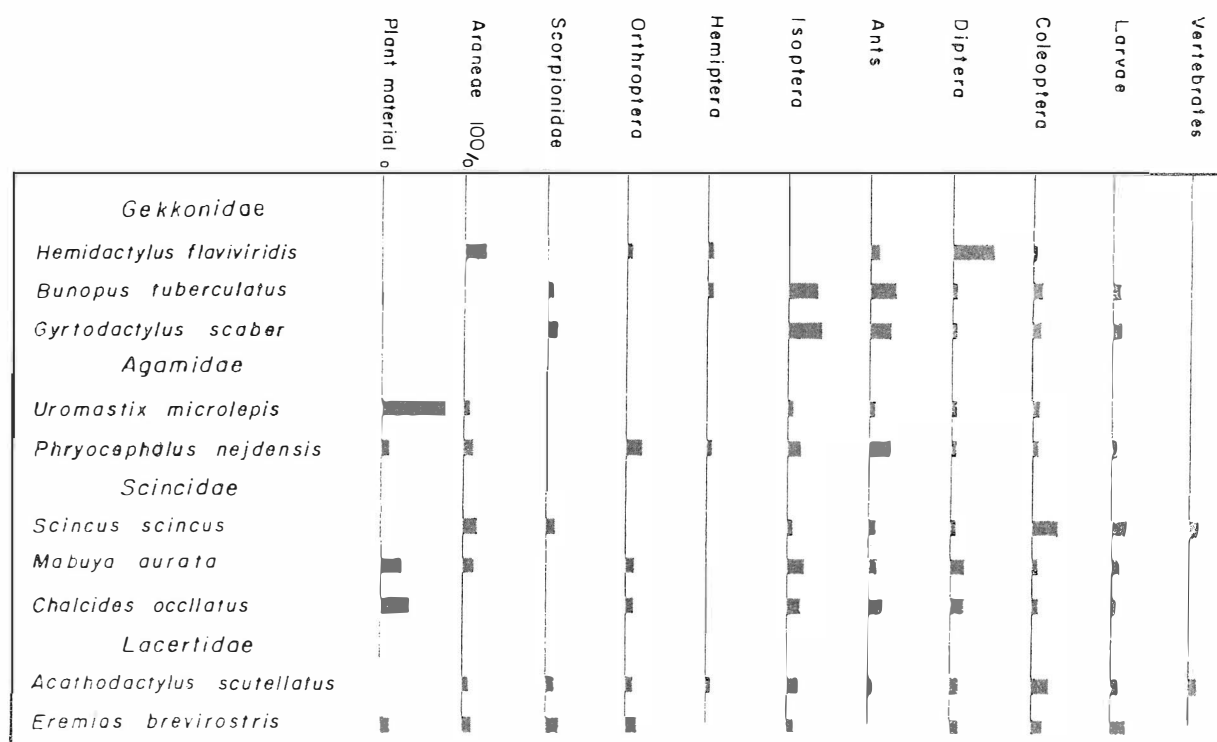


TABLE 1: The percentage of prey in each category for every Qatari lizard species. Every column is based on the average of 10 individual lizards.

RESULTS

The results are given in Table 1, which shows these percentages. The diet of all the species is largely or entirely made up of a wide variety of arthropods, apart from *U. microlepis* and *C. ocellatus* which also ingest significant amounts of plant material. *S. scincus* and *A. scutellatus* were found to have eaten small vertebrates but at the same time had taken substantial quantities of beetles and insect larvae. On the other hand, of the nocturnal geckos, *H. flaviviridis* ate the highest proportion of Diptera, while *B. tuberculatus* and *G. scaber* consumed high proportions of ants and termites. Lepidopterus scales were found among the stomach contents of most species but no identifiable fragments were observed.

DISCUSSION

Of the Gekkonidae, *B. tuberculatus* and *G. scaber* were found mainly under stones whilst *H. flaviviridis* frequented the walls of buildings. These behavioural differences were reflected in their diets, the former species eating mainly Isoptera and ants while *H. flaviviridis* ate mostly flying insects and spiders. Ecological differences between *B. tuberculatus* and *G. scaber* were not apparent in this study since both species were found together and ate similar food. Differences may be apparent in other parts of their range. In the eastern United Arab Emirates, Arnold (1984) showed that *B. tuberculatus* is superficially like *C. scaber* and probably resembles it in many aspects of its ecology, but *C. scaber* lives in moist places. Also, unlike *Bunopus*, it climbs on rocks and walls. When disturbed, it runs rapidly to hide in holes or vegetation.

The remainder of Qatari lizards are day-eating species. Only three of them ate larger quantities of

plant material viz. *U. microlepis*, *C. ocellatus* and, to a lesser degree *M. aurata*. *P. nejdensis*, which inhabits regions of gravel, ate more Orthoptera, Isoptera and ants while *S. scincus*, *A. scutellatus* and *E. brevirostris* ate more larvae and Coleoptera. This may reflect their natural distribution in rocky and sandy areas. In general, therefore, it can be seen that, although there is some selection of food materials, the diets of most species is influenced by the fauna of their normal habitats- and other words, they are opportunistic feeders.

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