

A NOTE
ON THE GRASSHOPPERS (ACRIDOIDEA) OF THE
KALAHARI GEMSBOK NATIONAL PARK

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A study is being made of the Acridoidea (grasshoppers) in the south-central Kalahari of the Republic of Botswana (Tshane — Samane region). To gain some understanding of the variation of the grasshopper fauna between different parts of the Kalahari, a brief visit was made in April 1982, to the adjoining Kalahari Gemsbok National Park, Republic of South Africa.

Acridoidean populations were sampled at nine sites in the Nossob camp region: five sites in savanna, east and south-east of Kwang pan (up to three km from the Nossob valley); two sites in savanna, west of the Nossob camp (three and a half and five km from the camp) and two sites at Kwang pan. The species recorded are listed in Table 1. Grasshopper populations were generally sparse, which is not surprising since there had been a prolonged drought.

There are entomological similarities between the Nossob camp region and the south-central Kalahari. First, all the species listed in Table 1 except for *Aulocaroides capicolus*, have been recorded in the south-central Kalahari. Second, the marked difference between pan and savanna faunas in the Nossob camp region is paralleled by similar differences in the south-central Kalahari. For example, in both regions, *Sphingonotus scabriculus* was found on pans but not in the surrounding savanna.

The only common species in the Nossob region during the brief visit were *Acrotylus diana* in the savanna, and *Aulocaroides capicolus*, *Acrotylus patruelis* and *Sphingonotus scabriculus* at Kwang pan. With the exception of *Aulocaroides capicolus*, these species are apparently widespread in South West Africa and have been collected in the Twee Rivieren region (specimens in the National Collection, Pretoria, mainly collected by H. D. Brown and associates).

Acrotylus diana is a widespread but often uncommon grasshopper in the south-central Kalahari. It seems to favour localities with a sparse vegetation cover, being especially noticeable in areas that have been heavily over-grazed by cattle (Barker 1982, *Botswana Notes and Records* 14:1-10). The grass cover in the south-central Kalahari is usually greater than in the south-western Kalahari. However, overgrazing in the former area reduces grass cover to a level more comparable to that found in the Kalahari Gemsbok National Park. It is interesting to note therefore, that *Acrotylus diana* was the commonest species at the Nossob savanna sites.

The prolonged drought in the Kalahari Gemsbok National Park has already been referred to. The rainfall figures for the three months preceding the April visit are given in Table 2.

Table 1

Grasshoppers (Acridoidea) collected in the Nossob Camp area, Kalahari Gemsbok National Park, April 1982

Group	Species	Savanna	Pan
Charilaidae	<i>Charilaus carinatus</i> Stal	uncommon	—
Porthetinae	<i>Hoplolopha</i> sp.	uncommon	—
Euryphyminae	<i>Brachyphymus vylderi</i> (Stal)	uncommon	—
	<i>Euryphymus</i> n.sp.	uncommon	—
	<i>Rhodesiana cuneicerca</i> Johnsen	uncommon	—
Acridinae	<i>Acrotylus diana</i> Karny	common	uncommon
	<i>Acrotylus patruelis</i> (Herrich-Schäffer)	uncommon	common
	<i>Aulocaroides capicolus</i> Dirsh	—	common
	<i>Locustana pardalina</i> Walker	uncommon	uncommon
	<i>Oedaleus nigrofasciatus</i> (Degeer)	—	uncommon
	<i>Sphingonotus scabriculus</i> Stal	—	common
Truxalinae	<i>Pseudoarcyptera platypternodes</i> (Karny)	uncommon	—
	<i>Thyridota</i> sp.	uncommon	—

Table 2

Kalahari Gemsbok National Park rainfall data (mm)

	Twee Rivieren	Nossob	Mata-Mata
1982			
January	9,3	12,9	58,9
February	12,4	20,3	9,5
March	1,4	4,0	3,3