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DISTRIBUTION AND INCIDENCE OF GRASSHOPPERS (ACRIDIDAE) OF ZHOB DIVISION (BALOCHISTAN)

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Abstract

A total of 52 species of grasshoppers were collected from Z hob division (Balochistan) during 1993-94. Of these, seven species are recorded for the first time from this area: namely *Dericorys tibialis* (Pallas). *Choroedocus illustris* (Walker), *Mesopsis iranicus* (Uv.) *Gonista sagitta* Uv., *Gelastrohinus semipictus* (Walker), *Leionotacris bolivari* (Uv.) and *Brachycrotaphus longiceps* (Bolivar). The species distributions and incidence at the district level are also considered.

Key Words: Acrididae, Balochistan, distribution.

Introduction

Zhob division of Balochistan lies between 29^0 and 32^0 N latitude and 67^0 to 70^0E longitude. It is bounded on the north and northwest by Afghanistan and N.W.F.P; on the east by Dera Ismail Khan and Dera Ghazi Khan, on the south west by Quetta, Pishin and Sibi divisions. It covers an area of nearly 46200 km^2.

Until now a detailed survey of the grasshopper fauna of Zhob has not been attempted, although several papers have made casual reference to it (Kirby, 1914; Uvarov, 1941, 1942, 1943, Dirsh 1949; Dirsh & Uvarov 1953, Bei-Bienko and Mishchenko, 1951 a, b; Jago, 1963, 1967, 1977; Hollis, 1968, 1971, 1975; Ahmed et al. 1979, 1980, Ritchie 1981, 1982, Grunshaw, 1991).

The following study was carried out on the distribution, incidence and important host plants in order to bring the knowledge of Acrididae of Z hob division of Balochistan upto date.

Materials and Methods

The survey of Zhob division was carried out for two consecutive years (1993 & 1994). During this period four trips were made on different dates in the Barkhan, Musa Khail, Qila Saifullah, Loralai and Zhob districts. The elevation of surveyed areas varies from 914 -1922m.

The species incidence was determined by taking about 250 sweeps throughout each area of Zhob division (an average of 50 sweeps in each district during each trip) with an insect collecting hand net of 8" diameter and 20" depth.

The collected material was preserved by conventional methods and deposited in the Department of Zoology Museum, University of Sindh. The system of classification followed is that of Uvarov (1966).

Results and Discussion

A total of 51 species of grasshoppers were collected and their distributions at district level are shown in Table 1. Most of the species were collected from grasses, herbs, and shrubs. However, some species e.g. *Oxya velox* (F.), *O. fuscovittata* (Marsch.), *Hieroglyphus perpolita* (Uv.) *Acrida exaltata* Walker, *Aiolopus thalassinus thalassinus, A. thalassinus tamulus* (F.), *Truxalis eximia eximia* (Echwald), *Eyprepocnemis alacris alacris* (Serville), *Heteracris littoralis littoralis and Ochrilidia gracilis gracilis* (Krauss) were collected from cultivated jowar, maize, tomato, and wheat fields, where they are regarded as a minor pest.

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Table 1- Total numbers of Adults collected in a average of 1000 sweeps

Subfamily and species	DISTRICTS				
	Bar khan	Musa khail	Qila Saifullah	Loralai	Zhob
Dericorythinae					
Dericorys tibialis (Pall)	3	—	—	1	—
Oxyinae					
Oxya velox (F.)	—	2	6	1	—
O. fuscovittata (Marschall)	—	1	1	1	—
Hemiacridinae					
Spathosternum prasiniferum prasiniferum (Wlk)	—	—	—	2	—
Hieroglyphus perpolita (Uv.)	5	—	—	1	—
Cyrtacanthacridinae					
Schistocerca gregaria (Forsk)	1	—	1	2	—
Anacridium aegyptium (L.)	2	—	2	1	—
A. rubrispinum B. Bienko	1	—	2	2	2
Calliptaminae					
Sphodromerus undulatus afghanus B.Bienko	—	—	—	2	—
Sphodromerus luteipes rubripes (Uv.)	—	—	—	1	1
Acorypha glaucopsis (Wlk)	2	1	—	12	10
Calliptamus balucha (Uv.)	1	—	—	—	—
C. barbarus barbarus (Costa)	—	—	2	1	2
Eyprepocnemidinae					
Eyprepocnemis alacris alacris (Serville)	—	1	—	2	—
E. alacris impicta Uv.					
Choroedocus illustris (Wlk)	3	—	—	4	—
Heteracris littoralis (Rambur)	9	2	27	18	6
H. persa (Uv.)	—	—	2	—	—

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H. adspersa (Redt)	3	3	2	4	5
Oedipodinae					
Hilethera aeolopoides (Uv.)	9	1	2	2	—
Aiolopus thalasssinus *thalassinus* (Fab.)	5	2	31	28	5
A. thalassinus tamulus (Fab.)	21	13	34	23	18
Locusta migratoria (L.)	—	—	2	4	—
Gastrimargus africanus sulphureus B. Bienko	1	—	—	—	—
G. africanus africanus (Saussure)	2	—	—	—	—
Oedaleus senagalensis Kr.	4	—	4	4	—
Oedipoda fedtskenkoi pamirica (Ram)	3	—	—	8	—
O. miniata atripes B.Bienko	—	2	1	3	—
Acrotylus humbertianus Sauss	4	1	8	7	10
A. *longipes subfasciatus* B.Bienko	—	—	8	11	5
A. *insubricus insubricus* (Scop)	—	—	1	4	—
A. *insubricus infictus* (Wlk)	—	—	—	1	—
Scintharista notabilis pallipes (Uv.)	9	8	18	17	12
Cophotylus splendid (Uv.)	—	—	1	1	2
Sphingonotus balteatus balucha (Uv.)	—	—	3	—	1
S. *maculatus* (Uv.)	—	—	3	—	—
S. *rubescens rubescens* (Wlk)	2	12	7	15	3
S. *savignyi* (Sauss)	2	7	9	4	3
S. *nebulosus discolor* (Uv.)	4	3	5	6	2
S. *montanus* Mischchenko	3	5	1	6	4
Truxalinae					
T. *eximia eximia* (Eich)	—	—	5	6	—
T. *fitzgeraldi* (Dirsh)	—	—	—	2	—

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Acridinae					
Acrida exaltata (Wlk.)	—	—	15	10	—
Gonista sagitta (Uv.)	—	—	1	6	—
Duroniella laticornis (Kr)	2	—	2	7	—
Gelastrohinus semipictus Walker	—	—	—	1	—
Gomphocerinae					
Dociostaurus tartarus (Uv.)	6	4	10	15	10
Mesopsis iranicus (Uv.)	4	—	—	—	—
Ochrilidia geniculata Bol.	—	—	—	2	—
O. gracilis gracilis (Kr)	4	6	—	—	—
Brachycrotaphus longiceps (Boliar)	1	—	—	—	—
Leionotacris bolivari (Uv.)	—	—	—	—	1

Table 1. also shows the incidence of adult grasshopper species in the districts of Zhob division during 1993-1994. The most abundant species was *Aiolopus thalassinus thalassinus*, forming more than 14% of the total number of all the grasshopper species collected, followed by *A.thalassinus tamulus* (9.39) *Scintharista notabilis pallipes* (8.46%) and *Heteracris littoralis* (8.2%) while the single collected individuals of *Leionotacris bolivari* (Uv.), and *Gelastorhinus semipictus* (Walker) and *Brachycratophus bolivari* (Uv.) were considered rare.

Ahmed (1980) and Ahmed et al. (1979, 1980) did not record a single species of subfamily Calliptaminae from Balochistan. We have collected four species of this subfamily namely *Calliptamus balucha* Uv., *C. barbarus barbarus* (costa) *Sphodromerus undulatus afghanus* B. Bienko and *Acorypha glaucopsis* (Walker). The distribution of *Cophotylus splendid* Uv. earlier reported from Ziarat and Quetta has been extended to Larolai, Qila Saifullah and Zhob districts of Balochistan. In addition, the distributions of many of the previously recorded species have been extended.

Species recorded for the first time from this area are *Dericorys tibialis* (Pall.), *Choroedocus illustris* (Walker), *Mesopsis iranicus* (Uv.), *Brachycrotaphus longiceps* (Bolivar) *Gelastrohinus semipictus* (Walker), *Gonsita sagitta* Uv. and *Leionotacris bolivari* (Uv.).

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