

## ORTHOPTERAN DIVERSITY OF ROPER WETLAND PUNJAB, INDIA

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The number of known species of Orthoptera from around the world is about 20,000, out of which 1,750 species (nearly 8.75%) are known from India (Tandon & Hazra, 1998). Majority of the species are tropical but are also well represented in temperate areas. Vertically, they are found from sea level to the high altitudes in the Himalaya (Bhowmik & Rui 1982; Mehta *et al.*, 2002; Shishodia *et al.*, 2002).

Here we present a total of 42 species collected from the Roper wetland, Punjab, India, by different survey parties of the Zoological Survey of India, Solan, between May 2000 and June 2002. This collection accounts for 2.46% of the total orthopteran fauna of India and consists of 38 genera, under 12 families and under super families Acridoidea (Short-horned Grasshopper), Tettigoniidae (Long-horned Grasshopper), Tetrigodes (Grouse-locusts) and Grylloidea (Crickets).

The Roper wetland (30°57'N & 76°31'E) an area of *ca.* 14km<sup>2</sup>, came into being in the year 1952 as a result of construction of a small barrage on the river Sutlej primarily for irrigation and drinking purposes. It is located *ca.* 40km from Chandigarh near the National Highway 21 (Ambala to Leh) at an elevation of 275m. The wetland is mainly fed from river Sutlej and also

from the discharge channel of Guru Gobind Singh Super Thermal Power Plant (GGSSTPP). Although the water level is maintained, some swampy areas are found in the surroundings. Climatically, the area falls under semi-arid zone of Punjab with a mean annual rainfall of 151.8cm. The southwest monsoon occurs here from end of June up to September. The area has distinct summer months and the temperature varies from 41°C in summer to 2°C in winter.

The aquatic vegetation of the reservoir consists of *Eichhornia* sp., *Potamogeton* sp., *Typha angustata* and *Ceratophyllum* sp. The surrounding bushes include *Ipomoea carnea*, *Cyperus sanguinolentus*, *Euphorbia hirta*. The wetland is surrounded by scrub forest of the Shiwaliks comprising principally *Acacia nilotica*, *A. modesta*, *Dalbergia sissoo*, *Azadirachta indica*, *Ficus religiosa*, *F. bengalensis*, *Salix* sp, etc. The forest is interspersed with agriculture fields and wasteland. The principal grasses in the surrounding marshes are: *Cynodon dactylon*, *Phragmites kakra*, *Saccharum benghalense*, *S. spontaneum*, *Setaria glauca* and *Vetiveria zizanioides*.

### REFERENCES

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**Table 1. List of Orthoptera collected from Roper wetland, Punjab, India.**

<b>Acrididae</b>	<i>prasiniferum</i> (Walker)	<b>Tetrigidae</b>	<b>Conocephalini</b>
<b>Acridinae</b>	<b>Oxyinae</b>	<i>Hedotettix costatus</i> (Hancock)	<i>Conocephalus maculatus</i> (Le Guillou)
<i>Acrida exaltata</i> (Walker)	<i>Oxya hyla hyla</i> Servile	<i>Hedotettix gracilis</i> (DcHaan)	<i>Euconocephalus incertus</i> (Walker)
<i>Ceracris nigricornis nigricornis</i> (Walker)	<i>Oxya fuscovittata</i> (Marschall)	<i>Ergatettix guntharie</i> Steinmarm	
<i>Phlaeoba infumata</i> Brunner		<i>Pseudotettix histicus</i> (Stal)	<b>Phaneropteridae</b>
<i>Gonista sagitta</i> Bolivar	<b>Eyprepocnemidae</b>		<i>Letana</i> sp.
<i>Gelastorrhans</i> sp	<i>Choroedocus illustris</i> Walk	<b>Gryllidae</b>	
	<i>Eyprepocnemis alacris alacris</i> (Serville)	<b>Gryllinae</b>	<b>Eneopteridae</b>
<b>Oedipodinae</b>	<b>Catantopinae</b>	<i>Loxoblemmus detectus</i> (Serville)	<i>Euscyrus hemelytrus</i> (Haan)
<i>Gastrimargus africanus africanus</i> (Saussure)	<i>Catantops pinguis innotabilis</i> (Walker)	<i>Loxoblemmus equestris</i> Saussure	<b>Oecanthidae</b>
<i>Gastrimargus marmoratus</i> (Thunberg)		<i>Modicogryllus confirmatus</i> (Walker)	<i>Oecanthus indicus</i> Saussure
<i>Aiolopus thalassinus tamulus</i> (Fabricius)	<b>Ghomphocerinae</b>	<i>Teleogryllus mitratus</i> (Burmeister)	
<i>Mesopsis cylindricus</i> (Kirby)	<i>Dnopherula (Aulacobothrus)</i> sp.	<i>Gryllodes sigillatus</i> (Walk)	<b>Gryllotalpidae</b>
<i>Oedaleus abruptus</i> (Thunberg)	<b>Prygomorphidae</b>		<i>Gryllotalpa africana</i> Beauvois
<i>Trilophidia annulata</i> (Thunberg)	<i>Atractomorpha crenulata crenulata</i> (Fabricius)	<b>Nemobiinae</b>	
	<i>Chrotogonus (Chrotogonus) trachypterus trachypterus</i> (Blanchard)	<i>Pteroneombius fascipes</i> (Walker)	<b>Mecapodidae</b>
<b>Hemiacridinae</b>		<i>Pteronomobius</i> sp.	<i>Mecopoda elongata</i> (Linn.)
<i>Hieroglyphus concolor</i> Walk.		<b>Tettigoniidae</b>	
<i>Spathosternum prasiniferum</i>		<i>Phaneroptera myllocera</i> Ragge	<b>Tridactylidae</b>
		<i>Ducetia japonica</i> (Thunberg)	<i>Xya</i> sp.

