

ON A COLLECTION OF AQUATIC RHYNCHOTA FROM THE  
RAJMAHAL HILLS, SANTAL PARGANAS, BIHAR.

By H. A. HAFIZ, *Ph.D. (London), D.I.C., Assistant Superintendent* and  
G. MATHAI, *Gallery Assistant, Zoological Survey of India, Calcutta.*

In connection with the investigation of the fauna of the Rajmahal Hills in Santal Parganas, Bihar, Dr. H. S. Rao and the senior author recently collected a number of aquatic insects from rivers, streams, ponds and pools. The present paper deals with only the adult members of the Order Rhynchota, nymphal forms in the absence of their corresponding imagines being omitted. In the case of the Naucorid bug *Heleocoris vicinus* Montand., we have, however, dealt with a number of nymphs which were collected in association with the adults.

We are very grateful to Dr. Baini Prashad, Director, Zoological Survey of India, for helping us in preparing this paper for the press.

SYSTEMATIC ACCOUNT.

Family HYDROMETRIDAE.

Subfamily *Vellinae*.

**Rhagovelia nigricans** Burm.

1910. *Rhagovelia nigricans*, Distant, *Faun. Brit. Ind., Rhyn.* V (Appendix), p. 137.

Several specimens—Pools of water in the course of the Hill-stream of the Motijharna Waterfalls, near Maharajpur Railway Station, Santal Parganas.

Recorded by Distant from Travancore ; Ceylon ; Syria ; Egypt ; Abyssinia ; West Africa ; Mascarene Islands ; and Seychelles.

Represented in the collection of the Zoological Survey of India from the Simla Hills, Punjab ; Assam ; Satara, Bombay Presidency ; Ceylon ; and Palestine.

Subfamily *Gerrinae*.

**Gerris spinolae** Leth. & Serv.

1904. *Gerris spinolae*, Distant, *Faun. Brit. Ind., Rhyn.* II, p. 180.

One specimen—Morel River, near Bario, Santal Parganas.

One specimen—Gumani River, near Kusma, Santal Parganas.

Recorded from North India ; Calcutta ; Toungoo, Burma ; Ceylon ; and China.

The specimens in the Zoological Survey of India are from the Kumaon Hills and Lucknow in United Provinces ; Bihar ; Assam ; Calcutta ; Chilka Lake, Ganjam district, Orissa ; Travancore ; and Burma.

**Metrocoris nigrofasciatus** Dist.

1910. *Metrocoris nigrofasciatus*, Distant, *Faun. Brit. Ind., Rhyn.* V (Appendix), p. 159.

Four specimens—Gumani River, near Kusma, Santal Parganas.

Recorded from Naini Tal, United Provinces; Dawna Hills, Lower Burma; Malay Peninsula; and Pahang.

Represented in the collection of the Zoological Survey of India from Western Himalayas; Nepal Terai; United Provinces; Assam; and Malay Peninsula.

## Family NEPIDAE.

**Laccotrephes griseus** Guér.

1910. *Laccotrephes griseus*, Distant, *Faun. Brit. Ind., Rhyn.* V (Appendix), p. 314.

One specimen—Round about a pool of water, near the Dak Bungalow at Taljahari, Santal Parganas.

One specimen—Morel River, near Bario, Santal Parganas.

Recorded from Bengal; Pondicherry, Madras Presidency; Ceylon; Burma; Malacca; and Mahé, Seychelles.

Represented in the collection of the Zoological Survey of India from Punjab; Nepal Terai; Kumaon Hills and Lucknow in United Provinces; Rajshahi, Siliguri, Khulna and Calcutta in Bengal; Ganjam, Orissa; Satara, Bombay Presidency; Cochin State; Ceylon; and Siam.

**Laccotrephes ruber** Linn.

1906. *Laccotrephes ruber*, Distant, *Faun. Brit. Ind., Rhyn.* III, pp. 18-19.

Two specimens—Gumani River at Barhait, Santal Parganas.

Five specimens—Gumani River, near Kusma, Santal Parganas.

One specimen—Gumani River, near Dhamni, Santal Parganas.

One specimen—A pool of water, near the Dak Bungalow at Taljahari, Santal Parganas.

One specimen—Amongst weeds in sluggish stream, below Boarijore Inspection Bungalow, Santal Parganas.

Six specimens—Small pools in sand between stones in the course of the dried-up Sunderpahari River, half a mile from the Sunderpahari Inspection Bungalow, Santal Parganas.

Recorded from Kashmir; Punjab; Naga Hills and North Khasi Hills in Assam; Calcutta; Sind; Ceylon; Bhamo, Burma; China; Japan; and Formosa.

Represented in the collection of the Zoological Survey of India from Nepal; Sikkim; Darjiling district and Calcutta in Bengal Presidency; Santal Parganas and Purnea district in Bihar; Siam; and Japan.

**Ranatra elongata** Fabr.

1906. *Ranatra elongata*, Distant, *Faun. Brit. Ind., Rhyn.* III, pp. 20-21.

Two specimens—Tributary of Morel River, near Barhait, Santal Parganas.

Two specimens—Gumani River, near Kusma, Santal Parganas.

One specimen—Bhanji River, close to Bhanji, Santal Parganas.

Recorded from Kashmir; Calcutta; Bombay; and Nilgiri Hills, Madras Presidency.

Represented in the collection of the Zoological Survey of India from Nepal; United Provinces; Calcutta, Bengal; Puri, Orissa; Madras Presidency; and Australia.

**Ranatra filiformis** Fabr.

1906. *Ranatra filiformis*, Distant, *Faun. Brit. Ind., Rhyn.* III, pp. 21,22.

One specimen—Amongst weeds in sluggish stream, below Boarjore Inspection Bungalow, Santal Parganas.

One specimen—Morel River, near Bario, Santal Parganas.

One specimen—Gumani River, near Dhamni, Santal Parganas.

Recorded from Quetta; Karachi; Bombay; Assam; Tranquebar, Madras Presidency; Johore; and Philippines.

Represented in the collection of the Zoological Survey of India from Chota Nagpur; South India; and Siam.

Family NAUCORIDAE.

Subfamily *Laccocorinae*.

**Heleocoris elongatus** Montand.

1906. *Heleocoris elongatus*, Distant, *Faun. Brit. Ind., Rhyn.* III, p. 31.

One specimen—Pools of water in the course of the Hill-stream of the Motijharna Waterfalls, near Maharajpur Railway Station, Santal Parganas.

Recorded from "Indes orientales"

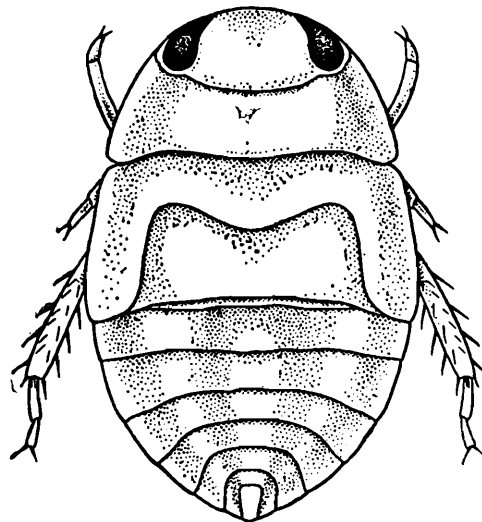
Represented in the collection of the Zoological Survey of India from Paresnath, Western Bengal; Poona, Satara and Ratnagiri districts in Bombay Presidency.

**Heleocoris vicinus** Montand.

1910. *Heleocoris vicinus*, Distant, *Faun. Brit. Ind., Rhyn.* V (Appendix), pp. 322-323.

Seven imagines and four nymphs—Gumani River, near Kusma, Santal Parganas.

The nymphs are much lighter in colour than the imagines and only show rudiments of the wings (text-fig.).



TEXT-FIG.—Dorsal view of the nymph of *Heleocoris vicinus* Montand.  $\times 7$ .

Recorded from Western Bengal and Tenmalai, Western Ghats.

Represented in the collection of the Zoological Survey of India from the Kumaon Hills, United Provinces ; Assam-Bhutan Frontier ; Western Bengal ; and Tenmalai, Western Ghats.

Family BELOSTOMATIDAE.

**Sphaerodema annulatum** Fabr.

1906. *Sphaerodema annulatum*, Distant, *Faun. Brit. Ind., Rhyn.* III, pp. 35,36.

One specimen—Red mud on the road side, between Taljahari and the River Ganges, Santal Parganas.

Recorded from Sylhet, Assam ; and Calcutta.

Represented in the collection of the Zoological Survey of India from Mangaldai district, Assam ; Saran in Bihar ; Asansol, Khulna, Rajshahi, Calcutta and Berhampur Court in Bengal Presidency ; Puri, Orissa ; and Chota Nagpur.

Family NOTONECTIDAE.

**Enithares abbreviata** (Kirby).

1906. *Enithares indica*, Distant, *Faun. Brit. Ind., Rhyn.* III, pp. 42-43.

One specimen—Pools in the course of the Hill-stream of the Motijharna Waterfalls, near Maharajpur Railway Station, Santal Parganas.

Recorded from Santal Parganas, Bihar ; Bombay ; Tranquebar, South India ; Travancore ; Ceylon ; Andaman Island ; Java ; and Sumatra.

Represented in the collection of the Zoological Survey of India from Lucknow in United Provinces ; Satara, Nasik and Belgaum districts in Bombay Presidency ; Travancore ; and Ceylon.

**Anisops sardea** Herr.-Schaff.

1906. *Anisops sardea*, Distant, *Faun. Brit. Ind., Rhyn.* III, p. 45.

Three specimens—A pool on the side of the River Ganges, about a mile from Sakrigali Ghat Railway Station, Santal Parganas.

Distributed over British India, Ceylon and Celebes.

Represented in the collection of the Zoological Survey of India from the Simla Hills, Punjab ; Siliguri, Damukdia Ghat and Port Canning in Bengal ; Ganjam district, Orissa ; Nilgiri Hills, Madras Presidency ; and Yawnghwe, Burma.

Family CORIXIDAE.

**Corixa promontoria** Dist.

1910. *Corixa promontoria*, Distant, *Faun. Brit. Ind., Rhyn.* V (Appendix), p. 341.

One specimen—Dighi River, Bario-Bhanji Road, Santal Parganas.

One specimen—Gumani River at Barhait, Santal Parganas.

Five specimens—Morel River, near Bario, Santal Parganas.

Recorded from Lucknow and Naini Tal in United Provinces.

The Zoological Survey of India collection contains specimens from Lucknow and Naini Tal in United Provinces ; Berhampur Court and Calcutta in Bengal.