

## ON THE COLLECTION OF HEMIPTERA (INSECTA) FROM LADAKH JAMMU AND KASHMIR

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**ABSTRACT :** While exploring the insect diversity of Ladakh during 2008 by the first author, the specimens of true bugs were also collected, which yielded the identification of 10 species of order Hemiptera belonging to 10 genera and 9 families.

**Key words :** True bugs, Hemiptera, Ladakh, Jammu and Kashmir.

### INTRODUCTION

Ladakh means land of high passes, a region of India in the state of Jammu and Kashmir that lies between the Kunlun mountain range in the North and the main Great Himalayas to the South, inhabited by people of Indo-Aryan and Tibetan descent. The fauna of Ladakh has much in common with that of Central Asia in general and that of the Tibetan Plateau in particular. Natural vegetation commonly seen along water courses includes *Hippophae* sp, wild roses, *Myricaria* sp, caraway, stinging nettles, *Physochlaina praealta* (Decne.) and various grasses. Hemiptera is a large diverse group of insects. There are 133 families of Hemiptera found worldwide, consisting about 184000-193000 species (Hodkinson and Casson, 1991). Present study reported 10 genera of order Hemiptera representing 10 species belonging to 9 families of suborders Heteroptera and Auchenorrhyncha of Ladakh region.

### MATERIAL AND METHODS

Bugs were collected by extensive surveys undertaken by the scientific team of Zoological Survey of India from various localities of Ladakh, in the year 2008. Examples of bugs were collected by using the light trap, net-sweep and hand picking methods from various habitats. Collected bugs were sorted out, pinned and identified with the help of reference collection and literature present in ZSI (Jabalpur Centre and HQs Kolkata) and Fauna of British India (Distant, 1902, 1904, 1908, 1910, 1916). Microscopic study was done by Leica M205-A Stereo zoom microscope and photographs (Plate.1) were taken by Sony DSC-W55 Camera.

### RESULTS AND DISCUSSION

#### Systematic account :

**Order :** Hemiptera

**Suborder :** Auchenorrhyncha

**Infra order :** Cicadomorpha

**Superfamily :** Cercopidea

**Family :** Cercopidae

#### *Tituria acutangulata* (Distant, 1908)

1908. *Tituria acutangulata* Distant, *Fauna Brit. India, Rhynchota, IV* : 161.

**Material examined :** Ladakh, Henley, (1ex.), 23.VIII.2008, Coll. K. Chandra.

**Distribution :** Nagaland and Jammu & Kashmir.

**Suborder :** Heteropteroidea

**Infra order :** Cimicomorpha

**Superfamily :** Cimicoidea

**Family :** Nabidae

#### *Nabis* sp.

1807. *Nabis* Latr. (part) *Gen.*, **III** : 127.

1902. *Nabis* Distant, *Fauna Brit. India, Rhynchota, II* : 399.

**Material examined :** Ladakh, Hunder Forest Guest House, (2 exs.), 28.VIII.2008, Coll. K. Chandra.

**Distribution :** Widely distributed.

**Infra order :** Pentatomorpha

**Superfamily :** Lygaeoidea

**Family :** Lygaeidae

#### *Consivius collinus* (Distant, 1909)

1909. *Consivius collinus* Distant, *A.M.N.H.*, **(8)III** : 321.

1910. *Consivius collinus* Distant, *Fauna Brit. India, Rhynchota, V* : 11.

**Material examined :** Ladakh, near Pongong Lake, (19 exs.), 21.VIII. 2008, Coll. K. Chandra.

**Distribution :** Himachal Pradesh and Jammu & Kashmir.

**Superfamily :** Pyrrhocoroidea

**Family :** Phyrhacoridae

#### *Physopelta schlanbuschi* (Fabricius, 1787)

1787. *Physopelta schlanbuschi* Fabricius *Mant. Ins.*, **II** : 299.

1902. *Physopelta schlanbuschi* Distant, *Fauna Brit. India, Rhynchota, II* : 99.

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Received 18.06.2013

Accepted 10.08.2013

*Priassus spiniger* Haglund, 1868*Zicrona caerulea* (Linnaeus, 1758)*Cletus punctulatus* (Westwood, 1842)*Leptocoris varicornis* (Fabricius, 1803)*Physopelta schlabachii* (Fabricius, 1787)*Apodiphus pilipes* Horvath, 1889

**Material examined :** Ladakh, Hunder Forest Guest House, (1 ex.), 28.VIII.2008, Coll. K. Chandra.

**Distribution :** Assam and Jammu & Kashmir.

**Superfamily :** Coreoidea

**Family :** Coreidae

***Cletus punctulatus* (Westwood,1842)**

1842. *Coreus punctulatus* Westwood, *In Hope Cat.*, **II** : 23.

1904. *Cletus punctulatus* Distant, *Fauna Brit. India, Rhynchota*, **I** : 302.

**Material examined :** Ladakh, Hunder, 29.VIII. 2008, (1 ex), Coll. K. Chandra & Party.

**Distribution :** Arunachal Pradesh, Assam, Jammu & Kashmir. Madhya Pradesh, Nagaland and West Bengal,

**Family :** Alydidae

***Leptocoris varicornis* (Fabricius,1803)**

1803. *Gerris varicornis* Fabricius, *Syst. Rhyng.*, : 260.

1902. *Leptocoris varicornis* Distant, *Fauna Brit. India*, **I** : 409.

**Material examined :** Ladakh, Pongong Lake, (2 ex.), 21.VIII.2008, Coll. K. Chandra.

**Distribution :** India-Madhya Pradesh, Assam, Kerala, Meghalaya, Nagaland, Sikkim, West Bengal and Jammu & Kashmir.

**Superfamily :** Pentatomoidea

**Family :** Pentatomidae

***Priassus spiniger* (Haglund,1868)**

1868. *Priassus spiniger* Haglund, *Stett. Ent. Zeit*, **XXIX** : 160.

1904. *Priassus spiniger* Distant, *Fauna Brit. India, Rhynchota*, **I** : 205.

**Material examined :** Ladakh, Leh, Guest House, (1 ex.), 26.VIII.2008, Coll. K. Chandra.

**Distribution :** Nagaland and Jammu & Kashmir.

***Apodiphus pilipes* (Horvath,1889)**

1889. *Apodiphus pilipes* Horvath, *Termesz. Fiizetek*, **XII** : 29.

1904. *Apodiphus pilipes* Distant, *Fauna Brit. India, Rhynchota*, **I** : 116.

**Material examined :** Ladakh, Ynoma, 21. VIII. 2008, (1 ex), Coll. K. Chandra.

**Distribution :** Arunachal Pradesh and Jammu & Kashmir.

**Family :** Asopinidae

***Zicrona caerulea* (Linnaeus,1758)**

1758. *Cimex caerulea* Linnaeus, *Syst. Nat. ed.* **I** : 445.

1904. *Zicrona caerulea*, Distant, *Fauna Brit. India, Rhynchota*, **I** : 254-256.

**Material examined :** Ladakh, Leh Guest House (1 ex.), 26.VIII.2008, Coll. K. Chandra.

**Distribution :** Nagaland, West Bengal and J&K.

**Family :** Urostylidae

***Urochela guttulata* (Stal,1876)**

1876. *Urochela guttulata* Stal, *Ent. Hem.*, **V** : 115

1904. *Urochela guttulata* Distant, *Fauna Br. India, Rhynchota*, **I** : 310

**Material examined :** Ladakh, Chushul, 21. VIII. 2008 (1 ex), Coll. K. Chandra.

**Distribution :** Nagaland, West Bengal, Arunachal Pradesh and Jammu & Kashmir.

Present investigation reports altogether 10 species pertaining to 9 families of order Hemiptera, 1 species belonging to suborder Auchenorrhyncha and 9 species from suborder Heteropteroidea from Ladakh, India. More investigation is needed to draw the faunastic profile of order Hemiptera of Ladakh, India.

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