



## HEMIPTERA FAUNA OF HARIPUR DISTRICT, PAKISTAN

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### ABSTRACT

Present investigation deals with diversity of True bugs (Insecta: Hemiptera) from Haripur District of Khyber Pakhtunkhwa Province of Pakistan. Research study revealed a total of 24 species belonging to 24 genera under 9 families. Pentatomidae family was dominant with 12 species under 12 genera representing 2 subfamilies, followed by Coreidae with 3 species while Lygaeidae and Phyrrocoreidae had 2 species each. Cercopidae, Alydidae, Cydnidae, Scutelleridae, Tessaratomidae consisted one species respectively.

**Keywords:** Bug fauna, Diversity, Haripur, Pakistan

### INTRODUCTION

Hemiptera is a diverse group of true bugs and are commonly identified by the strong odour produced by the metathoracic scent glands (Schuh and Slater, 1995). Hemipteran insects possess great economic importance as most of them are pests of various commercial crops. The members of the group show hemimetabolous type of metamorphosis as the nymphal stages having great resemblance in structure with that of adult (Ghosh and Biswas, 1995). There are 133 families of Hemiptera found worldwide, consisting about 184000-193000 species (Hodkinson and Casson, 1991). A detailed account of Hemiptera fauna of Indian-subcontinent had been done by Distant (1904, 1906).

Haripur district is one of the renowned cities of the Hazara division in Pakistan. It is located 65 km north of Islamabad at an altitude of 520 m. It has latitude 33° 44' - 34° 22' and longitude 72° 35' - 73° 15'. Haripur is a green valley, wealthy in fruits and vegetables. The district is home to a diverse ecology ranging from tropical to temperate forest zones. The upper parts support forestry based livelihoods, while the lower parts are more suitable for agro-pastoral herbs.

Studies on the Hemiptera fauna in Haripur district are very scarce (Chaudhry *et al.*, 1966;1970). Haripur is blessed with perennial rivers and seasonal rainfall. The evergreen rain forests make the area favorable for supporting huge biota. There is great need to explore the insect fauna from district

Haripur, Khyber Pakhtunkhwa.

### MATERIALS AND METHODS

The Hemiptera fauna were collected by using various methods such as sweeping from vegetation by insect net, hand picking under stones, leaf axils, loose bark, with the help forceps. Night collections were also carried out on a spread white thick cloth illuminated with mercury bulb. The specimens were set, pinned and identified with the help of available literature Distant (1902a,b, 1904, 1906), reference collection present in the Insect Museum of Pakistan Forest Institute (IMPFI), Peshawar, National Insect Museum National Agricultural Research Centre Islamabad and other authentic literature Chaudhry *et al.* (1966, 1970). The studied materials are deposited in Insect Museum of Pakistan Forest Institute, Peshawar.

### RESULTS AND DISCUSSION

#### TAXONOMIC ACCOUNT

ORDER	HEMIPTERA
SUBORDER	HETEROPTERODEA
INFRAORDER	PENTATOMORPHA
SUPERFAMILY	PENTATOMOIDEA
FAMILY	PENTATOMIDAE
SUBFAMILY	ASOPINAE

GENUS *CAZIRA* AMYOT AND SERVILLE,  
1843

**1. *Cazira verrucosa* (Westwood), 1834**

Material Examined: Haripur, Mankhial, 05-v-13, ex IMPFI,  
Coll. Ali & party.

Distribution: Pakistan, India, Bangladesh, China

GENUS *CANTHECONA* AMYOT & SERVILLE,  
1843

**2. *Canthecona furcellata* (Wolff), 1851**

Material Examined: Haripur, Langeryl, 07-v-13, ex IMPFI,  
Coll. Ali & party.

Distribution: Pakistan, India, Sri Lanka, Myanmar.

SUBFAMILY PENTATOMINAE

GENUS *ERTHESINA* SPINOLA, 1837

**3. *Erthesina fullo* (Thunberg), 1783**

Material Examined: Haripur, Phalan, 29-vi-14, ex IMPFI,  
Coll. Ali & party.

Distribution: Pakistan, China; Japan; India

GENUS *HALYS* FABRICIUS, 1803

**4. *Halys dentatus* (Fabricius), 1775**

Material Examined: Haripur, Lora, 23-vi-14, ex IMPFI,  
Coll. Khan & party.

Distribution: Sri Lanka; Myanmar; Pakistan; India

GENUS *ADRIA* STÅL, 1867

**5. *Adria parvula* (Dallas), 1851**

Material Examined: Haripur, Karaki, 17-vi-14, ex IMPFI,  
Coll. Ali & party.

Distribution: Pakistan, Myanmar; India

GENUS *DALPADA* AMYOT AND SERVILLE,  
1843

**6. *Dalpada brevivitta* (Walker), 1867**

Material Examined: Haripur, Kohala, 21-vi-14, ex IMPFI,  
Khan. Ali & party.

Distribution: Pakistan, India

GENUS *NEZARA* AMYOT AND SERVILLE,  
1843

**7. *Nezara viridula* (Linnaeus), 1758**

Material Examined: Haripur, Karaki, 17-vi-14, ex IMPFI,  
Coll. Ali & party.

Distribution: Pakistan; Galapagos Islands; India

GENUS *BAGRADA* STÅL, 1862

**8. *Bagrada picta* (Fabricius), 1775**

Material Examined: Haripur, Mankhial, 06-v-13, ex IMPFI,  
Coll. Ali & party.

Distribution: Pakistan; India, Thailand

GENUS *AGONOSCELIS* SPINOLA, 1837

**9. *Agonoscelis nubila* (Fabricius), 1775**

Material Examined: Haripur, Lora, 23-vi-14, ex IMPFI,  
Coll. Khan & party.

Distribution: Sri Lanka; Myanmar; China; Japan; Indonesia;  
Myanmar; Pakistan;

Philippines; Taiwan; Thailand; Veitnam; India

GENUS *EURYDEMA* LAPORTE, 1832

**10. *Eurydema lituriferum* (Distant), 1867**

Material Examined: Haripur, Karaki, 17-vi-14, ex IMPFI,  
Coll. Ali & party.

Distribution: Sri Lanka; Myanmar; China; Pakistan;

GENUS *DOLYCORIS* MULSANT AND RAY,  
1866

**11. *Dolycoris indicus* (Stål), 1876**

Material Examined: Haripur, Jabri, 25-vi-14, ex IMPFI,  
Coll. Ali & party.

Distribution: Pakistan, India, Nepal

GENUS *PLAUTIA* STÅL 1867

**12. *Plautia fimbriata* (Fabricius) 1787**

Material Examined: Haripur, Kohala, 21-vi-14, ex IMPFI,  
Coll. Khan & party.

Distribution: Sri Lanka; Myanmar; Pakistan; China;

Afghanistan; Gambia;

Indonesia; Madagascar; Malaysia;

SUPER FAMILY COREODEA

FAMILY COREIDAE

SUBFAMILY COREINAE

GENUS *OCHROCHIRA* STÅL 1873

**13. *Ochrochira albiditarsis* (Westwood), 1842**

Material Examined: Haripur, Jabri, 25-vi-14, ex IMPFI,  
Coll. Ali & party.

Distribution: Sri Lanka; Myanmar; Pakistan; China;

GENUS *HOMEOCERUS* BURMEISTER, 1835

**14. *Homoeocerus lucertus* (Distant), 1889**

Material Examined: Haripur, Karaki, 17-vi-14, ex IMPFI,  
Coll. Ali & party.

Distribution: Myanmar; Pakistan; India

GENUS *CLETUS* STAL, 1859

**15. *Cletus signatus* (Walker), 1871**

Material Examined: Haripur, Lasan, 28-vi-14, ex IMPFI,  
Coll. Khan & party.

Distribution: Pakistan; Thailand; China

SUPERFAMILY LYGAEOIDEA

FAMILY LYGAEOIDAE

SUBFAMILY RHYPAROCHROMINAE

GENUS *LACHNESTHUS* BERGROTH, 1894

**16. *Lachnethus singalensis* (Dohrn), 1860**

Material Examined: Haripur, Jabri, 25-vi-14, ex IMPFI,  
Coll. Ali & party.

Distribution: India; Pakistan;

SUBFAMILY GEOCORINAE

GENUS *Geocoris* Fallen, 1814

**17. *Geocoris tricolor* (Fabricius), 1798**

Material Examined: Haripur, Phalan, 29-vi-14, ex IMPFI,  
Coll. Ali & party.

Distribution: Pakistan; China; India

SUPER FAMILY PYRRHOCOROIDEA

FAMILY PYRRHOCORIDAE

SUBFAMILY EURYOPHTALMINAE

GENUS *PHYSOPELTA* AMYOT & SERVILLE,  
1843

**18. *Physopelta gutta* (Burmeister), 1843**

Material Examined: Haripur, Mankhial, 06-v-13, ex IMPFI,  
Coll. Ali & party.

Distribution: Sri Lanka; Myanmar; Pakistan; China

SUBFAMILY PYRRHOCORINAE

GENUS *DYSDERCUS* AMYOT & SERVILLE,  
1843

**19. *Dysdercus koenigii* (Fabricius), 1775**

Material Examined: Haripur, Lasan, 28-vi-14, ex IMPFI,  
Coll. Ali & party.

Distribution: Southeast Asia

SUPER FAMILY CERCOPOIDEA

FAMILY CERCOPIDAE

SUBFAMILY CALLITETTIXNAE

GENUS *CALLITETTIX* STAL, 1865

**20. *Callitettix contiguus* (Walker), 1851**

Material Examined: Haripur, Lora, 23-vi-14, ex IMPFI,  
Coll. Ali & party.

Distribution: Pakistan, India, Sri Lanka

FAMILY ALYDIDAE

SUBFAMILY ALYDINAE AMYOT &

SERVILLE, 1843

GENUS *RIPTORTUS* STAL, 1860

**21. *Riptortus fuscus* (Fabricius), 1798**

Material Examined: Haripur, Karaki, 17-vi-14, ex IMPFI,  
Coll. Ali & party.

Distribution: Sri Lanka; Myanmar; Pakistan

SUPERFAMILY PENTATOMOIDEA

FAMILY CYDNIDAE

SUBFAMILY CYDNINAE

GENUS *CYDNUS* FABRICIUS, 1803

**22. *Cydnus aterrimus* (Forster), 1771**

Material Examined: Haripur, Lasan, 28-vi-14, ex IMPFI,  
Coll. Ali & party.

Distribution: Sri Lanka; Myanmar; Pakistan; China

SUPERFAMILY PENTATOMOIDEA

FAMILY SCUTELLERIDAE

SUBFAMILY HOTEINAE

GENUS *HOTEA* AMYOT & SERVILLE, 1843

**23. *Hotea (Tylonca) nigrorufa* (Walker), 1867**

Material Examined: Haripur, Phallan, 29-vi-14, ex IMPFI,  
Coll. Ali & party.

Distribution: Sri Lanka; Myanmar; Pakistan; China

FAMILY TESSARATOMIDAE

SUBFAMILY TESSARATOMINAE

GENUS *TESSARATOMA* LEPELELIER &

SERVILLE, 1825

**24. *TessarATOMA javanica* (Thunberg), 1783**

Material Examined: Haripur, Jabri, 25-vi-14, ex IMPFI,  
Coll. Ali & party.

Distribution: Sri Lanka; Myanmar; Pakistan; China.

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