

STUDIES ON SOME MATERIAL OF DERMAPTERA FROM HIMACHAL PRADESH, INDIA

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INTRODUCTION

The present study is based on the Dermaptera from Himachal Pradesh collected during 1969 and 1976 by various survey parties of the Department. Altogether, 19 species under 12 genera are represented. Of these 9 species are reported for the first time from the area.

During the course of present study it was observed that at high altitudes the genus *Anechura* Scudder, is represented by a large number of specimens which confirms the phenomenon of congregation.

A check-list of various species recorded from Himachal Pradesh is provided.

CHECK LIST OF DERMAPTERA FROM HIMACHAL PRADESH

****Species reported for the first time from the area.**

***Species represented in the material studied.**

Superfamily : PYGIDICRANOIDEA

Family : PYGIDICRANIDAE

Subfamily : DIPLATYINAE

Haplodiplatys glenis (Kapoor, 1968)

**Haplodiplatys rufescens* (Kirby, 1896)

Haplodiplatys simlaensis (Kapoor, 1968)

Haplodiplatys chinensis (Hincks, 1955)

Haplodiplatys srivastavai (Kapoor, 1974)

Superfamily : ANISOLABIOIDEA

Family : ANISOLABIDIDAE

Subfamily : CARCINOPHORINAE

***Aborolabis pervicina* (Burr, 1913)

**Euborellia annulipes* (Lucas, 1847)

***Euborellia compressa* (Borelli, 1907)

***Euborellia rajasthanensis* Srivastava, 1977

Subfamily : PARISOLABIDINAE

Parisolabis elegans (Hebard, 1917)

Subfamily ISOLABOIDINAE

**Isolaboides burri* (Borelli, 1909)

I. jonathani (Kapoor and Katiyar, 1971)

I. santokhi (Kapoor and Katiyar, 1971)

Family : LABIDURIDAE

Subfamily : NALINAE

***Nala lividipes* (Dufour, 1829)

***Nala nepalensis* (Burr, 1907)

Subfamily : LABIDURINAE

**Labidura riparia* (Pallas, 1773)

Forcipula indica Brindle, 1966

***F. quadrispinosa* (Dohrn, 1863)

**F. trispinosa* (Dohrn, 1863)

Superfamily : FORFICULOIDEA

Family : CHELIOSCHIDAE

Hamaxas singhi Kapoor, 1966

Family : FORFICULIDAE
 Subfamily : ANECHURINAE

- **Anechura stoliczkae* Burr, 1911
- **Anechura zubovskii* Semenov, 1901
- Anechura nayyari* Kapoor, 1966

Subfamily : FORFICULINAE

- ***Elaunon bipartitus* (Kirby, 1891)
- Forficula aceris* Burr, 1905
- ***Forficula planicollis* Kirby, 1891
- **Forficula schlagintweiti* (Burr, 1904)
- Forficula asketi* Purohit, Julka & Lal, 1985
- **Forficula davidi* Burr, 1905
- Forficula beelzebub* (Burr, 1900)

Subfamily : EUDOHRNIINAE

- ***Eudohrnia metallica* (Dohrn, 1865)

Subfamily : ALLODAHLINAE

- **Allodahlia macropyga* (West wood, 1839)

SYSTEMATIC ACCOUNT
 PYGIDICRANOIDEA
 PYGIDICRANIDAE
 DIPLATYINAE

Haplodiplatys refescens (Kirby)

- 1896. *Cylindrogaster rufescence* Kirby, J. Linn. Soc., 25 : 524, pl. 20, fig. 2 (♂, North India).
- 1904. *Diplatys rufescence* (Kirby), Kirby, Syn. cat. Orth. 1 : 2

Material examined : INDIA : Himachal Pradesh : Sirmour dist., Naina Ticker on Shimla-Nahan Road, 1 ♂, 4.8.72 (H. P. Agrawal), Genitalia mounted between two coverslips and pinned with the specimen.

Distribution : INDIA : N. W. Himalayas and West Bengal (Kurseong).

Remarks : The material studied represents microlabic form of forceps.

ANISOLABIOIDEA
ANISOLABIOIDAE
CARCINOPHORINAE

Aborolabis pervicina (Burr)

1913. *Anisolabis pervicina* Burr, Rec. Indian Mus., 8 (2) : 137 (♂, ♀, India, Assam and Maria Basti, Bhutan)
1915. *Paralabis pervicina* : Burr, J. R. Micr. Soc. : 540, pl. 12, fig. 13 (♂ genitalia)
1969. *Aborolabis pervicina* : Srivastava, Entomologists. Rec. J. var. 81 : 247, fig. 1 (♂ genitalia)

Material examined : INDIA : Himachal Pradesh : Kangra dist., Soon Khud, 8 km. from Palampur, 1 ♂ (Genitalia mounted between two coverslips and pinned with the specimen), 1 nymph, 20.2.1976 (R. Tilak); Kulu dist., 2 km. West of Kulu, 2 ♂♂ (Genitalia of 1 ♂ mounted between two coverslips, pinned with the specimen), 6 ♂♂, 8 nymphs, 23.7.1973 (M. Chandra).

Remarks : This species was hitherto recorded from the mountain regions of N.E. India, Nepal and Bhutan. On the basis of present material from Himachal Pradesh, it is reported for the first time from N. W. Himalayas.

Euborellia annulipes (Lucas)

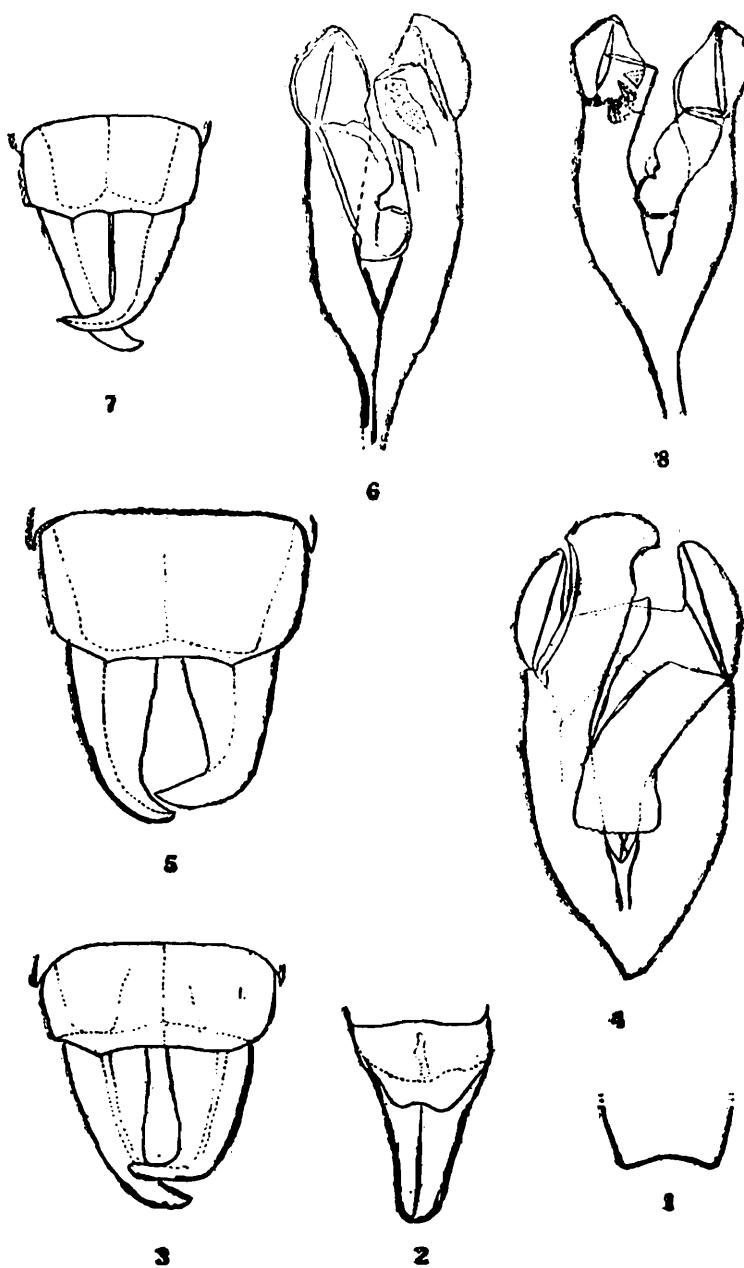
1817. *Forficesila annulipes* Lucas, Ann. Soc. ent. Fr., 5 (2) : 84.

Material examined : INDIA : Himachal Pradesh Sirmour dist., Dhamla, 1 ♂, 23.8.73 (M. Chandra); Sultanpur, 1 ♂ (Genitalia mounted between two coverslips and pinned with the specimen), 2 ♂♂, 9.6.71 (A. Kumar); Rajgarh road, Goura, 1 ♂, 1 ♀, 5.8.71 (H. P. Agarwal); Kulu dist., Gandi Nagar, 1 ♂, 3 ♀♀, 3 nymphs, 25.7.78, Simla dist., Along Giri River, Kotkhai, 1 ♂, 13.7.74 (M. Chandra).

Distribution : World wide.

Euborellia rajasthanensis (Srivastava)

1977. *E. rajasthanensis* Srivastava, Oriental Insects, 11 (2) : 184, 186, figs. 2a-e (♂ genitalia); Holotype ♂, India : Rajasthan, Phalodi).



Figs. 1-8. *Haplodiplatys rufescens* (Kirby) ♂ : 1. Penultimate sternite ; 2. Ultimate tergite and forceps—*Aborolabis pervicina* (Burr) ♂. : 3. Ultimate tergite and forceps 4. Genitalia.—*Euborellia annulipes* (Lucas) ♂ : 5. Ultimate tergite and forceps ; 6. Genitalia.—*Euborellia compressa* (Borelli) ♂ : 7. Ultimate tergite and forceps ; 8. Genitalia.

Material examined : INDIA : Himachal Pradesh : Kulu dist., 2 km. W. of Kulu, 1 ♂ (genitalia mounted between two coverslips and pinned with the specimen), 23.7.73 (M. Chandra); Bilaspur dist., Kandhor, 1 ♂ (genitalia mounted between two coverslips and pinned with the specimen), 18.8.72 (K. K. Mahajan); Simla dist. Along Giri River, Kotkhai, 1 ♂ (under stones; genitalia mounted between two coverslips and pinned with the specimens), 13.7.74 (M. Chandra).

Distribution : Hitherto this species was known from the type locality in Rajasthan and the present material constitutes its first record from the state as well as N. W. Himalayas.

Euborellia compressa (Borelli)

1907. *Anisolabis compressa* Borelli, *Boll. Musei. zool. Anat. comp. R. Univ., Torino*, (558) 22 : 3 (♂, ♀ ; Uganda) ; Burr, 1910, *Trans. R. ent. Soc. Lond.*, 1910 : 177
 1915. *Euborellia compressa* Burr *J. R. micr. Soc.* : 545, pl. 12, fig. 18 (♂ genitalia).

Material examined : INDIA Himachal Pradesh : Bilaspur dist., Old Bilaspur, 2♂♂ (Genitalia of both ♂♂ mounted between two coverslips and pinned with the specimens), 1♀, 1 nymph, 3.6.73 (H. P. Agarwal) ; Naina Devi, 1♂ (Genitalia mounted between two coverslips and pinned with the specimen), 1♀, 2 nymphs, 22.4.72 (M. Chandra).

Distribution : INDIA (Himachal Pradesh and Tamil Nadu), Pakistan, Uganda, Congo and Mozambique.

Remarks : It is recorded for the first time from western Himalayas.

ISOLABOIDINAE

Isolaboides burri (Borelli)

1909. *Pseudisolabis burri* Borelli, *Boll. Musei. Zool. Anat. Comp. R. Univ., Torino*, 24 (63) : 1 (♂, ♀ ; North East Kashmir)
 1910. *Pseudisolabis tenera* Burr, *Fauna. Brit. India. Dermaptera* : 104, fig. 36, pl. 4.
 1958. *Isolaboides burri*: Hincks, *EOS, Madrid*, 34 (2) : 132.

Material examined : INDIA : Himachal Pradesh : Lahaul-spiti dist., Sissu, 11000 ft., 1♂ (Genitalia mounted between two coverslips and pinned with the specimen), 1♀, 28.8.71, 1♀, 30.8.71 ; Kirtnig, 2♂♂ (Genitalia of 1♂ mounted between two coverslips and pinned with the specimen), 13.9.71 ; Keylong, 10500 ft., 1♂, 1♀, 20.8.71 ; Chamba dist., Dharwasangi, 2♂♂, 3, ♀♀ 13 nymphs, 11.9.74 (R. Tilak) ; Purthipangi, 1♂, 1♀, 31.8.74 (R. Tilak) ; Chil, 1♂, 5.11.1970 ; Kinnaur dist., Chini, 4♂♂, 3♀♀, 16 nymphs, 8.iv.1971.

Distribution : In the mountain regions of India (Kashmir and Himachal Pradesh) and Pakistan (Muree, Abbottabad and Chitral).

LABIDURIDAE

NALINAE

Nala lividipes (Dufour)

1820. *Forficula pallipes* Dufour, *Ann. gener. des. Sc. Phys. de Bruxelles*, 4 : 316, pl. 116, figs. 7, 7a & 7b (♂, ♀ Lower Catalonia, Spain).
1828. *Forficula lividipes* Dufour, *Ann. Sci. Nat.*, 13 : 340 (New name proposed).

Material examined INDIA : Himachal Pradesh Sirmour dist., Lal Khud, near Dadahu, 1♂, 3♀ ♀, 24.9.73 (H. P. Agrawal); Kangra dist., Nakeri Khud, 10 km from Dehra Gopipur, 1♂, 7.2.76 (R. Tilak); Bilaspur dist., Old Bilaspur, 1♂, 3.6.73; Badripur, Paouta, 1♂, 20.9.73 (H. P. Agrawal); Satluj River, 2 km downstream from Nangal, 1♂, 1♀, 9.2.76 (R. Tilak).

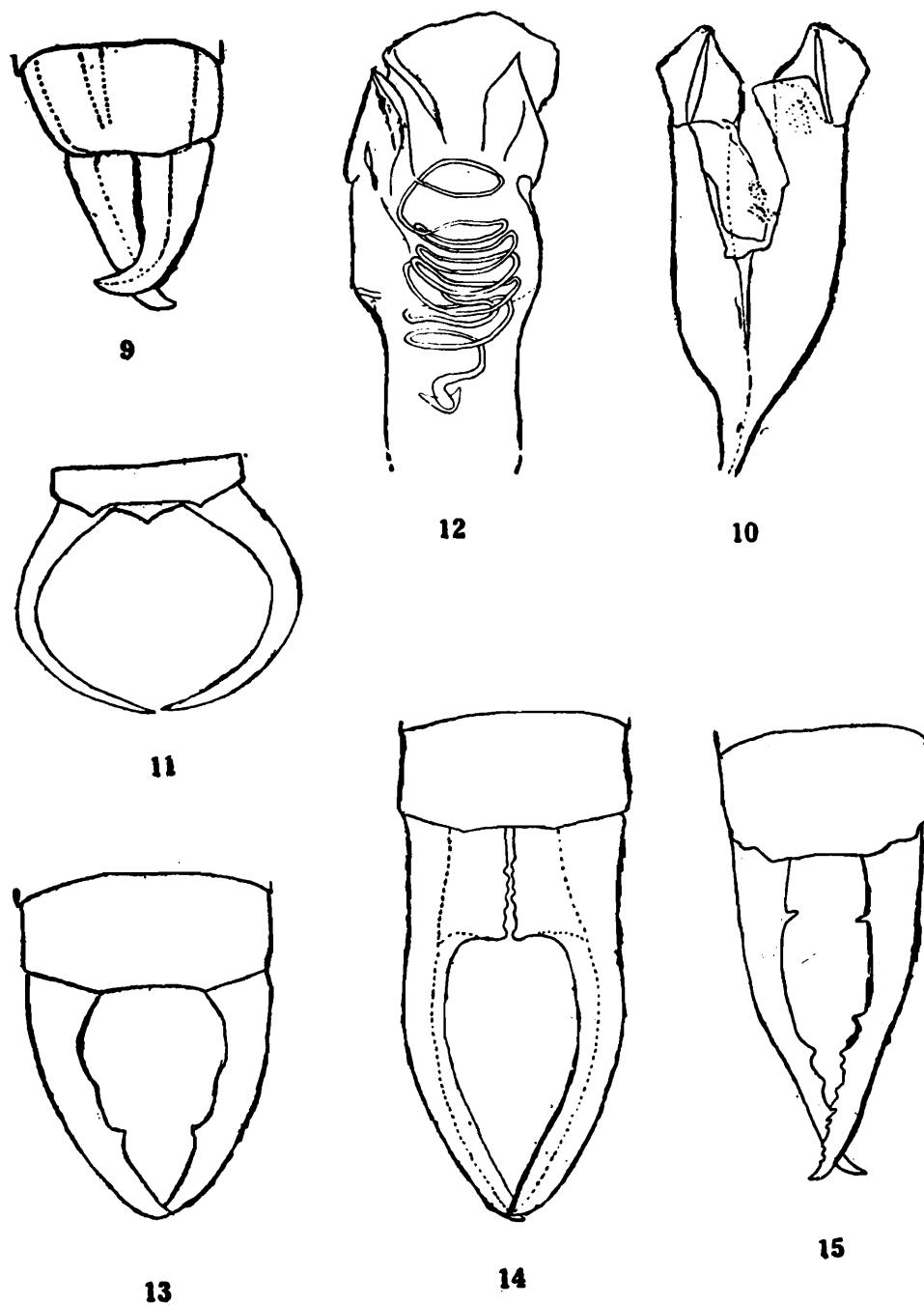
Distribution : World wide.

Remarks : The species is recorded for the first time from the State.

Nala nepalensis (Burr)

1907. *Labidura nepalensis* Burr, *Rec. Indian Mus.*; 1: 208 (♂, ♀; Nepal, Soondrijal & Pharping)
1910. *Nala nepalensis*; Zacher, *Zool. Jb.*, 30 : 393.
1910. *Paralabidura nepalensis* Burr, *Trans. R. ent. Soc. Lond.*: 185.

Material examined : INDIA : Himachal Pradesh : Kangra dist., Kauli Khud, 1 Km from Shahpur, 5♂♂ (Genitalia of 1♂ mounted between two coverslips, pinned with the specimen), 3♀ ♀, 26.2.76, Churan Khud, 6 km from Dharamshala, 1♂, 1♀, 24.2.76 Maul Khud, Palampur 3♂♂, 20♀ ♀, 1 nymph, 21.2.76 Loond Khud, 14 km from Dehra Gopipur, 1♂, 9.3.76 Ava Khud, 9 km from Palampur, 2♂♂, 5♀ ♀, 19.2.76 Sukni Khud, 6 km from Thural, 2♂♂, 3♀ ♀, 16.2.76 Soon Khud, 8 km from Palampur, 1♂, 3, ♀ ♀ 20.2.76; Bilaspur dist., Changarh Khud, 2♂♂, 1♀, 1 nymph, 11.8.72 (K. K. Mahajan); Chamba dist., Ranikhet, 1♂ (Genitalia mounted between two coverslips and pinned with the specimen), 12.6.74, 2♂♂, 14.6.74 (A. Kumar); Mandi dist., Jivni Khud, Pandoh, 1♂, 1♀, 30.5.73 (H. P. Agrawal); Kulu dist., 2 km S of Kulu, 1♂, 1♀, 22.7.73; Ramsheel, 1♂ (only posterior half present), 2♀ ♀, 24.7.73 (M. Chandra); Kalka dist., Parwanu, 1♂, 14.2.73 (K. A. Alvi); Arki, 50 km from Solan, 3♂♂, 2♀ ♀, 20.4.72 (H. P. Agrawal); Shinda dist., Kumarsan, 1700 m, 5♂♂, 3♀ ♀; Sarshan Nala, 1♂, 8.4.70; Manta, Tattapani, Mandi Road, 800m, 1♂, 20.9.69 (K. K. Mahajan); Rajgarh, 2♂♂, 1.3.71 (H. P. Agrawal).



Figs. 9-15. *Euborellia rajasthanensis* Srivastava, ♂ : 9. Ultimate tergite and forceps ; 10. Genitalia. —*Isolaboides burri* (Borelli) ♂ : 11. Ultimate tergite and forceps ; 12. Genitalia. —*Nala lividipes* (Dufour) — : 13. Ultimate tergite and forceps. —*Nala nepalensis* (Burr) ♂ : 14. Ultimate tergite and forceps. —*Labidura riparia* (Pallas) ♂ : 15. Ultimate tergite and forceps.

Distribution : In the mountain regions of India, Nepal, Bhutan, Malaya, Indo-China and Afghanistan.

Remarks : It is reported for the first time from the State.

LABIDURINAE

Labidura riparia (Pallas)

1773. *Forficula riparia* P. llas, *Reise Russ. Reichs.*, 2 : 727 (Shores of Irtysch river, Western Siberia).

Material examined : INDIA Himachal Pradesh : Kangra dist., Kauli Khud, 1.5 km from Shahpur, 4♂♂, 1♀, 3 nymphs, 28.2.76 ; Churan Khud, 6 km. from Dharamsala, 22♂♂, 41♀♀, 36 nymphs, 24.2.7 ; Palampur, Maul Khud, 8♂♂, 7♀♀, 21.2.76, Rait village near Shahpur, 1♂, 1♀, 28.2.76 (R. Tilak) ; Kulu dist., Rest house, Kulu, 3♂♂, 2♀♀, 1 nymph (2♂♂ night collection), 22.7.73 and 1♂, 1♀, 3 nymphs (night coll.), 24.7.73 ; 2 km S of Kulu, 2♂♂, 2♀♀, 10 nymphs, 22.7.73 (M. Chandra) ; Jawalamukhi dist.. P.W.D. Rest house (2 km W of Jawalamukhi), 1♂, 1♀, 25.5.73, Anb Khud, 3, ♂♂3♀♀, 9 nymphs, 26.5.73, Mandi dist., Pandoh Dam, 7♂♂, 3♀♀, 10 nymphs, 31.5.73, Samli village, 8♂♂, 12♀♀, 40 nymphs, date not given ; Sarkaghat, 2♂♂, 1♀, 1 nymph, 1.4.72 (M. Chandra), Bilaspur dist., Old Bilaspur, 11♂♂, 5♀♀, 36.73 (H. P. Agrawal) ; Meirikattan Shara, 2♂♂, 1♀, 7.4.72 ; Sirmour dist., 1♂, 1.7.72, Dhamla, 2♂♂, 1 nymph, 23.8.73 (M. Chandra), Naina Ticker on Simla-Nahan Road, 2♂♂, 3♀♀, 4.8.72 (H. P. Agrawal) ; Nohra, 1♂, 1♀, 2 nymphs, 1.7.72 (M. Chandra) ; Lal Khud (Near Dadahu), 1♂, 3♀♀, 24.9.73 ; Giri River at Dadahu, 2♂♂, 1♀, 23.9.73 (H. P. Agrawal) ; Kasauli dist., 3 km away from Kasauli, Auola, 11♂♂, 7♀♀, 10 nymphs, 10.12.72 (T P. Sharma) ; Simla dist., Shamsherpur, 1♂, 2 nymphs, 19.7.73, Badripur, Paouta, 6♂♂, 6♀♀, 7 nymphs, 20.9.73 (H. P. Agrawal) ; South bank of Bhalka river, 1♂, 23.4.75 (K. A. Alvi) ; Satluj river, 2 km down stream from Nangal, 5♂♂, 2♀♀, 9.2.76 (R. Tilak) ; Yamuna river bank, 1♂, 1♀, 10.4.74 (A. Kumar) ; Hamirpur, 3 km from Sujanpur Tira, 5♂♂, 5♀♀, 12.2.76 (R. Tilak) ; Ashni Khud, 4♂♂ (3 damaged), 3♀♀ (1 damaged), 4 nymphs, 19.6.70 (M. Chandra).

Distribution : World wide.

Forcipula trispinosa (Dohrn)

- 1863. *Labidura trispinosa* Dohrn, *Stettin. ent. Zeit.*, 24 : 310 (♂, India Orientali).
- 1900. *Forcipulo trispinosa* : Bormans, *Das Tierreich*, 2 : 30.
- 1891. *Labidura pugnax* Kirby, *J. Linn. Soc. (Zool.)*, 25 : 510, pl. 12, fig. 1 (♂, ♀ ; North India).
- 1910. *Forcipula trispinosa* var. *Minor* Burr, *Fauna Brit. India. Dermaptera* : 93, pl. 3, fig. 26a (♂, Nepal).
- 1966. *Forcipula trispinosa* sub sp. *minor*, Brindle, *Ann. Mag. nat. Hist.*, 9 (13) : 268.
- 1980. *Forcipula afghana* Steinmann, *Acta. zool. Acad. Sci. Hung.*, 26 (1-3) : 243 (♂ ; Afghanistan).

Material examined : INDIA : Himachal Pradesh : Kangra dist., Palampur, Maul khud, 9♂♂, 7♀♀, 21.2.76 ; Sukni khud (6 km from Thural), 3♂♂, 2♀♀, 16.2.76 ; Kauli khud, 1 km from Shahpur, 2♂♂, 2♀♀, 2 nymphs, 26.2.76, (R. Tilak) ; Churan khud, 6 km from Dharamsala, 1♂, 24.2.76 ; Rait village (near Shahpur), 1♂, 28.2.76 ; Ava khud, 9 km from Palampur, 3♂♂, 1♀, 19.2.76 (R. Tilak) ; P. W. D. Rest house, 2 km W. of Jawalamukhi, 2♂♂, 25.5.73 (H.P. Agrawal) ; Majhi khud, 1♂, 4.3.76 (R. Tilak) ; Kulu dist., Ramsheel, 1♂, 24.7.73 (M. Chandra), Solan Dist., arki, 50 km from Solan, 4♂♂, 3♀♀, 2 nymphs, 20.4.72 (H. P. Agrawal) ; Simla dist., 2 km N. of Pullbhal Nala (under stone), 3♂♂, 2 nymphs, 18.7.74 (M. Chandra) ; Sirmour dist., Giri river at Dadahu, 1♂, 8.4.74 (A. Kumar), Lal khud, near Dadahu, 1♂, 2♀♀, 24.9.73 (H. P. Agrawal) ; Chamba dist., Ranikhet, 3♂♂, 4♀♀, 12.6.74 (A. Kumar) ; Bilaspur dist., Guyal village, 2♂♂, 15.8.73 (K. K. Mahajan) ; Haloni, 5 km from Rajgril, 4♂♂, 6♀♀, Yamuna river bank, 2♂♂, 2♀♀, 10.4.74 (A. Kumar) ; Rajgarh road, Goura, 1♂, 1♀, 5.8.71 (H. P. Agrawal) ; Simla dist., Kumarsan, 1700m, 2♂♂, 2♀♀; Manta, Tattapani (Mandi Road), 800m, 1♂, 2 nymphs, 20.9.1969 (K. K. Mahajan) ; Arki, 1♂, 4.3.71 (M. Chandra).

Distribution : India, Nepal and Afghanistan.

Forcipula quadrispinosa (Dohrn)

1863. *Labidura quadrispinosa* Dohrn, Stettin. ent. Ztg., 24 : 311 (♂, Tranquabar, India and Ceylon).

Material examined : INDIA : Himachal Pradesh : Sirmour dist., Giri river at Dadahu, 4♂♂, 6♀♀, 8.4.74 (A. Kumar) ; Kangra dist., near Beas Sive Bridge (Dehra), 2♂♂, 2♀♀, 20.7.73 (M. Chandra).

Distribution : India, Sri Lanka, Nepal, Bhutan, Burma, Thailand, Java, Indo-China, Phillipine Islands, Reunion and Mauritius.

Remarks : This species is recorded for the first time from Himachal Pradesh.

FORFICULOIDEA

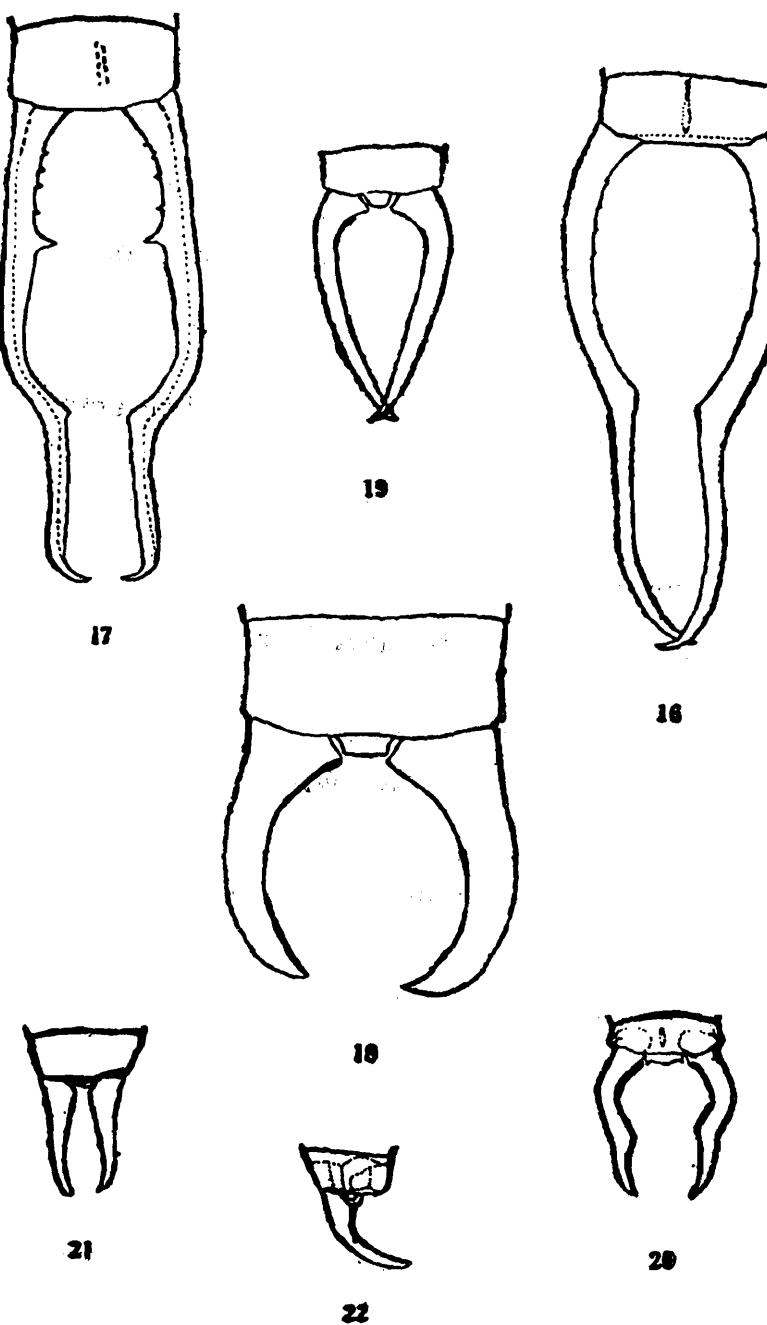
FORFICULIDAE

ANECHURINAE

Anechura zubovskii Semenov

1901. *Anechura zubovskii* Semenov, Horae. Soc. Ent. Ross., 35 : 188 (♂, ♀ ; India : Kashmir ; Ladakh Valley of the River Dras, 9,000-11,000 ft).

1975. *Anechura zubovskii* : Steinmann, *Fol. Ent. Hung.*, 28 : 162.
 1966. *Anechura pirpanjalae* Kapoor, *Ann. Mag. nat. Hist.*, 13 : (9) : 391.
 1955. *Anechura bipunctata pirpanjalae* Singh, *Agra Univ. J. Res. (Sci.)*, 4 (1) : 182.



Figs. 16-22. *Forcipula quadrispinosa* (Dohrn) ♂ : 16. Ultimate tergite and forceps. —*Forcipula trispinosa* (Dohrn) ♂ : 17. Ultimate tergite and forceps. —*Anechura stoliczkae* Burr, ♂ : 18. Ultimate tergite and forceps (cyclolabic form); 19. Ultimate tergite and forceps (macrolabic form). —*Anechura zubovskii* Semenov, ♂ : 20. Ultimate tergite and forceps. — ♀ : 21. Ultimate tergite and forceps ; 22. Abnormal ultimate tergite and forceps.

Material examined : INDIA : Himachal Pradesh : Lahaul-Spiti dist., Sissu, 11,000 ft., 1♂, 27.8.71, 1♀ 30.8.71, Lossar, 4100 ft, 3♂♂, 8♀♀, 7.8.71, 2♂♂, 2♀♀, 8.8.71, 3♂♂, 1♀, 11.8.71 ; Jespa, 11,000 ft, 2♀♀, 25.8.71 (K. K. Mahajan) ; Samolha village, 4♂♂, 2♀♀, 1 nymph, 22.8.75 (M. Chandra) Khoksar, 10,512 ft, 1♂, 2♀♀, 26.7.70, 2♀♀, 6.7.71, 3♀♀, 24.7.1971 ; Keylong, 10,500 ft, 3♂♂, 6♀♀, 20.8.71, 1♂, 1♀, 31.8.70 ; Kinnaur dist., Around P.W.D. Rest House, Sangla and Kaurik village, 5♂♂, 6♀♀, 20.8.71 (K. K. Mahajan) ; Chamba dist., Tindipangi, 1♀, 22.8.74, 1♂, 2♀♀, 23.8.74 ; Purthipangi, 2♀♀, 28.8.74 ; Dharwaspangi, 1♀, 12.9.74 (R. Tilak) ; Narkanda, 2,700m, 1♀, 2 nymphs, 15.9.69 ; Kolhapuri, 2♂♂, 19.4.70 (K. K. Mahajan).

Distribution : India (Kashmir, Himachal Pradesh and Sikkim) and China (S. W.) Tibet.

Remarks : In one female, collected from Khoksar ultimate tergite and forceps were observed to be abnormal (fig. 22).

Anechura stoliczkae Burr

- 1911. *Anechura stoliczkae* Burr, *J. Asiatic Soc. Bengal*, (N. S.), 7 : 792 (♂, Northern India, Upper Sutlej dist., Bashahr).
- 1955. *Anechura himalayana* Singh, *Agra Univ. J. Res. (Sci.)*, 4 (1) : 180.
- 1955. *Himanechura lahaulensis* Singh, *Agra. Univ. J. Res. (Sci.)*, 4 (1) : 184 (Nymphs).

Material examined : INDIA: Himachal Pradesh : Kinnaur dist., Sangla Hill, 6♂♂, 6♀♀, 27.6.75 (A. Kumar) ; Kalpa, 1♂, 2 nymphs, 15.4.70 ; Mandi dist., 1♂, 28.7.1970 (K. K. Mahajan).

Distribution : All along the Himalayas in India, Nepal and Bhutan.

Remarks : The macro-and cyclolabic forms of forceps in males with various intermediate stages are represented in the material.

Subfamily : ALLODAHLIINAE

Allodahlia macropyga (Westwood)

- 1839. *Forficula macropyga* Westwood in Royle, *Ills. Himalayas*, 2 : iii. (♂, ♀; by inference Himalayan Mts.).

Material examined : INDIA : Himachal Pradesh : Simla dist., 3 km north of P.W.D. Rest House, Baghi, 2686 m, 5♂♂, 3♀♀, 6.10.74 ; 2 km S.E. of P.W.D. Rest House, Baghi, 2686 m, 1♂, 2♀♀, 7.10.74 ; 3 km N. E. of P.W.D. Rest House, Thanedhar, Dabbi, ca 1850 m, 1♀, 2.10.74 (L. K. Ghosh).

FORFICULINAE

Forficula schlagintweiti (Burr)

- 1904. *Anechura schlagintweiti* Burr *Trans. R. ent. Soc. Lond.*, : 313 (♂, ♀ ; Tibet, Lahaol, Dohrn coll. ; India : Darjeeling).
- 1910. *Forficula schlagintweiti* : Burr, *Fauna Brit. India, Dermaptera* : 166, fig. 54, pl. 6.
- 1923. *Anechura stoliczkae* : Hebard, *Mem. Dept. Agric. India, Ent. Ser.*, 7 : 224 ("Brachylabic condition").

Material examined : INDIA : Himachal Pradesh : Kulu dist., P.W.D. Rest House Kothi (Kulu), 1♂, 29.7.73, 2 km S. of Kothi, Kulu, 3♀♀, 30.7.73, Bella, 3 km from Kothi, Kulu, 4♀♀, 31.7.75, Rest House, Manali 7000 ft, 1♀ (night coll.) 27.7.73 (M. Chandra) ; Lahaul-Spiti dist., Sissu, 11000 ft, 1♀, 30.8.71 (K. K. Mahajan) ; Chamba dist., Purhipangi, 1♀, 28.8.74 (R. Tilak) ; Sirmour dist., Sarpat, 1♂, 1♀, 28.8.73 (K. K. Mahajan).

Distribution : Along the Himalayas in India, Nepal, Bhutan and Pakistan.

Forficula planicollis Kirby

- 1891. *Forficula planicollis* Kirby, *J. Linn. Soc.* : 525 (♀, North India).

Material examined : INDIA : Himachal Pradesh : Simla dist., 2 km S.E. of P.W.D. Rest House, Baghi, 2686 m, 1♂, 7.10.74 (L. K. Ghosh).

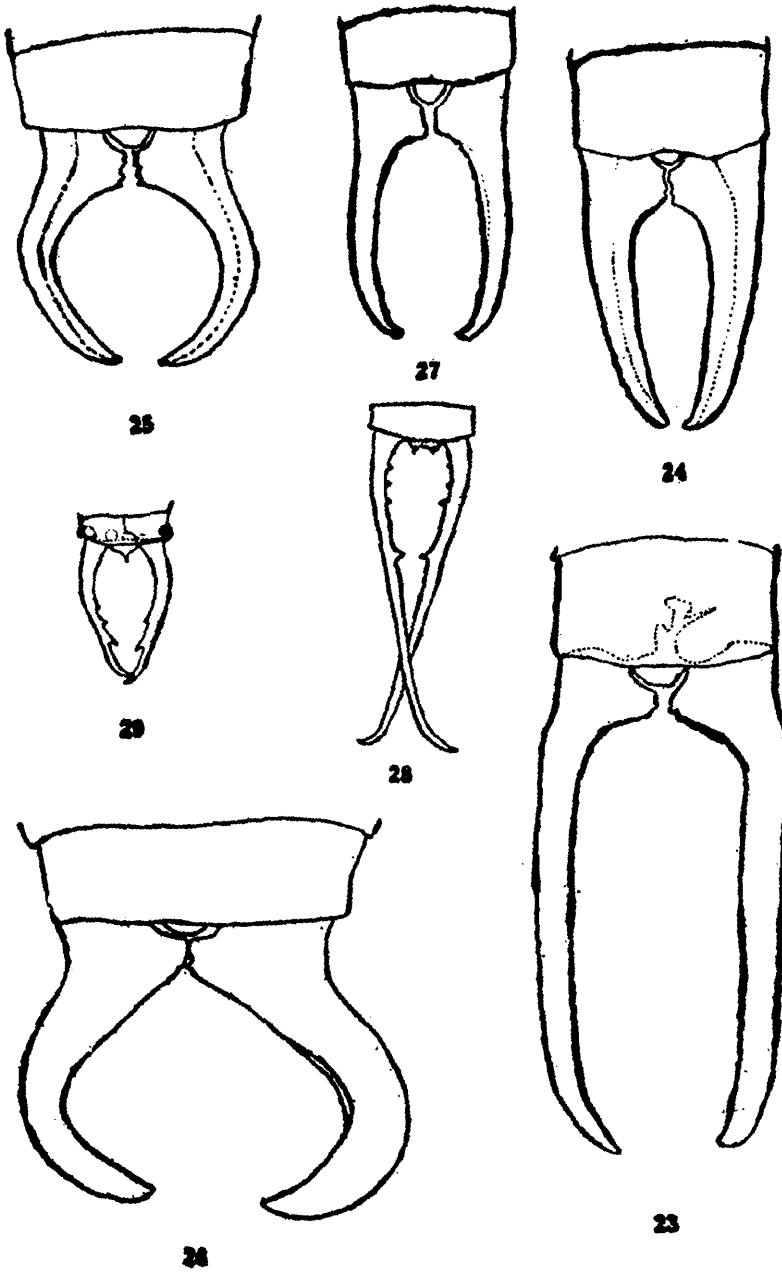
Remarks : The occurrence of this species in Simla dist. constitutes its first record for the fauna of this State.

Forficula davidi Burr

- 1905. *Forficula davidi* Burr, *Ent. mon. Mag.* (Ser. 2), 16 : 86. (♂, China : Mou-Pin, Szechwan).

Material examined : INDIA : Himachal Pradesh, Sirmour dist., Habban, 2334 m., 2♂♂ 24.5.80 (Julka & Purohit).

Remarks: This material is a part of the material studied by Purohit, Julka & Lal, 1985.



Figs. 23-29. — *Elaunon bipartitus* (Kirby) ♂ : 23. Ultimate tergite and forceps (macrolabic); 24. Ultimate tergite and forceps (cyclolabic). — *Forficula planicollis* Kirby, ♂ : 25. Ultimate tergite and forceps. — *F. schlagintweiti* (Burr) ♂ : 26. Ultimate tergite and forceps. — *F. davidi* Burr, ♂ : 27. Ultimate tergite and forceps. — *Eudohrnia metallica* (Dohrn) ♂ : 28. Ultimate tergite and forceps. — *Allodahlia macropyga* (Westwood) ♂ : 29. Ultimate tergite and forceps.

Elaunon bipartitus (Kirby)

1891. *Sphingolabis bipartita* Kirby, J. Linn. Soc. Z., 23 : 526 (♂, ♀ ; India).

Material examined : INDIA Himachal Pradesh Kulu dist., Ramsheel, 1♂, 1♀, 24.7.73 ; P.W.D. Rest House (Kulu), 1♀, 23.7.73 and 1♂, 24.7.73 2♂♂, 1♀, 22.7.73 (Night coll. ; Gandi Nagar, 1♂, 1♀, 25.7.73 ; Shimla dist., Jatoo, 2♂♂, 1♀, 29.7.72 genitalia of both males mounted between two coverslips and pinned with the specimen (M. Chandra) ; Solan dist., 2♂♂ (at light), 14.7.1968 (O. B. Chhotani).

Remarks : Both macro and cycloabtic forms of forceps in males are present in the material studied.

EUDOHRNIINAE**Eudohrnia metallica (Dohrn)**

1865. *Forficula metallica* Dohrn, Stettin. ent. Ztg., 26 : 90 (♂, ♀ ; India : Assam).

Material examined : INDIA : Himachal Pradesh : Rajgarh, 1♂, 3.9.70 (M. Chandra).

Remarks : This species is reported for the first time from this State.

SUMMARY

The paper deals with 19 species of Dermaptera belonging to 12 genera from various localities of Himachal Pradesh, India. Of these, 9 species are reported for the first time from the area.

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REFERENCES

PUROHIT, G. L., JULKA, J. M. AND LAL, S. S. 1985. A new species of *Forficula* Linnaeus and new record of *Forficula davidi* (Dermaptera : Forficulidae) from India. *Bull. zool. Surv. India*, 7 (2-3) : 165-168.