

# REICHENBACHIA

Staatliches Museum für Tierkunde Dresden

Band 22

Ausgegeben: 3. September 1984

Nr. 3

## On Some Typhlocybinae from Kishtwar, Jammu & Kashmir (India), with Description of Five New Species (Homoptera, Auchenorrhyncha, Cicadellidae)

With 90 Figures

BALDEV SHARMA  
Jammu

The Typhlocybinae species recorded in the present paper were collected at light from Kishtwar, J & K state, India during July, 1980. Kishtwar is a small town situated in a small valley at an elevation of 4500 ft. above the sea level and is placed at latitude 33°, 17 min., and Longitude 75°, 47 min. This valley is surrounded between high mountains belonging to Pirpanjal range of mountains. River Chenab (Chanderbhaga) and some of its tributaries flow through this valley.

Tribe *Empoascini*

*Empoasca* (s. str.) *punjabensis* PRUTHI, 1940

7 ♂♂, 1 ♀, Kishtwar (J & K) (base of Mt. Pirpanjal, 4500), July 1980, Coll. B. SHARMA.

*Empoasca kishtwarensis* sp. n. (Figs. 1–6)

Natural colour faded in the specimen. Body light beige without distinct hypodermal pattern.

Male genital structures of *Empoasca kishtwarensis* sp. n. resemble to that of *E. uniprossica* SOHI, 1977, but aedeagus is slimmer and its unpaired apical process possesses a proximal part slightly shorter than the distal one and its termination is neither broadened (as in *uniprossica*) nor serrated (Figs. 3, 4).

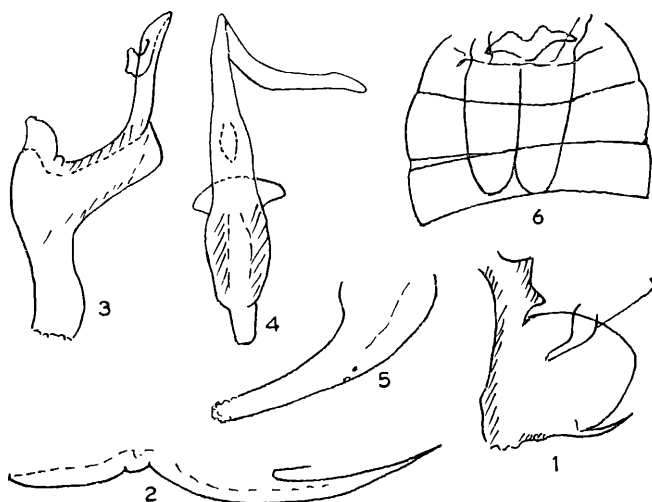
Length ♂ 3.3 mm.

**Holotype**, male, India (Jammu and Kashmir), Kishtwar (base of Pirpanjal mount, 4500'), July 1980, Coll. B. SHARMA. Deposited in the Museum, Department of Biosciences, University of Jammu, Jammu, India.

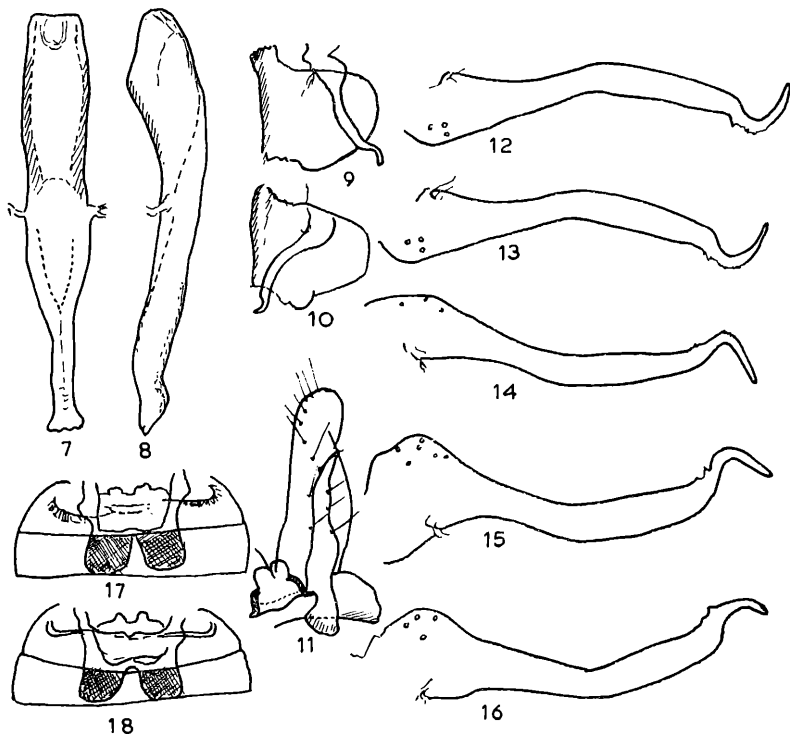
*Chlorita* (*Eremochlorita*) *curvidentata* sp. n. (Figs. 7–18)

Colour olivaceous-green with well developed ivory pattern resembling to that of *Chlorita* (*Eremochlorita*) *albomaculata* (RAMAKRISHNAN & MENON, 1972). A large patch above base of antenna joined with that below ocellus. A central streak on face continued to the mid-length of vertex. Large patches mesad of frontal sutures on frons joined with those above ocelli. Upper  $\frac{1}{3}$  of clypeus, almost whole of lorum, inner parts of genae and broad central streak on frontoclypeus ivory or yellowish. Distinct narrow central streak on pronotum and patches at its anterior margin ivory or yellowish. Fore-wing semitransparent, very light, marble pattern on them hardly visible.

In its male genitalic components the new species resembles with that of *Ch. (E.) akadzhusani* ZACHV. but can be distinguished from it by the possession of long aedeagal shaft



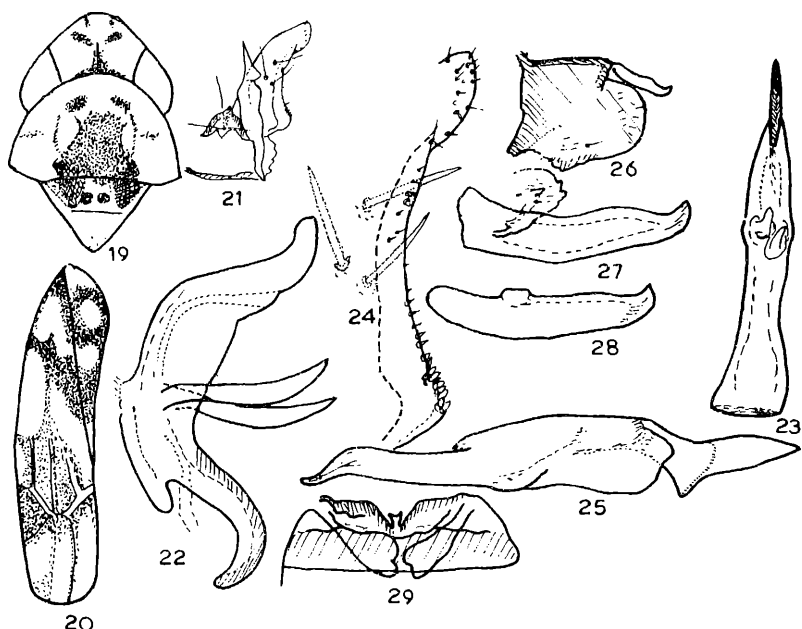
Figs. 1–6. *Empoasca kishtwarensis* sp. n.  
1: pygofer – 2: pygofer process – 3: aedeagus, lateral view – 4: aedeagus posterior view – 5: anal tube appendage – 6: adominal apodemes.



Figs. 7–18. *Chlorita (Eremochlorita) curvidentata* sp. n.

7+8: aedeagus – 9+10: pygofer – 12–16: pygofer appendages – 17+18: abdominal apodemes.

(Figs. 7, 8) as compared to knob-like in *akadzhusani* ZACHV., apically arched anal tube appendage with teeth-like structures on it (Figs. 12–16) as against smoothly tapering process in *Ch. (E.) akadzhusani* ZACHV.

Figs. 19–29. *Mitjaevia atropictila* AHMED

19: head and thorax – 20: forewing – 22: aedeagus, lateral view – 23: aedeagus, posterior view – 24: male subgenital plate – 25: paramere – 26–28: pygofer and its appendage.

Length: ♂ 2.6 mm and ♀ 2.4 mm.

Holotype, male and paratypes, 1 ♂, 1 ♀, India (Jammu and Kashmir), Kishtwar (base of Pirpanjal mount, 4500'), July 1980, Coll. B. SHARMA. Type material is to be deposited in the museum, Department of Biosciences, University of Jammu, India.

#### Tribe Erythroneurini

**Arboridia (Arborifera) vinealis** (AHMED) DWORAKOWSKA & VIRAKTAMATH, 1978

*Erythroneura vinealis* AHMED, 1970

2 ♂♂, 3 ♀♀, India, Kishtwar (J & K) (base of Mt. Pirpanjal, 4500'), July 1980, Coll. B. SHARMA.

**Kapsa mingorensis** (AHMED) DWORAKOWSKA, NAGAICH & SINGH, 1978

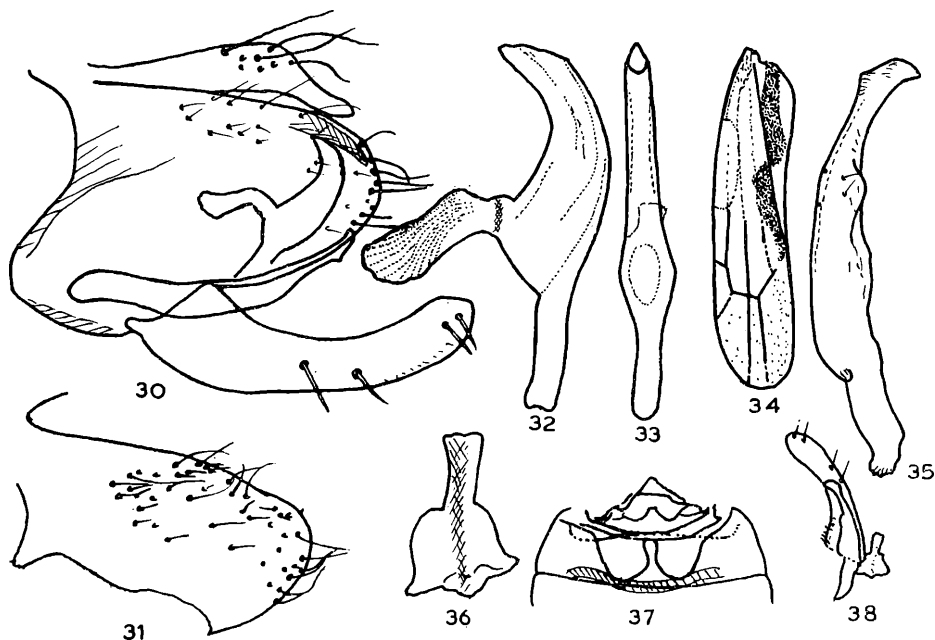
*Erythroneura mingorensis* AHMED, 1970

*Erythroneura kuluensis* SOHI & KAPOOR, 1973

♂♂ & ♀♀, India (J & K), Kishtwar (base of Pirpanjal Mt., 4500'), July 1980, Coll. B. SHARMA.

#### *Mitjaevia atropictila* (AHMED, 1970) (Figs. 19–29)

Colour light-yellow. Face without dark markings. Vertex with 2 comma-like yellowish-brown patches on disc, 2 small near its anterior margin (one on each side of mid-line) and largely expanded brown infuscation at base. Pronotum with large triangular greyish patch on disc and hind margin and two bracket-like marks laterad, two rounded anterior and two transverse dashes near lateral margins, brown. Scutum and scutellum sordid-ochre. Centre of basal triangles on scutum with two roundish patches near midline. Fore-



Figs. 30–38. *Zygina schneideri* (GÜNTHART)

30: male genital apparatus, lateral view — 31: pygofer — 32: aedeagus, lateral view — 33: aedeagus, posterior view — 34: forewing — 35: paramere — 36: connective — 37: abdominal apodemes.

wings sordid-whitish with greyish-brown pattern resembling that of *Mitjaevia diana* (DISTANT) but much reduced.

Length ♂ 2.7 mm.

1 ♂, 1 ♀, India (J & K), Kishtwar (base of Pirpanjal Mt., 4500'), July 1980, Coll. B. SHARMA.

***Zygina schneideri* (GÜNTHART, 1974) (Figs. 30–38)**

*Flammigeroidia schneideri* GÜNTHART, 1974

1 ♂, 1 ♀, India (J & K), Kishtwar (base of Pirpanjal Mt., 4500'), July 1980, Coll. B. SHARMA.

This species has already been recorded by DWORAKOWSKA & SOHI (1978) from Kulu (H. P.), India.

Tribe Typhlocybini

***Linnavuoriana (Sharmana) swaraji* (SHARMA) DWORAKOWSKA, 1982**

*Agnesiella swaraji* SHARMA, 1978

♂♂ & ♀♀, India (J & K), Kishtwar (base of Pirpanjal Mt., 4500'), July 1980, Coll. B. SHARMA.

***Farynala malhotri* SHARMA, 1977**

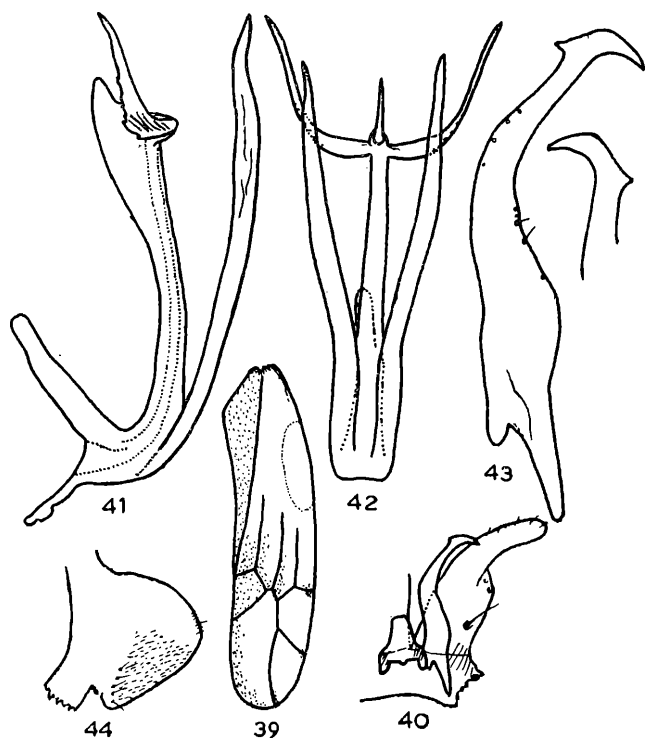
1 ♂, India (J & K), Kishtwar (base of Pirpanjal Mt., 4500'), July 1980, Coll. B. SHARMA.

***Eupteryx multifaciata* SINGH, 1969**

2 ♀♀, India (J & K), Kishtwar (base of Pirpanjal Mt., 4500'), July 1980, Coll. B. SHARMA.

***Eupteryx bhartiæ* DWORAKOWSKA, 1980**

1 ♂, 1 ♀, India (J & K), Kishtwar (base of Pirpanjal Mt., 4500') July 1980, Coll. B. SHARMA.



Figs. 39–44.  
*Ribautiana trifurcata* sp. n.  
 39: forewing — 40: part of  
 genital capsule — 41:  
 aedeagus, lateral view —  
 42: aedeagus, posterior  
 view — 43: paramere —  
 44: pygofer.

***Eurhadina (Singhardina) vittata* AHMED, 1969**

3 ♂♂, India (J & K), Kishtwar (base of Pirpanjal Mt., 4500'), July 1980, Coll. B. SHARMA.

***Ribautiana trifurcata* sp. n. (Figs. 39–44)**

Head whitish beige. Two indistinct orange spots on midlength of vertex near eyes. Pronotum whitish centrally, ochre at sides. Scutum and scutellum beige. Forewing semitransparent with light to dark-brown pattern as shaded (Fig. 39).

Male genital structures of *Ribautiana trifurcata* sp. n. resemble to that of *R. alces* (RIBAUT, 1936) but can be distinguished by the apical enlargement of aedeagal shaft in lateral view (Fig. 41); aedeagal shaft apically tapering into a long, pointed, unpaired median process (Fig. 42) and absence of any dorsally directed process from the dorsal aspect of the aedeagal shaft.

Length ♂ 3.0 mm.

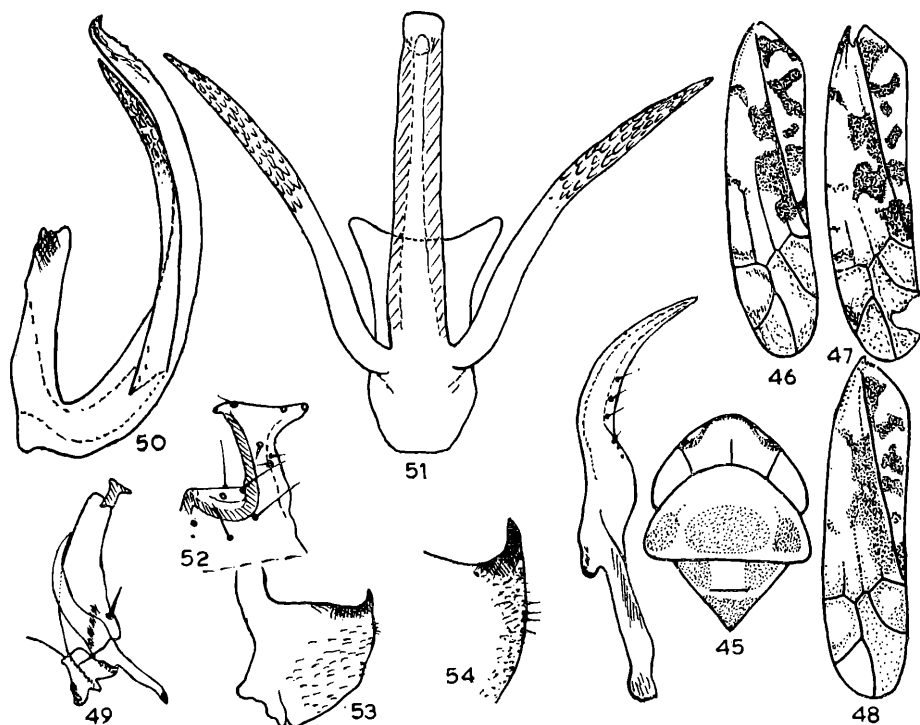
**Holotype**, male, India (Jammu and Kashmir), Kishtwar (base of Pirpanjal Mt., 4500'), July 1980, Coll. B. SHARMA. Holotype to be deposited in the department of Biosciences, Museum, University of Jammu, Jammu.

***Typhlocyba afghana* DLABOLA, 1971 (Figs. 45–54)**

♂♂ & ♀♀, India (J & K), Kishtwar (base of Pirpanjal Mt., 4500'), July 1980, Coll. B. SHARMA.

***Typhlocyba chandrai* DWORAKOWSKA, 1980**

2 ♀♀, India (J & K), Kishtwar (base of Pirpanjal Mt., 4500'), July 1980, Coll. B. SHARMA.

Figs. 45–54. *Typhlocyba afghana* DLABOLA

45: head and thorax — 46–48: forewings — 49: part of the male genital apparatus — 50: aedeagus, lateral view — 51: aedeagus, posterior view — 52: tip of the male subgenital plate — 53+54: pygofer.

***Typhlocyba ghanii* AHMED, NAHEED et SAMAD, 1981 (Figs. 55–63)**

♂♂, India (J & K), Kishtwar (base of Pirpanjal Mt., 4500'), July 1980, Coll. B. SHARMA.

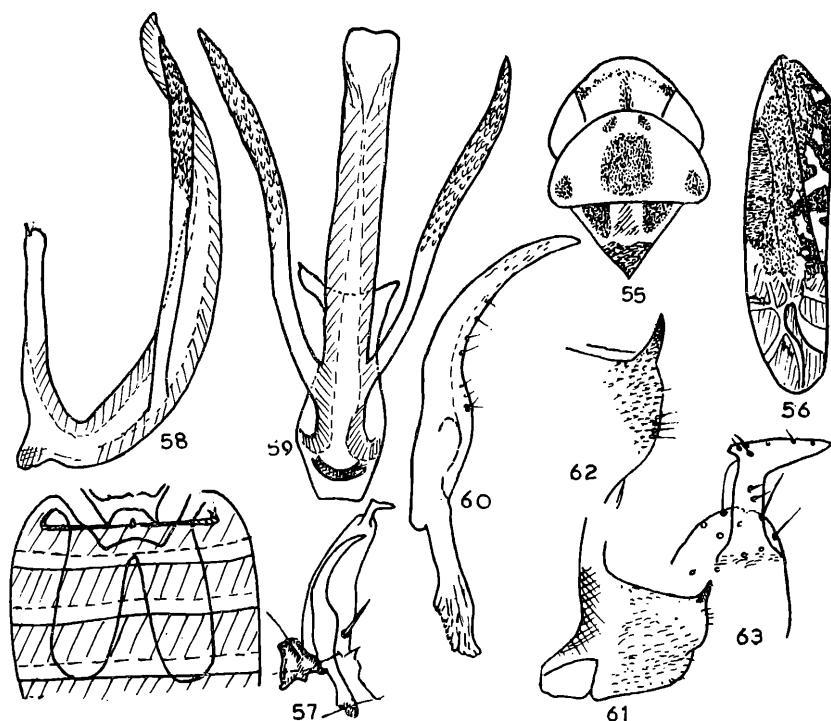
***Typhlocyba piariae* sp. n. (Figs. 64–72)**

Colour of vertex and upper part of thorax ivory with dark-brown pattern as in Fig. 64. Basal triangles of scutellum beige, some times brownish basally. Blackish transverse patch at tip of vertex joins the two brown patches. In male face dark-brown below, lighter above with only small beige areas at sides of the blackish apical transverse patch. Antennae also beige. In female large areas of frons and anteocular areas also beige. Forewing ochre-brown in basal  $\frac{4}{5}$  light grey apicad. Veins bordered with yellowish. Apical  $\frac{1}{5}$  of wing brownish. Hind part of longitudinal Sc cell brown-red.

Male genital apparatus of *T. piariae* sp. n. resembles to that of *Typhlocyba arborea* DWORAKOWSKA, 1979, but can be distinguished by much longer extension at the hind lower angle and acuter upper angle of pygofer side (Fig. 67), inner (ventral) margin of paramere being ornamented with numerous small teeth (Fig. 71) and entirely different shape and size of the preapical aedeagal processes (Fig. 69, 70).

Length ♂ 3.2 mm, ♀ 3.3 mm.

**Holotype**, male, India (Jammu and Kashmir), Kishtwar (base of Pirpanjal Mt., 4500'), July 1980, Coll. B. SHARMA. **Paratype**, 1 ♀, collection data as for holotype; 1 ♂, 1 ♀, India, H. P., Manali, Oct. 16, 1981, Coll. I. DWORAKOWSKA.



Figs. 55–63. *Typhlocyba ghanii* AHMED, NAHEED & SAMAD

55: head and thorax – 56: forewing – 57: part of male genital apparatus – 58: aedeagus, lateral view – 59: aedeagus, posterior view – 60: paramere – 61+62: pygofer – 63: tip of male subgenital plate.

The species is named after Piari, my wife for various helps and sacrifices. Type material will be partly deposited in the museum, Department of Biosciences, University of Jammu, and partly in Staatliches Museum für Tierkunde Dresden.

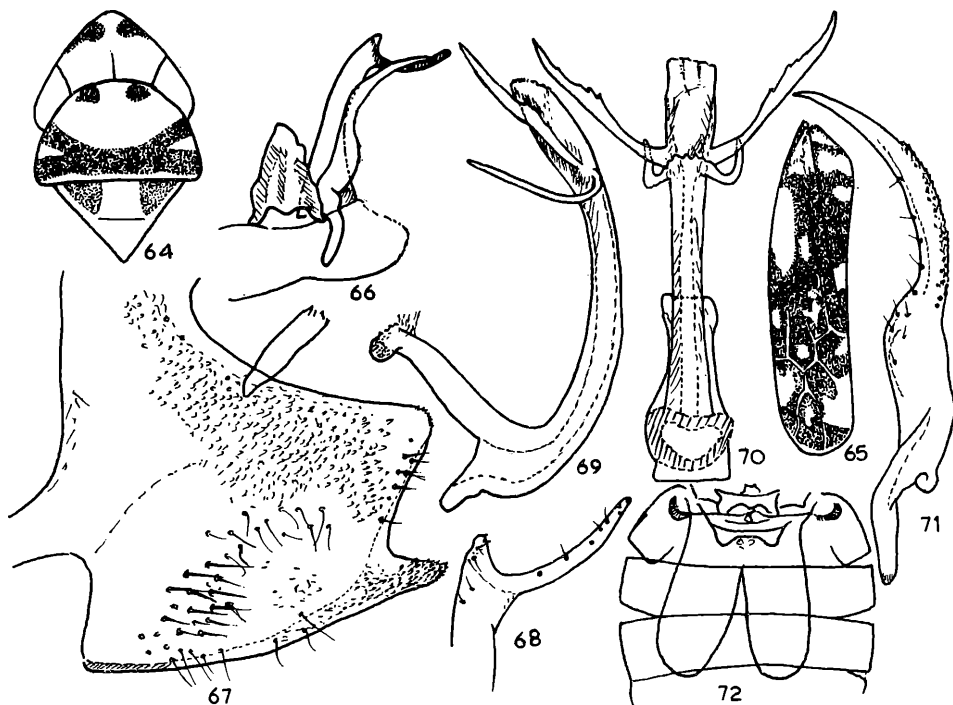
#### ***Typhlocyba irenae* sp. n. (Figs. 73–81)**

Colour ivory with bright red markings on pronotum, scutellum and forewing (shaded in Fig. 74). Basal triangles sometimes beige or slightly orange. Male genital apparatus of *T. irenae* sp. n. resembles *Typhlocyba ghanii* AHMED, NAHEED & SAMAD, 1981, but aedeagal shaft in profile is thicker at apex and slimmer at base (Fig. 76), from behind it is roundish apically and slightly swollen basally (Fig. 77) and its basal appendages are shifted more apical as compared to *T. ghanii*. Besides, pygofer lobe has shorter sclerotized tooth as hind upper angle (Figs. 79, 80).

Length ♂ 3.0 mm, ♀ 3.2 mm.

Holotype, male, and paratypes, 2 ♂♂, 1 ♀, India (Jammu and Kashmir), Kishtwar (base of Pirpanjal Mt., 4500'), July 1980, Coll. B. SHARMA.

The new species is described in honour of Dr. Irena DWORAKOWSKA a well known Typhlocybinae taxonomist. Holotype and part of paratypes will be deposited in the museum, Department of Biosciences, University of Jammu, 2 ♂♂ paratypes are with Dr. I. DWORAKOWSKA to be deposited in Staatliches Museum für Tierkunde Dresden.



Figs. 64–72. *Typhlocyba piariae* sp. n.

64: head and thorax — 65: forewing — 66: part of male genital apparatus — 67: pygofer — 68: tip of male subgenital plate — 69: aedeagus, lateral view — 70: aedeagus, posterior view — 71: paramere — 72: abdominal apodemes.

***Baaora variata* (AHMED, 1971)**

3 ♂♂, India (J & K), Kishtwar (base of Pirpanjal Mt., 4500'), July 1980, Coll. B. SHARMA.

***Baaora borealis* DWORAKOWSKA, 1980**

4 ♂♂, India (J & K), Kishtwar (base of Pirpanjal Mt., 4500'), July 1980, Coll. B. SHARMA.

***Baaora garhiensis* (AHMED, 1970) (Figs. 82–90)**

*Typhlocyba garhiensis* AHMED, 1970

3 ♂♂, India (J & K), Kishtwar (base of Pirpanjal Mt., 4500'), July 1980, Coll. B. SHARMA.

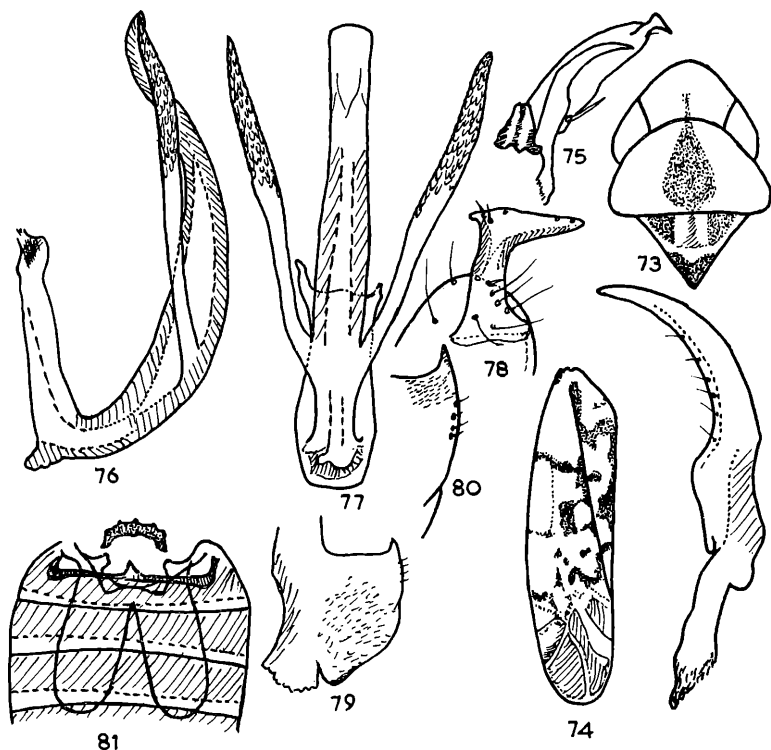
**A c k n o w l e d g e m e n t s**

My sincerest thanks are due to Dr. Irena DWORAKOWSKA (Bangkok, Thailand) for helping me in identifying and making descriptions of the species incorporated in the paper. Besides, author would like to thank Dr. I. D. MITJAEV (Alma Ata, Kazakh SSR, USSR), Dr. P. LAUTERER (Brno, Czechoslovakia) (through Dr. DWORAKOWSKA) and Dr. A. S. SOHI (Ludhiana, India) for helping in arriving at definite conclusions with regard to identification of some species.

**R e f e r e n c e s**

- AHMED, M., 1969: Studies on the genera of *Eupteryx* complex (Typhlocybini: Homoptera) in West Pakistan. — Pak. J. Forestry, July 1969, 311–320.  
 —, 1970: Some species of *Typhlocyba* Germar (Typhlocybinae — Cicadellidae) occurring in West Pakistan. — Pak. J. Sci. 22 (5–6): 269–276.  
 AHMED, M., NAHEED, R., & K. SAMAD, 1980: On some species of genus *Typhlocyba* from Pakistan (Homoptera: Cicadellidae: Typhlocybinae). — Reichenbachia Mus. Tierk. Dresden 19: 89–95.



Figs. 73-81. *Typhlocyba irenae* sp. n.

73: head and thorax — 74: forewing — 75: part of male genital apparatus — 76: aedeagus, lateral view — 77: aedeagus, posterior view — 78: tip of male subgenital plate — 79-80: pygofer — 81: abdominal apodemes.

DLABOLA, J., 1971: Taxonomische und chorologische Ergänzungen der Zikadenfauna von Anatolien, Iran, Afghanistan und Pakistan (Homoptera: Auchenorrhyncha). — Acta ent. bohemoslov. **68**: 377-396.

DWORAKOWSKA, I., 1977: On several of Dlabola's Typhlocybinae species (Auchenorrhyncha: Cicadellidae). — Acta Zoologica Academiae Scientiarum Hungaricae **23** (1-2): 29-36.

—, 1979: Five new species of the genus *Typhlocyba* Germar (Auchenorrhyncha: Cicadellidae: Typhlocybinae). — Bull. Pol. Acad. Sci., Biol. Ser. **27** (3): 195-203.

—, 1980: On some Typhlocybini from India and Nepal (Auchenorrhyncha: Cicadellidae, Typhlocybinae). — Bull. Pol. Acad. Sci., Biol. Ser. **28** (10-11): 593-602.

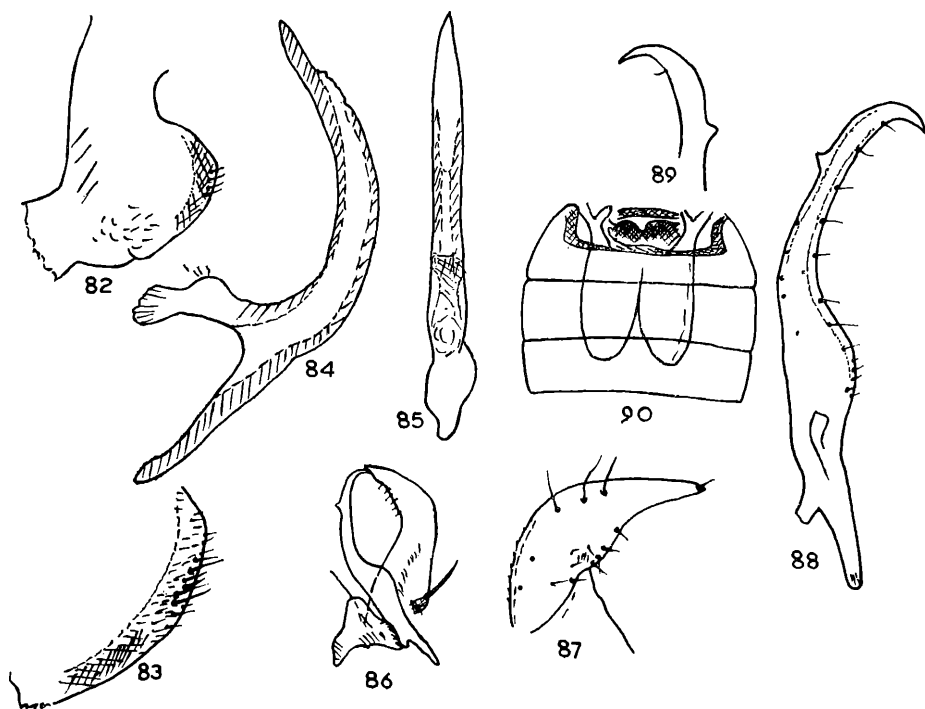
—, 1981: Typhlocybini of Asia (Homoptera, Auchenorrhyncha, Cicadellidae). — Ent. Abh. Mus. Tierk. Dresden **45**: 99-181.

DWORAKOWSKA, I., & A. S. SOHI, 1978: On some Typhlocybinae with remarks on synonymy of Indian species (Auchenorrhyncha, Cicadellidae). — Bull. Pol. Acad. Sci., Biol. Ser. **26** (1): 35-44.

DWORAKOWSKA, I., & A. S. SOHI, 1978: *Kadrabia* gen. n. and some other Typhlocybinae (Auchenorrhyncha: Cicadellidae) from India. — Bull. Pol. Acad. Sci., Biol. Ser. **26** (7): 463-471.

DWORAKOWSKA, I., NAGAICH & S. SINGH, 1978: *Kapsa simlensis* sp. n. from India and some other Typhlocybinae (Auchenorrhyncha, Cicadellidae). — Bull. Pol. Acad. Sci., Biol. Ser. **26** (4): 243-249.

DWORAKOWSKA, I., & C. A. VIRAKTAMATH, 1978: On some Indian Typhlocybinae (Auchenorrhyncha: Cicadellidae). — Bull. Pol. Acad. Sci., Biol. Ser. **26** (8): 539-548.



Figs. 82–90. *Baaora garhiensis* (AHMED)

82+83: pygofer — 84: aedeagus, lateral view — 85: aedeagus, posterior view — 86: part of the male genital apparatus — 87: tip of male subgenital plate — 88+89: paramere — 90: abdominal apodemes.

- GÜNTHART, H., 1974: Beitrag zur Kenntnis der Kleinzikaden (Typhlocybinae, Hom., Auch.) der Schweiz. 1. Ergänzung. — Mitt. Schweiz. Ent. Ges. **47** (1–2): 15–27.
- PRUTHI, H. S., 1940: Descriptions of some new species of *Empoasca* Walsh (Eupterygidae, Jassoidae) from North India. — Ind. J. Ent. **2** (1): 1–9.
- RAMAKRISHNAN, U., & M. G. Ramdas MENON, 1972: Studies on Indian Typhlocybinae (Homoptera: Cicadellidae). 3. Three new genera with four new species of Typhlocybini. — Oriental Insects (New Delhi) **6** (2): 183–192.
- RIBAUT, H., 1936: Homoptera Auchenorrhynques (Typhlocybidae). Faune de France **31**, 1–228. Paris.
- SHARMA, Baldev, 1977: A new species of genus *Farynala* DWORAKOWSKA 1970, from India (Homoptera: Cicadellidae: Typhlocybinae). — Entomon (Kerala, Kariavattom) **2** (2): 241–242.
- , 1978: *Elbelus tripunctatus* MAHMOOD a new record, description of a new species of *Agnesiella* Dworakowska from India, along with some generic synonymies (Homoptera: Cicadellidae: Typhlocybinae). — Entomologists Rec. London **90**: 11–14.
- SINGH, Sawai, 1969: Fifteen new species of Jassids (Cicadellidae) from Himachal Pradesh and Chandigarh. — Res. Bull. (N. S.) Punjab Univ. **20**: 339–361.
- SOHI, A. S., 1977: New genera and species of Typhlocybinae (Homoptera: Cicadellidae) from North Western India. — Oriental Insects (New Delhi) **11** (3): 347–362.

Address of the author:

Dr. Baldev Sharma, Department of Biosciences, University of Jammu,  
Jammu — 180 001 (J & K, India)

# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Reichenbachia](#)

Jahr/Year: 1984

Band/Volume: [22](#)

Autor(en)/Author(s): Sharma Baldev

Artikel/Article: [On Some TYphlocybinae from Kishtwar, Jammu & Kashmir \(India\), with Description of Five New Species \(Homoptera, Auchenorrhyncha, Cicadellidae\) 31-40](#)