

ODONATA OF DOON VALLEY 2. ZYGOPTERA

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(With 3 Text-figures)

Suborder *ZYGOPTERA*
Superfamily GOENAGRIOIDEA
Family PLATYSTICTIDAE
Subfamily PLATYSTICTINAE

Drepanosticta carmichaeli Laidlaw

1915. *Prosticta carmichaell* Laidlaw, *Rec. Ind. Mus.*, **11**: 390.

1933. *Drepanosticta carmichaeli*, Fraser, *Fauna Brit. Ind. Odon.* **1** : 142-144

Material: Doiwala, 2 ♂♂; Lachhiwala, 2 ♂♂; Kansrao, 1 ♀.

Measurements: Male—Abdomen, 31-32 mm. fore wing, 21-22 mm. hind wing, 20.5-21 mm. Female—Abdomen, 28-29 mm. fore wing, 21-22 mm. hind wing, 20-21 mm.

Remarks: The males collected from Dehra Dun differ slightly from the published description. They are smaller in body-length as well as in wing expanse. Postnodal nervures in the forewing vary from 14-15, and in the hind wing from 12-13. Riv+v arises from the same point or proximal to the oblique nervure. The females are also smaller in body-length and in wing expanse. Postnodal nervures vary from 13-15 in the fore wing, and 12-14 in the hind wing. In some specimens the oblique nervures descend from the subnode.

Family PROTONEURIDAE
Subfamily CACONEURINAE

Caconeura autumnalis Fraser

1922. *Caconeura autumnalis* Fraser, *Mem. Dept. Agric. India (Ent.)* **7**: 43.

1933. *Caconeura autumnalis*. Fraser, *Fauna Brit. Ind. Odon.* **1**: 223-225.

Material: Herbertpur, 4 ♂♂, 1 ♀; Rishikesh, 1 ♂, 1 ♀.

Measurements: Male—Abdomen, 27 mm. fore wing, 18 mm. hind wing, 17.5 mm. Female—Abdomen, 29 mm, fore wing, 21 mm. hind wing, 20 mm.

Remarks: The labium is brown but its basal portion is creamywhite. Pterostigma is black and covers only one cell. Postnodal nervures vary from 13-14 in the fore wing and from 11-12 in the hind wing.

Family PLATYCNEMIDIDAE

Subfamily PLATYCNEMININAE

Copera marginipes (Rambur)1842. *Platycnemis marginipes* Rambur, *Ins. Neurop* : 240.1933. *Copera marginipes*, Fraser, *Fauna Brit. Ind. Odon.* 1: 192-197.

Material: Asarori, 1 ♂; Herbertpur, 11 ♂♂, 2 ♀♀; Kansrao, 4 ♀♀, 1 ♀; Kalsi, 1 ♂; Rishikesh, 4 ♂♂, 4 ♀♀.

Measurements: Male—Abdomen, 30 mm; fore wing, 18.5 mm; hind wing, 17 mm. Female—Abdomen, 30 mm; fore wing, 20 mm; hind wing, 20 mm.

Remarks: Common species.

Copera vittata (Selys)1863. *Psilocnemis vittata* Selys, *Bull. Acad. Belg.* 16(2): 170.1933. *Copera vittata*, Fraser, *Fauna Brit. Ind. Odon.* 1: 198-201.

Material: Herbertpur, 1 ♀.

Measurements: Female—Abdomen, 30 mm; fore wing, 19 mm; hind wing, 19 mm.

Remarks: Very rare species.

Distribution: It is known from Southern and Eastern India, Burma, and Sri Lanka.

Subfamily CALICNEMINAE

Calicnemia miles Laidlaw

(Text-fig. 1 A, B)

1886. *Calicnemis eximia* Selys, *Mem. Cour.* 28: 131, 132.1933. *Calicnemis miles*, Fraser, *Fauna Brit. Ind. Odon.* 1: 178-181.

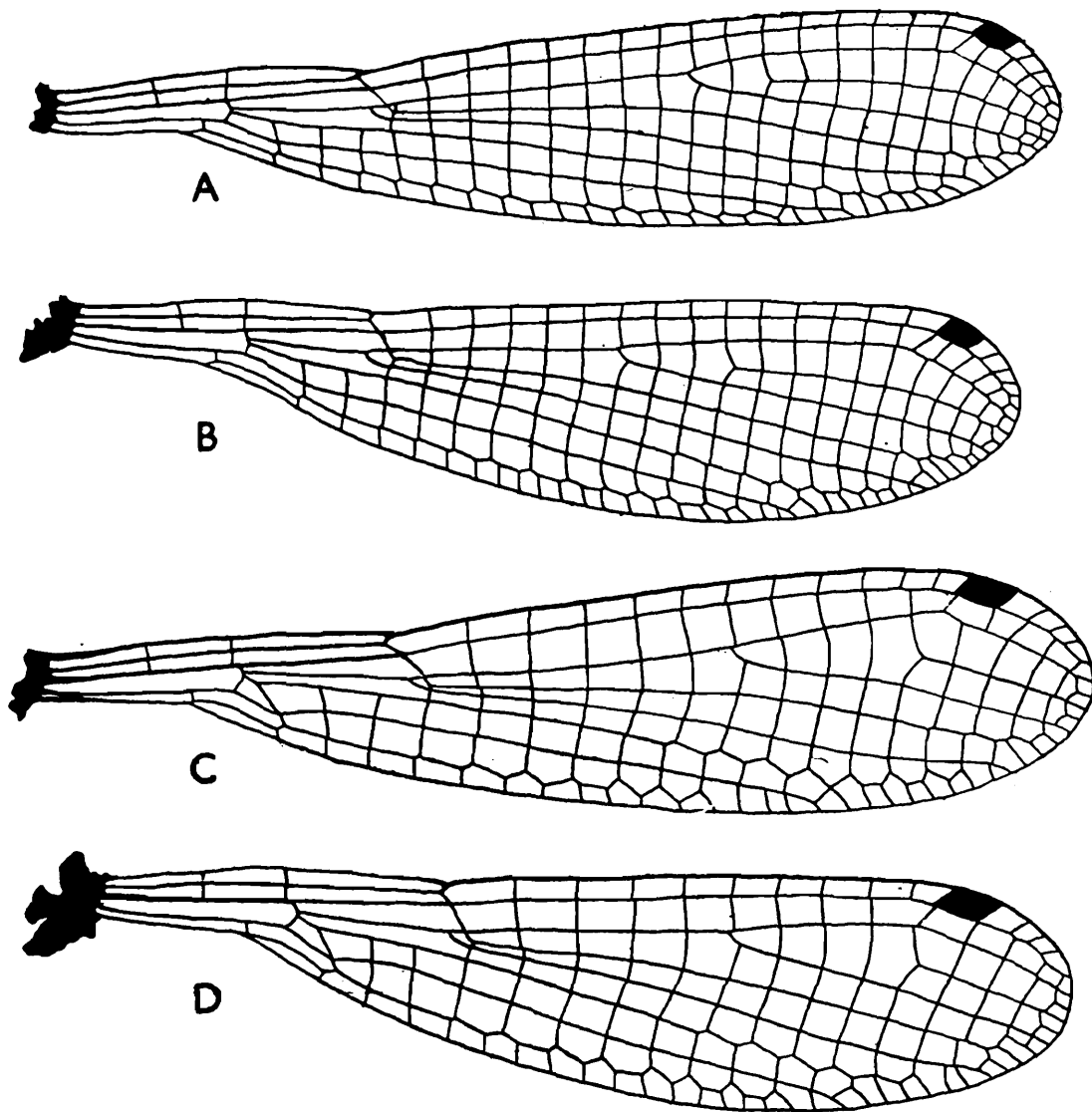
Material: Donga, 1 ♂, 1 ♀; Kandholi, 6 ♂♂, 3 ♀♀; Raipur, 4 ♂♂; Selakuan, 1 ♀; Sahastradhara, 21 ♂♂, 14 ♀♀; Timli, 1 ♀.

Measurements: Male—Abdomen, 28-30 mm; fore wing, 21-23 mm; hind wing, 20-22 mm. Female—Abdomen, 27-30 mm; fore wing, 23-26 mm; hind wing, 21.5-24 mm.

Remarks: The males are smaller in body-length as well as wing expanse. Legs are reddish yellow, Femora are not marked with black posteriorly, but in some specimens their dorsal area is marked with black. Bases of antennae brick red upto third segment. Postnodal nervures vary from 14-16 in the fore wing and from 13-15 in the hind wing. The females are also smaller. Postnodal nervures vary from 14-16 in the fore wing and from 12-14 in the hind wing.

Family GOENAGRIIDAE

Subfamily PSEUDAGRIINAE

***Pseudagrion decorum* (Rambur)**1842. *Agrion decorum* Rambur, *Ins. Neurop.* : 258.1933. *Pseudagrion decorum*, Fraser, *Fauna Brit. Ind. Odon.* 1: 286-289.*Material*: Bhaniawala, 1 ♂; Rishikesh, 1 ♂; Herbertpur, 1 ♂*Measurements*: Male—Abdomen, 29 mm; fore wing, 20.5 mm; hind wing, 19 mm.*Remarks*: Rare species.

Text-fig. 1.—(A & B) *Calicnemis miles* Laidlaw, A. Fore wing, B. Hind wing ;
 (C & D) *Ceriagrion cerinorubellum* (Brauer), C. Fore wing, D.
 Hind wing.

***Pseudagrion laidlawi* Fraser**1922. *Pseudagrion laidlawi* Fraser, *Mem. Dept. Agric. India (Ent.)*, 7(7): 48-50.1933. *Pseudagrion laidlawi*, Fraser, *Fauna Brit. Ind. Odon.* 1: 294-296,*Material*: Herbertpur, 1 ♂, 1 ♀.

Measurements: Male—Abdomen, 23.5 mm; fore wing, 17 mm; hind wing, 16 mm. Female—Abdomen, 22.5 mm; fore wing, 17 mm; hind wing, 16 mm.

Remarks: Very rare species. It differs from the published description in the following characters. Labrum is reddish yellow; post nodal nervures vary from 8-9 in the fore wing.

Distribution: It is known from Sind (Pakistan) and also from Dehra Dun.

Pseudagrion rubriceps Selys

1876. *Pseudagrion rubriceps* Selys, *Bull. Acad. Belg.* **42**: 510.

1933. *Pseudagrion rubriceps*, Fraser, *Fauna Brit. Ind. Odon.* **1**: 296-299.

Material: Bhaniawala, 6 ♂♂, 1 ♀; Bhoorpur, 1 ♂; Herbertpur, 11 ♂♂, 7 ♀♀; Haripur, 3 ♂♂, 1 ♀♀; Kalsi, 5 ♂♂, 5 ♀♀; Kansrao, 5 ♂♂; Langha, 2 ♂♂, 5 ♀♀; Mahantmajri, 1 ♂; Rishikesh, 4 ♂♂, 1 ♀; Sahstradhara 2 ♂♂, 1 ♀; Selakuan, 6 ♂♂, 1 ♀.

Measurements: Male—Abdomen, 29 mm; fore wing, 19 mm; hind wing, 19 mm; Female—Abdomen, 28 mm; fore wing, 21 mm; hind wing, 21 mm.

Remarks: A very common species. It has only 9 postnodal nervures in the fore wing and 8 in the hind wing.

Ceriagrion coromandelianum (Fabricius)

1798. *Agrion coromandelianum* Fabricius, *Ent. Syst. Suppl.*: 287.

1933. *Ceriagrion coromandelianum*, Fraser, *Fauna Brit. Ind. Odon.* **1**: 315-316.

Material: Bhaniwala, 5 ♂♂, 2 ♀♀; Bhogpur, 1 ♂; Ghandrabani, 1 ♂; Gulatappar, 3 ♂♂, 1 ♀♀; Herbertpur, 19 ♂♂, 5 ♀♀; Haripur, 1 ♂, 1 ♀; Jasowala, 5 ♂♂, 2 ♀♀; Kansrao, 10 ♂♂, 3 ♀♀; Langha, 1 ♂, 1 ♀; Lachhiwala, 6 ♂♂, 1 ♀; Mianwala, 18 ♂♂, 5 ♀♀; Rishikesh, 12 ♂♂, 5 ♀♀; Raipur, 4 ♀♀; Sabhawala, 1 ♂; Selakuan, 1 ♂; Timli, 10 ♂♂, 1 ♀.

Measurements: Male—Abdomen, 30 mm; fore wing, 20 mm; hind wing, 19 mm. Female—Abdomen, 28 mm; fore wing, 20.5 mm; hind wing, 19 mm.

Remarks: A very common species from July to October.

Ceriagrion cerinorubellum (Brauer)

(Text-fig. 1 C, D)

1865. *Pyrrhosoma cerinorubellum* Brauer, *Verh. Zool. bot. Ges. Wien.* **15**: 511.

1933. *Ceriagrion cerinorubellum*, Fraser, *Fauna Brit. Ind. Odon.* **1**: 326-328.

Material: Herbertpur, 2 ♂♂

Measurements: Male—Abdomen, 30 mm; fore wing, 19 mm; hind wing, 18 mm.

Remarks: A very rare species. It can be easily identified by its bright brick-red basal region of the abdomen,

Distribution: Throughout India and South East Asia.

Subfamily ISCHNURINAE

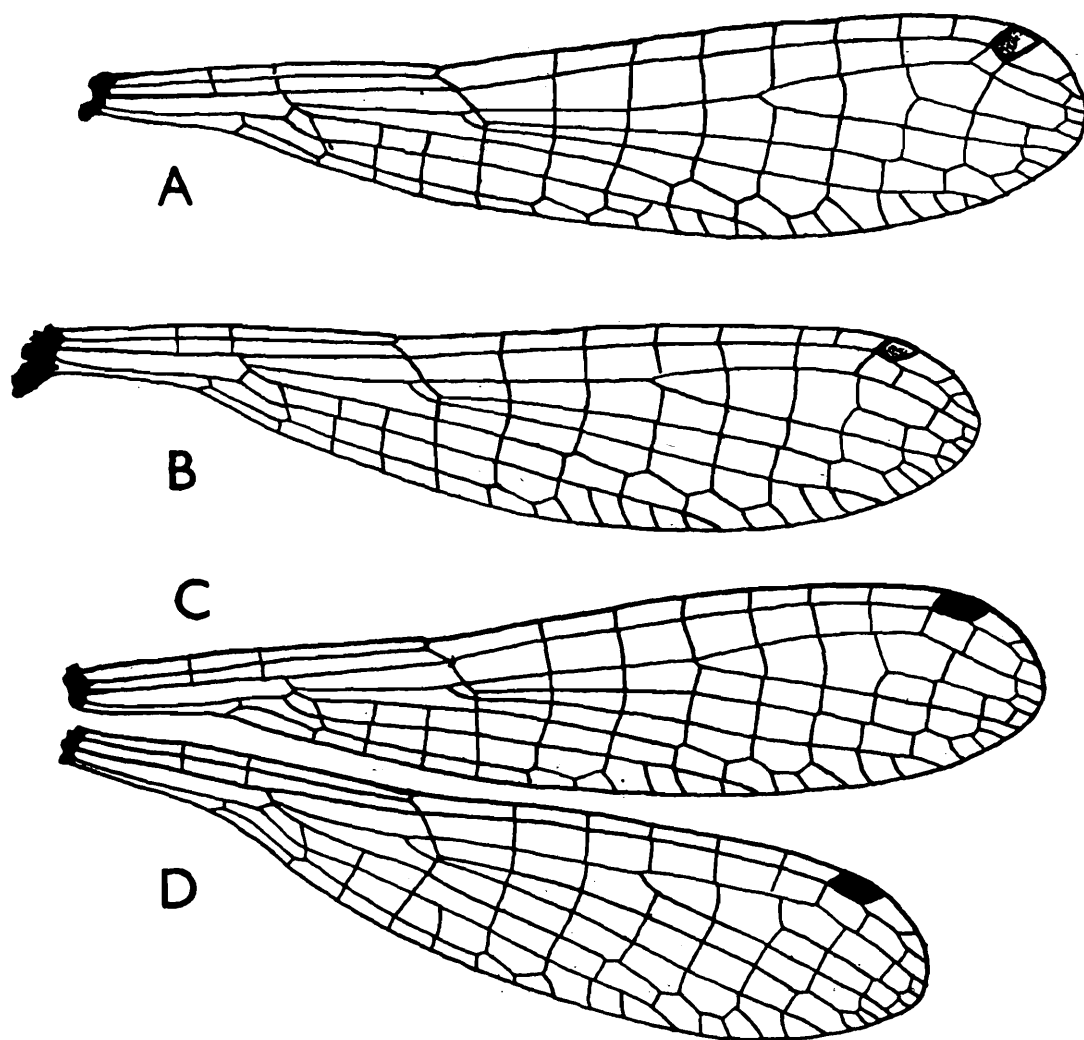
***Ischnura forcipata* Morton**

1907. *Ischnura forcipata* Morton, *Trans. ent. Soc. Lond.* p. 306.

1933. *Ischnura forcipata*, Fraser, *Fauna, Brit. Ind. Odon.* 1: 354-357.

Material: Asarori, 1 ♀; Bhaniawala, 2 ♂♂, 2 ♀♀; Bhoorpur, 1 ♂; Donga, 1 ♀; Gulatappar, 1 ♂, 3 ♀♀; Herbertpur, 20 ♂♂, 16 ♀♀; Haripur, 11 ♂♂, 9 ♀♀; Jasowala, 3 ♀♀; Kansrao, 2 ♂♂, 1 ♀; Kalsi, 19 ♂♂, 20 ♀♀; Kandholi, 2 ♂♂, 1 ♀; Karwapani, 1 ♂, 1 ♀; Langha, 3 ♂♂, 2 ♀♀; Lachhiwala, 1 ♂, 2 ♀♀; Motichur, 1 ♂; Nalapani, 1 ♂; Rishikesh, 2 ♀♀; Robber's Cave, 4 ♂♂, 4 ♀♀; Raipur, 19 ♂♂, 8 ♀♀; Selakuan, 10 ♂♂, 1 ♂, 13 ♀♀; Sahastradhara, 40 ♂♂, 15 ♀♀; Satnarain, 1 ♀; Timli, 1 ♀.

Measurements: Male—Abdomen, 23 mm; fore wing, 17 mm; hind wing, 15.5 mm. Female—Abdomen, 21 mm; fore wing, 17 mm; hind wing, 15 mm.



Text-fig. 2.—(A & B) *Ischnura delicata* (Hagen), A. Fore wing, B. Hind wing; (C & D) *Agriocnemis pygmaea* (Rambur), C. Fore wing, D. Hind wing.

Remarks: This is one of the most common species and is found throughout the year. It differs from the published description in having only 7 postnodal nervures in the hind wing.

Ischnura delicata (Hagen)

(Text-fig. 2 A, B)

1858. *Agrion delicatum* Hagen, *Verh. Zool.-bot. Ges. Wien.* **8**: 479.

1933. *Ischnua derlirata*, Fraser, *Fauna Brit. Indi. Odon.* **1**: 360-362.

Material: Asarori, 1 ♂, 2 ♀♀; Bhaniawala, 7 ♂♂, 9 ♀♀; Bhogpur, 1 ♂, 2 ♀♀; Barkot, 2 ♀♀; Ghandrabani, 3 ♂♂; Gulatappar, 1 ♀, 3 ♀♀; Haripur, 1 ♂; Herbertpur, 19 ♂♂, 10 ♀♀; Jhajra, 1 ♂, 3 ♀♀; Jasowala, 26 ♂♂, 10 ♀♀; Kansrao, 2 ♂♂; Kalsi, 5 ♂♂, 3 ♀♀; Kuanwala, 1 ♂; Lachhi, wala, 7 ♂♂, 4 ♀♀; Langha, 2 ♂♂; Mahant-majri, 4 ♂♂; Mianwala, 23 ♂♂, 4 ♀♀; Motichur, 1 ♂; Maldevta, 1 ♀; Rishikesh, 3 ♂♂, 6 ♀♀; Robber's Gave, 3 ♀♀; Sahastradhara, 3 ♂♂, 3 ♀♀; Satnarain, 2, ♂♂ 4 ♀♀; Selakuan, 1 ♂, 1 ♀; Sahaspur, 26 ♂♂, 6 ♀♀; Timli, 2 ♂♂, 3 ♀♀.

Measurements: Male—Abdomen, 16-20 mm; fore wing, 11 mm; hind wing, 10.5-12 mm. Female—Abdomen, 17 mm; fore wing, 13 mm; hind wing, 12.5 mm.

Remarks: Differs slightly from the published description. In a few specimens the anterior border of the pterostigma in the fore wing is yellow and not white; *acis* situated nearer to the antenodal nervure.

Distribution: Throughout India and South East Asia.

Enallagma parvum Selys

1876. *Enallagma parvum* Selys, *Bull. Acad. Belg.* **41**: 537.

1933. *Enallagma parvum*, Fraser, *Fauna Brit. Ind. Odon.* **1**: 376-378.

Material: Raipur, 1 ♂; Haripur, 1 ♂; Herbertpur, 3 ♂♂; Kalsi, 1 ♂; Kansrao, 1 ♂; Mianwala, 3 ♂♂; Sahastradhara, 1 ♂; Bhaniawala, 2 ♂♂, 1 ♀; Timli, 1 ♂

Measurements: Male—Abdomen, 17 mm; fore wing, 11 mm; hind wing, 11 mm. Female—Abdomen, 17.5 mm; fore wing, 12 mm; hind wing, 11 mm.

Remarks: It is a fairly common species.

Subfamily AGRIOCNEMINAE

Agriocnemis clauseni Fraser

1922. *Agriocnemis clauseni* Fraser, *Mem. Dept. Agric. India, (Ent.)*, **7**(7): 53.

1933. *Agriocnemis clauseni*, Fraser, *Fauna Brit. Ind. Odon.* **1**: 390-392.

Material: Herbertpur, 16 ♂♂, 3 ♀♀.

Measurements: Male—Abdomen, 19 mm; fore wing, 12.5 mm; hind wing, 12 mm.

Female—Abdomen, 19 mm; fore wing, 13 mm; hind wing, 12.5.

Remarks: It is rather a rare species.

Distribution: Assam and West Bengal, Burma and Thailand.

Agriocnemis pygmaea (Rambur)

(Text-fig. 2 C, D)

1842. *Agrion pygmaeum* Rambur, *Ins. Neurop.*: 278.

1933. *Agriocnemis pygmaea*, Fraser, *Fauna Brit. Ind. Odon.* 1: 398-401.

Material: Bhogpur, 1 ♂; Bhianawala, 1 ♂, 3 ♀♀; Haripur, 1 ♂; Herbertpur, 5 ♂♂, 1 ♀; Jasowala, 5 ♂♂, 1 ♀; Kansrao, 1 ♂, 1 ♀; Lachhiwala, 1 ♀; Mianwala, 3 ♂♂, 1 ♀; Maldevta, 1 ♂; Motichur, 1 ♀; Raipur, 4 ♂♂; Rishikesh, 1 ♂, 1 ♀; Sahastradhara, 1 ♂, 1 ♀; Satnarain, 1 ♂; Selakuan, 2 ♂, Sabhawala, 1 ♀.

Measurements: Male—Abdomen, 19 mm; fore wing, 11.5 mm; hind wing, 10 mm. Female—Abdomen, 15 mm; fore wing, 11 mm; hind wing, 10 mm.

Remarks: It is one of the commonest species in the Valley and is represented by both type of females (Fraser, 1933).

Superfamily LESTINOIDEA

Family LESTIDAE

Subfamily LESTINAE

Lestes praemorsa praemorsa Selys

1862. *Lestes praemorsa* Selys, *Bull. Acad. Belg.* 13: 320.

1933. *Lestes praemorsa praemorsa*, Fraser, *Fauna Brit. Ind. Odon.* 1: 30-34.

Material: Asarori, 1 ♂; Bhaniawala, 1 ♂; Jaintanwala, 1 ♀; Kanddholi, 2 ♂♂; Mahantmajri, 5 ♀♀, 1 ♀; Mianwala, 19 ♂♂, 9 ♀♀; Sahastradhara, 1 ♂, 2 ♀♀; Timil, 14 ♂♂, 2 ♀♀.

Measurements: Male—Abdomen, 35 mm; fore wing, 24 mm; hind wing, 24 mm.

Female—Abdomen, 32.5 mm; fore wing, 26.5 mm; hind wing, 26 mm.

Remarks: In the males postnodal nervures of the hind wing vary from 10-13; *ac* of the hind wing is situated slightly proximal to the first antenodal nervure. Some of the females have 13 nervures; *ac* situated nearer to the first antenodal nervure; and their anal appendages are blackish brown and not creamy white.

Distribution: It is known to extend from Western India to Burma and to southern Asia.

Lestes viridula Rambur

(Text-fig. 3 A, B)

1842. *Lestes viridula*, Rambur, *Hist. Nat. Ins. Neurop.* p. 252.

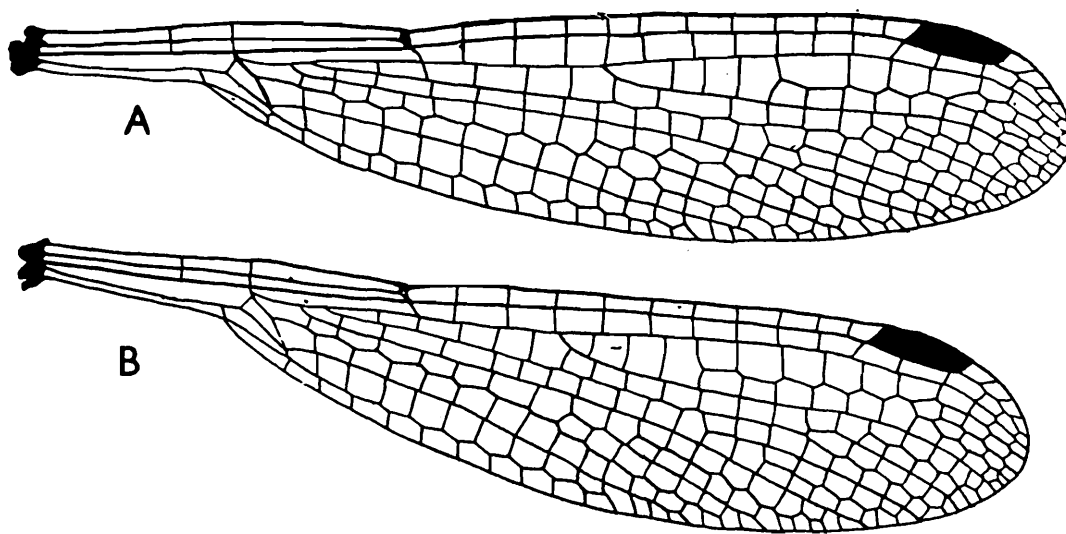
1933. *Lestes viridula*, Fraser, *Fauna Brit. Ind. Odon.* 1: 45-46.

Material: Asaroir, 3 ♂♂; Barkot, 2 ♂♂, 1 ♀; Lachhiwala, 1 ♂, 1 ♀; Mianwala, 2 ♂♂, 1 ♀; Phanduwala, 1 ♂; Rudarpur, 1 ♂; Timli, 1 ♂, 2 ♀♀.

Measurements: Male—Abdomen, 33 mm; fore wing, 24.5 mm; hind wing, 24 mm. Female—Abdomen, 34 mm; fore wing, 25 mm; hind wing, 24 mm.

Remarks: It is rather a rare species. It is usually found in the long, dry grasses and has a weak and short flight.

Distribution: It is confined to peninsular India.



Text-fig. 3.—*Lestes viridula* Rambur, A. Fore wing, B. Hind wing.

***Lestes thoracica* Laidlaw**

1920. *Lestes thoracica* Laidlaw, *Rec. Indian Mus.* **19**: 152.

1933. *Lestes thoracica*, Fraser, *Fauna Brit. Ind. Odon.* **1**: 56-57.

Material: Mianwala, 5 ♂♂, 1 ♀.

Measurements: Male—Abdomen, 29 mm; fore wing, 20 mm; hind wing, 19 mm. Female—Abdomen, 28 mm; fore wing, 21 mm; hind wing, 20 mm.

Remarks: It is a very rare species. It differs from the published description as follows. Occiput and post genae in the males are blackish brown and not creamy white. In the females facial region, dorsal to the clypeus has numerous densely placed, blackish spots.

Distribution: It is known from U.P., Bihar, West Bengal and Orissa.

Superfamily AGRIOIDEA

Family CHLOROCYPHIDAE

***Rhinocypha quadrimaculata* Selys**

1853. *Rhinocypha quadrimaculata* Selys, *Syn. Cal.*: 60.

1934. *Rhinocypha quadrimaculata*, Fraser, *Fauna Brit. Ind. Odon.* **2**: 14-17.

Material: Barkot, 1 ♂, 1 ♀; Donga, 6 ♂, 3 ♀♀; Kandholi, 1 ♂♂, 6 ♀♀; Kalsi, 12 ♂♂, 2 ♀♀; Motichur, 5 ♂♂, 3 ♀♀; Raipur 5 ♂♂, 2 ♀♀; Ramgarh, 2 ♂♂, 2 ♀♀; Sahastradhara, 6 ♂♂, 3 ♀♀.

Measurements: Male—Abdomen, 19 mm; fore wing, 24 mm; hind wing, 22.5 mm. Female—Abdomen, 19 mm; fore wing, 26 mm; hind wing, 24 mm.

Remarks: This is a fairly common species. It is usually found perched on stones and small twigs in the streams. In one specimen opaque area in the fore wing extends upto 5 cells proximal to the node. Discoidal cell traversed 3-5 times. Antenodal nervures vary from 16-20.

Rhinocypha unimaculata Selys

1853. *Rhinocypha unimaculata* Selys, *Syn. Cal.*: 61.

1934. *Rhinocypha unimaculata*, Fraser, *Fauna Brit. Ind. Odon.* 2: 27-29.

Material: Khera, 1 ♂, 1 ♀; Sahastradhara, 2 ♂♂.

Measurements: Male—Abdomen, 22 mm; fore wing, 29 mm; hind wing, 28 mm. Female—Abdomen, 22 mm; fore wing, 32 mm; hind wing, 30 mm.

Remarks: This is a very rare species.

Distribution: It is known from north east India and Dehra Dun.

Rhinocypha trifasciata Selys

1853. *Rhinocypha trifasciata* Selys, *Syn. Cal.*: 61.

1936. *Rhinocypha trifasciata*, Fraser, *Fauna Brit. Ind. Odon.* 2: 31-33.

Material: Donga, 5 ♂♂, 3 ♀♀; Kandholi, 3 ♂♂; Sahastradhara, 13 ♂♂, 8 ♀♀;

Measurements: Male—Abdomen, 20 mm; fore wing, 25.5 mm; hind wing, 24 mm. Female—Abdomen, 20 mm; fore wing, 28 mm; hind wing, 28 mm.

Remarks: This is a rare species.

Distribution: It is known from U.P. and Himachal Pradesh.

Rhinocypha biforata beelsoni Fraser

1922. *Rhinocypha beelsoni* Fraser, *Mem. Dept. Agric. India (Ent.)*, 7: 61.

1934. *Rhinocypha biforata beelsoni*, Fraser, *Fauna Brit. Ind. Odon.* 2: 48-49.

Material: Karwapani, 1 ♂; Kansrao, 1 ♂.

Measurements: Male—Abdomen, 18 mm; fore wing, 24 mm; hind wing, 24 mm.

Remarks: This is a very rare species.

Distribution: It is known from Dehra Dun and Burma.

Libellago lineata lineata (Burmeister)

1839. *Calopteryx lineata* Burmeister, *Handb. Ent.* 2: 826.

1934. *Libellago lineata lineata*, Fraser, *Fauna Brit. Ind. Odon.*, 2: 60-63.

Material: Herbertpur, 6 ♂♂, 9 ♀♀; Kansrao, 2 ♂♂.

Measurements: Male—Abdomen, 13 mm; fore wing, 18 mm; hind wing, 17 mm. Female—Abdomen, 12 mm; fore wing, 20 mm; hind wing, 20 mm.

Remarks: This is a rare species. The nodal index of the males is higher in number. The antenodal nervures are 6, postnodal nervures 11.

Family EPALAGIDAE

Bayadera indica (Selys)

1853. *Epallage indica* Selys, *Syn. Cal.*: 49

1934. *Bayadera indica*, Fraser, *Fauna Brit. Ind. Odon.* 2: 79-81.

Material: Haripur, 2 ♂♂; Khera, 5 ♂♂; Sahastradhara, 19 ♂♂, 8 ♀♀.

Measurements: Male—Abdomen, 36 mm; fore wing, 33.5 mm; hind wing, 32 mm. Female—Abdomen, 32-36 mm; fore wing, 36 mm; hind wing, 32-36 mm.

Remarks: A yellowish green, rounded spot is present near each of the lateral ocelli. Pterostigma covers $7\frac{1}{2}$ cells. First and second abdominal segments are heavily pruinosed. Postnodal nervures of the females vary from 22-23 in the fore wing and from 18-19 in the hind wing.

Anisopleura lestoides Selys

1853. *Anisopleura lestoides* Selys, *Syn. Cal.*: 48.

1934. *Anisopleura lestoides*, Fraser, *Fauna Brit. Ind. Odon.* 2: 86-87.

Material: Jhajra, 3 ♂♂; Sahastradhara, 2 ♂♂.

Measurements: Male—Abdomen, 36 mm; fore wing, 29 mm; hind wing, 27 mm.

Remarks: This is a very rare species.

Distribution: It is known from Nainital, West Bengal, Assam and Sikkim.

Anisopleura comes Selys

1880. *Anisopleura comes* Selys, *C.R. Soc. Ent. Belg.* 23: 63.

1934. *Anisopleura comes*, Fraser, *Fauna Brit. Ind. Odon.* 2: 87-89.

Material: Sahastradhara, 1 ♂.

Measurements: Male—Abdomen, 37 mm; fore wing, 33 mm; hind wing, 31 mm.

Remarks: This is a very rare species.

Distribution: It is known from Dehra Dun, Punjab, Assam and Sikkim.

Family AGRIIDAE

Subfamily AGRIINAE

***Neurobasis chinensis chinensis* (Linnaeus)**

1758. *Libellula chinensis* Linnaeus, *Syst. Nat.* 1: 545.

1934. *Neurobasis chinensis chinensis*, Fraser, *Fauna Brit. Ind. Odon.* 2: 121-124.

Material: Barkot, 1 ♂; Gulatappar, 1 ♂, 1 ♀; Haripur, 3 ♂♂, 4 ♀♀; Herbertpur, 2 ♂♂; Kansrao, 2 ♂♂, 4 ♀♀; Kalsi, 1 ♂, 1 ♀; Maldevta, 2 ♂♂; Raipur, 3 ♀♀; Rajpur, 1 ♂; Ramgarh, 2 ♂♂, 2 ♀♀; Sahastradhara, 42 ♂♂, 14 ♀♀; Timli, 1 ♂.

Measurements: Male—Abdomen, 46 mm; fore wing, 34 mm; hind wing, 32 mm. Female—Abdomen, 39 mm; fore wing, 36 mm; hind wing, 34 mm.

Remarks: This is a very common species. In the males the Labium is yellowish white, with metallic green sides. Discoidal cell is traversed 7-10 times. In the females the labium is yellow.

SUMMARY

Forty two species of Anisoptera and 27 species of Zygoptera have been recorded from Doon Valley. Twenty one of these have been recorded from this valley for the first time. Differences wherever noted from the published description have been recorded.

REFERENCES

- FRASER, F. C. 1933. *The Fauna of British India, Odonata*, 1. xiii-423 pp.—London (Taylor and Francies).
- FRASER, F. C. 1934. *The Fauna of British India, Odonata*, 2. xxiii-398 pp.—London (Taylor and Francis).
- FRASER, F. C. 1936. *The Fauna of British India, Odonata*, 3. xi-461 pp.—London (Taylor and Francis).
- SINGH, A. and M. PRASAD 1974. New Records of Odonata from North West India, *J. Bombay nat. Hist. Soc.* Bombay 70(2) : 403-405.