

Sande bei Pflanzenwurzeln an kleinen Dünen. Bei ruhigem und sonnigem Wetter flogen die blossgelegten Käfer sofort weg. – San Agustin, Barranco Rocas Rojas, 1.VII.1974. 2 Ex. im Sand bei Pflanzenwurzeln.

Für das Ausleihen von Elateriden-Material danke ich herzlich Dr. Sten Jonsson und Dr. Lars Hedström, Zool. Inst., Uppsala, Dozent T. Nyholm, Schwed. Reichsmuseum und den Herren T.-E. Leiler und Dietmar Borisch. Letzterem danke ich auch für die sprachliche Überprüfung meines Manuskripts.

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## *Chrysopa* (*Chrysoperla*) *gujaratensis* n.sp. from India (Neuroptera: Chrysopidae)

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Ent. scand. 7.1976. 74–75.

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Among the interesting collection of Neuroptera from Gujarat, collected by Dr S. K. Gupta in 1973, was a new species belonging to the family Chrysopidae.

### *Chrysopa* (*Chrysoperla*) *gujaratensis* n.sp.

**Holotype** ♂. Head yellowish; mouthparts pale; scape of the antennae swollen, yellow, and pedicel also of the same colour.

**Thorax** mainly yellow. Pronotum slightly brownish laterally; sides parallel, anterior angles rounded; a raised transverse ridge across the middle.

**Forewings** elongate-oval, apex slightly subacute, costal margin almost straight. Pterostigma distinct. About 21 costal veinlets before the pterostigma. First intramedian cell ovate. The basal cross vein between  $R_s$  and  $M_{1+2}$  beyond the apex of the median loop. 11 cells between  $R_1$  and  $R_s$ , 6 crossveins in the outer gradate and 4 cross veins in the inner gradate series. Venation wholly pale. Hairs on the margin not long.

**Hindwings** similar to forewings but smaller. 16 costal veinlets before pterostigma. 6 cross veins in the outer and 3 cross veins in the inner gradate series. Colour same as in the forewings.

**Legs** pale with short black hairs. Tarsi pale, brownish. Claws brown, dilated basally.

**Abdomen** pale.

**Genitalia** (figs 1–2). Arcessus in the distal part – a tubular straight organ ending at apex with minute dents. Proximally to the arcessus there is a pair of side pieces. A few gonosetae present on the inner wall of the gonosaccus in which the gonarcus is situated.

**Entoprocessus**: a pair of flattened structures with acute apices. The main part of the tignum appears semicircular with curved and narrow proximal ends; a prominent but small notch present at each proximal end. Acumen prominent, flattened with smoothly rounded apex; presence of some small setae at the base of the acumen.

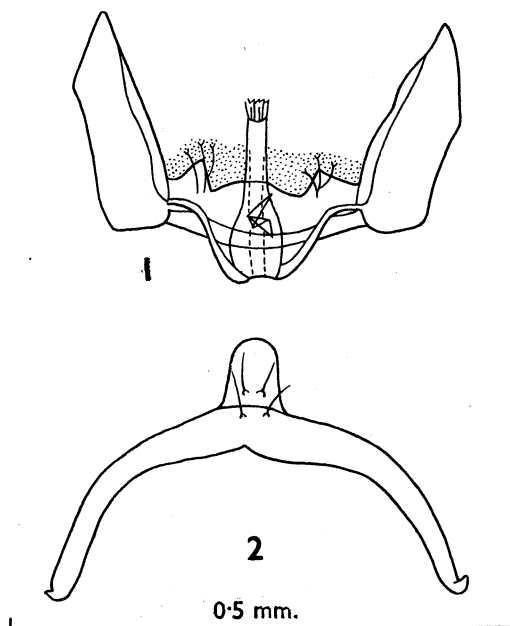


Fig. 1–2. *Chrysopa* (*Chrysoperla*) *gujaratensis* n.sp. – 1. Gonarcus with arcessus. – 2. Tignum.

This species is closely allied to *Chrysopa carnea* Steph. (cf. Tjeder 1936 and Killington 1937) but differs from it in the genital structures, especially in the shape of the arcessus and gonarcus, and the presence of basal notches on tignum.

**Holotype** ♂. Gujarat Survey, Dwarka, E of Rly. Stn., Stn. No 14, 2. xi. 1973. Leg. S. K. Gupta. The type will be deposited in the National Zoological Collection of the Zoological Survey of India.

I am indebted to Dr S. Khera, Zool. Survey of India, Calcutta, for providing me with the facilities to work on Neuroptera, and to Dr B. Tjeder, Zool. Inst., Lund, Sweden, for critical reviewing the paper and making valuable suggestions.

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*Hemerobius solanensis* n.sp. from India (Neuroptera: Hemerobiidae)

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I recently examined some unidentified Neuroptera collected from Himachal Pradesh in 1969 by Dr G. S. Arora and Dr O. B. Chhotani. Among the collection was a new species of the family Hemerobiidae.

*Hemerobius solanensis* n. sp.

*Holotype* ♂. Head brown; face genae and sides of clypeus dark brown; antennae yellow; epicranium pale brown with white hairs.

*Pronotum* brown, with dark brown lateral stripes and with yellowish lateral projections; long black and white hairs on the anterior and lateral margins of the pronotum. Meso- and metanotum testaceous; mesonotum with three black spots above wing roots.

*Forewings* (fig. 1). Membrane with yellow tinge; faint blackish brown shading all over the wings; clouded with brownish along the gradate series; longitudinal veins pale, marked with brown dots; cross veins yellow. Costal veinlets brown, darker at the pterostigma; 3 branches to  $R_s$ ; basal cross vein between R and M close to the root; margin with pale trichosors.

*Hindwings* (fig. 2) paler than forewings, but costal space and pterostigma somewhat yellower than the other portion of the wing.

*Legs* pale yellow; tarsi brown.

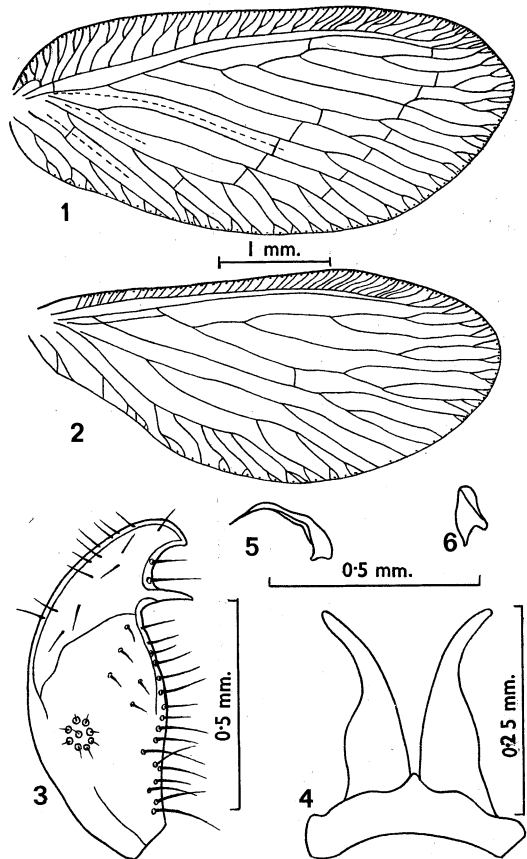
*Abdomen* pale brown.

*Genitalia* (figs 3–6) ♂. Gonarcus rounded laterally; the pair of appendages which form the arcessus is rather close and broad at the base and gradually becoming slender and pointed at the distal half; ectoprocts broad, directed downwards with a curved finger-like cato-processus and a short spine-like anoprocesus; parameres at the apex abruptly broadened with a small tooth-like projection. Hypandrium internum as in fig. 3.

This species can be easily distinguished from *Hemerobius indicus* Kimmins, 1938 by the structure of the genitalia.

*Holotype* ♂ (pinned specimen; abdomen and genitalia on slide). India: Himachal Pradesh. Kufri. Solan, 12. ix. 1969. Leg. O. B. Chhotani and G. S. Arora. Type will be deposited in the National Zoological Collection of the Zoological Survey of India.

I am indebted to Dr S. Khera, Zool. Survey of India,



Figs 1–6. *Hemerobius solanensis* n.sp. – 1. Forewing. – 2. Hindwing. – 3. Ectoproct. – 4. Gonarcus with arcessus. – 5. Paramere. – 6. Hypandrium internum.

Calcutta, for providing me with working facilities, to Dr G. S. Arora and Dr O. B. Chhotani for kindly allowing me to examine their collection of Neuroptera, and to Dr B. Tjeder, Zool. Inst., Lund, Sweden, for reviewing the paper.

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