

TIGER BEETLES (COLEOPTERA, CICINDELIDAE) OF SILENT VALLEY (KERALA, INDIA)

By

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(With one Text-figure)

Since the work of Fowler (1972), little importance has been given to the Cicindelid fauna of India. Dover and Ribeiro (1923) listed Indian species of Cicindelidae with localities. Heyneswood and Dover (1928) published a Catalogue of Indian Cicindelidae, Pajni and Bedi (1973) made a preliminary survey of the Cicindelid fauna of Chandigarh (Punjab). Recently Mandal (1969, 1970 and 1978) Mandal and Wiesner (1975) published a few papers on the Cicindelid fauna of India and other Asiatic Countries.

The present study is based on a small collection of Cicindelidae made by four successive surveys during 1980 led by Dr. R. S. Pillai (April-1979), Dr. S. K. Bhattacharya (January-February, 1980), Dr. R. S. Pillai (December, 1980) and again by Dr. R. S. Pillai (April-May 1980). The material comprising a total of 13 examples belongs to six species under three genera including a new species which is described and illustrated.

Dr. S. Biswas who participated one of the survey parties (April-May, 1980) collected *Neocollyris* specimens collected from green vegetation of the forest and the *Cicindela* specimens from the roadside rocks enlightened by sunshine.

Subfamily COLLEYRINAE

Genus *Neocollyris* Horn

1901. *Neocollyris* W. Horn, *Dentsche Ent. Zeitschr* : 45.

Neocollyris andrewesi (W. Horn)

1894. *Collyris andrewesi* (W. Horn) *Denteschi Ent. Zeitschr* : 170.

1912. *Neocollyris andrewesi* Fowler : 270.

Material examined : 1 o, iv. 1980, R. S. Pillai ; 2 oo, May, 1981, S. Biswas.

This is a large (20-22 mm.) and distinct species. Head and pronotum shining blue-black, the latter with greenish or coppery reflection; elytra rather dull, dark olivaceous; antennae black, apex of joints 3 and 4 middle of 5 and 6 or 7 joints red; femora red, front and middle tibiae and tarsi blue-black, hind tibiae blue-black with apex reddish yellow, hind tarsal joints 1-3 except apex yellowish, joints 4 and 5 and claws black.

This species is nearest to *N. arnoldi* Macleay and *N. horsfieldi* Chaudoir but both are rather common Javanese species, but they are much smaller and with the eyes more prominent.

Distribution : This species was previously recorded from TAMIL NADU : Nilgiri Hills, Anamalai Hills; KERALA : Trivandrum, Travancore; MAHARASHTRA : North Kanara.

***Neocollyris shyamrupi** n. sp.**

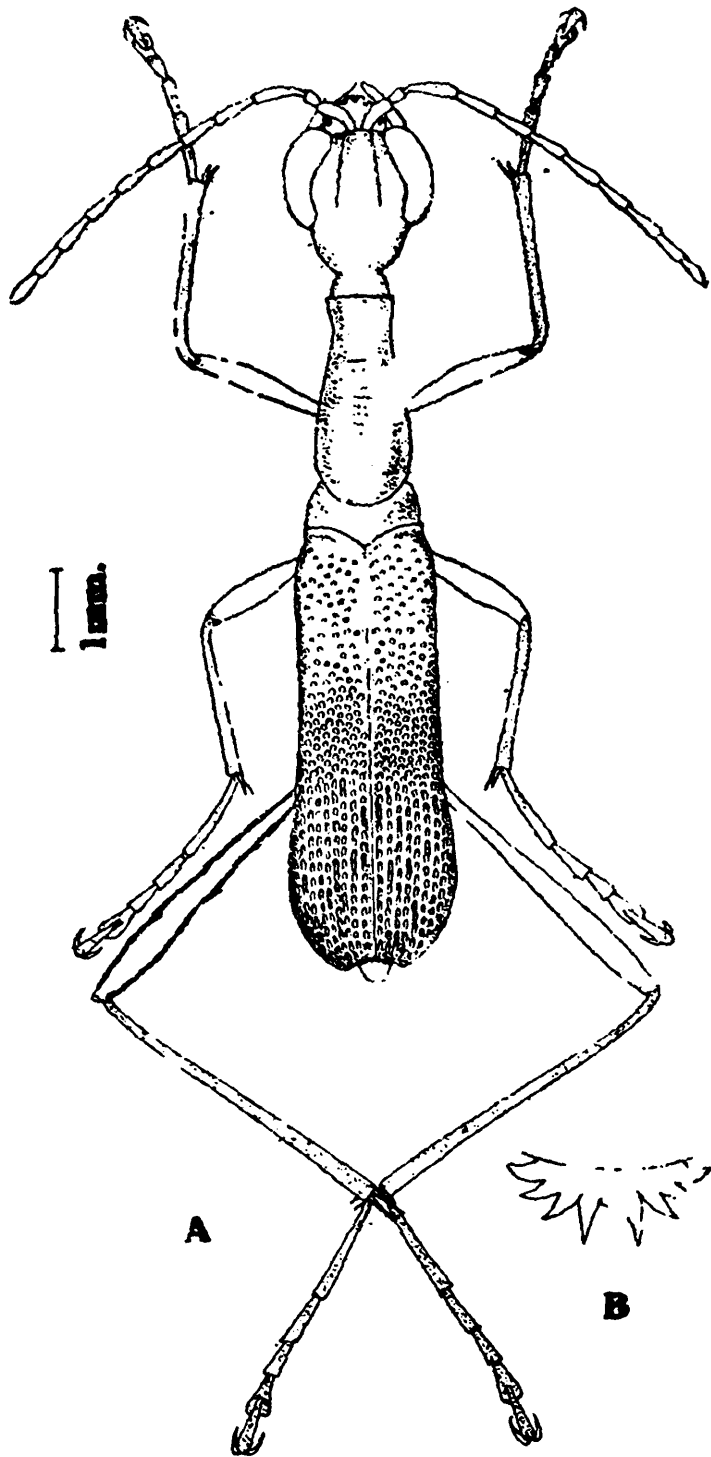
Form elongate; head shining dark blue, long and narrowed behind; forehead moderately excavate between the eyes, sulci almost parallel and not strongly marked, space between the sulci slightly raised on front only and flat behind; eyes rather prominent; labrum dark blue, large and semicircular with three central tooth wide and blunt, lateral pairs sharp; antennae thickened towards apex, pitchy, joints 3 and 4 faintly ringed with red at apex; pronotum long, not strongly constricted before the base, intermediate portion moderately dilated and then gradually passing into a somewhat distinct pronotal column, anterior margin moderately reflexed; dorsal surface rather strongly and transversely strigose with faint scattered punctures, underside strongly punctured and pilose; elytra long and narrow, slightly dilated near apex and with a distinct brownish yellow transverse band of anterior two-fifth, anterior two-fifth before the transverse band shining green with coppery reflection posteriorly and posterior three-fifth after the band rather dull green, surface strongly and closely punctate, punctures coarser and denser on middle than on apical area and longitudinal before apex; metasternum impunctate; legs slender. Femora mostly red except apex, apex of femora, tibiae and tarsi pitchy black.

Females are slightly wider than male and with the pronotum column more distinct; female apophysis consists of two sharp and straight processes.

* Named after Dr. Shyamrup Biswas, Zoologist, ZSI, who has collected the valuable specimens.

Length : 12.0 mm.

Holotype ♂, Kerala Silent Valley, May 1981, S. Biswas ; Paratypes 1 ♀, same data as Holotype (head damaged), 1 ♀, Silent Valley, April 1880, R. S. Pillai. All are deposited in the National Zoological Collection, Zoological Survey of India, Calcutta.



Dorsal View of *Neocollyris shyamrupi* n. sp.

Discussion : This is one of the most distinct species of the genus *Neocollyris*. This is closely related to *N. cylendripennis* Chaudoir by its elytra having transverse band and longitudinal punctures before apex, but can be easily distinguished from the latter by its smaller size. shape of pronotum and colour of tibiae and tarsi being entirely pitchy black. By the shape of pronotum it approaches *parvula* Chaudoir which is also of almost equal size but various form the latter by the present of transverse band, longitudinal punctures of elytra.

Genus **Derocrania** Chaudoir

1860. *Derocrania* Chaudoir *Bull. Soc. Muscou* : 284 and 297.

1904. *Derocrania* W. Horn, *Spol Zelyl* : 39.

Derocrania brevicollis Chaudoir

1905. *Derocrania brevicollis* W. Horn ; *Deutche. Ent. Zeitchr* : 15.

1912. *Derocrania brevicollis* Fowler : 285.

Material examined : 1 ex., December 1980. R. S. Pillai.

Dorsal surface shining blue-black, elytra with violet reflection ; femora and chief part of the tibiae reddish, tarsi and antennae pitchy black ; this species is easily recognised by the much shorter pronotum having no distinct column, elytra widest at middle and inflated part longitudinally and markedly impressed. The individual elongate impression unite in the form of a chain and donot from any regular sulci.

Distribution : This species was described and known from Trichinopoly (Tamilnadu) only. This is second record of the species.

Subfamily **CICINDILINAE** Genus **Cicindela** Linnaeus

1935. *Cicindela* Linn., *Syst. Nat.* 2 : 657.

1854. *Cicindela* Lacordaire, *Gen. Col.* 1 : 17.

Cicindela tetragrammica Chaudoir

1865. *Cicindela tetragrammica* Chaudoir, *Cat. Coll.*, : 58.

1912. *Cicindela tetragrammica* Fowler : 331.

Material examined : 3 exs., Silent Valley, May 1981, S. Biswas.

This species is recognised by its dark colour, the front part black with coppery reflections ; labrum metallic ; legs black, femora coppery. This species is easily recognised by its dull velvety black elytra with two whitish yellow spots along the middle of each side one on middle

and another on posterior fourth, and the surface irregularly sprinkled with small greenish or obscurely aeneous ocelloid spots.

Distribution : TAMIL NADU : Trichinopali; Nilgiri Hills, Anamalai Hills, Ramnand and Shembognur; KERALA : Malabar Coast and as above.

***Cicindela viridilabris severini* W. Horn**

1852. *Cicindela viridilabris* Chaudoir, *Bull. Soc. Moscou.*, : 14.

1892. *Cicindela severini* W. Horn. *Ann. Soc. Ent. Belgiques* : 537.

1912. *Cicindela viridilabris* var *severini* W. Horn, Fowler : 350.

Material examined : 1 ex., Silent Valley, May 1981, S. Biswas.

This subspecies varies from *viridilabris* (s. str.) Chaudoir by its large size, finer sculpture of head and pronotum, less distinct median line of pronotum, and the second elytral spots not approaching to join the third ones. This is close to *viridilabris labioaena* Horn but can be distinguished from the latter by the less projecting eyes, finer sculpture of the orbital plates and pronotum and the more distinctly defined metallic band at the shoulder of elytra. But this differences are very minute and the scanty material renders difficult to determine the true value of these varieties

Distribution : TAMILNADU : Travancore, Nilgiri Hills; KERALA : as above; MAHARASHTRA Kanara; BENGAL; BURMA : Teinzo; TONKIN.

***Cicindela umbropolila* W Horn**

1905. *Cicindela belli* W. Horn. sub. sp. *Umbropolita* W. Horn, *Denteche, Ent. Zeit. cher* : 61.

1912. *Cicindela umbropolila* W. Horn., Fowler : 345.

Material examined 2 exs., May 1981, S. Biswas.

Horn described this as subspecies of *C. belli*. Horn Fowler (1912) regarded this as a distinct species. This is closely allied to *C. belli* Horn, but can be distinguished by its larger size, more projecting eyes, longer and less convex elytra, clear red trochanters, more sparser pubescence of ventral side and almost impunctate proepisterna.

Distribution : TAMILNADU, Madras ; Nilgiri Hills ; KERALA : as above.

SUMMARY

Six species of Cicindelidae under three genera are recorded from Silent Valley (Kerala) one of which *i.e.* *Neocollyris shyamrupi* is described as pertaining to a new species.

ACKNOWLEDGEMENTS

The authors are grateful to the Director, Zoological Survey of India, for providing laboratory facilities and Dr. T. Sengupta, Superintending Zoologist, Coleoptera Section, for encourage and help in preparation of this manuscript.

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