

Koleopterologische Rundschau, Band 57 (1984)

ON SOME NEW AND RARE SPECIES OF *Chlaenius bonelli* s.l. OF THE INDIAN SUBREGION IN THE NATURAL HISTORY MUSEUM; VIENNA (*Carabidae*, *Col.*)

by S.K. SAHA

Zoological Survey of India, Calcutta (India)

The present study is based on a small collection of *Chlaenius* BONELLI of the Indian subregion, received from the Natural History Museum, Vienna (Austria), resulting the discovery of two new species and one new subspecies, from Ceylon, India and Nepal respectively, which are described below. It also includes new records of *C.(Chlaenius) pubipennis* CHAUDOIR (Burma) and *C.(Lissauchlaenius) tetragonoderus* CHAUDOIR (Ceylon). Relationship and identification of *C.(Chlaenius) pubipennis* CHAUDOIR, *C.(Pseudonochlaeniellus) puncticollis* DEJEAN, *C.(Amblygenius) bengalensis* CHAUDOIR and the *tetragonoderus* group of species which are identified through differences of minute morphological structures such as colour, degree of punctation and proportions of pronotum and elytra, are discussed.

Chlaenius BONELLI is one of the large and complex genus of the family *Carabidae* distributed throughout the world. It also predominantly occurs in Indian subregion and more than one hundred and fifty species have been described by different authors but subgeneric classification of Oriental *Chlaenius* is unsatisfactory due to the fact that no attempt has been made by any author. The species which have not been assigned to the proper subgenus by the original describers or the subsequent authors, have been listed under *Chlaenius* (s.str.) by CSIKI (1931) in Junk and Schenkling's *Coleopterorum Catalogus*. Recently MANDL (1978) discussed identity of some subgenera and assigned all the species he dealt with to the proper subgenus.

The following abbreviations are used:

| | |
|----------------------------------|-----------------------|
| AWP = apical width of pronotum | WE = width of eyes |
| BWP = basal width of pronotum | WE1 = width of elytra |
| GWP = greatest width of pronotum | WH = width of head |
| LE1 = length of elytra | |
| LH = length of head | |
| LP = length of pronotum | |

Nat.Mus.Wien = Naturhistorisches Museum, Wien

Z.S.I., Cal. = Zoological Survey of India, Calcutta.

Genus *Chlaenius* BONELLI

Subgenus *Chlaenius* (s.str.) BONELLI

Chlaenius (Chlaenius) reflexicollis n.sp. (Fig.1)

Total length 15,8 mm; width 6,0 mm.

General appearance (Fig.1) elongate oval; dorsal surface of head and pronotum dark metallic green tinged with violet, reflexed margins of pronotum translucent posteriorly; elytra greenish black, moderately shining; palpi, labrum, antennae, legs reddish brown; ventral surface shining brownish black.

Head convex, little wider than long ($WH/LH = 1,02$); surface coarsely rugose-punctate on lateral and posterior sides, finer punctures intermingled with coarser ones; front finely and sparsely punctate, centre impunctate and finely rugose; microsculpture moderately distinct; tentorial pits small but distinct; frontal grooves obsolete; clypeus smooth and impunctate; labrum less than twice wider than long and little emarginate at apex; antennae moderately long and reaching apical one-third of elytra; eyes moderately large ($WE/WH = 0,40$); neck short and little contracted below the eyes; occiput little swollen.

Pronotum slightly convex, quadrate and widest little before middle ($GWP/WH = 1,31$, $GWP/LP = 1,03$, $GWP/AWP = 0,71$, $GWP/BWP = 0,92$, $BWP/LP = 1,00$); apex sinuate near anterior angles which are hardly obtuse, moderately rounded and little projecting; apical margin not bordered; sides gently curved and more contracted towards apex, obliquely curved towards base; lateral margins finely bordered and narrowly reflexed; reflexed margins wider posteriorly; surface coarsely and somewhat densely punctate on lateral and apical areas and also on either side of median line; disc with sparsely punctate areas on either side; isodiametric-reticulate microsculpture distinct; median line fine and not reaching the extremities; anterior transverse impressions moderately distinct; basal grooves deep and triangular; posterior fixed setae at posterior one sixth.

Elytra convex, elongate-oval and widest near middle ($WE1/GWP = 1,58$, $LE1/WE1 = 1,58$, $LE1/LP = 2,21$); sides gently curved near shoulder, subparallel near middle and faintly sinuate near apex; basal margins sinuate and forming sharp angles with lateral margins; striae fine, very finely and closely punctate; intervals moderately convex, punctures coarser and sparser; isodiametric microsculpture moderately distinct; epipleurae feebly concave, moderately punctate and pubescent;

Ventral surface almost entirely punctate and pubescent; prosternum coarsely, densely punctate, prosternal process with raised margin; proepisterna somewhat sparsely and shallowly punctate; mesepisterna with few punctures on antero-inner sides only; metasternum and metepisterna coarsely and moderately densely punctate, punctures on latter rather shallow; metepisterna longer than wide and faintly sulcate on outermargins; abdominal sternites moderately, densely and thoroughly punctate, punctures coarser on sides and finer in the middle.

First three segments of front tarsi strongly dilated, distinctly punctate and pubescent; first segment obliquely truncate at apex, first and second segments wider than long, third segment oval and as wide as long.

Aedeagus (Figs.1b, 1c) abruptly bent close to base; apical lobe hardly differentiated; apex bluntly rounded, left side emarginate little before apex; internal sac rounded and sclerotised; internal filament short, uncoiled.

Holotype: 1 ♂, labelled as "Ceylon; collect. Palson, Mus. Vindob." Aedeagus dissected out, mounted and pinned with the holotype (in Nat. Mus., Wien).

D i s c u s s i o n: This species belongs to the group which includes *C. calcothorax* WIEDEMAN and *C. tudicus* ANDREWS but can be easily differentiated from the latter by its elytra devoid pale border. It can also be differentiated by its pronotum without sinuation posteriorly and elytral intervals with coarser and sparser punctures.

Chlaenius (Chlaenius) pubipennis CHAUDOIR

Chlaenius pubipennis CHAUDOIR, 1856 : 233; Ibid., 1876 : 138; BATES 1892 : 315; ANDREWES 1921 : 169; Ibid., 1930 : 103.

Material examined: 1 ♂, labelled as "Burma 16.5.1976, Rangun, leg F. Wewalka" (In Nat. Mus., Wien).

Distribution: India: Tamilnadu, Tranqueber (Type-locality): M.P., Raipur, Bhandara and Orissa, Balaghat (Andrewes). Now recorded from Burma, Rangoon.

D i s c u s s i o n: This species is closely related to *C. calcothorax* WIEDEMAN with which it was synonymised by CHAUDOIR (1876). BATES (1892) placed his specimens from Burma under *calcothorax* and noted that granulate punctation of elytral interstices was perceptibly closer and finer than the examples he saw from Bengal and Assam. ANDREWES (1921) revived *C. pubipennis* CHAUDOIR as a true species distinct from *calcothorax* WIEDEMAN, described from Calcutta (Bengal). He (1930) also pointed out that the localities given for *calcothorax* other than Calcutta (type locality) was doubtful. This example is assigned to *pubipennis* CHAUDOIR by its wider pronotum with denser punctation and evident sinuation posteriorly, and elytral intervals with coarser punctures.

Subgenus *Chlaeniellus* REITTER

Chlaenius (Chlaeniellus) mussardi mussardi SAHA & SENGUPTA (Fig. 3)

Chlaenius (Chlaenius) mussardi SAHA & SENGUPTA, 1979: 423

Material examined: 1 ♂, labelled as Madras. Aedeagus dissected out, mounted on a board and pinned with the specimen.

D i s c u s s i o n: This species was first described based on a single ♀ from Cardamon H. (India: Kerala). Now the ♂ is recorded and the male genital is described.

Aedeagus (Figs.3a, 3b) is slender and abruptly bent at some distance from base, apical lobe narrowed, acutely pointed and strongly deflexed; internal sac large, elongated and sclerotised anteriorly; filament prominent and almost straight.

Chlaenius (Chlaeniellus) mussardi barmatius n.ssp. (Fig.2)

Total length 11,5 mm; width 4,5 mm.

General appearance (Fig.2) rather short oval; dorsal surface of head and pronotum shining metallic blue-green with reddish tinge; the latter with metallic green on sides; lateral margins translucent reddish

brown; elytra black, shining; epipleurae brownish; mouth parts and segments 2-11 of antennae dark reddish brown, segment 1 yellowish brown; ventral surface shining black.

Head convex, wider than long ($WH/LH = 1,17$) surface coarsely and densely rugose-punctate on lateral and posterior sides; front minutely and sparsely punctate with a few coarse punctures below; centre impunctate but distinctly rugose; isolated meshes of reticulate microsculpture moderately visible; tentorial pits prominent; frontal grooves obsolete; labrum little more than twice as wide as long and little emerginate at apex; antennae rather short and not reaching apical third of elytra; eyes moderately large ($WE/WH = 0,40$); neck short and not contracted below the eyes; occiput little swollen.

Pronotum convex, oval and widest near middle ($GWP/WH = 1,44$, $GWP/LP = 1,40$, $AWP/GWP = 0,63$, $BWP/GWP = 0,88$, $BWP/LP = 1,24$); apex faintly emerginate, apical margin bordered except on middle; anterior angles obtuse and moderately rounded, not projecting; sides strongly curved and more contracted towards apex; lateral margins distinctly bordered and not reflexed; base wider than apex, faintly sinuate at middle and obliquely curved forward towards posterior angles which are much obtuse and well rounded; surface coarsely, moderately densely punctate, more densely on basal area; reticulate microsculpture moderately visible; median line fine and not reaching the extremities; anterior lateral impressions obsolete; basal grooves deep and curved, shallowly reaching the base; posterior fixed setae a little before posterior angles.

Elytra convex, rather short oval and widest near middle ($WE1/GWP = 1,28$, $LE1/WE1 = 1,55$, $LE1/LP = 2,80$); sides moderately curved near shoulder, little curved from below shoulder to widest point and distinctly sinuate near apex; basal margins sinuate and humeri rounded; striae fine, distinctly punctate, puncture finer towards apex; intervals convex, moderately and densely punctate with yellowish pubescence; isodiametric microsculpture distinct; epipleurae little concave, impunctate and glabrous.

Ventral surface coarsely and irregularly punctate; prosternum coarsely and densely punctate on sides and sparsely punctate along middle; prosternal process with raised margin; proepisterna somewhat coarsely punctate on anteroinner areas only; mesepisterna with few punctures on antero-inner sides only; metasternum densely punctate; metepisterna longer than wide, outer margin sulcate, with 2-3 faint punctures near posterior sides; abdominal sternites 2-4 faintly and rather finely punctate.

First three segments of front tarsi much dilated and distinctly transverse, dorsal surface distinctly punctate with short hairs.

Aedeagus identical with *C. mussardi* s.str.

Holotype: 1 ♂, Nepal: Katmandu, Barmati river, N. of Chobar Gorge, May 1972, coll. R. Davidson, Aedeagus dissected out, mounted on a board and pinned with the holotype. (in Nat.Mus., Wien).

D i s c u s s i o n : This subspecies can be distinguished from *mussardi* s. str. by reflexed margins of pronotum and wider head. This also varies from the latter by its head more coarsely rugose punctate and elytral intervals more convex. Aedeagus is identical with *mussardi* s.

str. and hence considered as subspecies of the latter. Specimens from the areas where integradation would presumably occur are not available at present.

Chlaenius (Chlaeniellus) puncticephalis n.sp. (Fig.4)

Total length 11,3; width 4,5.

General appearance (Fig.4a) rather short, oval; dorsal surface of head and pronotum dark metallic green, the latter with reddish reflection; lateral margins of elytra translucent yellowish brown; elytra black, shining; palpi, labrum, first three segments of antennae and legs yellowish brown; ventral surface shining brownish black.

Head convex, little wider than long ($WH/LH = 1,12$); entire dorsal surface very finely and densely rugose-punctate; reticulate microsculpture moderately distinct; tentorial pits distinct; frontal grooves deep and rounded below the tentorial pits and then shallowly running postero - laterally; clypeus finely and densely punctate like head; labrum more than twice wider than long and gently emerginate at apex; lateral pair of setiferous punctates at a more distance than are inner pairs; antennae rather short and not reaching apical third of elytra; eyes large and projecting ($WE/WH = 0,44$); neck short and not contracted below the eyes.

Pronotum convex, cordate and widest at middle ($GWP/WH = 1,44$, $GWP/LP = 1,44$, $APW/GWP = 0,61$, $BWP/GWP = 0,80$, $BWP/LP = 1,15$); apex truncate and declivous towards anterior angles; apical margin bordered near anterior angles which are obtuse and well rounded; sides strongly curved and more contracted towards apex and distinctly sinuate near posterior angles; lateral margins finely bordered and narrowly reflexed, reflexed margins wider posteriorly; base distinctly wider than apex, basal margin sinuate at middle and obliquely advancing towards posterior angles; posterior angles distinctly obtuse and sharply angulate; surface coarsely and densely rugose punctate, more densely on basal third; granulo-reticulate microsculpture moderately visible on sides; median line fine and not reaching extremities; anterior transverse impressions faint; basal grooves moderately deep and wide, almost straight and shallowly reaching the base.

Elytra convex, oval and widest near middle ($WE1/GWP = 1,38$; $LE1/WE1 = 1,55$, $LE1/LP = 3,10$); sides moderately curved, little more curved near shoulder and distinctly sinuate near apex; base moderately sinuate, humeri well rounded; striae fine, finely and closely punctate; intervals convex, moderately and densely granulate-punctate; isodiametric-reticulate microsculpture moderately distinct; epipleurae flat, densely punctate and pubescent.

Ventral surface thoroughly punctate and pubescent; punctures coarser on sternites than on ventrites; prosternal process with raised margin; metepisterna longer than wide, outer margins not sulcate.

Female genitalia (Fig.4b): basal segment of stylus with one basal spine reaching half of apical lobe; apical lobe widely rounded at apex; basal segment of stylus with broad base and its surface covered with dozens of short lateral spines.

Holotype labelled as "Miller Ind., ex.coll.Fischer" (in Nat.Mus.,Wien).

Discussion: This species varies from all Indian species of subgenus *Chlaeniellus* having pronotum strongly sinuate posteriorly, by the dense and thorough punctation of head and pronotum. In punctation of head and pronotum it approaches *C. amplipennis* CHAUDOIR from which it can be easily distinguished by its pronotum sinuate posteriorly.

Subgenus *Pseudochlaeniellus* JEANNEL

Pseudochlaenius JEANNEL, 1949; 784, 820; MANDL, 1978 : 267.

Chlaenius (Pseudochlaenius) puncticollis DEJEAN

Chlaenius puncticollis DEJEAN, 1826 : 315; CHAUDOIR, 1856 : 243; BATES, 1892 : 319; ANDREWES, 1925; Ibid, 1930.

Chlaenius (Pseudochlaeniellus) puncticollis, MANDL, 1978 : 269.

Material examined: 1 ♀, labelled as "Madras" (in Nat.Mus., Wien).

Distribution: India: Bengal (DEJEAN and CHAUDOIR); Punjab, Badia (ANDREWES 1925). Burma: Senmigion (BATES); Nepal: Biragam (MANDL). ANDREWES (1930) noted its distribution as throughout India and Ceylon, also in Mandalaya (including Senmigion) of Burma.

Discussion: This species is very close to *C. laevipennis* CHAUDOIR described from Deccan (Dacca) and can only be differentiated by minute morphological structures such as proportion of pronotum, size and density of punctures on pronotum and elytral intervals. MANDL (1978) has given a table of differentiating morphological structures of these species and their ally *C. callichloris* BATES (China). This species is referred to *C. puncticollis* DEJEAN by its green colour, wider pronotum and elytra, and coarser punctures of elytral intervals.

Subgenus *Lissauchlaenius* MACLEAY

Lissauchlaenius MACLEAY, 1825 : 13; CHAUDOIR, 1876 : 12; MANDL 1978 : 263.

Chlaenius (Lissauchlaenius) variipes CHAUDOIR

Chlaenius variipes CHAUDOIR, 1856 : 268; Ibid., 1876 : 87; BATES, 1891: 328.

Material examined: 1 ♂, labelled as "India orient". (in Nat.Mus., Wien).

Distribution: "North India" (Type locality); Chota Nagpur, Tatera (Bates). ANDREWES (1930) noted some additional localities as Barwa (Chota Nagpur): Chapra (Bihar), Allahabad (U.P.), Rawalpindi (U. Pakistan).

Discussion: This species belongs to the group to which *C. rayotus* BATES belongs, but can easily be distinguished by absence of the elytral spots.

Chlaenius (Lissauchlaenius) tetragonoderus CHAUDOIR

Chlaenius tetragonoderus CHAUDOIR, 1876 : 68; BATES, 1892 : 311; DARLINGTON, 1971 : 343.

Material examined: 1 ♂, Ceylon, Perideniya, Dr.Uzel, coll. Mus.

Vindob. (in Nat.Mus., Wien); 1 ♀, Ceylon, Henaratgoda, Dr.Uzel, coll. Mus. Vindob. (in Z.S.I. Cal.); 1♀, Java, collect. Palson, coll. Mus. Vindob. (in Nat.Mus., Wien).

Distribution: Celebes, Sumatra (CHAUDOIR); Palon (Pagu), Burma (BATES), Moluecas (LOUWERENS, 1956), Palau Islands (DARLINGTON, 1970a), Philippines. ANDREWES (1930) noted the following additional distribution: Pusa (Bihar), Andaman Is. (India); Tennasserim (Burma); Malaya Peninsula; Sumatra; Sumbawa; Tonkin; Formosa and China. Here this species is first time recorded from Ceylon.

Remarks: The example of Java varies from those of Ceylon by its pronotum metallic green with coppery tinge and somewhat coarsely punctate, the punctures sparser toward base of inner intervals.

Discussion: This species belongs to a zoogeographically interesting group characterised by exceptionally short and transverse mandible. DARLINGTON (1970b) called this as *tetragonoderus*-group and said that this is the only group of the genus *Chlaenius*, consisting of five species and two subspecies, has successfully differentiated over a wider area of islands, in the Indo-Australian archipelago and Western Pacific Islands. According to him their success in Islands is that they presumably live away from water, on the ground in rain forest and need not depend on finding fresh water.

Subgenus *Amblygenius* Laferté

Amblygenius Laferté, 1851 : 213, 235; LACORDAIRE, 1845 : 227.

Chlaenius (Amblygenius) bengalensis CHAUDOIR

Chlaenius bengalensis CHAUDOIR, 1856 : 262; Ibid., 1876 : 157; 1889 : 266; MANDL, 1978: *Poecilostus quadricolor*, MOTSCHULSKY (not OLIV.), 18 : 348.

Material examined: 1 ♂, Burma: Rangoon, 16.5.1976 F. Wewalka (in Nat. Mus., Wien).

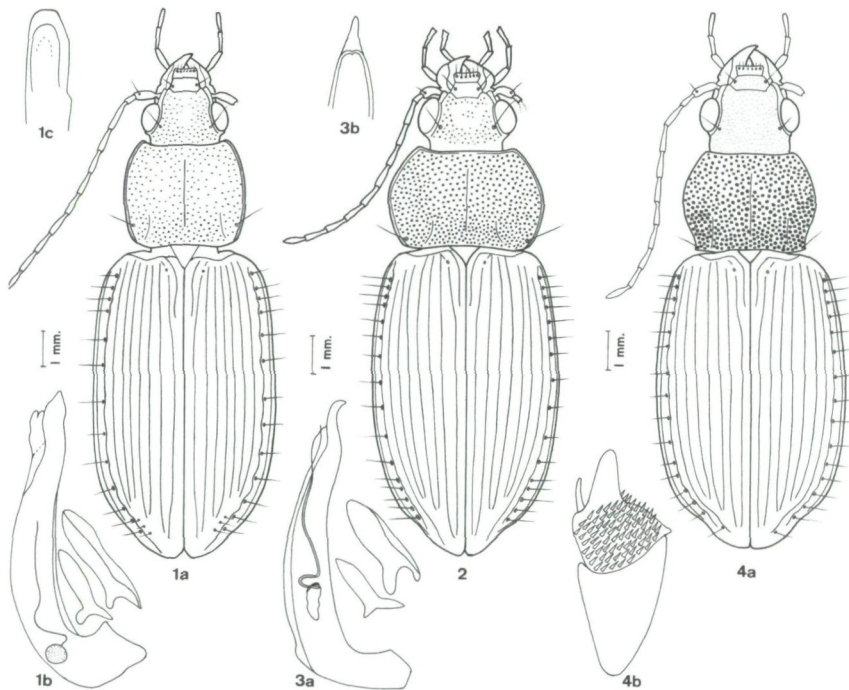
Distribution: India: Bengal (Type locality); Bengal, Tranqueber Ceylon (CHAUDOIR, 1876); Indo-China (BATES). ANDREWES (1930) noted its additional distribution as follows: Manipur (India), Rangoon (Burma), including above localities.

Discussion: This species is close to *C. quadricolor* OLIVIER but can be distinguished from the latter by its entire dorsal surface uniformly green; punctures on head and pronotum more evident and denser; pronotum less wide and evidently sinuate posteriorly; elytral intervals somewhat ridged and striae distinct.

References

- ANDREWES, H.E., 1921: Notes on synonymy and on some types of Oriental Carabidae in various foreign collection. Trans.ent.Soc.London., : 169
- ANDREWES, H.E., 1924: Mission dans les provinces Centrales de l'Indie et dans la Region Occidentale de l'Himalay 1914, par Guy Babault, Paris, 60 : 24-90
- ANDREWES, H.E., 1930: Catalogue of Indian Insects. Part 18 - Carabidae : 82-109

- BATES, H.W., 1889: Contributions à la faune indo-chinoise. 3^e memoire. Carabidae. Ann.Soc.Ent.Franc., 9(6) : 266
- BATES, H.W., 1891: List of Carabidae (Coleoptera) obtained by Père Cardon in Chota-Nagpore. Ann.Soc.Ent.Belg., 35 (compt.Rend.): 327-328
- BATES, H.W., 1892: Viaggio di Leonardo Fea in Birmania e regioni vicine. Ann.Mus.Civ.Stor.Nat.Genova (2) 12(32) : 307-332
- CSIKI, E., 1931: In Junk and Schenkling's Coleopterorum Catalogus Pars 115, Carabidae, Harpalinae V : 927-1000
- CHAUDOIR, B.M., 1856: Memoire sur la famille des carabiques (6-e partie). Bull.Soc.Imp.Nat.Moscou, 29 : 187-291
- CHAUDOIR, B.M., 1876: Monographie des chleniens. Ann.Mus.Civ.Stor.Nat. Genova, 8 : 5-315



- Fig.1: *Chlaenius (Chlaenius) reflexicollis* n.sp.; 1a: dorsal view; 1b: left lateral view of aedeagus; 1c: dorsal view of apical lobe of aedeagus.
- Fig.2: *Chlaenius (Chlaeniellus) mussardi barmatus* n.ssp., dorsal view.
- Fig.3: *Chlaenius (Chlaeniellus) mussardi mussardi* SAHA & SENGUPTA; 3a: left lateral view of aedeagus; 3b: dorsal view of apical lobe of aedeagus.
- Fig.4: *Chlaenius (Chlaeniellus) puncticephalus* n.sp.; 4a: dorsal view; 4b: female genitalia.

- DARLINGTON, P.J. Jr., 1970a: Carabidae including Cicindelinae Insects of Micronesia, 15(1) : 1-50
- DARLINGTON, P.J. Jr., 1970b: The *tetragonoderus* group of *Chlaenius* (Coleoptera : Carabidae) in the Indo-Australian archipelago. Psyche, September, 1970 : 343-346
- DEJEAN, M.F.A., 1826: Species general des Coleopteres de la collection d.M. le comte Dejean, 2 : 297-367
- JEANNEL, R., 1949: Coleoptères Carabiques de la Region Malagache. Faune de L'Empire Francais, (3) 11:784, 820
- LACORDOIRE, T., 1854: Histoire naturelle des Insectes, genera des Coleoptères, Vol.1. Cicindeletes-Palpicornes : 216, 227
- LAFERTE-SENECTÈRE, M.F.T., 1851: Revision de la tribu des patellimanes. Ann.Soc.Ent.France (2) 9 : 209-294
- MANDL, K., 1978: Neue und wenig bekannte Formen der Subfamily Callistinae (Col.Carabidae) aus dem Himalaya-Gebiet und dem benachbarten chinesischen und indo-chinesischen Raum. Entomologica Basiliensia, 3 : 263-279
- MOTSCHULSKY, V., 1864: Enumeration des nouvelles espèces de Coleoptères reportes de ses voyages. Bull.Soc.Imp.Nat.Moscou, 37(2) : 348
- SAHA S.K. and SENGUPTA T., 1979: On a collection of Indian *Chlaenius Bonelli* (*Chlaeniini* : Carabidae : Coleoptera) in Museum d'Histoire Naturelle de Genève with descriptions of three new species. Rev. Suisse.Zool., 36(2) : 423-425.

Acknowledgements:

I am grateful to the Director, Zoological Survey of India, Calcutta, for providing me the laboratory facilities. I am also grateful to Dr.I. Sengupta and Dr.S. Biswas, Coleoptera Section of this department for their various help for preparation of this work.

I must express my special gratitude to Dr.K. Mandl, Vienna, for his various help and valuable suggestions through correspondence at different times and also for providing me this material to work out, going through the manuscript and for forwarding the paper for publication.

Summary:

Two new species and one new subspecies of genus *Chlaenius* Bonelli are described from Ceylon, India and Nepal respectively. The species *C. (Chlaenius) pubipennis* CHAUDOIR (Burma) and *C. (Lissauchlaenius) tetragonoderus* CHAUDOIR (Ceylon) are recorded for the first time. Relationship and identity of *C. (Chlaenius) pubipennis* CHAUDOIR, *C. (Pseudochlaeniellus) puncticollis* DEJEAN, *C. (Amblygenius) bengalensis* CHAUDOIR, *C. (Lissauchlaenius) variipes* CHAUDOIR and the *tetragonoderus* group of species is discussed. Subgeneric status of all the species are ascertained.

Zusammenfassung:

Über einige neue und seltene Arten der Gattung *Chlaenius* BONELLI s.l. der Indischen Subregion im Naturhistorischen Museum, Wien. Zwei neue Arten und eine neue Unterart der Gattung *Chlaenius* BONELLI wurden von Ceylon, Indien und Nepal beschrieben. *C. (Chlaenius) pubipennis* CHAUDOIR werden erstmals aus Burma und *C. (Lissauchlaenius) tetragonoderus* CHAUDOIR aus Ceylon gemeldet. Für die Arten *C. (Chlaenius) pubipennis* CHAUDOIR, *C. (Pseudochlaeniellus) puncticollis* DEJEAN, *C. (Amblygenus) bengalensis* CHAUDOIR, *C. (Lissauchlaenius) variipes* CHAUDOIR und die Artengruppe des *C. tetragonoderus* werden Verwandtschaftsbeziehungen diskutiert und für die einzelnen Arten ihr subgenerischer Status festgelegt.

Manuscript received: 1982 11 06

Address of author: Shri S.K.Saha, Zoological Survey of India, 34, Chittaranjan Avenue, Calcutta-700012, INDIA

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Koleopterologische Rundschau](#)

Jahr/Year: 1984

Band/Volume: [57_1984](#)

Autor(en)/Author(s): Saha Shri S.K.

Artikel/Article: [On some new and rare species of *Chlaenius bonelli* s.l. of the Indian subregion in the Natural History Museum; Vienna \(Carabidae, Col.\). 97-106](#)