CONTRIBUTION TO THE KNOWLEDGE OF THE SPECIES OF THE GENERA AGONISCHIUS CANDÈZE AND VUILLETUS FLEUTIAUX (EXCEPT THOSE FROM JAPAN AND TAIWAN) (COLEOPTERA, ELATERIDAE, ELATERINI)

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Abstract: The species of the genera *Agonischius* Candèze, 1863 and *Vuilletus* Fleutiaux, 1940 (except those from Japan and Taiwan) are revised. In total, 26 species (8 new) of the genus *Agonischius*, distributed from Nepal to New Guinea, and 14 species (11 new) of the genus *Vuilletus*, distributed from Nepal to Vietnam and China, are recognized. Two synonymies and one new combination are proposed.

Key words: Coleoptera, Elateridae, Elaterini, *Agonischius*, *Vuilletus*, new species, new combinations, synonyms, chorology, keys.

Aportación al conocimiento de las especies de los géneros *Agonischius* Candèze y *Vuilletus* Fleutiaux (excepto las de Japón y Taiwán) (Coleoptera, Elateridae, Elaterini).

Resumen: Se revisan las especies del género *Agonischius* Candèze, 1863 y *Veilletus* Fleutiaux, 1940 (excepto las de Japón y Taiwán). En total, se reconocen 26 especies (8 nuevas) del género *Agonischius*, distribuido desde Nepal hasta Nueva Guinea, y 14 especies (11 nuevas) del género *Vuilletus*, distribuido desde Nepal hasta Vietnam y China. Se proponen dos sinonimias y una nueva combinación.

Palabras clave: Coleoptera, Elateridae, Elaterini, Agonischius, Vuilletus, especie nueva, combinación nueva, sinonimia, corología, claves.

Taxonomy/Taxonomía:

Agonischius brevilineatus n. sp. Agonischius discoidalis n. sp. Agonischius lineiformis n. sp. Vuilletus confusus n. sp. Vuilletus himalayanus n. sp. Vuilletus schimmeliorum n. sp. Vuilletus substriatus n. sp. Agonischius carinatus n. sp. Agonischius insolitus n. sp. Agonischius mimeticus n. sp. Vuilletus glacialis n. sp. Vuilletus maoxianus n. sp. Vuilletus semicupreus n. sp. Agonischius cordiformis n. sp. Agonischius magnificus n. sp. Vuilletus candezei n. sp. Vuilletus gurjevae n. sp. Vuilletus murzini n. sp. Vuilletus sinensis n. sp.

Introduction

In the fourth volume of his monography of the Elateridae of the world Candèze (1863) described the genus Agonischius (type-species: A. pectoralis Candèze, 1863) with 26 species from the oriental region, divided into two sections. Many other species were subsequently described by the same author until 1900 and by Schwarz until 1902. Candèze himself, since the description of the genus, underlined the possibility of segregating the very high number of species into new genera with more homogeneous characters. But it was only in 1940 that Fleutiaux, in his studies on the clickbeetles of the Indochinese Region, established two new genera to include a large part of the species previously assigned to Agonischius Candèze: Vuilletus (type-species: Agonischius altus Candèze, 1889) and Chiagosnius (typespecies: Elater obscuripes Gyllenhal, 1817). Chiagosnius Fleutiaux, containing the greater part of the described species, was later synonymized with Ludioschema Reitter, 1891 (type-species: Ludioschema emerichi Reitter, 1891) by Platia & Gudenzi (1998) and will be revised in future papers. The aim of the present paper is the revision of the genera Agonischius Candèze sensu Fleutiaux, 1940, and Vuilletus Fleutiaux, 1940 (not included are the Japanese and Taiwanese species of *Vuilletus*). As a result of this study and after examination of nearly all type specimens of the described species, 27 species of Agonischius and 14 of

Vuilletus are recognized out of a total of more than 160 species at one time attributed to the genus *Agonischius*.

The true Agonischius (type-species: A. pectoralis Candèze, 1863) sensu Fleutiaux constitute in general a rather homogeneous group of species. They are characterized at first glance by general shape and a colourful body, often with metallic lustre. Further examination adds other morphological characters, especially the antennae (in the majority of species) strongly dilated from the fourth article on as well as certain pronotal features, particularly the hind angles not carinate or with a vestige of carina and the absence of basal furrows. The shape of the male genitalia (see fig. 1-16) confirms the generic distinctiveness of the species included in the genus. It also shows a moderate but sufficient degree of variation between the different species (sometimes even among specimens from the same locality) and for this reason can be employed to separate allied species, whereas the bursa copulatrix doesn't contain perceptible sclerified plaques and is therefore not available to separate the species.

The genus *Vuilletus* constitutes a small and very homogeneous group of species immediately recognizable by the fusiform shape and metallic colours; other reliable characters to separate it from *Agonischius* are the antennae moderately dilated from the fourth article on, apparently

unicarinate hind angles of pronotum, male genitalia with simple apicis of parameres (see fig. 17-29) In species of *Vuilletus* the bursa copulatrix also does not have perceptible sclerified plaques which could be used to separate the species. A very interesting feature is the presence of a sexual dimorphism in some species, particularly apparent in *V. altus* (Candèze): the anterior articles of tarsi are dilated in the male and covered with robust and dense setae. This tarsal form of sexual dimorphism is rather uncommon among click-beetles, known to the author only from some species of the genus *Cardiohypnus* Fleutiaux of the Himalayan region.

Material and methods

Body measurements. Body length is measured along the midline from the anterior margin of the frons to the apex of the elytra, body width across the broadest part of the body.

Pronotal measurements. Pronotal length is measured along the midline, pronotal width across the broadest part, which is usually at the hind angles.

Abbreviations. The names of institutions, museums and collections containing the material studied, to which I am deeply indebted, are abbreviated as follows:

BMNH	London British Museum Netural History (M
DIVINI	London, British Museum Natural History (M. Kerley)
CCW	Cate coll., Wien (Austria)
CDZ	Dusanek coll., Zábřeh na Moravě, Kralove,
	(Czech Rep.)
CMHK	Mertlik coll., Hradec Kralove (Czech Rep.)
CPG	Platia coll., Gatteo (Italy)
CRG	Riese coll., Genoa (Italy)
CSO	Sitek coll., Ostrava (Czech Rep.)
CSV	Schimmel coll., Vinningen (Germany)
DEI	Müncheberg, Deutsches Entomologisches Institut
	(Dr. L. Zerche)
IRSNB	Bruxelles, Institut royal des Sciences naturelles
	de Belgique (J. Constant)
MCSNG	Museo Civico di Storia Naturale, Genoa (Italy)
	(Dr. R. Poggi)
MTD	Dresden, Museum fur Tierkunde, (Dr. O. Jager)
NHMB	Basel, Naturhistorisches Museum (M. Brancucci)
TM	Termeszettudomany Museum, Budapest
	(Hungary) (Dr. O. Merkl)
MNHNP	Paris, Muséum National d'Histoire Naturelle (O.
NIT	Montreuil)
NL	Leiden, Naturalis, National Museum of Natural
NIDC	History (A. van Assen).
NRS	Stockholm, Swedish Museum of Natural History
SMNS	(B. Viklund)
SIVINS	Stuttgart, Staatliches Museum Naturkunde (W. Schawaller)
ZISP	,
LISP	Zoologiceskij Institut Akademii Nauk, St. Petersburg (Dr. M. Volkovitsch)
ZMW	
ZIVI VV	Warsaw, Zoological Museum

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Agonischius Candèze, 1863

Agonischius Candèze, 1863: 407.

TYPE-SPECIES: Agonischius pectoralis Candèze, 1863. **DIAGNOSIS**. Body colourful, often with metallic lustre, rarely (one known species) entirely blackish; frons with supra-antennal carinae short, not touching anterior margin. Antennae reaching or exceeding apicis of posterior angles of pronotum in the male, shorter in the female, strongly serrated from fourth article on. Pronotum convex, widest at posterior angles, the latter more or less sharp, not or just barely divergent, not carinate or only with a vestige of carina; basal furrows absent; puncturation rather uniformly distributed, generally moderate with deep and sparse punctures.

Scutellum shield-like, punctured, without particular characters. Elytra as wide as pronotum or just wider, rounded at apicis.

Prosternal sutures closed at anterior ends; prosternal process subhorizontal behind the procoxal cavities, feebly emarginate at apex.

Male genitalia with median lobe a little longer than parameres, the latter sharply toothed at apex; bursa copulatrix without well-defined sclerified structures.

Size. Length 5,5-13 mm.

DISTRIBUTION. Nepal, India, Myanmar, Thailand, Laos, Cambodia, Vietnam, Indonesia, Malaysia, Philippines, New Guinea.

• KNOWN SPECIES

A. anticus Candèze, 1896

Fig. 1, 48.

Agonischius anticus Candèze, 1896: 256; Van Zwaluwenburg, 1959: 408.

Loc. Typ.: Indonesia: Mentawei, Si Oban.

MATERIAL EXAMINED. Lectotype ♀ - Indonesia: Mentawei, Si Oban, IV.-VIII.1894, Modigliani (MCSNG). 3 Paralectotypes ♀- same data as Lect. (des. van Zwaluwenburg, 1959) (MCSNG; IRSNB). 61° \bigcirc – Indonesia: Batu Isl., 1896-1897, H. Raap. (MCSNG); 1 ♀- Nias Is., 1897-1898, U Raap. (MCSNG); Sumatra, Indrapoera, Weyers (det. brevicollis by Schwarz, 1902) (IRSNB); W Sumatra, Singalang Mts, 1500 m VII.1991 (CPG; CRG); W Sumatra, Padang Panjang, 1400 m, 13.V.1991, R. Cermak (CRG); W Sumatra, Merapi Mts, 1000 m, IV.1991 (CRG); W Sumatra, 1992, Jakl (CSO); W Sumatra, VIII.1991 (CMHK); W Sumatra, VII.1991 (CCW; CPG); W Sumatra, Singgalong, III.1981 (CCW); W Sumatra, Merapi, III,1991 (CCW); Sumatra, Anai, 8.VII.1993, Widagdo (CCW); W Sumatra, Talang, II.1991 (CCW); W Sumatra, Padang Panjang, Anai Valley, II.1992 (CCW). Malaysia: Cameron Highlands, 2700 ft, X.1988, C.C. Chua (CRG); Pahang, Cameron Highlands, Tanah Rata, Wong Tet Fatt, V.1996 (TM); Cameron Highlands, IV.1987 (CCW); Cameron Highlands, 22.IV.1989 (CCW). Thailand: Rayong, I.III.1989 (CCW); Pratschuap, Khiri Khan, I.III.1989 (CCW); Tarang, I.III.1989 (CCW); Pak Kong to Nakhon Ratchashima, I.III.1989 (CPG).

REDESCRIPTION. Male. Shiny; bicoloured: head, antennae, legs, prosternal process, thorax and abdomen black; pronotum red-orange with median black spot of variable shape departing from anterior margin and touching the beginning of basal slope; propleura entirely red-orange as pronotum; elytra entirely dark bluish with metallic lustre; covered with moderate, blackish, partially erect vestiture.

Frons convex, punctures umbilicate, with very short, shining intervals. Antennae exceeding apicis of posterior angles of pronotum by about two articles; strongly serrated from fourth article on; second article cylindrical, a little

longer than wide; third subconical, less than twice as long as second; second and third together 1,3x longer than fourth; fourth triangular, as long as wide; the following articles wider, last ellipsoidal, as long as penultimate.

Pronotum 1,2x wider than long, subtrapezoidal, widest at posterior angles, strongly convex; sides tapering regularly from base to apex; posterior angles short, sharp, not diverging; punctures moderate, deep, simple or slightly umbilicate, on disc with much larger intervals than their own diameters; lateral margins nearly straight, complete.

Scutellum shield-like, moderately convex, punctured. Elytra as wide as base of pronotum, 3,3x longer than pronotum, moderately convex; sides tapering gradually from base to apex; striae regularly punctured; interstriae flat with finer punctures.

Female. Very similar to male, with shorter antennae only reaching apicis of posterior angles of pronotum.

Size. Length 5,8-8 mm; width 1,55-2,37 mm. Male genitalia as in fig. 1 (length 0,9 mm).

A. armus Candèze, 1896

Fig. 2, 57, 58.

Agonischius armus Candèze, 1896: 256; Van Zwaluwemburg, 1959: 408.

Loc. Typ.: Indonesia: Sipora.

MATERIAL EXAMINED. Lectotype $\[\bigcirc \]$ - Indonesia: Mentawei, Sipora, Sereinu, V.VI.1894, Modigliani (MCSNG). 4 Paralectotypes (2 $\[\bigcirc \]$, 2 $\[\bigcirc \]$) – 1 $\[\bigcirc \]$ 1 $\[\bigcirc \]$ - same data as Lect. (MCSNG; IRSNB); 1 $\[\bigcirc \]$ (det. *armus* var.) same data as Lect.; 1 $\[\bigcirc \]$ - (det. *armus* var.) Mentawei, Si Oban, IV-VIII.1894, Modigliani (des. van Zwaluwenburg) (MCSNG). 9 $\[\bigcirc \]$ - Nias Is., 1897-1898, U. Raap. (det. *sanguinipennis* Candèze by Fleutiaux) (MCSNG).

REDESCRIPTION. Male. Moderately shiny; bicoloured; colour variable, particularly on elytra; head, antennae, legs, scutellum, first elytral intervals, prosternal process, thorax and abdomen black; pronotum trimaculate, red-orange with a median broad black stripe from base to anterior margin and two narrower black stripes at sides from base to anterior margin or nearly so; elytra red-orange with black colour variable in extension, from behind the middle to apicis or reduced to the apical extremities or extended nearly to base; covered with dense, blackish, semi-erect vestiture.

Frons convex, punctures coarse, umbilicate, with very short intervals. Antennae exceeding apicis of posterior angles of pronotum by about 2,5 articles, strongly serrated from fourth article on; second article cylindrical, as long as wide; third subconical, about twice as long as second; second and third together 1,5x longer than fourth; fourth-tenth triangular; fourth as long as wide, the following articles wider; last ellipsoidal, as long as penultimate.

Pronotum 1,3x wider than long, trapezoidal, widest at posterior angles, convex; sides narrowing regularly from base to apex; posterior angles short, moderately sharp, not diverging; punctures on disc deep, simple or slightly umbilicate, with intervals on average equal to or smaller than their own diameters, denser at anterior margin and on sides.

Scutellum shield-like, moderately convex, punctured. Elytra as wide as base of pronotum, 3,3-3,5 x longer than pronotum, moderately convex; striae distinctly punctured; interstriae all equally subconvex with sparse and fine punctures.

Aedeagus as in fig. 2 (length 1,25 mm).

Female. Very similar to male, body larger, antennae shorter and just reaching apicis of posterior angles of pronotum

Size. Length 6,8-8,8 mm; width 2-2,56 mm.

A. basalis Candèze, 1875

Fig. 3, 43.

Agonischius basalis Candèze, 1875: 127; 1891a: 201; Schenkling, 1927: 465; Schultze, 1916: 65; *Van Zwaluwenburg, 1936: 428 (see "Material examined").

Agonischius rufolaterus Schwarz, 1902: 299 (syn. n.) (Type-locality: Kina Balu (Lectotype ♂ + Paralectotype ♂ - Malaysia: Sabah, Kina Balu (DEI).

**Agonischius pulcher Van Zwaluwenburg, 1943: 299. (syn. n.) (Type locality: Bismarck Archipelago, New Britain (Ht ♀ in BMNH) (not examined)

Loc. Typ.: Philippines, Luzon.

MATERIAL EXAMINED. Holotype (sex not determined): **Philippines**: Luzon, ex coll. Candèze (IRSNB) (specimen in bad condition). 1 ♀- Luzon, Aurora, Sierra Madre, VI.2005, I. A. Lumawig (CRG); 1 ♀- **New Guinea**: Gehr W. Müller, Vermacht, 1909 (MTD).

* Van Zwaluwenmburg (1936) records the species from the following localities: Ambos Camarines Province, Mount Isarog (Cornell collection); Laguna Province, Mount Maquiling, up to 800 feet, on flowers of *Terminalia nitens*, of *Ehretia philippinensis* and of *Clethra lancifolia*, IV-VI, Hadden; Nueva Vizcaya Province, Imugan (Cornell collection); Tayabas Province, Mount Banahao (Cornell collection) and an unnamed variety noted by Candèze from Mindanao, Bukidnon Province, Diklom, 3000 feet, III, Phillips, det. Fleutiaux; Lanao Province, Kolambugan (Cornell collection); Zamboanga Province, Kabasalan, VIII, Muzzall, on flowers

REDESCRIPTION. Male. Shiny; bicoloured; head, antennae, legs, scutellum, prosternal process, thorax and abdomen black; pronotum red-orange with a median black spot of variable shape and extension, departing from anterior margin and touching the beginning of basal slope; prosternum and propleura red-orange as pronotum; elytra black or with moderate bluish metallic lustre (in a specimen) with two yelloworange basal spots not reaching the suture with a rufous stripe on the outer margin of the elytra for about two-thirds of their length" (*rufolaterus* Schwarz) (recorded by Van Zwaluwenburg (1936) as a variety; covered with dense, blackish, semierect vestiture.

Frons convex, punctures umbilicate, with very short intervals. Antennae exceeding apicis of posterior angles of pronotum by about two articles; strongly serrated from fourth article on; second article cylindrical, a little longer than wide; third subconical, about twice as long as second; second and third together 1,5x longer than fourth; fourth-tenth triangular; fourth as long as wide, the following articles wider; last ellipsoidal, as long as penultimate.

Pronotum 1,4x wider than long, widest at posterior angles, strongly convex; sides from base to middle subparallel, then narrowing to apex; posterior angles short, not diverging; base with a short, prominent longitudinal carina on inner side of posterior angle; lateral margins nearly straight, complete; punctures moderate, deep, simple or slightly umbilicate, on disc with intervals on average larger than their own diameters.

Scutellum shield-like, moderately depressed at middle, punctured. Elytra as wide as base of pronotum, 3,3x longer than pronotum; sides tapering gradually from base to apex; striae punctured; interstriae flat with finer punctures.

Aedeagus as in fig. 3 (length 1,02 mm).

Female. Very similar to male (in the specimens examined without stripe on outer margin of elytra); body larger and convexer; antennae shorter, just exceeding apicis of posterior angles of pronotum

Size. Length 6,5-9 mm; width 1,9-2,5 mm.

**Remark. The synonymity is based on the examination of the detailed description and the picture of adult given by the Author.

A. bilaterus Candèze, 1897

Fig. 4, 60.

Agonischius bilaterus Candèze, 1897: 72; Schwarz, 1906: 274; Schenkling, 1927: 465.

Loc. Typ.: Ile Banguey au Nord de Borneo

MATERIAL EXAMINED. Holotype ♀ - Malaysia: Borneo, Banguey, Sipora (IRSNB). 21♂ ♀ - Borneo, Banguey (IRSNB); N Borneo, coll. C. Felsche, Geschenk,1907 (MTD); Borneo, Gehr W. Muller, Vermacht. 1909 (MTD); Cameron Highlands, 27.III.1989, 4.IV.1989 (CPG). Indonesia: Sumatra, Palembang (bellulus Candèze, in litteris); Mentawei, Sipora, Sereinu, V.VI.1894, Modigliani (IRSNB); Sumatra, Anai, 8.VII.1993, Widagdo (CCW); W Sumatra, Pawang, V.1991 (CMHK); W Sumatra, Talang Mts, II.1991 (CRG). Thailand: Pak Kong to Nakhon Ratchashima, III.1989 (CPG); Pratschuap, Khiri Khan, I.III.1989 (CCW).

REDESCRIPTION. Male. Shiny; bicoloured; head, antennae, pronotum, scutellum, entire ventral surface black; elytra bicoloured, black, sometimes with violet metallic lustre, with base and sides reddish from sixth intervals to after the middle (in one female specimen from N Borneo (MTD) elytra nearly entirely reddish save for first and second interstriae after middle blackish); covered with moderate, blackish, semi-erect vestiture.

Frons convex, punctures umbilicate, with very short intervals. Antennae exceeding apicis of posterior angles of pronotum by about two articles, strongly serrated from fourth article on; second article cylindrical, a little longer than wide; third subconical, about twice as long as second; second and third together 1,5x longer than fourth; fourth-tenth triangular; fourth as long as wide, the following articles wider; last ellipsoidal, as long as penultimate.

Pronotum as long as wide or a little wider than long, widest at posterior angles, strongly convex; sides nearly regularly narrowing from base to apex, posterior angles sharp, not diverging; punctures moderate, on disc deep, simple or slightly umbilicate, with intervals clearly larger than their own diameters, at sides somewhat denser; lateral margins nearly straight, complete.

Scutellum shield-like, flat, pointed at apex, finely punctured. Elytra as wide as base of pronotum, 3x longer than pronotum, moderately convex; sides narrowing very gradually from base to apex; striae more or less deeply punctured; interstriae flat, sparsely punctured.

Aedeagus as in fig. 4 (length 1 mm).

Female. Very similar to male; body larger and convexer; antennae shorter, just exceeding apicis of posterior angles of pronotum

Size. Length 5,8-8,7 mm; width 1,37-2,18 mm.

A. brevicollis Candèze, 1875

Fig. 54.

Agonischius brevicollis Candèze, 1875: 127; 1891a: 201; Schultze, 1916: 65; Schwarz, 1906-7: 275; Schenkling, 1927: 466; Van Zwaluwenburg, 1936: 428.

Loc. Typ.: Philippines, Luzon.

MATERIAL EXAMINED. Holotype ♀ - Philippines, Luzon, ex coll. Candèze (IRSNB).

REDESCRIPTION. Female. Moderately shiny; bicoloured; head, scutellum, elytra, antennae, legs, prosternal process, thorax and abdomen black; pronotum bicoloured, redorange with two black spots, one median, triangular and larger, extending from anterior margin to anterior third, the second at basal slope, subelliptical and small; propleura and prosternum red-orange as pronotum; covered with moderate, blackish, semi-erect vestiture.

Frons convex, punctures coarse, umbilicate, nearly contiguous. Antennae (mutilated after the fourth article) serrated from fourth article on; second cylindrical, a little longer than wide; third subconical, less than twice as long as second; second and third together longer than fourth; the latter triangular, as long as wide.

Pronotum 1,4x wider than long, widest at posterior angles, convex; sides narrowing very gradually from base to middle, then abrutptly to apex; posterior angles short, not diverging; punctures on disc deep, simple or slightly umbilicate, with intervals on average equal or a little larger than their own diameters, denser at anterior margin; lateral margins nearly straight, complete.

Scutellum shield-like, flat, punctured. Elytra as wide as base of pronotum, 3,7x longer than pronotum, moderately convex; sides narrowing very gradually from base to apex; striae finely punctured; interstriae flat with finer punctures.

Male unknown.

Size. Length 7,9 mm; width 2,4 mm.

A. elegans Candèze, 1883

Fig. 5, 6, 7, 47.

Agonischius elegans Candèze, 1883: 213; Schwarz, 1906-7: 274; Schenkling, 1927: 467; Van Zwaluwenburg, 1959: 408.

Loc. Typ.: Serdang, Sumatra.

MATERIAL EXAMINED. Lectotype ♀ (des. Van Zwaluwenburg, 1959) - Indonesia: NO Sumatra, Tandjong Morawa, Serdang, Dr. B. Hagen (NL). 42 ♂ ♀ - Indonesia: W Sumatra, Merapi Mt, 1000, m, II., VI.1991 (CPG; CRG); W Sumatra, Padang Panjang, Anai Valley, II.1992 (CCW); W Sumatra, Talang, II.1991 (CCW); W Sumatra, Singalang Mt, 1400-1800 m, II.1991, VII.1991(CRG); W Sumatra, Merapi, III,1991 (CCW); W Sumatra, Anai, 8.VII.1993, Widagdo (CCW); W Sumatra, Sago Mts, 1000 m, II.1991 (CRG); W Sumatra, VIII.1991 (CMHK). Malaysia: Cameron Highlands, 27.III.1989, 4.IV.1989, 2.V.1989 (CPG); Fraser's Hills, Selangor, 23.VI.1990, Dauber (CCW); Pahang, Benom Mts, 15 km E Kampong Dong, 300-1000 m, 24.III.-15.IV.1998, Dembicky & Pacholatko (CCW). Thailand: Rayong, I:III. 1989 (CCW); Tarang, I.III.1989 (CCW); Pratschuap, Khiri Khan, I.III.1989 (CCW); Saraburi, IV.1988, S. Steinke (CCW).

REDESCRIPTION. Male. Shiny; bicoloured; head, antennae, pronotum, scutellum, propleura, prosternal process, thorax and abdomen black; prosternum generally entirely yellowish, rarely only at anterior lobe; in some specimens anterior and posterior margins of propleura yellowish as prosternum; elytra bicoloured, black, generally with bluish metallic lustre, more rarely without, with base and sides reddish from sixth intervals to after the middle; covered with moderate, blackish, semi-erect vestiture.

Frons convex, punctures umbilicate, with very short intervals. Antennae exceeding apicis of posterior angles of pronotum by about one article, strongly serrated from fourth article on; second article cylindrical, a little longer than wide; third subconical, about twice as long as second; second and third together 1,5x longer than fourth; fourth-tenth triangular; fourth as long as wide, the following articles wider; last ellipsoidal, as long as penultimate.

Pronotum as long as wide or a little wider, widest at posterior angles, strongly convex; sides narrowing nearly regularly from base to apex, posterior angles sharp, not diverging; punctures moderate, on disc deep, simple or slightly umbilicate with intervals clearly larger than their own diameters, at sides somewhat denser; lateral margins nearly straight, complete.

Scutellum shield-like, flat, pointed at apex, finely punctured. Elytra as wide as base of pronotum, 3x longer than pronotum, moderately convex; sides narrowing very gradually from base to apex; striae more or less deeply punctured; interstriae flat, sparsely punctured

Aedeagus variable as in figs. 5, 6, 7 (length 1-1,2 mm), even in specimens from the same locality.

Female. Very similar to male; body larger and convexer; antennae shorter, not reaching apicis of posterior angles of pronotum; intermediate articles more strongly serrated.

Size. Length 5,6-7,8 mm; width 1,5-2,1 mm.

A. fusiformis Candèze, 1875

Fig. 53.

Agonischius fusiformis Candèze, 1875: 127; 1891a: 201; Schenkling, 1927: 467; Schultze, 1916: 65; *Van Zwaluwenburg, 1936: 428.

Loc. Typ.: Philippines: Mindanao.

MATERIAL EXAMINED. Type ? (not located) - $4 \circ$ - Philippines, without exact locality, ex coll. Candèze (IRSNB); $1 \circ$ - Philippines: Samar Isl., 18.VI.1993, G. Deslisle (CRG).

*Van Zwaluwenburg (1936) records the species from the following localities: Mindanao, Lanao Province, Momungan (Cornell collection); Zamboanga Province, Kabasalan, III, VIII, Muzzall, on flowers; Luzon: Ambos Camarines Province, Mount Isarog (Cornell collection); Laguna Province, Mount Maquiling, II-VI, Hadden, det. Fleutiaux, under bark; Nueva Vizcaya Province, Imugan (Cornell collection); Tayabas Province, Quezon Park, V, Hadden.

REDESCRIPTION. Female. Moderately shiny; bicoloured; head, antennae, scutellum, prosternal process, thorax and abdomen, sometimes inner sides of propleura, black; pronotum trimaculate, red-orange with one median black stripe extending and becoming broader from base to anterior margin and two narrower stripes at sides, extending forwards from base or mid-part and generally not reaching the anterior margin; prosternum and normally propleura red-orange

as pronotum; elytra lighter, entirely yellow-orange, sometimes darkened along the suture; covered with dense, balckish, partially erect vestiture.

Frons convex, punctures umbilicate, with very short shining intervals. Antennae exceeding apicis of posterior angles of pronotum by about one article, strongly serrated from fourth article on; second article cylindrical, a little longer than wide; third subconical, about twice as long as second; second and third together 1,5x longer than fourth; fourth-tenth triangular; fourth as long as wide, the following articles wider; last ellipsoidal, as long as penultimate.

Pronotum 1,3x wider than long, widest at posterior angles, strongly convex; sides tapering nearly regularly from base to apex; posterior angles short, not diverging; punctures rather uniformly distributed, on disc deep, slightly umbilicate, with short intervals smaller than their own diameters. Lateral margins nearly straight, complete.

Scutellum shield-like, flat, moderately convex, punctured. Elytra as wide as base of pronotum, 3,5-3,6x longer than pronotum, moderately convex; striae well-punctured; interstriae subconvex, very finely punctured.

Male unknown.

Size. Length 8,2-10 mm; width 2,37-2,81 mm.

A. indicus Fleutiaux, 1933

Fig. 8, 51, 52.

Agonischius indicus Fleutiaux, 1933: 15.

MATERIAL EXAMINED. Holotypus ♀ - India: Nilgiri Hills, H. L. Andrewes (Fleutiaux coll. MNHNP). 1 Paratypus ♀ - Chakata range, Haldwani, U.P., VII.1930, S.N. Chatterjee (Fleutiaux coll. MNHNP).1 ex. Coorg, Fraserpet, 12.XI.1930 (recorded by Fleutiaux, 1933: 15 (not examined). 5 (1♂4♀)-Mysore State, Shimoga Distr., Agumbe Ghat, 2000 Ft, V.1991, T.R.S.Nathan (CRG); Coimbatore Distr., Marudamalai Hills, X.2001, S.A. Surrander (CPG); Tamil Nadu, Nilgiris, 15 km SE Kotagiri, Kunchappanai, 900 m, 7-22.V.2000, P. Pacholatko (CRG) (var.).

REDESCRIPTION. Male. Unicoloured; entirely dark bluish, very shiny, antennae black save for the first articles, legs brownish; abdomen entirely or only last visible sternite reddish; covered with blackish, partially erect vestiture. Variability: one female specimen from Tamil Nadu has a large part of pronotum reddish as propleura, darkened only at anterior margin and on central disc.

Frons convex, punctures umbilicate with intervals on average equal to their own diameters or larger. Antennae exceeding apicis of posterior angles of pronotum by about one article, strongly serrated from fourth article on; second article cylindrical, a little longer than wide; third subconical, about twice as long as second; second and third together 1,5x longer than fourth; fourth-tenth triangular; fourth as long as wide, the following articles wider; last ellipsoidal, as long as penultimate.

Pronotum 1,28x wider than long, widest at posterior angles, strongly convex, sloping abruptly at sides and base; sides narrrowing moderately from base to middle, then abruptly to apex; posterior angles sharp, not diverging; lateral margins nearly straight, complete; punctures moderate, on disc deep, simple or slightly umbilicate, with intervals much larger than their own diameters.

Scutellum shield-like, gently convex, punctured. Elytra as wide as base of pronotum and 3,3x longer

than pronotum; striae regularly punctured; interstriae flat with finer punctures.

Aedeagus as in fig. 8 (length 1,43 mm).

Female. Body larger and convexer; antennae shorter, just reaching apicis of posterior angles of pronotum, more strongly serrate.

Size. Length 6,3-9,8 mm; width 1,93-3 mm.

A. lateritius Fleutiaux, 1940

Fig. 9, 46.

Agonischius lateritius Fleutiaux, 1940: 122.

Loc. Typ.: Laos: Sen-Kam, V, Vitalis de Salvaza.

MATERIAL EXAMINED. Type \mathcal{L} (coll. Fleutiaux, MNHNP) (not examined). 29∂♀- Laos: 70 km NE Vientiane, Ban Phabat env., 150 m, 27.IV.-1.V.1997, E. Jendek & O. Sausa (CPG); Bolikhamsai Prov., Ban Nape-Kaew Nua Pass, 600m, 18.IV-1.V.1998, M. Strba & R. Hergovits (CPG); 15 km NW Louang Namtha, 750-1000 m, 13-24.V.1997, E. Jendek & O. Sausa (CPG); Xamneva, Pho Pan (Pan Mt), 1350-2700 m, IV-V.2001, T. Porion (CRG). Vietnam: Quang Chu Prov., Bac Thai, 500 m, 24.V.1987, Matskasi, Olah & Topal (TM); 12 km N of Dalat, Lang Bian, 1580-1750 m, 17-21.IV.1995, Pacholatko & Dembicky (CCW). Myanmar: Dawna, 29.IV.1994, S. Steinke (CCW). Thailand: Chiang Mai, Doi Suthep to Doi Pui, 19-23.IV.1991, L. Dembicky (CSV); Chiang Mai, 6.VI.1992, S. Steinke (CRG); Naemo Lampang, 17.VI.1991, F. Ferrero (CRG). India: W Bengal, Darjeeling, Kalimpong, Khanni Busty, 1200, 19.V.1987, N. Dangal (SMNS); Assam, 5 km N of Umrangso, 700 m, 21.V.1999, Dembicky & Pacholatko (CCW); Kaziranga, 75 m, 7-9.V.1976, Wittmer & Baroni Urbani (CSV). Nepal: Janakpur Dolakha, Tamba Koshi, 850-1100 m, 24-29.V.1989, C. Holzschuh (Basel Mus.); Arun Valley, Chichila-Mure, 2050 m 7.VI.1992, J. & J. Probst (Basel Mus.); Kashi Distr., Chandrakot-Hille, Dawalagiri, 1000-1600 m, C. Holzschuh (CSV); Modi Khola, Landrung, 1100-1800 m, 3-6.VI.1984, C. J. Rai (CSV); Janakpur, Tamba-Khosi-Khola, SE Charikot, 900-1200 m, 16-26.VI.1987, C. Holzschuh (CCW).

REDESCRIPTION. Male. Shiny; unicoloured; entirely redferruginous, generally blackish along elytral suture, around scutellum, on anterior margin of elytra and basal extremity of pronotum; antennae and legs ferruginous to blackish with intermediate colours; ventral surface totally ferruginous; covered with moderate, blackish, semi-erect vestiture.

Frons convex, punctures umbilicate, with variable intervals, on average smaller than their own diameters. Antennae exceeding apicis of posterior angles of pronotum by about two articles, moderately serrated from fourth article on; second article cylindrical, a little longer than wide; third subconical, about twice as long as second; second and third together just longer than fourth; fourth-tenth triangular, just longer than wide; last ellipsoidal, as long as penultimate.

Pronotum 1,2-1,3x wider than long, widest at posterior angles, strongly convex; sides tapering nearly regularly from base to apex; posterior angles sharp, not diverging; punctures distributed rather uniformly, on the disc slightly umbilicate with intervals on average larger than their own diameters, sparser and finer at base, denser at sides and anterior margin; lateral margins nearly straight, complete.

Scutellum shield-like, moderately depressed, pointed at apex, punctured. Elytra as wide as base of pronotum, 3,2-

3,3x longer than pronotum, convex; sides narrowing gradually from base to apex; striae moderately and regularly punctured; interstriae flat with finer punctures.

Aedeagus as in fig. 9 (length 1,53 mm).

Female. Very similar to male with shorter antennae not reaching apicis of posterior angles of pronotum,

Size. Length 9,35-11,80 mm; width 2,55-3,50 mm.

A. militaris Candèze, 1882

Fig. 44.

Agonischius militaris Candèze, 1882: 104; 1891a: 201; Schwarz, 1906-7: 275; Schenkling, 1927: 468.

Loc. Typ.: Andamans.

MATERIAL EXAMINED. Holotype \mathcal{P} - India: Andamans (IRSNB); 1 Paratype \mathcal{P} - Andamans (IRSNB).

REDESCRIPTION. Female. Shiny; bicoloured; head, pronotum, scutellum, base of elytra, entire ventral surface and legs yellow-orange; remaining part of elytra black; antennae brownish with first articles lighter; covered with dense, blackish, semi-erect vestiture.

Frons convex, punctures umbilicate with variable intervals, on average smaller than their own diameters. Antennae reaching apicis of posterior angles of pronotum, strongly serrated from fourth article on; second article cylindrical, a little longer than wide; third subconical, about twice as long as second; second and third together 1,5x longer than fourth; fourth-tenth triangular; fourth as long as wide, the following articles wider; last ellipsoidal, as long as penultimate.

Pronotum 1,1x wider than long, widest at posterior angles, strongly convex; sides subparallel from base to middle, then gradually tapering to apex; punctures rather uniformly distributed, on disc deep, simple or slightly umbilicate, with intervals on average larger than their own diameters, a little denser at sides; lateral margins nearly straight, complete.

Scutellum shield-like, pointed, flat, punctured. Elytra as wide as base of pronotum, 2,8x longer than pronotum; sides subparallel for about two-thirds of its length; striae moderately and regularly punctured; interstriae flat with finer punctures.

. Male unknown.

Size. Length 6,7-8 mm; width 1,93-2,25 mm.

A. mirus Candèze, 1863

Fig. 50.

Agonischius mirus Candèze, 1863: 412; 1891a: 201; 1891b: 793; Schwarz, 1906-7: 275; Schenkling, 1927: 468; Chatterjee, 1933: 12.

Loc. Typ.: Indes Orientales.

MATERIAL EXAMINED. Type (BMNH) (not examined). 12♀ - India: Sheveroy Hills, Yercaud, 4500 Ft, V.1996, T.R.S. Nathan (CMHK; CPG; CRG).

REDESCRIPTION. Female. Shiny; bicoloured; head, scute-llum and elytra including epipleura dark bluish with metallic lustre; pronotum, propleura, prosternum and abdomen redorange; antennae, legs, prosternal process and mesothorax blackish; metathorax partially red-orange with ill-defined bluish metallic lustre; covered with moderate, blackish, semi-erect vestiture.

Frons convex, punctures slightly umbilicate, with variable intervals equal to or smaller than their own diame-

ters. Antennae reaching apicis of posterior angles of pronotum, strongly serrated from fourth article on; second article cylindrical, a little longer than wide; third subconical, about twice as long as second; second and third together 1,5x longer than fourth; fourth-tenth triangular; fourth as long as wide, the following articles wider; last ellipsoidal, as long as penultimate.

Pronotum 1,3x wider than long, widest at posterior angles, strongly convex; sides subparallel from base to before the middle, then tapering rather abruptly to apex; punctures moderate, on disc simple to slightly umbilicate, with intervals much larger than their own diameters, somewhat denser at sides and anterior margin; lateral margins nearly straight, complete.

Scutellum shield-like moderately convex, sparsely punctured. Elytra as wide as base of pronotum, 3,4x longer than it, convex; sides subparallel for about two-thirds of its length; striae finely and regularly punctured; interstriae flat, sparsely punctured.

Male unknown.

Size. Length 7-7,5 mm; width 2-2,1 mm.

A. nigerrimus Fleutiaux, 1934

Fig. 31, 61.

Agonischius nigerrimus Fleutiaux, 1934a: 369.

Poemnites (Gnathodicrus) nigerrimus. Tarnawski, 2001: 297.

Loc. Typ.: Philippines: Luzon, Imugan.

REDESCRIPTION. Male. Shiny; unicoloured; black-piceous with apex of prosternal lobe yellowish; covered with moderate, blackish, semi-erect vestiture.

Frons convex, punctures coarse, umbilicate, nearly contiguous. Antennae exceeding apicis of posterior angles of pronotum by about three articles, strongly serrated from fourth article on; second article subcylindrical, a little longer than wide; third subconical, less than twice as long as wide; second and third together just longer than fourth; fourth-tenth triangular, a little longer than wide to as long as wide; last subellipsoidal, as long as penultimate.

Pronotum 1,35x wider than long, trapezoidal, widest at posterior angles, strongly convex, abruptly sloping at base and sides; posterior angles sharp, not diverging; punctures deep, simple or slightly umbilicate, on disc with intervals notably larger than their own diameters; lateral margins nearly straight, complete.

Scutellum shield-like, moderately depressed, punctured. Elytra as wide as base of pronotum, 3,9x longer than pronotum, rather depressed on disc; sides narrowing regularly from base to apex; striae very finely punctures; interstriae flat with sparse punctures.

Aedeagus lost.

Female. Specimen in bad condition, without head and antennae. Similar to male with base of pronotum, apical extremity of posterior angles of pronotum and base of propleura yellowish.

Size. Length 6,87-7,10 mm; width 1,81 mm.

Note. I have not examined the type material, but the description given by Fleutiaux is in conformity with the two specimens from the typical locality.

A. ornatus Candèze, 1880

Fig. 55.

Agonischius ornatus Candèze, 1880: 10; 1891a: 201; Schwarz, 1906-7: 275.

Loc. Typ.: New Guinea: Andai.

REDESCRIPTION. Female. Moderately shiny; bicoloured; head, extremity of anterior margin of pronotum and scute-llum black with moderate bronze lustre; pronotum yellow-orange; elytra black with moderate metallic lustre and longitudinal yellowish stripes, two shorter ones between second and fourth interstriae reaching at most the first third of elytra and two others, more or less elongate, on the first half of the sides and not reaching the lateral extremities; antennae, legs, prosternal process, thorax and abdomen black; covered with moderate, blackish, partially erect vestiture.

Frons convex, punctures variable in size, generally umbilicate, with variable intervals on average smaller than their own diameters. Antennae nearly reaching apicis of posterior angles of pronotum, strongly serrated from fourth article on; second article cylindrical, a little longer than wide; third subconical, about twice as long as second; second and third together 1,5x longer than fourth; fourth-tenth triangular; fourth as long as wide, the following articles wider; last ellipsoidal, as long as penultimate.

Pronotum 1,3x wider than long, widest at posterior angles, convex; sides narrowing nearly regularly from base to apex; posterior angles short, not diverging; punctures moderate, simple or slightly umbilicate, on disc with intervals larger than their own diameters, somewhat denser at sides; lateral margins nearly straight, complete.

Scutellum shield-like, moderately convex, sparsely punctured. Elytra as wide as base of pronotum, 3,5-3,6x longer than pronotum; sides narrowing very gradually from base to apex; striae finely punctured; interstriae flat, with smaller punctures

Male unknown.

Size. Length 7-7,5 mm; width 2-2,18 mm.

A. pectoralis Candèze, 1863

Fig. 10, 33, 45.

Agonischius pectoralis Candèze, 1863: 411; 1891a: 201; Schwarz, 1906-7: 274; Schenkling, 1927: 468; Van Zwaluwenburg, 1959: 409; Ôhira,1973: 118.

Loc. Typ.: Borneo, Sarawak.

MATERIAL EXAMINED. Lectotype ♀ (des. Van Zwaluwenburg, 1959) (BMNH) (not examined). 170 ♂ ♀- Malaysia: Borneo without data (det. Candèze) (IRSNB); Sabah, Crocker Range, 12.IV, 5-7.VI.1988 (CPG); Borneo, Sarawak, 1865-1866, ex. coll. Doria, det. E. Candèze (IRSNB; MCSNG); Borneo, Sintang (IRSNB); Borneo, Banguey Is. (IRSNB); Borneo, Waterstradt, ex. coll. Fleutiaux (IRSNB); Borneo, ex coll. Schramm (IRSNB); Borneo, Kina Balu, 1500 m , H. Rolle (MCSNG); Sabah, Bajnaran Maitland, Sapulut, 22-24.V.1995, I. Jenis (CCW); Sabah, W Crocker Range, W of Apin Apin, II.2000, M. Snizek (CRG); Sabah, Kinabatangan River, 8-10.IV.2002, R. Novak (CRG); W Malaysia, Cameron Highlands, 24.III.1989, 27.III.1989,

8.IV.1989 (CPG; CSV); Cameron Highlands, 2700 ft, X.1998, C. C. Chua (CRG); Cameron Highlands, 1000 m, IV.1990, Dauber (CCW); Johor, 15 km NW of Kota Tinggi, Muntanak Mt, 200m, 14-16.V.2001, P. Cechovsky (CRG); Perak, Banjaran Titi Wangsa, Ringlet, 900 m, 29.III.-15.IV.2004, P. Cechovsky (CRG); Pahang, Benom Mts, 15 km E Kampong Dong, 300-1000 m, 24.III.-15.IV.1998, Dembicky & Pacholatko (CCW); Taiping, V.1987, A. Chaminade (CRG); Tioman, nr Kampong Telek, 10-100 m, 1-16.III.1998, Dembicky & Pacholatko (CCW). Indonesia: Sumatra, Indrapoera, Weyers (IRSNB); Sumatra without data (IRSNB); Sumatra, Salida (IRSNB); Sumatra, Aceh, 17.VI.1994 (CCW); W Sumatra, Harau Valley, 20 km N of Payakumbuh, 500-800m, V.2006, S. Jakl (CRG); W Sumatra, VII.VIII.1991 (CCW; CMHK); W Sumatra, Singalang Mts, 1200-1600 m, VII.1991 (CRG); W Sumatra, Talang Mts, II.1991 (CRG); W Sumatra, Payang, V.1991 (CMHK); W Sumatra, 1992 (CSV); W Sumatra, Padang Panjang, 13.VI.1991, R. Cermak (CMHK; CPG); W Sumatra, Bengkulu Prov., nr. Gurup, Bukit Kaba Mt., 1000-1500 m, 30.I.-3.II. 2000, J. Bezdek (CCW); W Sumatra, 1992, Jakl (CSO); W Sumatra, Sago Mts, 1000 m, III.1991 (CRG); W Sumatra, Singgalong, III.1991 (CCW); N Sumatra, Kerinci Mt, 2200 m, 15.V.1991, R. Cermak (CRG); N Sumatra, Brastagi-Toba, 20.VII.1980, Heiss (CCW); W Sumatra, Merapi, III.1991 (CCW). Thailand: Pak Kong to Nakhon Ratchashima, III.1989 (CPG); Pratschuap, Khiri Khan, I.III.1989 (CCW); Tarang, I.III.1989 (CCW); Rayong, I.III.1989 (CCW).

REDESCRIPTION. Male. Moderately shiny; bicoloured; head and pronotum entirely black with bronze lustre or with two reddish spots, variable in size and shape and sometimes prolonged to anterior margin, at lateral slopes before the base; scutellum black, elytra variable in colour except the first intervals, which are always black; colour usually reddish with more or less extended black colour, which sometimes has bluish or violet reflexions; propleura black or partially to entirely reddish along the sides; prosternum yellow; remaining parts black; dorsal surface covered with blackish, short and partially erect vestiture; ventral surface with denser and whitish vestiture.

Frons convex, punctures coarse, umbilicate, nearly contiguous. Antennae exceeding apicis of posterior angles of pronotum by about two articles, strongly serrated from fourth article on; second article globous; third subcylindrical, longer than second; second and third together 1,2x longer than fourth; fourth triangular, as long as wide; fifthtenth more serrate, wider than long; last subellipsoidal, as long as penultimate.

Pronotum trapezoidal, 1,3x wider than long, convex, without midlongitudinal depression; sides tapering regularly from base to apex; posterior angles short and acuminate; lateral margins nearly straight, complete; punctures moderate, rather uniformly distributed, on disc deep, simple or slightly umbilicate with variable intervals, on average equal or larger than their own diameters, at sides a little denser and larger, with very short intervals.

Scutellum shield-like, convex, punctured. Elytra as wide as base of pronotum, 3,5-3,6x longer than pronotum; moderately convex; sides narrowing regularly and gradually from base to apex; striae punctured; even-numbered interstriae more convex than odd-numbered for almost all their length, sparsely punctured.

Aedeagus as in fig. 10 (length 1,37 mm).

Female. Body larger; antennae shorter, just reaching apicis of posterior angles of pronotum.

Size. Length 6,4-11,5 mm; width 1,8-3,2 mm.

A. praeustus Fleutiaux, 1934

Agonischius praeustus Fleutiaux, 1934b: 485.

Poemnites (Gnathodicrus) praeustus. Tarnawski, 2001: 267.

Loc. Typ.: Philippines, Luzon, Mount Makiling (Type: MNHNP) (not examined)

The species was transferred to the subgenus *Poemnites* (*Gnathodicrus*) Fleutiaux by Tarnawki (2001). According to the description it agrees perfectly with the characters of the genus *Agonischius* Candèze and Fleutiaux himself confirmed that it had the same generic characters as *A. pectoralis* Candèze, the type-species of *Agonischius* Candèze. Length 8 mm.

A. sanguinipennis Candèze, 1863

Fig. 11, 59.

Agonischius sanguinipennis Candèze, 1863: 411; 1891a: 201; Fleutiaux, 1899: 571; Schwarz, 1906-7: 274; Schenkling, 1927: 469; Van Zwaluwenburg, 1959: 408.

Loc. Typ.: Java

MATERIAL EXAMINED. Type $\[\]$ - Indonesia: Java (BMNH) (not examined). 13 $\[\]$ - Thailand: Chiang Mai, 6.VI.1992, S. Steinke (CPG; CRG); Naemo Lampang, 17.VI.1991, F. Ferrero (CPG; CRG); Chiang Mai, Maetano, V.1992 (CCW). **REDESCRIPTION**. Male. Moderately shiny; bicoloured; head, antennae, pronotum, scutellum and entire ventral surface except prosternum yellow; legs black; elytra entirely red-orange, sometimes darkened along the suture; vestiture dense and partially erect, blackish on head and pronotum, fulvous on elytra.

Frons convex, punctures deep, simple or slightly umbilicate, with very short intervals. Antennae exceeding apicis of posterior angles of pronotum by about two articles, strongly serrated from fourth article on; second article globous; third subcylindrical, longer than second; second and third together 1,2x longer than fourth; fourth triangular, as long as wide; fifth-tenth more serrate, wider than long; last subellipsoidal, as long as penultimate.

Pronotum trapezoidal, 1,3x wider than long, strongly convex; sides tapering regularly from base to apex; posterior angles short and acuminate; lateral margins nearly straight, complete; punctures moderate, rather uniformly distributed, on disc deep, simple or slightly umbilicate with variable intervals on average equal or larger than their own diameters, at sides a little denser and larger with very short intervals.

Scutellum shield-like, convex, punctured. Elytra as wide as base of pronotum, 3,5-3,6x longer than pronotum; moderately convex; sides narrowing regularly and gradually from base to apex; striae punctured; interstriae flat or subconvex, sparsely punctured.

Aedeagus as in fig. 11 (length 1,37 mm).

Female. Body larger and convexer; antennae shorter, reaching the apices of posterior angles of pronotum.

Size. Length 7,9-10 mm; width 2,37-2,84 mm.

A. sternalis Candèze, 1893

Fig. 56.

Agonischius sternalis Candèze, 1893: 61.

MATERIAL EXAMINED. Holotype ♀ - Indonesia: Java ex coll. Candèze (IRSNB). 7 ♀- Java: K. O. Blawan, Idjen Plateau, m 900-1500, H. Lucht, ex coll. C. v. Nidek (ZMAN; CPG).

Loc. Typ.: Java

REDESCRIPTION. Female. Shiny; bicoloured; head, pronotum except extremities of anterior angles, scutellum, apical third of elytra and ventral surface black; remaining parts of elytra and prosternum yellow-orange; covered with dense, blackish, partially erect vestiture.

Frons convex, punctures umbilicate with very short intervals. Antennae exceeding apicis of posterior angles of pronotum by about two articles, strongly serrated from fourth article on; second article globous; third subcylindrical, longer than second; second and third together 1,5x longer than fourth; fourth triangular, as long as wide; fifthtenth more serrate, wider than long; last subellipsoidal, as long as penultimate.

Pronotum aswider as long, widest at posterior angles, strongly convex; sides narrowing nearly regularly from base to apex; punctures very small, on disc simple or slightly umbilicate, with intervals twice or more than twice as large as their own diameters, a little denser at sides; lateral margins nearly straight, complete.

Scutellum shield-like, moderarely convex, more or less strongly punctured. Elytra as wide as base of pronotum, 3,6x longer than pronotum, convex; sides tapering very gradually from base to apex; striae regularly punctured; interstriae flat, very finely punctured.

Male unknown.

Size. Length 7-7,8 mm; width 1,90-1,93 mm.

A. thoracicus Fleutiaux, 1889

Fig. 12, 49.

Agonischius thoracicus Fleutiaux, 1889: 145; 1918: 259; Candèze, 1891a: 201; Schenkling, 1927: 470.

Loc. Typ.: Cambodia: Mytho, Phnom Penh.

MATERIAL EXAMINED. Type (coll. Fleutiaux, MHNP) (not examined). 84 ♂♀ - Indonesia: N Sumatra, Aceh, 20 km S Kutacane, 360 m, 18. VIII. 1992, Barries & Cate (CCW). Malaysia: Cameron Highlands, 17.V.1988 (CPG). Vietnam: Lac Thò, Hoa Binh, A. de Cooman (det. Fleutiaux) (IRSNB); Tonkin, Hoabinh, VIII.1918, R. Vitalis de Salvaza (IRSNB); 40 km NW of An Khe, Buon Luoi, 620-750 m, 28.III-12.IV.1995, Pacholatko & Dembicky (CCW). Thailand: Pai, 22-29.V.1996, A. Kudrna jr. (CSV); Chiang Mai, 6.VI.1992, S. Steinke (CMHK; CRG); Chiang Mai, Maetaeng, 13.VII.1989 (CCW; CPG); Mae Taman, 50 km NW Chiang Mai, 25.VI.4.VII.1998, E. Kucera (CMHK); Chiang Mai, Maetaeng, 13.VII.1988 (CPG); Chiang Mai, Maetano (CCW); Mae Hong Son, Ban Huai Po, 1600-2000, 17-23.V.1991, J. Horak (CCW); Naemo, Lampang17.VI.1991, F. Ferrero (CRG); Soppong, Mae Hong Son Prov., 600m, 28.V.-2.VI.1999, D. Hauck (CRG); Tarang, I.III.1989 (CCW); Rayong, I.III.1989 (CCW). Laos: 60 km S of Vientiane, 1.IX.2001, R. Hergovits (CSV); Hua Phan Prov., Ban Kangpabong env., 25 km SE of Vieng Xai, 14-18.V.2001, J. Bezdek (CCW); Khan Mouan Prov., Ban Khoun Ngeum, 21-29.IV.2001, P. Pacholatko (CCW); Namnad N.P., 150km W of Khon Khaen, 2-6.V.2004, J. Louda (CRG). Myanmar: without loc., Fea (det. A. mirus) (MCSNG); SW Shan State, Kalaw, 10-11.VI.1997, J. Kalab (CCW); SW Shan State, Nyaungshwe (N of Inle Lake), 7-16.VI.1997, J. Kalab (CCW). India: Assam, 5 km N of Umrangso, 700 m, 21.V.1999, Dembicky & Pacholatko (CCW); Meghalaya, 3 km E Tura, 500-1150 m, 1-8.V.1999, J. Rolcik (CCW); Darjeeling, Suntuk (KPG), 900 m, 14.V.1986, Ch.J. Rai (CSV); Darjeeling, Kalimpong, Khangebung, 1400 m, 21.V.1987, N. Dangal (CCW). Nepal: Arun Valley, Chichila-Mure, 2050 m, 7.VI.1992, J. & J. Probst (CCW); Chitwan- Sauraha, B. Malec (CDZ); Sauraha, 20-25.V.1992, I. Jenis (CMHK); Dhankuta distr., Arun Valley, Hille Shidua, Bhedetar, 2700 m, 24-28.V.1996, P. Cechovsky (CPG); Narayani, Chitawan Distr., Sauraha-Thati Bagh Mara, 200-500 m, 17-21.V.1996, P. Cechovesky (CRG); Arun Valley, Mun-Arunriver-Ruhruna, 1600-900-1200 m, 13.VI.1992, J. & J. Probst (CSV); Royal Chitwan N.P., Dumaria, 21.V.1992, J. Moravec (CSV).

REDESCRIPTION. Male. Shiny; bicoloured; head, scutellum and elytra including epipleura dark bluish with metallic lustre; antennae, prosternal process, sometimes base of prosternum, thorax, abdomen and legs black; pronotum except extremity of anterior margin black; propleura and sometimes partially prosternum, red-orange; covered with moderate, blackish, semi-erect vestiture.

Frons convex, punctures slightly umbilicate, with variable intervals equal to or smaller than their own diameters. Antennae reaching apicis of posterior angles of pronotum, strongly serrated from fourth article on; second article cylindrical, a little longer than wide; third subconical, about twice as long as second; second and third together 1,5x longer than fourth; fourth-tenth triangular; fourth as long as wide, the following articles wider; last ellipsoidal, as long as penultimate.

Pronotum 1,3x wider than long, widest at posterior angles, strongly convex; sides subparallel from base to before the middle, then tapering rather abruptly to apex; punctures moderate, on disc simple to slightly umbilicate, with intervals much larger than their own diameters, somewhat denser at sides and anterior margin; lateral margins nearly straight, complete.

Scutellum shield-like, moderately convex, sparsely punctured. Elytra as wide as base of pronotum, 3,4x longer than pronotum, convex; sides subparallel for about two-thirds of their length; striae finely and regularly punctured; interstriae flat, sparsely punctured.

Aedeagus as in fig. 12 (length 1,07 mm).

Female. Very similar to male, antennae shorter, not reaching apicis of posterior angles of pronotum; intermediate articles more serrate.

Size. Length 5,3-7,5 mm; width 1,56-2,25 mm.

• NEW SPECIES

Agonischius brevilineatus n. sp.

Fig. 13, 69.

MATERIAL EXAMINED. Holotype ♂ - Indonesia: W Sumatra, Padang Panjang, Anai Valley, II.1992 (CCW). 7 Paratypes ♂ - W Sumatra Anai, 8.VII.1993, Widagdo (CCW); W Sumatra, Singgalong, III.1991 (CCW); W Sumatra, VII.1991 (CMHK); W Sumatra, Sago Mts, 1000 m, VIII.1991 (CRG); N Sumatra,

Kerinci Mt, 220 m, 15.V.1991, R. Cermak (CPG); Sumatra, Aceh, 17.VI.1994 (CCW).

DESCRIPTION. Male. Shiny; bicoloured; pronotum reddish with three longitudinal black stripes, one wide and central, two narrower at sides, reaching from base to apex (only in one specimen is the pronotum totally black); scutellum and elytra for the large part black with violet reflexions; second, fourth, fifth and sixth interstriae red only at base, last three interstriae red from base to posterior third; propleura reddish as side stripes of pronotum; prosternum yellow; remaining parts black; vestiture dorsally blackish, short and partially erect, ventrally denser and whitish.

Frons convex, supra-antennal carinae not reaching anterior margin; punctures coarse, umbilicate, with very short and shiny intervals. Antennae exceeding apicis of posterior angles of pronotum by about two articles, strongly serrated from fourth article on; second article globous; third subcylindrical, longer than second; second and third together 1,2x longer than fourth; fourth triangular, as long as wide; fifth-tenth more serrate, wider than long; last subellipsoidal, as long as penultimate.

Pronotum trapezoidal, 1,3x wider than long, convex, without midlongitudinal depression; sides tapering regularly from base to apex; posterior angles short and acuminate; lateral margins nearly straight, complete; punctures moderate, rather uniformly distributed, on disc deep, simple or slightly umbilicate with variable intervals, on average equal or larger than their own diameters, at sides a little denser and larger, with very short intervals.

Scutellum shield-like, convex, punctured. Elytra as wide as base of pronotum, 3,7-3,8x longer than pronotum; moderately convex; sides narrowing regularly and gradually from base to apex; striae punctured; second and fourth interstriae more convex at base, then nearly flat as all others; all interstriae finely punctured.

Aedeagus as in fig. 13 (length 1,5 mm).

Female unknown.

Size. Length 6,85-8,1 mm; width 1,93-2,12 mm.

ETYMOLOGY. The name is derived from the short red lines on the convex second and fourth elytral interstriae.

Agonischius carinatus n. sp.

Fig. 67.

MATERIAL EXAMINED. Holotype $\[\]$ -Indonesia: Seram Island, Maluku, Solea, 12 km SE of Wahai, 17.I-8.II.1997, S. Bily (CCW). 1 Paratype $\[\]$ - same locality as Ht, 16.X.-4.XI.1999, S. Bily (CPG).

DESCRIPTION. Female. Shiny; bicoloured; head, antennae, scutellum, first elytral intervals, sides of elytra from middle to apex, apical third of elytra, prosternal process, thorax and abdomen black; pronotum red-orange with a black midlongitudinal stripe departing from anterior margin and touching the basal slope; remaining parts of elytra yellowish, lighter than pronotum; propleura and prosternum same colour as pronotum; covered with short, blackish, semi-erect vestiture.

Frons convex, punctures coarse, umbilicate, with very short shiny intervals. Antennae not reaching apicis of posterior angles of pronotum by about one article, strongly serrated from fourth article on; second article cylindrical, a little longer than wide; third subconical, less than twice as long as second; second and third articles togethe, 1,5x

longer than fourth; fourth triangular, as long as wide, the following articles wider than long; last subellipsoidal, as long as penultimate.

Pronotum 1,25x wider than long, widest at posterior angles, strongly convex, abruptly sloping at sides and base; sides from base to middle subparallel, then tapering gradually to apex; base with a short, prominent longitudinal carina at inner sides of posterior angles, the latter short, sharp, not or slightly diverging; lateral margins nearly straight, complete; punctures rather uniformly distributed, on disc simple or slightly umbilicate with intervals on average larger than their own diameters, a little denser at sides and anterior margin.

Scutellum shield-like, moderately convex, punctured. Elytra as wide as base of pronotum, 3,4x longer than pronotum, convex; sides narrowing regularly from base to apex; striae well-punctured, interstriae flat, densely and finely punctured.

Male unknown.

Size. Length 8,4-8,5 mm; width 2,25 mm.

ETYMOLOGY. The name is derived from the short carination at the base of pronotum.

Agonischius cordiformis n. sp.

Fig. 66.

MATERIAL EXAMINED. Holotype ♀ -Indonesia: Seram Island, Maluku, Solea, 12 km SE of Wahai, 17.I-6.II.1997, I. Martinu (CCW). 13 Paratypes ♀ – same data as Ht (CCW; CPG; CMHK); same locality, 17.I-8.II.1997, 16.X.-4.XI.1999, S. Bily (CCW; CPG).

DESCRIPTION. Female. Shiny; bicoloured; head, antennae, scutellum, first elytral intervals, sides of elytra from middle, last third or apical extremity, prosternal process, thorax and abdomen black; pronotum red-orange with a black midlongitudinal stripe departing from anterior margin and touching the basal slope, stripe elongate, heart-shaped at apex (one specimen) or more commonly divided into two parts, the posterior heart-shaped; remaining parts of elytra yellowish, lighter than colour of pronotum; propleura and prosternum same colour as pronotum; covered with short, blackish, semi-erect vestiture.

Frons convex, punctures coarse, umbilicate, with very short shiny intervals. Antennae not reaching apicis of posterior angles of pronotum by about one article, strongly serrated from fourth article on; second article cylindrical, a little longer than wide; third subconical, less than twice as long as second; second and third articles together 1,5x longer than fourth; fourth triangular, as long as wide, the following articles wider than long; last subellipsoidal, as long as penultimate.

Pronotum 1,3-1,4x wider than long, subtrapezoidal, widest at posterior angles, strongly convex; sides tapering nearly regularly from base to apex; posterior angles short, sharp, not diverging; punctures rather uniformly distributed, on disc simple or slightly umbilicate with intervals on average larger than their own diameters, a little denser at sides and anterior margin; lateral margins nearly straight, complete.

Scutellum shield-like, flat, punctured. Elytra as wide as base of pronotum, 3,4-3,5x longer than pronotum, convex; sides narrowing regularly from base to apex; striae well-punctured; interstriae flat, densely and finely punctured.

Male unknown.

Size. Length 6,6-8,7 mm; width 2-2,55 mm.

ETYMOLOGY. The name is derived from the shape of the black spot on pronotal disc.

Agonischius discoidalis n. sp.

Fig. 14, 64.

MATERIAL EXAMINED. Holotype ♂ - Thailand: Chiang Mai, 6.VI.1992, S. Steinke (CRG don. MCSNG). 2 Paratypes ♀ - Chiang Mai, Maetang, 28.III.1991 (CPG; CRG).

DESCRIPTION. Male. Moderately shiny; bicoloured; head, antennae, scutellum, prosternal process, thorax, abdomen and legs black; pronotum red-orange with anterior margin and a mid-longitudinal stripe prolonged to the beginning of basal slope black; elytra red-orange, a little lighter than pronotal colour, darkened along suture; propleura and prosternum red-orange as pronotum; covered with dense, semi-erect, blackish vestiture.

Frons convex, punctures deep, slightly umbilicate, with variable interstices equal to or larger than their own diameters. Antennae mutilated after fourth article (antennae nevertheless exceeding apicis of posterior angles of pronotum), strongly serrate from fourth article on; second article subcylindrical, a little longer than wide; third subconical, twice as long as second; second and third together 1,4x longer than fourth; fourth as long as wide.

Pronotum 1,2x wider than long, trapezoidal, strongly and regularly convex; sides tapering regularly from base to apex; posterior angles short, sharp, not diverging; punctures rather uniformly distributed on entire surface, much smaller at base, larger at anterior margin; intervals on average larger than their own diameters.

Scutellum shield-like, convex, with a trace of midlongitudinal carina. Elytra as wide as base of pronotum, 3,3x longer than pronotum, moderately convex; sides tapering gradually and regularly from base to apex; striae regularly punctured; interstriae perfectly flat with very fine and very sparse punctures.

Aedeagus as in fig. 14 (length 1,31 mm).

Female. Very similar to male; body more convex; antennae exceeding apicis of posterior angles of pronotum by about one article.

Size. Length 7,3-8,1 mm; width 1,87-2,18 mm. **ETYMOLOGY**. The name is derived from the presence of a stripe on the disc of pronotum.

Agonischius insolitus n. sp.

Fig. 15, 32, 68.

MATERIAL EXAMINED. Holotype ♂ - Malaysia: Cameron Highlands, Tanah Rata, 1400 m, V.2000, L. Cerny (CDZ). 1 Paratype ♀ - Tanah Rata, 21.III.-2.IV.1995, O. Merkl (at light) (TM).

DESCRIPTION. Male. Moderately shiny; head, prosternal process, thorax and abdomen brownish; pronotum, prosternum and legs yellowish; antennae ferruginous; elytra yellow-ochraceous; covered with moderate, yellow-golden, partially erect vestiture.

Frons convex, punctures umbilicate, with variable interstices on average smaller than their own diameters. Antennae exceeding apicis of posterior angles of pronotum by about 2,5 articles, moderately serrated from fourth article on; second article cylindrical, longer than wide; third coni-

cal, about twice as long as second, a little longer than fourth and with the same dull sculpture; fourth-tenth triangular, just longer than wide; last subellipsoidal, as long as penul-

Pronotum 1,35x wider than long, trapezoidal, widest at posterior angles, regularly convex; sides tapering regularly from base to apex, posterior angles short, converging at extremities; lateral margins nearly straight, complete; punctures very fine and sparse, on disc slightly umbilicate with variable intervals on average larger than their own diameters, at sides a little denser.

Scutellum shield-like flat, nearly smooth. Elytra as wide as base of pronotum, 3,9x longer than pronotum, moderately convex; sides narrowing gradually and regularly from base to apex; striae punctured; interstriae flat, neary smooth.

Aedeagus as in fig. 15 (length 1,25 mm).

Female. Very similar to male; shorter antennae nearly reaching apicis of posterior angles of pronotum; third article subconical and as long as fourth.

Size. Length 9,37-10,1 mm; width 2,56-2,75 mm. **ETYMOLOGY**. The name is derived from the particular appearance of the species with dull colours compared to the other species.

Agonischius magnificus n. sp.

Fig. 65.

MATERIAL EXAMINED. Holotype \bigcirc - Indonesia: Seram Island, VIII.1991, K. Werner (CRG don. MCSNG). 1 Paratype \bigcirc - Sulawesi, Palolo Palu, II.1996 (CCW).

DESCRIPTION. Female. Very shiny; bicoloured; head, antennae, legs, prosternal process, thorax and abdomen black; pronotum trimaculate, one central bottle-shaped spot from anterior margin to base and two almost circular spots at sides; elytra entirely blue-metallic with violet reflections; covered with sparse, erect, blackish vestiture.

Frons convex, punctures deep, umbilicate, with variable intervals on average smaller than their own diameters. Antennae reaching apicis of posterior angles of pronotum, strongly serrate from fourth article on; second cylindrical, a little longer than wide; third subconical, twice as long as wide; second and third together 1,35x longer than fourth; fourth just wider than long, the following articles clearly wider; last subellipsoidal, as long as penultimate.

Pronotum 1,2 x wider than long, widest at posterior angles, strongly convex, sloping abruptly at sides and base with a trace of mid-longitudinal depression at basal slope; sides gently sinuate from base to middle, then narrowing suddenly to apex; posterior angles sharp, not diverging; lateral margins nearly straight, complete; puncturation moderate, denser at anterior margin, sparser at base, on disc deep, simple or slightly umbilicate with variable interstices on average larger than their own diameters, at sides only a little denser.

Scutellum shield-like, moderately convex with midlongitudinal carina, coarsely punctured. Elytra as wide as base of pronotum, 3,7-3,9x longer than pronotum, rather depressed near the suture; sides tapering regularly from base to apex, striae regularly punctured; interstriae flat with finer punctures.

Male unknown.

Size. Length 12,0-12,8 mm; width 2,93-3,10 mm.

ETYMOLOGY. The name is derived from the particular attractive appearance of the species.

Agonischius lineiformis n. sp.

Fig. 16, 70.

MATERIAL EXAMINED. Holotype ♂ - Indonesia: W Sumatra, Merapi Mt., 1000 m, II.1991 (CRG don. MCSNG). 21 Paratypes ♂ - same data as Ht (CPG; CRG); W Sumatra, VIII.1991 (CMHK; CPG); W Sumatra, Solok, VIII.1995 (CSV); W Sumatra, Singgalong, III.1991 (CCW); W Sumatra, Payang, V.1991 (CMHK); Sumatra, Indrapoera, Weyers (IRSNB).

DESCRIPTION. Male. Shiny; bicoloured; pronotum black with two reddish spots variable in size and shape at lateral slopes before the base (in some specimens as two eyes). In one specimen the spots are prolonged to the anterior margin, in three specimens the pronotum is completely black. Scutellum and elytra for the large part black with violet reflexions; second interstria red from base to anterior third; fourth, fifth and sixth interstriae red only at base; last three interstriae red from base to posterior third; propleura black or reddish as pronotum along the sides, entirely or partially; prosternum yellow; remaining parts black; vestiture dorsally blackish, short and partially erect, ventrally denser and whitish.

Frons convex, supra-antennal carinae not reaching anterior margin; punctures coarse, umbilicate, with very short and shiny intervals. Antennae exceeding apicis of posterior angles of pronotum by about two articles, strongly serrated from fourth article on; second article globous; third subcylindrical, longer than second; second and third together 1,2x longer than fourth; fourth triangular, as long as wide; fifth-tenth more serrate, wider than long; last subellipsoidal, as long as penultimate.

Pronotum trapezoidal, 1,15-1,2x wider than long, convex, without mid-longitudinal depression; sides tapering regularly from base to apex; posterior angles short and acuminate; lateral margins nearly straight, complete; punctures moderate, rather uniformly distributed, on disc deep, simple or slightly umbilicate with variable intervals on average equal or larger than their own diameters, at sides a little denser and larger, with very short intervals.

Scutellum shield-like, convex, punctured. Elytra as wide as base of pronotum, 3,4-3,5 longer than pronotum; moderately convex; sides narrowing regularly and gradually from base to apex; striae punctured; second and fourth interstriae convex, the latter from base to the first third of its length, then nearly flat as all others. All interstriae finely punctured.

Aedeagus as in fig. 16 (length 1,28 mm).

Female unknown.

Size. Length 6,87-7,81 mm; width 1,81-2,20 mm.

ETYMOLOGY. The name is derived from the red convex second interstria, which forms a distinct line.

Agonischius mimeticus n. sp.

Fig. 17, 62, 63.

MATERIAL EXAMINED. Holotype ♂ - Malaysia: Sabah, Crocker Range, V.1988, Khoo (CRG don. MCSNG). 2 Paratypes ♀ - Sabah, Crocker Range, 14.VI.1988, 12.VI.1989 (CPG).

DESCRIPTION. Male. Moderately shiny; bicoloured; entirely black, with bronze reflexions on pronotum except for the first half of elytra, which is red-orange with the first interstria black; covered with moderate, blackish, vestiture, partially erect on pronotum.

Frons convex, punctures coarse, umbilicate, with variable intervals on average smaller than their own diameters. Antennae exceeding apicis of posterior angles of pronotum by about two articles, strongly serrated from fourth article on; second as long as wide; third subconical, less than twice as long as second; second and third together 1,27x longer than fourth; fourth triangular, as long as wide, the following articles notably wider than long; last subellipsoidal, as long as penultimate.

Pronotum 1,37x wider than long, trapezoidal, widest at posterior angles, strongly convex, abruptly sloping at sides and base; sides narrowing regularly from base to apex; posterior angles sharp, not diverging; lateral margins moderately curved at middle, complete; punctures moderate, denser at anterior margin, very fine and sparser at base, on disc deep, slightly umbilicate, with intervals on average larger than their own diameters, at lateral extremities denser.

Scutellum shield-like, flat, punctured. Elytra a little wider than base of pronotum, 3,7x longer than pronotum, moderately convex; sides narrowing very gradually from base to apex; striae deeply punctured; interstriae at base moderately convex with sparser and finer punctures, nearly smooth.

Aedeagus as in the fig. 17 (length 1,28 mm).

Female. Red-orange colour of elytra reaching nearly to the extremities, only the first intervals are black for their entire length; body larger and convexer; antennae only reaching apicis of posterior angles of pronotum; elytral interstriae more convex.

Size. Length 8,4-10,6 mm; width 2,31-2,87 mm. **ETYMOLOGY**. The name is derived from the colour of the species, which simulates that of other species such as *A. pectoralis*.

Key to the known species of Agonischius Candèze, 1863 *

- Dorsal surface unicoloured
 Dorsal surface bicoloured or tricoloured
 4
- Entirely blue-metallic with last abdominal segment or abdomen orangeindicus Fleutiaux f. typ.
- Pronotum reddish except for a narrow median part and propleuraindicus Fleutiaux var.
- Entirely black or with indistinct reddish marks at base of elytra and pronotumnigerrimus Fleutiaux
- **4.** Elytra unicoloured, sometimes with suture or apical extremities darkened5
- Elytra bicoloured12

5.	Elytra colour with metallic blackish, greenish or bluish
	reflexions6
_	Elytra colour not metallic, entirely red-orange, some-
6.	times with suture or apical extremities darkened10 Pronotum unicoloured red-orange
_	Pronotum bicoloured red-orange with one or more black
	spots8
7.	Abdominal sternites red-orange mirus Candèze
- 0	Abdominal sternites blackthoracicus Fleutiaux Smaller species (length 5,8-8 mm); pronotum with me-
8.	dian black spot of variable shape and extension extend-
	ing basally from anterior margin; elytra blackish or
	greenish9
_	Larger species (length 12-12.8 mm); pronotum trimacu-
	late with one median bottle-shaped spot from anterior margin to base and two almost circular spots at sides;
	elytra particularly elongate, very shiny blue-metallic
	with violet reflections
9.	Pronotum quadrangular; elytra blackish with feeble
	metallic shadings
_	Pronotum subtrapezoidal; elytra greenish with metallic shadings
10.	Pronotum red-orange with black spot
_	Pronotum entirely black sanguinipennis Candèze
11.	Pronotum with elongate central black spot from apex to
_	beginning of basal slope <i>discoidalis</i> n. sp. Pronotum trimaculate, one median black spot from base
	to apex, two elongate at sides fusiformis Candèze
12.	Prosternum and propleura unicoloured (in some speci-
	mens of pectoralis, lineiformis and brevilineatus the
	outer margin of propleura, totally or partially, can be red-orange, then the even convex interstriae are useful to
	separate these species
_	Prosternum and propleura differently coloured, proster-
	num generally yellow-testaceous (in some specimens of
	<i>elegans</i> the yellow colour can be reduced to prosternal lobe, then pronotum with metallic lustre as elytra)19
_	Prosternum unicoloured, propleura bicoloured with the
	outer sides same colour as prosternum, inner sides black
13.	Prosternum and propleura red-orange as pronotum 14 Prosternum and propleura blackish as pronotum, some-
_	times the prosternal lobe can be lighter
14.	Pronotum entirely red-orange
_	Pronotum with black median spots variable in shape and
15	extension
13.	ornatus Candèze
_	Entire ventral surface reddish as pronotum
	militaris Candèze
16.	Elytra for the large part yellowish with first interstriae
_	and apicis black
	basal spots yellow-orange
17.	Pronotum trapezoidal with mid-longitudinal black spot,
	heart-shaped at apex, more commonly divided into two
	parts or reduced to one heart-shaped spot; base of pronotum without carina <i>cordiformis</i> n.sp.
_	Pronotal sides subparallel from base to middle, disc with
	one mid-longitudinal black spot; base of pronotum with
	a short longitudinal prominent carina at inner sides of
	posterior angles carinatus n. sp.

- **18.** Elytra for the large part blackish with red-orange bands along the sides from base to after the middle; striae very shallow, interstriae perfectly flat.... *bilaterus* Candèze
- Elytra for the large part red-orange with first intervals and posterior half black (male), first intervals and apex black (female); striae deeply punctured, interstriae convex, particularly the second and fourth......

...... mimeticus n. sp.

- **20.** Elytra for the large part blackish or moderately greenish with red-orange bands along the sides from base to after the middle *elegans* Candèze
- **21.** Only the second and fourth elytral interstria more convex than others at base or along anterior third22
- All even-numbered elytral interstriae more convex than others for almost their entire length.. pectoralis Candèze
- **22.** Reddish colour of second convex interstria prolonged along anterior third of elytra *lineiformis* n. sp.
- Reddish colour of second convex interstria prolonged to just behind the scutellum brevilineatus n.sp.
- * Agonischius praeustus Fleutiaux, 1934b: 485 from Luzon, Philippines, is not included.

Vuilletus Fleutiaux, 1940

Vuilletus Fleutiaux, 1940: 123 Type-species: Agonischius altus Candèze, 1889.

Metaricus Nakane & Kishii, 1958: A295. Type-species: Sericosomus viridis Lewis, 1894.

DIAGNOSIS. Elongate, fusiform, cylindrical; bronze, green to bluish or cupreus colour with conspicuous metallic lustre; frons with supra-antennal carinae short, not touching anterior margin; antennae short, at best reaching apicis of posterior angles of pronotum, distinctly serrated from fourth to tenth articles. Pronotum convex, widest at posterior angles, the latter more or less sharp, more or less divergent, clearly unicarinate; basal furrows absent; puncturation rather uniformly distributed, generally moderate, sometimes with sparse punctures.

Scutellum shield-like, punctured, without particular characters. Elytra as wide as pronotum, rounded at apicis.

Prosternal sutures closed at anterior ends; prosternal process subhorizontal behind the procoxal cavities, barely or deeply emarginate at apex.

Male genitalia with median lobe a little longer than parameres, the latter simple at apex; bursa copulatrix without distinct sclerified structures.

Size. Length 5,5-9,5 mm.

DISTRIBUTION. Nepal, India, China, Thailand, Vietnam (species from Taiwan and Japan are excluded in this paper).

• KNOWN SPECIES

V. altus (Candèze, 1889)

Fig. 18, 34, 38, 71.

Agonischius altus Candèze, 1889: 120; 1891a: 201; Schenkling, 1927: 465.

Vuilletus altus. Fleutiaux, 1940: 123; Ôhira, 1971a:180; 1971b:211.

Loc. Typ.: Darjeeling.

MATERIAL EXAMINED. Holotype ♀- India: Darjeeling (IRSNB). 81 $\Diamond \Diamond -$ Darjeeling, ex. coll. Candèze (IRSNB); Darjeeling, Kurseong, ex coll. Candèze (IRSNB; MCSNG); Darjeeling, Kurseong (CCW); Darjeeling, Pudung, 900 m, 6.V.1985, B. Bhakta (NHMB); Darjeeling, Chitre, 2400 m. 29.V.1985, B. Bhakta (NHMW); Darjeeling, Ramam, 2400-2500 m, 19.V.1975, W. Wittmer (NHMB); Darjeeling, Chivo Busty, 1100 m, 9.IV.1985, B. Bhakta (NHMB); Sikkim, Gangtok, 1-4.V.1984, dr. A. Hamet (CMHK; CSV). Nepal: Hille-Basanthpur, 24.V.1996, B. Malec (CDZ); Lantag Mt. Dunche, V.1996, B. Malec (CDZ); Bagmati, Nuwakot, Gul Bhanjyang, 2300 m, C. Holzschuh (CCW); Kosi Zone, Dhankuta Distr., Arun Valley, Hille-Shidua, Bhedetar, 2000-2700m, 24-28.V.1996, P. Cechovsky (CPG; CRG); Dharan, 22.V.1996, B. Malec (CDZ); Katmandu Valley, Basantapur, 2300 m, 30.V.-2.VI.1985, M. Brancucci (NHMB); Chitre Ghar Kho, 26-31.V.1989, C. Holzschuh (CSV); Modi Khola, Pothana, 1900 m, 5-7.V.1984, C.J. Rai (NHMB); Arun Valley, Mure-Num, 2050-1600 m, 10.VI.1992, J. & J. Probst (CCW); Koshi, Simraghat, 500 m 13.VI.1985, M. Brancucci (NHMB); Modi Landrung, 3-6.VI.1984, C. Holzschuh (CSV); Modi Khola, Pothana-Landrung, 1900-1600 m, 7.V.1984, C.J. Rai (NHMB); Sankhua Sabha Distr., Arun Valley, between Mure and Hurure, 2050-2150 m, 17.VI.1988, Martens & Schawaller (mixed broad leaved forest) (SMTS); Taplejung Distr., Yamputhin ascent to Pass Deorali, 2100-2600m, 16.V.1988 (cultural land, bushes) (SMTS); Modi Khola, Landrung-Gandrung, 1600-2000 m, 8.V.1984, B. Bhakta (NHMB); Arun Valley, Arunthan-Chichila, 1300-1950m, 29.V.1983, M. Brancucci (NHMB); Koshi, Gufa-Gorza, 2800-2100 m, 4.VI.1985, M. Brancucci (NHMB); Arun Valley, Num, 1550 m, 5-6. VI. 1983, M. Brancucci (NHMB); Arun Valley, Chichila, 1950 m, 31.V.1983, M. Brancucci (NHMB); Hong Gaon, Kemathanka, 2900 m, 30.V.1980, W. Wittmer (NHMB).

REDESCRIPTION. Male. Very shiny; metallic colours rather variable; head, pronotum, scutellum, propleura and prosternum entirely dark green or with cupreous lustre; elytra dark green save around the suture and lateral extremities; antennae blackish with first three articles yellow; thorax, abdomen and legs yellow; covered with short, recumbent, indistinct, blackish vestiture.

Frons convex on vertex, flat at anterior margin; punctures of variable size, deep, simple or slightly umbilicate with variable and very short intervals. Antennae short, not reaching apicis of posterior angles of pronotum by about two articles; second article cylindrical, a little longer than wide; third subconical, slightly longer than second; second and third together 1,5x longer than fourth; fourth-tenth triangular; fourth more slender than the following articles, a little longer than wide; fifth-tenth as long as wide; last subellipsoidal, symmetrically constricted at apex.

Pronotum just wider than long, widest at posterior angles, strongly convex; sides tapering gradually from behind the middle to apex, more or less sinuate before posterior angles, the latter long, sharp, not or just barely diverging, with short carina directed mediad; lateral margins complete, visible from base to middle in dorsal view; punctures

moderate, on disc deep, simple with intervals on average twice their own diameters.

Scutellum shield-like, often transversally depressed at middle, punctured. Elytra as wide as base of pronotum, 2,9x longer than pronotum, moderately convex; sides subparallel in anterior third, then tapering gradually to apex; striae finely punctured, often shallow in posterior third; interstriae flat except for the base of third, which is convex, very sparsely punctured.

First four tarsal articled dilated, second and third wider than long, covered with robust and dense setae.

Aedeagus as in fig. 18 (length 1,90 mm).

Female. Very similar to male; antennae shorter; tarsal article less dilated, second and third as long as wide.

Size. Length 7,3-9,5 mm; width 2,05-2,70 mm.

V. gemmula (Candèze, 1878)

Agonischius gemmula Candèze, 1878: 50; 1891a: 201; Ôhira, 1968: 366. Schwarz, 1906-7: 275; Schenkling, 1927: 466.

Loc. Typ.: China: Hong Kong.

MATERIAL EXAMINED. No material available. The holotype was lost in a postal consignment from Bruxelles to Dr. Jiang (China) (J. Constant, in litteris).

We give the original description of the species. No specimens were available from Honk Kong, the type locality, or southeast regions of China. The description of Candèze is very short, and it is impossible to recognize the species as the descriptive characters are common to several other species also. Ôhira (1968) is of the opinion that *V. mushanus* (Miwa) from Taiwan could be a junior synonym of *V. gemmula*. I have examined specimens of the Taiwanese *V. mushanus* but the description of *V. gemmula* doesn't agree, particularly with respect to the pronotal puncturation, which is very dense in *V. mushanus*.

"Viridis metallicus nitidus parum pubescens, articulis latis nigris basi rufis protorace latitudine longiore a basi coarctato sparsim punctato angulis posticis divaricatis acute carinatis elytris prothotace latioribus strii fortiter punctatis pedibus rufis"

Size. Length 5,5 mm; width 1,1 mm.

V. potanini Gurjeva, 1972

Fig. 19, 74.

Vuilletus potanini Gurjeva, 1972: 306; Jiang, 1994: 84.

MATERIAL EXAMINED. Holotype ♂- China: Sichuan: Kandin (Da-tsejan-li), 22.VI.1893, C. Potanin, ex coll. Semenov-Tian-Shansky (ZISP). 9 ♂♀ - Sichuan: Jintiang (Tcho-nin), 15-20.VI.2002, E. Kucera (CCW); Sichuan, Jintang Jiajin Shan (30°22'451"N, 102°16'644"E), 2300 m 15.VII.2004, M. Janata; (1) Sichuan, Guanxian, 2100 m, 24.VII.1983 (CCW; CPG; CSV). (The paratype ♀ mentioned by Gurjeva (1972) belongs to *V. gurjevae* n. sp.).

REDESCRIPTION. Male. Shiny; metallic colours moderately variable; dorsal surfave, prothorax and thorax entirely dark green with metallic lustre, often mixed with bronze, cupreous or bluish reflexions; abdomen totally or partially ferruginous; legs yellowish; antennae black with first two or three articles yellowish; body covered with fine, moderately dense, recumbent, yellowish vestiture.

Pronotum just wider than long, widest at posterior angles, moderately convex; sides compressed at middle,

then gently dilated at anterior third, not sinuate before the posterior angles; the latter long, sharp, not diverging, with a prominent carina directed mediad; lateral margins complete, visible from base to middle in dorsal view; punctures very fine, deep and simple on disc, with intervals much larger than their own diameters.

Scutellum shield-like, flat or gently depressed at middle, punctured. Elytra as wide as base of pronotum, 2,8x longer than pronotum, convex; sides subparallel from base to middle, then gradually tapering; striae more or less punctured; interstriae flat, except for the third, which is more or less strongly convex at base, very sparsely punctured.

Prosternum transversally impressed behind the middle. Aedeagus as in fig. 19 (length 1,5 mm).

Female. Similar to female; body convexer; antennae shorter.

Size. Length 7-8 mm; width 1,87-2,18 mm.

• NEW SPECIES

Vuilletus candezei n. sp.

Fig. 20, 77.

MATERIAL EXAMINED. Holotype &- China: Yunnan, Yanmen, 13-23.VI.2005, E. Kucera (CSV). 26 Paratypes ∂♀ -Yunnan, Lugu Lake, Luo Shui (27°45'N, 100°45'E), 8-9.VII.1992, S. Becvar (CCW); Yunnan, Ninglang env. (27°19'N, 100°55'E), 6-10.VII.1992, S. Becvar (CCW); Yunnan, Baishui, 9-14.VII.1995, E. Kucera (CMHK; CPG); N Yunnan, 20 km N Lijiang, 3000 m, Murzin (CDZ; CPG); Yunnan, Heishui, 35 km N Lijiang, 18.VI-4.VII.1993, S. Becvar (CMHK); Yunnan, Dali, above Lake Erhai, 31.V. 1995, S. Becvar (CCW); Yunnan, Baishui, Yulongshan, 2900-3500 m, 7-12.VII.1990, V. Kuban (CCW; CSV); C Sichuan, Gongga Mts, Hailugou N.P. (29°34'6"N, 102°00' 0"E), 3397 m, V.2004, Hackel & Sehnal (CCW); Sichuan, Kanding env., Dagu, 3000 m, 27-29.VII.1992 (CSV); Sichuan, Daxue Shan, 2850 m, V. Siniaev & Plutenko (CCW; CDZ); Sichuan, Liziping near Shimien, 27.VI-3.VII.1991, Z. Kejval (CSV); Sichuan, Sabde, 24-28.VI.2001, E. Kucera (CSV); Sichuan, right bank of Niuzhihe river, E of Pusiun vill., 2200-2800m, 15-16.VI.2000, G. Davidian (CSO).

DESCRIPTION. Male. Shiny; metallic colours rather variable; dorsal surface, prothorax and thorax entirely dark green with metallic lustre often bronze or head and pronotum bronze with elyra moderately green with bluish reflexions; abdomen blackish or partially ferruginous; legs yellowish; antennae black with first two articles yellowish; covered with fine, moderately dense, recumbent, yellowish vestiture.

Frons convex on vertex, flat at anterior margin; punctures of variable size, deep, simple or slightly umbilicate with variable and very short intervals. Antennae nearly reaching apicis of posterior angles of pronotum, serrated from fourth article on; second article cylindrical; third subconical, longer than wide; second and third together 1,3x longer than fourth; fourth-tenth triangular; fourth slender, the following articles as long as wide; last subellipsoidal, a little longer than penultimate, symmetrically constricted at apex.

Pronotum just wider than long, widest at posterior angles, convex, sometines with trace of mid-longitudinal depression at basal slope; sides moderately arcuate at middle, feebly sinuate before posterior angles, the latter sharp, diverging, with a prominent carina directed mediad; lateral margins complete, visible from base to middle in dorsal view; punctures moderate, on disc simple, deep, with intervals on average larger than their own diameters.

Scutellum shield-like, flat or transversally depressed at middle, finely punctured. Elytra as wide as base of pronotum, 2,8-3x longer than pronotum, convex; sides subparallel from base to middle, then gradually tapering; striae more or less punctured; interstriae flat, very sparsely punctured.

Aedeagus as in fig. 20 (length 1,5 mm).

Female. Very similar to male; body convexer; antennae shorter.

Size. Length 6,2-8,2 mm; width 1,62-2,31 mm. ETYMOLOGY. The species is dedicated to E. Candèze, who described the type species of the genus.

Vuilletus confusus n. sp.

Fig. 21, 35, 72.

MATERIAL EXAMINED. Holotype &- India: Darjeeling, Chivo Busty, 1100 m, 9.IV.1985, B. Bhakta (NHMB). 175 Paratypes $\Diamond \mathcal{P}$ - same data as Ht (NHMB; CPG); Darjeeling ex Candèze coll, Agonischius altus (IRSNB); Kurseong, ex. Candèze coll., P. Braet (Agonischius altus det. Fleutiaux) (IRSNB); Kurseong, 1910, D. Montandon (Agonischius altus det. Fleutiaux) (MCSN); Darjeeling, Tiger Hill, 2150 m, 6.VI.1975, W. Wittmer (NHMB); Darjeeling, Tiger Hill, 2500 m, 7.V.1975, W. Wittmer (NHMB); Darjeeling, Shiri-Khola-Rim, 1950-2350 m, 21.V.1975, W. Wittmer (NHMB); Darjeeling, Lebong, 1600-1800 m, 11.V.1975, W. Wittmer (NHMB); Darjeeling, Ramam, 2450 m, 20.V.1975, W. Wittmer (NHMB); Darjeeling, Tonglu-Garibas, 3050-2600 m, 7.VI.1975, W. Wittmer (NHMB); Sikkim, Gangtok, 1-4.V.1984, dr. A. Hamet (CCW; CMHK); NW Bengal, Rimbik-Shirikhola, 10-14.VI.2003, E. Kucera (CSV); NW Bengal, Rimbik-Shirikhola, 2650 m, 15-27.V.2006, E. Kucera (CSV); Kashmir, Gulmarg-Tangmarg, 2650-2300, 3.VII. 1976, W. Wittmer (CSV). Nepal: Koshi, Basantapur, 2300 m, 30.V.-2.VI.1985, M. Brancucci (NHMB; CPG); Koshi, Gufa -Gorza, 2800-2100 m, 4.VI.1985, M. Brancucci (NHMB); Sankhua Sabha Distr., Pahakhola, 2550 m, 30-31.V.1988, Martens & Schawaller, cultural land bushes (SMTS); Sankhua Sabha Distr., above Pahakhola, 2600-2800m, 31.V.-5.VI.1988, Martens & Schawaller (Quercus semecarpifolia-Rhododendron) (SMTS); Taplejung Distr., Yamputhin ascent to Pass Deorali, 2100-2600m, 16.V.1988 (cultural land, bushes) (SMTS); Taplejung Distr., Omje Kharka NW Yamputhin, 2300-2500m, 1-6.V.1988, Martens & Schawaller (mature mixed broad-leaved forest) (SMTS); Koshi, Chauki, 2700 m, 2.VI.1985, M. Brancucci (NHMB); Arun Valley, Mure-Num, 2000-1550 m, 4-7.VI.1983, M. Brancucci (NHMB); Arun Valley, Mure-Num, 2050-1600 m, 10.VI. 1992, J. & J. Probst (CCW); Koshi, Chitre, 2400 m, 29.V.1985, M. Brancucci (NHMB); Kosi Zone, Dhankuta Distr., Arun Valley, Hille-Shidua, Bhedetar, 2000-2700m, 24-28.V.1996, P. Cechovsky (CMHK; CRG); Arun Valley, Hille-Shidua, Bhedetar, 2000-2700m, 5-8.VI.1999, J. Dalihod (CRG); Lantag Mt. Dunche, V.1996, B. Malec (CDZ); Godawari Pr., Katmandu, 1-4.VI.1996, B. Malec (CDZ); Koshi, Simraghat, 500 m, 13.VI.1985, M. Brancucci (NHMB); Mt Everest, 28.VI.1910 (ZMW); Hille-Basantapur, 24.V.1996, B. Malec (CDZ); Dharan, 22.V.1996, B. Malec (CDZ); Koshi, Hille-Mutidhunga, 2000-2200 m, 27.V.1985,

M. Brancucci (NHMB); Namche Bazar, Khumbu, 3200 m, 3.VI.1979, B. Bhakta (NHMB); Bagmati, Sindhupalchok, Sarmatang, 2500m, 4.VI.1989, C. Holzschuh (CCW); Lamiura, Khumbu, 3200 m, 28.VI.1979, B. Bhakta (NHMB); Chitwan, 18.V.1996, B. Malec (CDZ); Gosaigonda Halambu, 1300 m, 1-16.V.1989, Pasang (CCW); Arun Valley, Arunthan-Chichila, 1300-1950, 29.V.1983, M. Brancucci (NHMB); Koshi, Muthidunga-Chitre, 2200-2400 m, 28.V.1985, M. Brancucci (NHMB); Arun Valley, 1000-1200 m, V. 1980, W. Wittmer (NHMB).

DESCRIPTION. Male. Shiny; metallic colours; dorsal surface and prothorax entirely dark green with metallic lustre often bronze; thorax, abdomen and legs yellowish, sometimes metathorax darkened; antennae black with first two or three articles yellowish; covered with fine, moderately dense, recumbent, yellowish vestiture.

Frons convex on vertex, flat at anterior margin; punctures of variable size, deep, simple or slightly umbilicate with variable and very short intervals. Antennae reaching apicis of posterior angles of pronotum, serrated from fourth article on; second article cylindrical; third subconical, longer than wide; second and third together 1,3x longer than fourth; fourth-tenth triangular, a little longer than wide; last subellipsoidal, symmetrically constricted at apex.

Pronotum 1,1x wider than long, widest at posterior angles, convex, sometimes with trace of mid-longitudinal depression at basal slope; sides moderately arcuate at middle, feebly sinuate before posterior angles, the latter sharp, diverging, with a prominent carina directed mediad; lateral margins complete, visible from base to middle in dorsal view; punctures moderate, on disc simple, deep, with intervals on average larger than their own diameters.

Scutellum shield-like, flat or transversally depressed at middle, finely punctured. Elytra as wide as base of pronotum, 2,9x longer than pronotum, convex; sides subparallel from base to middle, then gradually tapering; striae more or less punctured; interstriae flat except for base of third convex, very sparsely punctured.

Aedeagus as in fig. 21 (length 1,37 mm).

Female. Body larger and convexer; antennae shorter. Size. Length 6,2-8,7 mm; width 1,62-2,46 mm.

ETYMOLOGY. The species was generally confused with V. *altus* (Candèze) and determined as such in many collections.

Vuilletus glacialis n. sp.

Fig. 22, 40, 79.

MATERIAL EXAMINED. Holotype ♂- China: W Sichuan, Daxue Shan, Hailuogou Glacier Park (Gongga Shan) tongue of glacier (29°34'N, 102°00'E), 3200 m, 29.V.1997, D. Wrase (CCW).

DESCRIPTION. Male. Very shiny; metallic colours; head, pronotum, propleura, prosternum, thorax and scutellum dark with bronze, moderately cupreous, lustre; elytra dark green; antennae black except for the two first articles ferruginous; legs ferruginous; covered with short, recumbent, indistinct, blackish vestiture.

Frons convex on vertex, flat at anterior margin, punctures coarse, deep, simple with variable intervals on average smaller than their own diameters. Antennae not reaching apicis of posterior angles of pronotum by about 1,5 articles, serrated from fourth article on; second article subcylindrical; third subconical, subequal in length to second; second

and third together 1,5x longer than fourth; fourth-tenth triangular; fourth slender, as long as wide; the following articles wider than long; last subellipsoidal, just longer than penultimate.

Pronotum 1,15x wider than long, widest at posterior angles, strongly convex; sides regularly arcuate, sinuate before posterior angles, the latter long, sharp, diverging, with a shallow carina directed mediad; punctures very fine, variable in size and density, on disc with intervals on average larger than their own diameters, lateral margins complete, not visible in dorsal view.

Scutellum shield-like, convex, very finely punctured. Elytra as wide as base of pronotum, 3x longer than pronotum, moderately convex; sides subparallel from base to middle, then gently dilated and therafter narrowing to apex, widest behind the middle; striae regularly punctured; interstriae flat to subconvex, sparsely punctured.

Prosternal process slightly emarginated at apex (fig. 39). Aedeagus as in fig. 22 (length 1,31 mm).

Female unknown.

Size. Length 6,7 mm; width 2 mm.

ETYMOLOGY. The name refers to the occurrence of the species in Hailuogou Glacier Park.

Vuilletus gurjevae n. sp.

Fig. 23, 41, 75.

MATERIAL EXAMINED. Holotype & China: Yunnan, Yanmen, 13-23.VI.2005, E. Kucera (CSV). 25 Paratypes ∂♀same data as Ht (CPG; CSV); Yunnan ex Candèze coll. (altus det. Candèze) (IRSNB); Yunnan, Habashan SE slope (27°20'N, 100°11'E), 4-5.VI.1995, S. Becvar (CRG); Yunnan, Baishui, 3000, 26.VI-3.VI.1996, E. Kucera (CDZ); Yunnan, Dali, 28.V.-9.VI.1994 (CMHK); N Yunnan, 20 km N Lijiang, 3000 m, Murzin (CMHK); Yunnan, Dali, above lake Erhai, 31.V.1995, S. Becvar (CCW); NW Yunnan, Deqen Co., Mekong side of Hengduan Shan, S of Meilixue Shan, 3500-4300 m, 3-5.VI.1999, L. & R. Businsky (CCW); E Tibet, valley SW of Tangmai & env. (3002'N, 95°01-07'E), 2100-2300 m, 4-5.VII.1996, L. & R. Businsky (CCW); Sichuan, 22 VII 1885, C. Potanin (coll. Gurjeva, ZISP); Sichuan, Daxue Shan, 2850 m, V. Siniaev & Plutenko (CDZ); Sichuan, Sabde, 24-28.VI.2001, E. Kucera (CSV); Sichuan, Daxue Shan, N Mianning, 2350 m, VI.1999, Plutenko (CDZ); Sichuan, Liziping near Shimien, 27.VI-3.VII.1991, Z. Kejval (CSV); Sichuan, right bank of Niuzhihe river, E of Pusiun vill., 2200-2800m, 15-16.VI.2000, G. Davidian (CSO); Sichuan, Kanding env., Dagu, 3000 m, 27-29.VII.2002 (CSV); Sichuan, Guanxian, 2100 m, 24.VII.1983 (CCW).

DESCRIPTION. Male. Shiny; metallic colours rather variable; dorsal surface, prothorax and thorax entirely green with bronze reflexions to dark green with bluish reflexions; antennae black with first three articles yellow; abdomen totally yellow; legs yellow; covered with rather dense, yellowish, recumbent vestiture.

Frons convex on vertex, flat at anterior margin; punctures coarse, deep, simple with variable interstices smaller than their own diameters. Antennae not reaching apicis of posterior angles of pronotum by about 1,5 articles, serrated from fourth article on; second subcylindrical; third subconical, longer than wide, subequal in length to second; second and thirds together 1,5x longer than fourth; fourth-tenth triangular; fourth slender, a little longer than wide; the fo-

llowing articles as long as wide; last subellipsoidal, a little longer than penultimate, moderately constricted before the apex.

Pronotum 1,15x wider than long, widest at posterior angles, strongly convex; sides moderately arcuate, just barely sinuate before posterior angles, the latter long, sharp, diverging, with a shallow carina directed mediad; punctures very fine, variable in size and density, on disc with intervals on average larger than their own diameters, lateral margins complete, visible from base to middle in dorsal view.

Scutellum shield-like, convex, often with a trace of mid-longitudinal carina, very finely punctured. Elytra as wide as base of pronotum, 2,9x longer than pronotum, moderately convex; sides gradually tapering from base to apex; striae regularly punctured; interstriae flat to subconvex, sometimes base of third more convex, sparsely punctured.

Prosternal process deeply emarginated at apex (fig. 40). Aedeagus as in fig. 23 (length 1,37 mm).

Female. Similar to male; body convexer; antennae shorter.

Size. Length 6,3-8,7 mm; width 1,68-2,56 mm.

ETYMOLOGY. The species is dedicated to the Russian elaterid specialist, Dr. E. Gurjeva, who described one of the species of the genus.

Vuilletus himalayanus n. sp.

Fig. 24, 42, 76.

MATERIAL EXAMINED. Holotype ♂- Nepal: Bagmati, Sindhupalchok, Sarmatang, 2500m, 4.VI.1989, C. Holzschuh (CCW); 18 Paratypes ♂♀ - same data as Ht (CCW; CPG); Koshi, Gufa –Gorza, 2800-2100 m, 4.VI.1985, M. Brancucci (NHMB); Koshi, Waku-Sakranti-Thaklung, 1600-2200-1500 m, 10.VI.1985, M. Brancucci (NHMB); Koshi, Chauki, 2700 m, 2.VI.1985, M. Brancucci (NHMB); Arun Valley, Hille-Shidua, Bhedetar, 2000-2700m, 5-8.VI.1999, J. Dalihod (CRG). India: Darjeeling, Tonglu-Garibas, 3050-2600 m, 7.VI.1975, W. Wittmer (NHMB); Darjeeling, Tonglu, 3070 m, 1-3VI.2006, E. Kucera (CSV); Darjeeling, Rimbik-Shrikola, 2650 m, 15-27.V.2006, E. Kucera (CSV); W Arunachal Pradesh, Tawang Monastery vicinity, 2700-3000 m, 15-27.V.2004, L. Dembicky (CCW).

DESCRIPTION. Male. Shiny; metallic colours rather variable; dorsal surface, prothorax and thorax entirely green to bronze with moderate cupreous reflexions to dark green with bluish reflexions; antennae black with first three articles yellow; abdomen totally or partially yellow; legs yellow; covered with rather dense, yellowish, recumbent vestiture.

Frons convex on vertex, flat at anterior margin; punctures coarse, deep, simple with variable interstices smaller than their own diameters. Antennae nearly reaching apicis of posterior angles of pronotum, serrated from fourth article on; second subcylindrical; third subconical, longer than wide, subequal in length to second; second and third together 1,5x longer than fourth; fourth-tenth triangular; fourth slender, a little longer than wide; the following articles as long as wide; last subellipsoidal, a little longer than penultimate, moderately constricted before the apex.

Pronotum 1,2x wider than long, widest at posterior angles, convex; sides moderately and regularly arcuate at middle, more or less sinuate before posterior angles, the latter sharp, more or less diverging, with a feeble carina

directed mediad; lateral margins complete, visible from base to middle in dorsal view; punctures on disc simple or slightly umbilicate, with intervals on average equal to their own diameters.

Scutellum shield-like, more or less convex, finely punctured. Elytra as wide as base of pronotum, 3,2x longer than pronotum, convex; sides subparallel from base to middle, then gradually tapering to apex; striae very superficial, interstriae flat with finer punctures.

Prosternal process bent immediately behind the procoxal cavities, emarginate at apex (fig. 41).

Aedeagus as in fig. 24 (length 1,31 mm).

Female. Very similar to the male; body larger and more convex; antennae shorter.

Size. Length 6,2-8 mm; width 1,75-2,25 mm.

ETYMOLOGY. The name is derived from the Himalaya mountain range, where the species lives.

Vuilletus maoxianus n. sp.

Fig. 25, 81.

MATERIAL EXAMINED. Holotype ♂- China: Sichuan, Maoxian env., 2500-3000 m, 15.VII.2003, S. Murzin (CRG don. MCSNG). 1 Paratype ♂- same data as Ht (CPG).

DESCRIPTION. Male. Shiny; metallic colours; dorsal surface, prothorax and thorax entirely bright green; abdomen blackish with sides of sternites yellowish; antennae black with first three articles yellowish; legs yellowish; covered with moderate, recumbent, yellowish vestiture.

Frons convex on vertex, flat at anterior margin, punctures coarse, deep, with variable, on average very short intervals. Antennae not reaching apicis of posterior angles of pronotum by about two articles, serrated from fourth article on; second subcylindrical; third subconical,longer than second; second and third together 1,5x longer than fourth; fourth-tenth triangular; fourth slender, a little longer than wide; the following articles as long as wide; last subellipsoidal, a little longer than penultimate.

Pronotum just wider than long, widest at posterior angles, moderately convex; sides subparallel at middle, narrowing at anterior third, gently sinuate before posterior angles; the latter long, sharp, just diverging with a short, prominent carina directed mediad; lateral margins complete, visible for about two-thirds of its length in dorsal view; punctures rather uniformly distributed, on disc deep, simple, with intervals on average equal to their own diameters, larger and denser at anterior margin and sides.

Scutellum shield-like, flat or moderately convex, finely punctured. Elytra as wide as base of pronotum, 2,8x longer than pronotum, convex; sides subparallel from base to middle, then gradually tapering to apex; striae well-punctured; interstriae flat, finely punctured.

Aedeagus as in fig. 25 (length 1,31 mm).

Female unknown.

Size. Length 6,3-6,4 mm; width 1,75-1,81 mm.

ETYMOLOGY. The name is derived from the type locality of the species, Maoxian.

Vuilletus murzini n. sp.

Fig. 26, 82.

MATERIAL EXAMINED. Holotype ♂- China: Sichuan, Maoxian env., 2500-3000 m, 15.VII.2003, S. Murzin (CRG don. MCSNG). 1 Paratype ♂- same data as Ht (CPG).

DESCRIPTION. Male. Shiny; metallic colours; dorsal surface, prothorax and thorax entirely bright green; abdomen blackish with sides of sternites or last two entirely yellowish; antennae black with first two articles, sometimes also base of third article yellowish; legs yellowish; covered with moderate, recumbent, yellowish, vestiture.

Frons convex on vertex, flat at anterior margin, punctures coarse, deep, with variable, on average very short intervals. Antennae nearly reaching apicis of posterior angles of pronotum, serrated from fourth article on; second subcylindrical; third subconical, longer than wide; second and third together 1,5x longer than fourth; fourth-tenth triangular; fourth slender, a little longer than wide; the following articles as long as wide; last subellipsoidal, a little longer than penultimate.

Pronotum as long as wide or just wider than long, widest at posterior angles, moderately convex; sides subparallel at middle, narrowing at anterior third, gently sinuate before posterior angles; the latter long, sharp, just diverging with a short, prominent carina directed mediad; lateral margins complete, visible for about two-thirds of its length in dorsal view; punctures rather uniformly distributed, on disc deep, simple, with intervals on average equal to their own diameters, larger and denser at anterior margin and sides.

Scutellum shield-like, flat or moderately convex, finely punctured. Elytra as wide as base of pronotum, 2,7x longer than pronotum, convex; sides subparallel from base to middle, then gradually tapering to apex; striae well-punctured; interstriae flat, finely punctured.

Female unknown.

Aedeagus as in fig. 26 (length 1,56 mm).

Size. Length 6- 6,5 mm; width 1,68-1,75 mm.

ETYMOLOGY. The species is dedicated to S. Murzin, collector of the specimens.

Vuilletus schimmeliorum n. sp.

Fig. 27, 36, 78.

MATERIAL EXAMINED. Holotype ♂- Nepal: Katmandu Valley, Nargakot, 8-10.V.1993, R. & I. Schimmel (CSV). 9 Paratypes ♂♀ - same data as Ht (CSV); Katmandu Valley, Budhanilkantha, 1500-2150 m, 26.V.1992, J. & J. Probst (CPG); Janakpur, Jiri Via Those, 23.V.1980, E. Migliaccio (CPG); Janakpur (Khimti-Khola), Shivalaya-Negalle, 1800-2300 m, 13.VI.1987, C. Holzschuh (CCW); Bagmati, Sindhupalchok, Sarmatang, 2500m, 4.VI.1989, C. Holzschuh (CCW); Bagmati, Sindhupalchok, Dubhachaur-Dubhachaur, 800-1600m, 2.VI.1989, C. Holzschuh (CCW); Koshi, Gufa-Gorza, 2800-2100 m, 4.VI.1985, M. Brancucci (NHMB). China: W Sichuan, Daxue Shan, Hailuogou Glacier Park Camp, 3000-3100 m, 29.V.1997, M. Schülke (CCW).

DESCRIPTION. Male. Shiny; metallic colours; dorsal surface, propleura and prosternum entirely moderately dark green with metallic lustre; thorax, abdomen and legs yellowish; antennae black with first two or three articles yellowish; covered with fine, moderately dense, recumbent, yellowish vestiture.

Frons convex on vertex, flat at anterior margin, punctures deep, of variable size and density. Antennae nearly reaching apicis of posterior angles of pronotum, serrated from fourth article on; second article subcylindrical, as long as wide; third subconical or conical, as long as wide; second and third together 1,3x longer than fourth; fourth-tenth

triangular, as long as wide; last ellipsoidal, a little longer than penultimate.

Pronotum just wider than long, widest at posterior angles, strongly convex; sides moderately arcuate at middle, sinuate before posterior angles; the latter long, sharp, feebly diverging, with a short carina directed mediad; lateral margins complete, visible from base to middle in dorsal view; punctures moderate, on disc deep, simple or slightly umbilicate with intervals more than twice as large as their own diameters.

Scutellum shield-like, often with transversal depression or flat, sparsely punctured. Elytra as wide as base of pronotum, 2,8-2,9x longer than pronotum, moderately convex; sides suboval, widest at middle; striae regularly punctured; interstriae flat, finely and sparsely punctured.

Aedeagus as in fig. 27 (length 1,18 mm).

Female. Very similar to male; body convexer; third antennal article slender.

Size. Length 5,7-7 mm; width 1,62-1,93 mm.

ECOLOGICAL NOTES. The species was collected by R. & I. Schimmel on a hot day (30° C) from the green leaves of *Rhododendron* sp.

ETYMOLOGY. The species is dedicated to my colleague, specialist of Elateridae, Mr. Rainer Schimmel and his wife Ingrid, who collected some of the specimens during their trip to Nepal.

Vuilletus semicupreus n. sp.

Fig. 28, 80.

MATERIAL EXAMINED. Holotype ♂ - Thailand: Mae Hong Son, Soppong, 9-12.V.1996, S. Bily (CCW). 6 Paratypes (1♂4♀) - same data as Ht (CCW; CPG); Mae Hong Son, Soppong, 1500 m, 12.V.1996, S. Becvar (CRG); Mae Hong Son, Ban Huai Po, 1600-2000 m, 9-16.V.1991, J. Horak (CCW); Nan prov., Doi Phuka N:P.28.IV-12.V.2002, R. Prudek & M. Obonl (CRG). Vietnam: Chapa, Jeanvoinei (Agonischius altus Candèze, ex. coll and det. Fleutiaux) (IRSNB).

DESCRIPTION. Male. Shiny; metallic colours; dorsal surface bicoloured; pronotum, propleura, prosternum, first intervals and lateral extremities of elytra dark green with metallic lustre, remaining parts of elytra cupreous; apex of prosternal process, thorax and abdomen yellowish; covered with short, recumbent, blackish, vestiture.

Frons convex on vertex, flat at anterior margin, punctures of variable size and density, deep, simple or vaguely umbilicate. Antennae not reaching apicis of posterior angles of pronotum by about 1,5 articles, serrated from fourth article on; second subcylindrical; third subconical, subequal in length to second; second and third together 1,3x longer than fourth; fourth-tenth triangular; fourth slender, a little longer than wide; the following articles as long as wide; last subellipsoidal, a little longer than penultimate, symmetrically constricted before the apex.

Pronotum 1,16x wider than long, widest at posterior angles, strongly convex; sides strongly arcuate at middle, conspicuously sinuate before posterior angles; the latter long, sharp, diverging, with a prominent, short, carina directed mediad; lateral margins complete, visible for almost all its length in dorsal view; punctures moderate, on disc deep, simple, with intervals on average more than twice as large as their own diameters.

Scutellum shield-like, flat or feebly convex, sparsely punctured. Elytra as wide as base of pronotum, 2,7x longer than pronotum, convex; sides subparallel from base to anterior third, then rather strongly tapering to apex; striae well-punctured; interstriae flat, only the second and fourth shortly convex at base, finely punctured.

Aedeagus as in fig. 28 (length 1,5 mm). Female. Very similar to male; antennae shorter. Size. Length 7,6-8,4 mm; width 2,12-2,5 mm.

ETYMOLOGY. The name of the species is derived from its partial cupreous colour.

Vuilletus sinensis n. sp.

Fig. 29, 73.

MATERIAL EXAMINED. Holotype ♂ - China: W Hubei, Dashennongjia Massif — E Slope (31° 24-30'N, 110°21-24'E), 1300-2000 m, 28.VI.-5.VII.1995, L. & R. Businsky (CCW). 38 Paratypes ♂♀- same data as Ht (CCW; CPG); W Hubei, Dashennongjia Mts. (31°51'N, 110°3'E), 2400 m, 17.VI.2000, J. Turna (CSV); W Hubei, Dashennongjia Mts. (31°51'N, 110°3'E), 2500-3000 m, 10-14.VI.2002, J. Turna (CSV); W Hubei, Dashennongjia Mts. (31°51'N, 110°3'E), 24.V.2001, J. Turna (CSV); S Shaanxi, Qinling Mts, S Slope, Xunyangba S+W env. (33° 28-37'N, 108°23-33'E), 1400-2100 m, 5-9.VI.1995, L. & R. Businsky (CCW); Sichuan, SSW of Shimian, SE Slope of mt"4977", W of Lijipin, 1800-2500 m, 2.VII.2000, Bebusov, Kabak & Davidian (CSO).

DESCRIPTION. Male. Shiny; metallic colours; dorsal surface, prothorax and thorax light green with metallic lustre, sometimes head and pronotum darker green-bronze, more rarely elytra or pronotum green-bluish; antennae black with first three articles ferruginous; legs and abdomen totally or partially yellow-ferruginous; covered with rather dense, yellowish, recumbent vestiture.

Frons flat, punctures coarse, simple or slightly umbilicate, with variable intervals smaller than their own diameters. Antennae not reaching apicis of posterior angles of pronotum by about 1,5 articles, serrated from fourth articleon; second subcylindrical; third subconical, subequal in length to second; second and third together 1,3x longer than fourth; fourth-tenth triangular; fourth slender, longer than wide, the following articles just longer than wide; last subellipsoidal, a little longer than penultimate, symmetrically constricted before the apex.

Pronotum just wider than long, widest at posterior angles, strongly convex; sides nearly regularly tapering from base or from middle to apex, not or just barely sinuate before posterior angles; the latter long, sharp, not or just barely diverging, with a prominent carina subparallel to lateral margin, the latter complete, visible for almost all its length in dorsal view; punctures moderate, on disc deep, simple, with intervals on average twice or more than twicw as large as their own diameters.

Scutellum shield-like, flat or gently depressed at middle, punctured. Elytra as wide as base of pronotum, 2,8x longer than pronotum, convex; sides subparallel from base to middle, then gradually narrowing; striae well-punctured; interstriae flat with sparser punctures.

Aedeagus as in fig. 29 (length 1,87 mm).

Female. Very similar to male; generally with larger body and shorter antennae, which barely surpass middle of pronotum. Size. Length 7-9,5 mm; width 1,93-2,75 mm.

ETYMOLOGY. The name refers to the country of origin, China.

Vuilletus substriatus n. sp.

Fig. 30, 37, 39, 83.

MATERIAL EXAMINED. Holotype *&*- **Nepal**: Chitre Ghar Kho, 26-31.V.1989, C. Holzschuh (CSV).

DESCRIPTION. Male. Very shiny; metallic colours; entirely dark bronze with metallic lustre; antennae black except first two articles ferruginous; legs ferruginous; covered with short, recumbent, indistinct, blackish vestiture.

Frons convex on vertex, flat at anterior margin, punctures coarse, deep and, simple with variable intervals on average smaller than their own diameters. Antennae reaching apicis of posterior angles of pronotum, serrated from fourth article on; second article globous, as long as wide; third conical, nearly as long as wides; second and third together 1,8x longer than fourth; fourth-tenth triangular, wider than long; last subellipsoidal, just longer than penultimate, constricted before apex.

Pronotum 1,2x wider than long, widest at posterior angles, regularly convex; sides nearly regularly arcuate from base to apex; posterior angles, sharp, not diverging, with a prominent carina directed mediad; punctures extremely fine and sparse, giving the surface an inpunctate appearance; the intervals between the punctures 5-6x larger than their own diameters; lateral margins complete, almost completely visible in dorsal view.

Scutellum shield-like, convex, finely punctured. Elytra as wide as base of pronotum, 3x longer than pronotum, moderately convex; sides subparallel from base to behind the middle, then narrowing to apex; striae shallowly punctured; interstriae flat, sparsely punctured.

Prosternal process slightly emarginate at apex.

Aedeagus as in fig. 30 length 1,31 mm).

Female unknown.

Size. Length 6,87 mm; width 1,90 mm.

ETYMOLOGY. The name is derived from the shallow elytral striae of the species.

Vuilletus viridicollis Fleutiaux, 1940: 123 = Sericus (Sericoderma) viridicollis (comb. n.)

MATERIAL EXAMINED. Holotype ♂ – Vietnam: Tonkin, Jeanvoine (Fleutiaux coll. MNHN). 2 ♀- Laos: NE, Xamneva, Pho Pan (Mt Pan), 1350-2700 m, IV.V.2001, T. Porion (CRG); Huan Phan prov., Ban Saluei, Phu Pan Mt, 1500-2000 m, 26.IV-11.V.2001, D. Hauck (CPG).

New to Laos.

REMARK: Examination of the type specimen of *Vuilletus viridicollis* Fleutiaux, 1940, has shown that it belongs to the genus *Sericus* subgenus *Sericoderma* Dolin & Ostafitschuk, 1973 because of the scutellum with anterior edge.

Key to the known species of *Vuilletus* Fleutiaux, 1940 (except Japanese and Taiwanese species)*

- 1. Prosternal process just barely emarginate at apex; intermediate antennal articles wider than long in male2
- Prosternal process more or less deeply emarginate at apex; intermediate antennal articles as long as or longer than in both sexes

2.	Pronotal sides strongly arcuate and distinctly sinuate before posterior angles; elytral striae distinct and deeply
	punctured
_	Pronotal sides tapering nearly regularly from base to
	apex; elytral striae not distinct, superficially punctured
3.	Tarsal articles not or feebly dilated in both sexes (sec-
٠.	ond and third as long as wide in the male, a little longer
	in the female), covered with shorter and lighter setae
	Tarsal articles distinctly dilated in male (second and
	third articles wider than long), less dilated in female
	(only as long as wide), covered with longer and more
	robust setae
1	Third antennal article subconical, clearly longer than
4.	
	wide
_	Third antennal article conical or subtriangular, nearly as
_	long as wideschimmeliorum n.sp.
5.	Dorsal surface unicoloured
-	Dorsal surface bicoloured; pronotum and first intervals
	and lateral extremities of elytra dark green with metallic
	lustre, remaining part of elytra cupreous
_	
6.	Only abdomen entirely or partially yellowish
_	Thorax and abdomen yellowish confusus n. sp.
7.	Prostenum not impressed traversally
_	Prosternum trasversally impressed behind the middle
_	potanini Gurjeva
8.	Abdomen entirely yellowish9
_	Only sides of abdomen or last abdominal segments yellowish11
9.	Posterior angles of pronotum more or less divergent,
	short with a very feeble carina; elytral striae not distinct,
	superficially punctured10
_	Posterior angles of pronotum long with a robust carina,
	not divergent; elytral striae distinct and deeply punc-
	tured
10	. Outer surface of prosternal process more or less concave
	in lateral view; antennae longer in the male, reaching
	apicis of posterior angles of pronotum
	himalayanus n. sp.
_	Outer surface of prosternal process nearly straight in
	lateral view; antennae shorter in the male, not reaching
	apicis of posterior angles of pronotum byabout one arti-
	clegurjevae n. sp.
11	Pronotum with sides narrowing nearly regularly from
	base to apex; punctures denser with intervals just larger
	than their own diameters12
_	Pronotum with sides arcuate and sparser punctures,
	intervals much larger than their own diameters
12	Antennae shorter, not reaching apicis of posterior angles
	of pronotum by about two articles in the male, first three
	articles yellowish maoxianus n. sp.
_	Antennae longer ,reaching apicis of posterior angles of
	pronotum in the male, first two articles yellowish
	<i>murzini</i> n. sp.

Bibliography

- CANDEZE, E. C. A. 1863. Monographie des Élatèrides. IV. *Mémoires de la Société Royale des Sciences de Liége*, 17: 534 pp., 6 pls.
- CANDEZE, E. C. A. 1875. Relevé des Élatérides des Iles Philippines avec les diagnoses de quelques espèces inédites. *Annales de la Société Entomologique de Belgique (Comptes-Rendus)*, 18: 118-127.
- CANDEZE, E. C. A. 1878. Élatèrides nouveaux. II. *Annales de la Société Entomologique de Belgique*, 21:li-lxi, lxxv-lxxxv, cxxxv-cxliii, clxi-clxxii, clxxxix-cxciv.
- CANDEZE, E. C. A. 1880. A new genus and four new species of Elateridae from the collections of the Leyden Museum. *Notes from the Leyden Museum*, 2(2): 7-10.
- CANDEZE, E. C. A. 1882. Elatérides nouveaux. III. Mémoires de la Société Royale des Sciences de Liége, 2e Série, 9: 117 pp.
- CANDEZE, E. C. A. 1883. Elatérides nouveaux récoltés à Serdang (Sumatra oriental) par M. B. Hagen. Notes from the Leyden Museum, 5(20): 207-214.
- CANDEZE, E. C. A. 1889. Élatérides nouveaux. IV. *Annales de la Société Entomologique de Belgique*, 33: 67-123.
- CANDEZE, E. C. A. 1891a. Catalogue méthodique des Élatérides connus en 1890. H. Vaillant-Carmanne. Liége. XII + 246 pp.
- CANDEZE, E. C. A.. 1891b. Viaggio di Leonardo Fea in Birmania e regioni vicine XXXVI. Elatèrides recueillis en Birmanie en 1888 par M. L. Fea. 2e Article. *Annali del Museo Civico di Storia Naturale di Genova*, Serie 2a, 10: 771-793.
- CANDEZE, E. C. A. 1893. Élatérides nouveaux. V. Mémoires de la Société Royale des Sciences de Liège, 2e Série, 18(4): 1-76.
- CANDEZE, E. C. A. 1896. Espèces nouvelles d'Élatérides recoltées dans les îles Mentawei par le Dr. E. Modigliani. *Annali del Museo Civico di Storia Naturale di Genova*, Serie 2a, 16 (36): 255-256.
- CANDEZE, E. C. A. 1897. Elatérides nouveaux. VI. Mémoires de la Société Royale des Sciences de Liège, 2e Série, 19(2): 1-88.
- CHATTERJEE, N. C. 1933. Entomological investigations on the spike disease of Sandal (15). Cicindelidae (Col.) and supplementary data on Neuroptera and Elateridae (Col.). *Indian Forestry Records*, 19(5): 1-12.
- FLEUTIAUX, E. 1889. Contributions a la faune indo-chinoise. Cicindelidae et Elateridae. 1e Mémoire. *Annales de la Société entomologiques de France*, 6(9): 135-146.
- FLEUTIAUX, E. 1918. Nouvelles Contributions a la Faune de l'Indo-Chine Française (Coleoptera: Serricornia). *Annales de la Société entomologique de France*, 87: 175-278.
- FLEUTIAUX, E. 1933. Entomological investigations on the spike disease of sandal (10). Melasidae and Elateridae (Col.). *Indian Forestry Records (Entomological Series)*, 18(7): 1-16.
- FLEUTIAUX, E. 1934a. Eucnemidae et Elateridae nouveaux. *Bulletin et Annales de la Société Entomologique de Belgique*, 74: 363-370.
- FLEUTIAUX, E. 1934b. Elatérides nouveaux des Iles Philippines. *Proceedings of the Hawaiian Entomological Society*, 8(3): 477-486.
- FLEUTIAUX, E. 1940. Les Élatérides de l'Indochine française. Septième partie. XVII. Subfam. Agriotinae. *Annales de la Société entomolgiques de France*, 108 [1939]: 121-148.
- GURJEVA, E. L. 1972. Novye vidy zhukov-shchelkunov (Coleoptera, Elateridae) fauny SSSR i sopredel'nikh stran. (In: Novye vidy morskikh i nasemnykh besprozvonochnikh.). *Trudy Zoologicheskogo Instituta Akademiya Nauk SSSR*, 52: 299-308.
- JIANG, S.-H. 1993. A Catalogue of the Chinese Elateridae. Beijing Agricultural University Publishing House: Elateridae pp. 136-162.

^{*} except V. gemmula (Candèze), see note on the species.

- JIANG, S.-H. 1994. Notes on the genus Vuilletus from China (Coleoptera: Elateridae). Sichuan Journal of Zoology, 13(2): 84-85.
- KISHII, T. 1999. A check-list of the family Elateridae from Japan (Coleoptera). *Bullettin of the Heian High School, Kyoto*, 42: 1-144
- LIU, G. 1932. Catalogue and Generic Synopsis of the Elateridae of China. *Lingnan Science Journal*, 11(2): 211-247.
- OHIRA, H. 1968. Notes on some Elateridae-beetles from Formosa V. *Kontyû*, 36(4): 363-368.
- OHIRA, H. 1971a. Notes on some Elaterid-beetles from Japan (VIII). *Kontyû*, 39(2): 178-181.
- OHIRA, H. 1971b. A List of the Elaterid-Beetles from South Asia Preserved in the Hungarian Natural History Museum, Part VI. (Coleoptera). *Annales Historico-Naturales Musei Nationalis Hungarici, Pars Zoologica*, 63: 205-216.
- OHIRA, H. 1973. Elaterid Beetles from Borneo in the Bishop Museum (Coleoptera). *Pacific Insects*, 15(1): 103-137.
- PLATIA, G. & I. GUDENZI 1998. Note tassonomiche e faunistiche su elateridi del vicino oriente (Coleoptera, Elateridae). *Bollettino dell'Associazione Romana di Entomologia*, 53(1-4): 49-62.
- SCHENKLING, S. 1927. Elateridae II. Pars 88. In: Schenkling, S. (ed.). Coleopterorum Catalogus. Berlin, W. Junk, 265-636 pp.
- SCHULTZE, W. 1916. A Catalogue of Philippine Coleoptera. *The Philippine Journal of Science, D. General Biology, Ethnology and Anthropology,* 11(1): 1-194. (*Elateridae*: 59-66).

- SCHWARZ, O. 1902. Neue Elateriden. Stettiner Entomolgische Zeitung, 63: 194-316.
- SCHWARZ, O. 1906-7. Fam. Elateridae. Fascicles 46 A-C. In: *Wytsman, P. Genera Insectorum, Coleoptera.* 370 pp., 6 pls.
- SUZUKI, W., 1999. Catalogue of the Family Elateridae (Coleoptera) of Taiwan. *Miscellaneous Reports of the Hiwa Museum for Natural History* no. 38, 348 pp.
- TARNAWSKI, D. 2001. A world catalogue of Ctenicerini Fleutiaux, 1936. Part II (Coleoptera: Elateridae: Athoinae). *Genus*, 12(3): 277-323.
- VAN ZWALUWENBURG, R. H. 1936. The Elaterid Beetles of the Philippine Islands. *The Philippine Journal of Science, Sec. D*, 59 (3): 393-432.
- VAN ZWALUWENBURG, R. H. 1943. New species and new records of Elaterid-beetles from the Pacific. II. *Proceedings of the Hawaian entomological Society*, 11(3): 289-300.
- VAN ZWALUWENBURG, R. H. 1959. Some type designations, with notes on Pacific Elateridae (Coleoptera). *Pacific Insects*, 1(4): 347-414.
- WU, J. F. 1938. [Coleoptera, Elateridae], Pp. 431-472. In: Catalogus Insectorum Sinensium (Catalogue of Chinese Insects).
 Volume III. Peiping: Fan Memorial Institute of Biology [1937], 1312 pp.

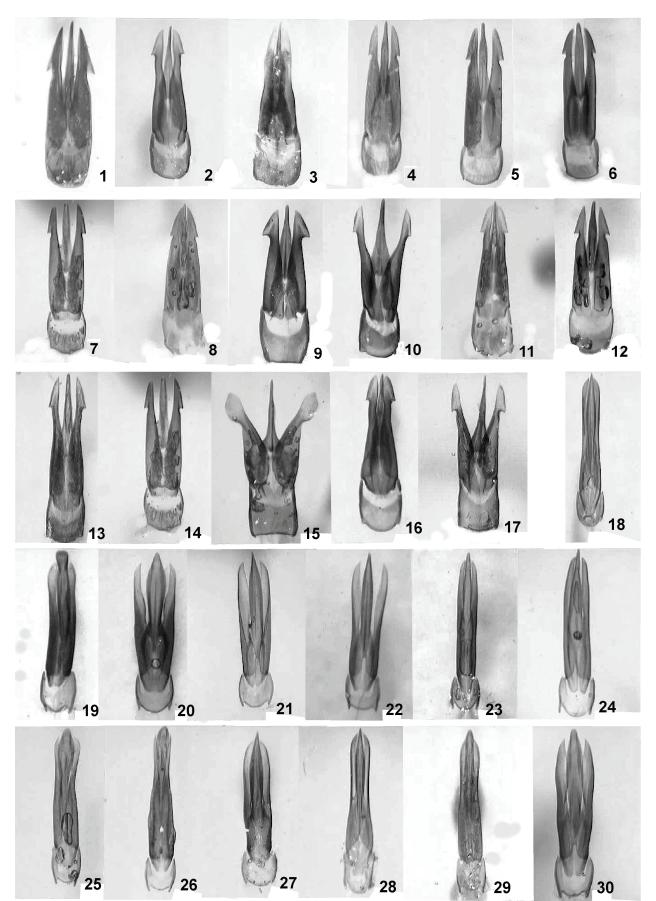


Fig. 1-30. Male genitalia in dorsal view. 1. Agonischius anticus Candèze; 2. A. armus Candèze; 3. A. basalis Candèze; 4. A. bilaterus Candèze; 5-6-7. Agonischius elegans Candèze (degree of variability); 8. A. indicus Fleutiaux; 9. A. lateritius Fleutiaux; 10. A. pectoralis Candèze; 11. A. sanguinipennis Candèze; 12. A. thoracicus Fleutiaux; 13. A. brevilineatus n. sp.; 14. A. discoidalis n. sp.; 15. A. insolitus n. sp.; 16. A. lineiformis n. sp.; 17. A. mimeticus n. sp. 18. Vuilletus altus (Candèze); 19. V. potanini Gurjeva; 20. V. candezei n. sp.; 21. V. confusus n. sp.; 22. V. glacialis n. sp.; 23. V. gurjevae n. sp.; 24. V. himalayanus n. sp.; 25. V. maoxianus n. sp.; 26. V. murzini n. sp.; 27. V. schimmeliorum n. sp.; 28. V. semicupreus n. sp.; 29. V. sinensis n. sp.; 30. V. substriatus n. sp.

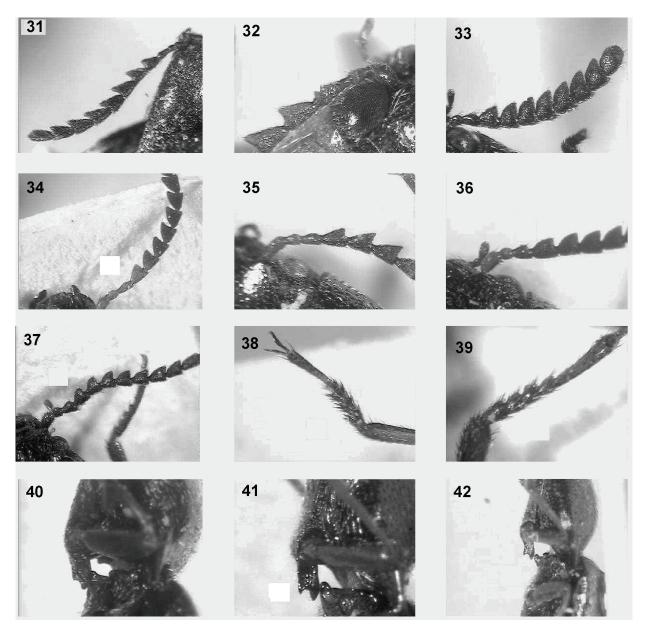


Fig. 31-37. Antennae. 31. Agonischius nigerrimus Fleutiaux, 3; 32. A. insolitus n. sp., 3; 33. A. pectoralis Candèze, 9; 34. Vuilletus altus (Candèze), 3; 35. V. confusus n. sp., 3; 36. V. schimmeliorum n. sp., 3; 37. V. substriatus n. sp., 3. Fig. 38-39. Anterior tarsi. 38. Vuilletus altus (Candèze), 3; 39. V. substriatus n. sp., 3. Fig. 40-42. Prosternal process in lateral view. 40. V. glacialis n. sp.; 41. V. gurjevae n. sp.; 42. V. himalayanus n. sp.

▶ Page 24

Fig. 43-62. Adults. 43. Agonischius basalis Candèze, $\[\]$ (8,1 mm); 44. A. militaris Candèze, Ht $\[\]$ (7,6 mm); 45. A. pectoralis Candèze, $\[\]$ (7,5 mm); 46. A. lateritius Fleutiaux, $\[\]$ (10 mm); 47. A. elegans Candèze, $\[\]$ (6,5 mm); 48. A. anticus Candèze, $\[\]$ (6,3 mm); 49. A. thoracicus Fleutiaux, $\[\]$ (6,5 mm); 50. A. mirus Candèze, $\[\]$ (7,1 mm); 51. A. indicus Fleutiaux, $\[\]$ (7,8 mm); 52. A. indicus Fleutiaux var., $\[\]$ (9,3 mm); 53. A. fusiformis Candèze, $\[\]$ (9,7 mm); 54. A. brevicollis Candèze, Ht $\[\]$ type (7,5 mm); 55. A. ornatus Candèze, $\[\]$ (7,4 mm); 56. A. sternalis Candèze, $\[\]$ (7,7 mm); 57. A. armus Candèze, $\[\]$ (7,3 mm); 58. A. armus Candèze, $\[\]$ (8,2 mm); 59. A. sanguinipennis Candèze, $\[\]$ (8,1 mm); 60. A. bilaterus Candèze, $\[\]$ (6,5 mm); 61. A. nigerrimus Fleutiaux, $\[\]$ (7,1 mm); 62. A. mimeticus n. sp. $\[\]$ (8,4 mm).

▶ Page 25

Fig. 63-83. Adults. 63. *A. mimeticus* n. sp., $\[\] \]$ (10,3 mm); 64. *A. discoidalis* n. sp., $\[\] \]$ (7,3 mm); 65. *A. magnificus* n. sp., $\[\] \]$ (12,8 mm); 66. *A. cordiformis* n. sp., $\[\] \]$ (8,1 mm); 67. *A. carinatus* n. sp., $\[\] \]$ (8,3 mm); 68. *A. insolitus* n. sp. $\[\] \]$ (9,37 mm); 69. *A. brevilineatus* n. sp., $\[\] \]$ (6,8 mm); 70. *A. lineiformis* n. sp., $\[\] \]$ (7,8 mm). 71. *Vuilletus altus* (Candèze), $\[\] \]$ (8,4 mm); 72. *V. confusus* n. sp., $\[\] \]$ (7,8 mm); 73. *V. sinensis* n. sp., $\[\] \]$ (8,3 mm); 74. *V. potanini* Gurjeva, $\[\] \]$ (7 mm); 75. *V. gurjevae* n. sp., $\[\] \]$ (7,5 mm); 78. *V. schimmeliorum* n. sp., $\[\] \]$ (6,3 mm); 79. *V. glacialis* n. sp., $\[\] \]$ (7,5 mm); 80. *V. semicupreus* n. sp., $\[\] \]$ (7,5 mm); 81. *V. maoxianus* n. sp., $\[\] \]$ (7,5 mm); 82. *V. murzini* n. sp., $\[\] \]$ (6,3 mm); 83. *V. substriatus* n. sp., $\[\] \]$ (6,85 mm).

