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Three new subgenera and five new species of Indo-Pacific *Agrilus* CURT. (Coleoptera: Buprestidae)

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Introduction

While from the faunistic and α -taxonomic perspective the western-Palaeartic and Nearctic *Agrilus* CURT. seems reasonably well known, and studies on the other faunae have been, due especially to the efforts of Slovak Eduard JENDEK (Palaeartic and Indo-Pacific) and Italian Gianfranco CURLETTI (Ethiopian, Austronesian and Neotropical faunae) entomologists, greatly intensified in the last decades, the internal taxonomic structure of the genus receives much less attention: ALEXEEV's (АЛЕКСЕЕВ 1998) subdivision of Palaeartic and CURLETTI's (1998) of Ethiopian representatives remain hitherto the only serious attempts to clarify the systematic relationships within it. As aptly evaluated by JENDEK & GREBENNIKOV (2011), to compile the subgeneric classification at once, simultaneously for the entire genus or for such enormous fauna as the Indo-Pacific, is “*a task seemingly well outside of the present-day reach*” (and – with each further species described – will be increasingly unfeasible in future...), so the only realistic strategy is to do this little by little, one group of species by one – this paper is an attempt to follow this way, started already with my earlier (HOLYŃSKI 2003, 2018a,b) papers [and *e.g.* by CURLETTI 2001 (for Australia) and 2018 (for Neotropics)].

Conventions

Like in my other publications (unless “corrected” by editors...), I follow the very useful conventions of applying (of course, except wordly citations, where the original form must be retained) SMALL CAPS to *all* [irrespective of context and full *vs.* abbreviated version: inconsistent use deprives the display of any sense!] personal family- (*not* given-) names, *italicizing* species- and genus-group names (as well as citations and words in languages different from that of the main text), and writing the suprageneric taxon-names in **Bold** [the latter is not a generally accepted custom, but is often important, as some of such names (*e.g.* of the subtribes **Buprestina** LEACH, **Melobasina** BÍLÝ or

Coraebina **BED.**) are (or may easily become) “homonymous” (but valid!) with generic or subgeneric ones (*Buprestina* **OBB.**, *Melobasina* **KERR.**, *Coraebina* **KERR.**); we must make possibly unequivocal what we have in mind, and possibly easy for the reader to “optically” spot the “wanted” name in the (especially longer) text!

Abbreviations:

L = length
W = width
H = width of head with eyes
V = width of vertex between eyes
∅ = sex unknown
BP*** = (e.g. BPfmw): specimen-identifying signature

Collection acronyms:

HUB = Humboldt Universität, Berlin, GERMANY
KBIN = Koninklijk Belgisch Instituut voor Natuurwetenschappen, Brussels, BELGIUM
RBH = Roman B. HOŁYŃSKI, Milanówek, POLAND

***Simpsonilus* sg.n.**

Type species: *Agrilus xenius* **OBERBERGER** 1924b: 594-595

General characteristics: Body small (5-7.5 mm.), rather robust; dorsally brown to purplish-cupreous, ventrally aeneous to dark bronzed, front in male (in *A. aeta* sp.n. unknown) green, in female purplish-cupreous; pubescence white or yellowish, sparse, recumbent, condensated (often indistinctly) on elytra in form of two to three elongated spots representing perisutural vitta, usually on sides of ventral surface, and sometimes as narrow stripe in longitudinal branches of laterobasal sulcus of pronotum. Epistome very wide (3-4× wider than long); front flat or very shallowly depressed along midline and on sides, ca. as long as wide, parallelsided, lateral margins almost straight, surface densely punctulate, vertex wide (V:W≈0.6), eyes moderately protruding. Prehumeral carinula on pronotum sharp, narrowly separated from lateral margin at base, shallowly S-shaped to closely approach it and disappear shortly before anterior angle; rather deep sulci along inner side of prehumeral carinulae transversely connected by also deep prebasal depression; another, somewhat shallower transverse depression runs parallel to apical margin; no trace of median sulcus except for more or less distinct prescutellar fovea (rarely also one at middle of anterior transverse sulcus); marginal and submarginal carinae narrowly separated, subparallel in apical half, confluent or almost so in basal third. Elytral perisutural depressions broad, shallow, but usually distinct posteriorly; apices more or less sharply acuminate or narrowly rounded. Gular lobe broadly emarginated; apex of prosternal process more or less roundedly truncated; first sternite regularly convex in both sexes; pygidium not mucronate. 1. metatarsomere subequal to three following combined. Sexual differences distinct only in structure and colour (flat, densely and finely punctulate, green in male; markedly sulcate, more coarsely punctatorugose, cupreous-red in female) of front.

Included species: *A. xenius* **OBB.**, *A. nudatus* **KERR.**, *A. sandakanus* **OBB.**, *A. aeta* sp.n., *A. manni* **THY.**

Geographical distribution: Somewhat strangely disjunct known distribution extends from Malay Peninsula through Borneo to Palawan, and otherwise includes Key Is. and Russell Is. group of Solomons.

Remarks: Highly distinctive subgenus: proportions and structure of pronotum, together with unique combination of other characters, make it easily recognizable “at glance”. Named in honour of famous theriologist and palaeontologist George Gaylord SIMPSON, one of the founders of Modern Synthesis, author of the most fundamental (“evolutionary”) concept of species.

Key to species of the subgenus *Simpsonilus* sg.n.

[*A. (S.) sandakanus* OBB. not included: actually not available to me for examination, while the original description does not allow to discriminate it from *A. (S.) nudatus* KERR.]

- 1 (2) Elytral apex sharply, subspinose acuminate *A. (S.) xenius* OBB.
- 2 (1) Elytra narrowly rounded apically
- 3 (6) Vertex but shallowly depressed, in posterodorsal aspect almost flat. Sides of pronotum distinctly rounded or basally sinuate. Posterior pubescent perisutural marking on elytra separated from elytral apex by much more than its own length
- 4 (5) Lateral margins of pronotum conspicuously sinuate in basal half. No pubescent stripe inside of prehumeral carinula of pronotum *A. (S.) nudatus* KERR.
- 5 (4) Pronotal sides regularly arcuate or at most with very short, hardly appreciable sinuation just before base. Anterior part of prehumeral carinula accompanied inside with contrasting white pubescent vitta *A. (S.) aeta* sp.n.
- 6 (3) Vertex deeply depressed, strongly biconvex in posterodorsal view. Sides of pronotum almost straight, parallel throughout or slightly divergent in basal half. Posterior elytral spot markedly cuneately elongated, reaching to near apex
..... *A. (S.) mannianus* THY.



Fig. 1

A. (S.) xenius OBB.



Fig. 2

A. (S.) nudatus KERR.



Fig. 3

A. (S.) aeta sp.n.



Fig. 4

A. (S.) mannianus THY.

***Agrilus (Simpsonilus) aeta* sp.n.**

Material examined:

Holotype: “N. Palawan, Bacuit” [ø (HUB)]

Paratype: “N. Palawan, Binaluan” [ø (RBH: BPFmw)]

Additional material: none

Holotype: “5.49×1.56.

Uniformly cupreous with slightly purplish tinge; underside cupreous, clearer. There is a densely pubescent longitudinal band on each side of pronotum, and on each elytron a remnant of longitudinal vitta, consisting of three longitudinal spots: one in the basal depression, one in about anterior third and one in the posterior third. The rest of elytra uniformly covered with golden pubescence, only about in the middle of elytra, between the second and third spot, pubescence is darker and less apparent. Undersurface covered with clear, apparent, uniformly dispersed pubescence, only the pro-, meso- and metepisterna, pleurites and a small spot on the sides of each sternite near anterior margin, very densely pubescent.

Antennae serrate from the fourth joint, which is about as long as the second and slightly longer than the third one. Front broad – the height (from the upper margin of clypeus to the top of head) is about 0.95 its maximal width – with the greatest width below and at the upper third, the sides strongly sinuate. Vertex distinctly longitudinally impressed, front almost flat, with small round depression near the middle. Front densely, not deeply punctured; vertex densely, finely, longitudinally striated, all the surface delicately scabrous. Eyes narrow, strongly convex. Clypeus about four times as wide as in the middle long, broadly and rather deeply emarginated.

The length of pronotum equals about 0.6 of its maximum width (slightly before the middle); sides regularly, strongly rounded, only slightly sinuate just before hind angles. Lateral margin very feebly sinuate, humeral carina nearly reaching to the apical angles. A broad depression behind the anterior margin and a deeper depression extending from the anterior angle along the humeral carina and posterior margin to the other anterior angle. All the surface of pronotum finely rugose-punctate. Scutellum wide, with a strong, transverse, straight carina.

Sides of elytra nearly straight to the middle of length, then obliquely narrowed to apices, which are separately acutely rounded and strongly serrulate; sides of abdomen visible from above. Disk with slight but distinct costa, basal depression deep, sutural depression distinct in the apical half; surface densely granulate.

Prosternal lobe broadly, shallowly emarginated, intercoxal process rather broad, sides nearly parallel to behind coxae, then rounded to apex, which is obtuse. Abdomen regularly convex, last ventral segment rounded, not emarginate at apex. Pygidium without projecting carina.

Paratype, 5.56×1.59, almost identical with the holotype, only the spots of denser pubescence more distinct, strongly pulverulent. The hind portion of the elytra slightly deformed.

A. aeta n.sp. is a member of the superspecies including A. sandakanus Obb. from Borneo and A. xenius Obb. from the Key Is. It differs from the Bornean species in having the pronotum broader, with the sides more rounded, the elytra with three spots instead of two, the spots larger, formed of yellowish (not white) pilosity, etc. From A. xenius Obb. it is easy to distinguish by lack of spine at the end of elytra.”

[The manuscript description of the holotype was prepared long ago (late 1970's or early 1980's), and waited – among many others... – for successively (due to other projects and personal “perturbations”) delayed publication. The style is, according to my current preferences, rather clumsy, terminology sometimes differs from that used in my recent papers (“lateral margin” = marginal carina of pronotum; “prosternal lobe” = gular lobe; “intercoxal process” = prosternal process), but generally the description seems sufficiently detailed and exact, so – having now no access to the holotype or to the species (*A. sandakanus* OBB.) then compared to it – I decided to reproduce it above **exactly** in the original form, without any correction or modification possibly introducing confusion or misunderstanding; some supplementary details (based on the paratype from my collection) are provided separately below under **Variability** and **Remarks**].

Variability: “*Front ... sides strongly sinuate*” suggests that the holotype might be a male (colour of front – correlated with sex in many buprestids, including closely related *A. xenius* OBB. – was unfortunately not specified): in the paratype, probably female, front is purplish-red with almost straight, parallel sides. Dorsal side in paratype almost concolorous: purplish-red on pronotum, cupreous with strong purplish shine on elytra; sternum dull brown with aeneous hue, abdomen golden-cupreous. Pronotal sides, “*only slightly sinuate just before hind angles*” in holotype, in paratype do not show any sinuation at all. Prehumeral carinula, rather strongly arcuate in basal $\frac{2}{5}$, anteriorly runs very close to marginal, joining it just before

apical angles. Submarginal carina, rather narrowly separated from, and running parallel to, marginal in apical half, sinuately approaches it at midlength to join in basal third. Elytral apices narrowly but regularly (without any angularity) rounded. Prosternal process convex anteriorly, flattened behind, densely and rather coarsely punctured. Basal metatarsomere very short, distal joints missing.

Geographical distribution: Hitherto known only from Palawan.

Remarks: *A. aeta sp.n.* differs from all the remaining representatives of the subgenus *Simpsonilus sg.n.* in no or at most hardly appreciable prebasal sinuation of distinctly rounded pronotal sides and somewhat more strongly arcuate basal part of prehumeral carinula. *A. xenius OBB.* is larger, uniformly – except green (male) or cupreous-purplish (female) front – dark bronzed-brown above, and has spiniform elytral apex. I have originally compared my new taxon to Bornean *A. sandakanus OBB.*, and indeed these two, with (unknown to me at that time) *A. nudatus KERR.* from Malay Peninsula, seem to make a separate group of very close – perhaps only subspecifically differentiated – relatives within *A. [xenius OBB.]*-superspecies; among them *A. aeta sp.n.* is characterized by brightest colouration and best developed pubescent pattern, whose most distinctive element seems to be contrastingly white linear vitta along inner side of anterior $\frac{2}{3}$ of prehumeral carinula, not mentioned in the description of *A. sandakanus OBB.* (OBENBERGER 1924b) and not seen in *A. nudatus KERR.* (though present in *A. xenius OBB.*!).

Degeerilus sg.n.

Type species: *Agrilus tolianus OBENBERGER 1924a: 121-122*

General characteristics: Body small (5-8 mm.), elongated; dorsal side bronzed, ventral bronzed to piceous-brown, front in female concolorous, in male typically green; pubescence white or yellowish, sparse, recumbent, condensed on elytra in form of two to three small dots, usually on sides of ventral side, and sometimes as narrow stripe in longitudinal branches of laterobasal sulcus of pronotum. Epistome *ca.* 1.5-2× wider than long; front flat or very shallowly depressed along midline and on sides, *ca.* as long as wide, lateral margins almost straightly subparallel or slightly sinuately convergent, surface densely punctulate, vertex rather wide (V:H≈0.5-0.6), eyes moderately protruding. Median sulcus usually divided into two (anterior often indistinct or vanishing); lateral depressions more or less deep; marginal carina strongly convexely arcuate in apical half, almost straight basally; submarginal shallowly concavely arcuate, widely separated from marginal anteriorly but very close to it behind midlength to coalesce or almost so in basal third. Elytral perisutural depressions broad, shallow; apices more or less sharply acuminate or narrowly rounded. Gular lobe broadly emarginated; apex of prosternal process more or less obtuse; first sternite regularly convex in both sexes; pygidium not mucronate. 1. metatarsomere subequal to three following combined. Sexual differences distinct only in structure and colour (flat, densely and finely punctulate, green in male; markedly sulcate, more coarsely punctatorugose, cupreous-red or brown in female) of front.

Included species: *A. tolianus OBB.*, *A. persimilis sp.n.*, *A. nylanderi sp.n.*, *A. chutiya sp.n.*, *A. fortunatus LEW.*, *A. sospes LEW.*, *A. quadrisignatus MARS.*

Geographical distribution: East-Asian subgenus, inhabiting the vast area between Transbaikalia to Palawan and Celebes.

Remarks: In many respects similar and possibly related to *Simpsonilus sg.n.*, but proportions of body and structure of pronotum suffice to easily differentiate between them. Development of prehumeral carinula and some other details divide the subgenus into two groups: the *Tolianus*- [*A. tolianus OBB.*, *A. persimilis sp.n.* and *A. nylanderi sp.n.*] and *Fortunatus*- [*A. chutiya sp.n.*, *A. fortunatus LEW.*, *A. sospes LEW.* and *A. quadrisignatus*

MARS.] circles. Named in honour of one of the “fathers” of systematic entomology, contemporary and compatriote of LINNAEUS, Charles DEGEER.

Key to species of the subgenus *Degeerilus* sg.n.

- 1 (6) Prehumeral carinulae well developed, extending to near apical angles *(Tolianus-circle)*
- 2 (5) Pronotal disk with two (prescutellar and postapical) shallow but broad foveae along middle
- 3 (4) Elytral apices acutely acuminate *A. (S.) persimilis sp.n.*
- 4 (3) Elytral apices narrowly rounded or at most obtusely angular ... *A. (S.) tolianus OBB.*
- 5 (2) Anterior half of pronotal disk regularly convex: median postapical depression lacking *A. (S.) nylanderii sp.n.*
- 6 (1) Prehumeral carinula lacking or rudimentary: discernible at most as short elevation just at base *(Fortunatus-circle)*
- 7 (8) Pronotum purplish-bronzed, elytra black. Only one (at apical third) pair of elytral spots present. L:W>4.2 *A. (S.) chutiya sp.n.*
- 8 (7) Dorsal side uniformly bronzed or brown. Elytra with two (sometimes inconspicuous) pairs of diskal pubescent spots, or L:W<4.0
- 9(12) Basal third of pronotal sides sinuate, apical part straight, both sections meet at very obtuse but distinct angle. Lateral depressions on pronotum narrower and shorter, not touching base
- 10(11) Antennae slender; joints 4.-5. much longer than wide, external angle sharply acute ..
..... *A. (S.) fortunatus LEW.*
- 11(10) Antennae compact; all joints as long or shorter than wide, external angles stump
..... *A. (S.) sospes LEW.*
- 12 (9) Basal situation shorter, otherwise pronotal sides distinctly rounded, without appreciable angularity. Lateral depression broad and long, extends to base
..... *A. (S.) quadrisignatus MARS.*

Agrilus (Degeerilus) persimilis sp.n.

Material examined:

Holotype: “Tonkin, Hoa-Binh” ”R.I.Sc.N.B., I.G. 22824” [♀ (KBIN)]

Paratypes: “Tonkin occ., Rég. de Hoa-Binh, 1919” ”R.I.Sc.N.B., I.G. 22824” “*Agrilus tolianus* Obenb., *A. Descarpentries* et *A. Villiers* det. 1963” [♀ (KBIN)]; “*Hoa-Binh, Tonkin*” [1 ♂ (RBH: BPflw)]; “*Hoa-Binh, Tonkin*” [2 ♀ (RBH: BPflx, lkk)]; “*Tonkin, Hoa-Binh*” [2 ♀ (RBH: BPfly, flz)]

Additional material: none

Holotype: Female, 7.5×1.7 mm. Dorsal side bronzed-brown, ventral bronzed-black, front dark bronzed with some greenish shine. Body mat, only abdomen lustrous. Pubescence hardly appreciable on head; lacking on pronotum except elongated spots anteriorly inside of prehumeral carinulae; very short, recumbent, yellowish on elytra, condensed into three (very small in humeral depressions; larger, widely spaced at anterior; and still larger, almost touching suture at posterior third) pairs of small speckles (there is also indefinite perisutural concentration just before apices); short, dense, recumbent on ventral side, condensed on sides of sternum, on metacoxae, entire 1. and spots on 2.-4. pleurites.

Antennae serrate from 4. (subequal to 2., slightly longer than 3.) joint. Epistome *ca.* 1.5× wider than long, shallowly emarginated, separated from front by sharp carinula. Front slightly uneven but generally flat, densely rugosopunctate, *ca.* as wide as long, sides almost straightly subparallel. Vertex rather broadly impressed, longitudinally strigose, rather wide (V:H≈0.5).



Fig. 4

A. (D.) persimilis sp.n.



Fig. 5

A. (D.) tolianus OBB.



Fig. 6

A. (D.) nylanderii sp.n.



Fig. 7

A. (D.) chutiya sp.n.



Fig. 8

A. (D.) fortunatus LEW.



Fig. 9

A. (D.) sospes LEW.



Fig. 10

A. (D.) quadrisignatus MARS.

Pronotum moderately transverse (L:W \approx 0.8), widest at apical third; sides deeply but very shortly sinuate just before basal angles, then almost regularly arcuate. Prehumeral carinula sharp, well developed, S-shaped, reaching to near apical margin. Prescutellar depression very broadly rounded, similar at anterior middle of disk somewhat shallower, lateral ones inside of middle part of prehumeral carinula elongate. Surface finely densely transversely strigose. Marginal and submarginal carinae shallowly S-shaped, confluent in basal third. Scutellar carina sharp.

Elytral sides slightly sinuately convergent to midlength, then cuneately tapering to acutely pointed serrulate apices; sides of abdomen visible from above. Disk convex, without distinct costa, basal depressions rather deep, perisutural indistinct; surface very finely and densely granular.

Gular lobe emarginated; prosternal process broad, parallelsided, apex obtuse. First abdominal segment regularly convex; anal sternite apically rounded without median incision. Pygidium without projecting carina. First metatarsomere somewhat longer than next three together.

Variability: Paratypes vary in size (male 6.7×1.5, females 6.8-7.8×1.6-1.8 mm.) and colouration (most are somewhat darker than holotype). Front in male green, regularly flat, simply though very densely punctulate;

Geographical distribution: Known only from the type locality: Hoa-Binh in Tonkin.

Remarks: Very close to *A. (D.) tolianus* OBB., but easily distinguishable by elytral apices sharply acuminate and periapical fovea on middle of pronotum rounded or elongated, not expanded transversely.

Agrilus (Degeerilus) nylanderi sp.n.

Material examined:

Holotype: "N. Palawan, Binaluan" [♂ (RBH: BPlkj)]

Additional material: none

Holotype: Male, 6.1×1.5. Dorsal side bronzed (anterior half of pronotum at middle bluish – preservation artifact?), ventral bronzed-black, front bright green. Body mat, only abdomen lustrous. Pubescence hardly appreciable on head and pronotum; more distinct, yellowish, very short, recumbent on elytra, condensed into two (at anterior and posterior thirds) pairs of small speckles (anterior punctiform and rather widely separated, posterior somewhat larger and very close to suture); whitish, very short, sparse, recumbent on ventral side.

Antennae serrate from 4. joint, which is slightly longer than 2. and decidedly longer than 3. Epistome *ca.* 1.5× wider than long, rather shallowly emarginated, separated from front by sharp carinula. Front flat, very densely regularly punctulated, *ca.* as wide as long, maximum width at upper third, sides distinctly sinuate. Vertex impressed at middle, longitudinally strigose, V:H≈0.5. Eyes narrow, strongly convex.

Pronotum moderately transverse (L:W≈0.7), maximum width at basal third; from there sides strongly, straightly convergent to base and subparallel to apical angles. Prehumeral carinula S-shaped, parallel to lateral margin in basal third and very narrowly so in anterior half, nearly reaching apical margin. Prescutellar depression very broadly rounded, lateral ones inside of middle part of prehumeral carinula somewhat narrower. Surface finely and very densely transversely strigose. Marginal carina shallowly, submarginal more strongly S-shaped, confluent in basal third. Scutellar carina sharp, conspicuous.

Elytral sides very shallowly sinuately parallel to midlength, then cuneately tapering to almost acutely rounded and strongly serrulate apices; sides of abdomen visible from above. Disk convex, without apparent costa, basal depression shallow, sutural rather deeply sulciform in apical third but hardly appreciable anteriorly; surface very finely and densely granular.

Gular lobe deeply, somewhat angularly emarginated, prosternal process rather broad, sides parallel to behind coxae, then cuneately convergent to obtuse apex. Abdomen regularly convex, last ventral segment rounded, not emarginate at apex. Pygidium without projecting carina. First metatarsomere somewhat longer than the next three together.

Geographical distribution: Known only from the holotype collected on Palawan (Philippines).

Remarks: *A. nylanderi* sp.n. is easily recognizable within the subgenus by unique combination of pronotal characters: lack of deep transverse periapical depression distinguishes it from *A. (D.) tolianus* OBB., anteriorly not depressed midline from *A. (D.) persimilis* sp.n., and well developed sharp prehumeral carinula from all the remaining species. Named in memory of several years' fruitful friendly cooperation with my late Colleague, Ulf NYLANDER, with appreciation for his studies on, especially, New Guinean *Stigmoderina* LAC. and *Metataenia* THY.

Agrilus (Degeerilus) chutiya sp.n.

Material examined:

Holotype: "INDIA – NEFA, Subansiri Div., Loc. Tamen, 18·V·1966 457m., A.N.T.Joseph"
"Z.S.I. & D.R.D.O, Jt. NEFA Survey, Stn. No 17, April-May, 1966" [♀ (RBH: BPlkl)]

Paratype: "INDIA – NEFA, Subansiri Div., Loc. Tamen, 18·V·1966 457m., A.N.T.Joseph"³⁵
"Z.S.I. & D.R.D.O, Jt. NEFA Survey, Stn. No 17, April-May, 1966" [1♀: (RBH: BPlkm)]

Additional material: none

Holotype: Female, 6.6×1.6 mm. Head purplish-cupreous, pronotum purplish-brown, elytra and ventral side black. Front, elytra and ventral side covered with very short, rather dense, recumbent grayish pubescence; with single pair of golden, elytral perisutural pair of somewhat elongate spots at apical third.

Antennae serrate from 4. (subequal to 2. and distinctly longer than 3.) joint. Epistome wider than long, shallowly emarginated, transverse carinula separating it from front rather inconspicuous. Front almost regularly flat, densely rugosopunctate, *ca.* as wide as long, parallelsided in upper, slightly sinuately convergent in lower half. Vertex rather broadly impressed, finely and densely longitudinally strigose, V:H≈0.6.

Pronotum moderately transverse (L:W≈0.8), widest near apical angles; sides somewhat sinuately divergent from base to midlength, then almost parallel. Prehumeral carinula practically absent, hardly appreciable only as very short indistinct elevation just before base. Prescutellar depression broadly rounded, lateral ones also deep. Surface finely densely transversely strigose. Marginal and submarginal carinae shallowly S-shaped, confluent in basal third. Scutellar carina sharp.

Elytra sinuately subparallelsided to midlength, then cuneately tapering to narrowly regularly rounded apices; sides of abdomen visible from above. Disk convex, without distinct costa, perisutural depressions broad and shallow in basal ¾, deeper but narrower apically; surface very finely, densely, regularly granular.

Gular lobe emarginated, prosternal process broad, parallelsided, apically depressed. Abdomen regularly convex, last ventral segment rounded apically. Pygidium without projecting carina. Metatarsi missing.

Variability: Paratype somewhat smaller (5.9×1.4 mm.), otherwise practically identical to holotype).

Geographical distribution: Known only from the type locality in the southern part of Arunachal Pr. (NE-India).

Remarks: Rudimental prehumeral carinula places *A. (D.) chutiya sp.n.* in the *Fortunatus*-circle, but contrastingly bicolourous dorsal side and but a single pair of elytral spots clearly differentiates it from all the remaining representatives of the subgenus. Name refers to the Chutiya Kingdom extending over the greater part of what is now Assam and Arunachal Pradesh.

Saundersilus sg.n.

Type species: *Agrilus cyaneoniger* SAUNDERS 1873: 515

General characteristics: Large (8.5-15, usually >10 mm.), dark (elytra and ventral side black or blackish with or without distinct metallic shine, head and pronotum sometimes dark cupreous or blackish-green); pubescence generally dark but in some species white or golden-orange setulae form pronotal and/or elytral spots or cover ventral side. Front with more or less clearly developed cross-like pattern of vertical (along midline) and transverse (often reduced to pair of lateral foveae) depressions, sometimes confluent to make a deep rounded cavity in upper ¾. Vertex rather wide, V:H≥0.5. Pronotum octagonal in outline: sides at middle parallel, anterior and posterior angles obliquely truncated; pattern of depressions cross-like, similar to that of front. Prehumeral carinulae – if discernible – very fine, often

irregularly broken. Elytral perisutural depressions usually wide, flat, entire or vanishing behind midlength; apices (sometimes subangularly) rounded or – rarely – subspathulate. Gular lobe emarginated or subtruncated; prosternal proces parallelsided before procoxae, more or less acutely pointed apically; 1. abdominal segment regularly convex; apex of anal sternite rounded. 1. metatarsomere *ca.* as long as 2.-5. together.

Included species: *A. cyaneoniger* SND. (with *ssp. melanopterus* SOLS.), *A. lafertei* KERR., *A. drumonti* sp.n. [and *A. agnatus* KERR., *A. quinling* JD., *A. lubopetri* JD., *A. pseudolubopetri* J.C., *A. auristernum* OBB., ?*A. bifoveolatus* KERR., ?*A. rubensteini* C.J. according to the descriptions and pictures in JENDEK 2000, JENDEK & GREBENNIKOV 2011, JENDEK & CHAMORRO 2012, CHAMORRO & JENDEK 2014 and CHAMORRO & *al.* 2015].

Geographical distribution: East-Asian group, widely distributed from Amur valley and Japan through China to southernmost Indochina, with isolated (relict? mislabeling?) historical locality in Cashmere.

Remarks: Large, elongated, dark-coloured body with octagonal pronotum and characteristically cross-shaped frontal and pronotal depressions, lack of pygidial mucro, long basal metatarsomere &c. substantiate subgeneric separation (perhaps after removal of *A. bifoveolatus* KERR., which remain unknown to me in nature but – judging from the description – may not belong here) of JENDEK’s (2000) rather clearly defined “*Agrilus cyaneoniger* species group” [in my paper (HOLYŃSKI 2018a) on Korean **Buprestidae** I have – accepting, in lack of better option, ALEKSEJEW’s (AJIEKCEEB 1998) classification – quoted *A. cyaneoniger* SND. as belonging to sg. *Anambus* THS. what, however, despite some similarities to *A. (Anambus) biguttatus* (F.), is obviously untenable in view of profound (even if not always easy to describe) differences in, *e.g.*, general proportions, colouration, antennal structure, scutellum, sculpture (esp. of elytra and abdomen), system of pubescent spots (ventral side!), &c.]. Strikingly slender body makes several representatives of *Saundersilus* *sg.n.* superficially similar to *A. (Iagrilus)* KUR., but contrastingly bicolorous (pronotum bright cupreous, elytra bluish) dorsal side, pronotum not much wider than long, pronotal sides almost regularly feebly rounded, median sulcus vague, scutellum large, perisutural depressions on elytra distinct in apical rather than basal $\frac{2}{3}$, 1. metatarsomere only subequal to following three, bituberculate 1. sternite in male, and other characteristics mentioned by KUROSAWA (1981) and JENDEK (2001) disprove any affinity between them. The subgenus is named for the eminent British entomologist Edward SAUNDERS, one of the leading late XIX c. authority in buprestid systematics.

Key to species of the subgenus *Saundersilus* *sg.n.*

[only species known to me in nature included]

- 1 (4) Body less elongated: L:W<5. Frontal depressions consisting of vertical median sulcus crossed by transverse trench (sometimes reduced to pair of large foveae). Elytral apices narrowly rounded or subacute
- 2 (3) Pubescence of ventral side grayish, sparse, less conspicuous *A. (S.) cyaneoniger* SND.
 - a (b) Pronotum with conspicuous greenish or cupreous shine, distinctly differing from elytra *A. (S.) c. melanopterus* SOLS.
 - b (a) Pronotum black with at most slight metallic bluish lustre, practically concolorous with elytra *A. (S.) cyaneoniger* SND. *s.str.*
- 3 (2) Ventral side covered with dense (especially on sides) rufous-orange pubescence *A. (S.) lafertei* KERR.
- 4 (1) Body very strongly elongated: L:W>>5. Upper $\frac{2}{3}$ of front deeply, regularly, ovately excavated. Elytral apices slightly but conspicuously spathulate *A. (S.) drumonti* sp.n.



Fig. 11

A. (S.) c. melanopterus SOLS.



Fig. 12

A. (S.) cyaneoniger SND. s.str.



Fig. 13

A. (S.) lafertei KERR.



dorsal



lateral



ventral

Fig. 14

A. (S.) drumonti sp.n.

***Agrilus (Saundersilus) drumonti* sp.n.**

Material examined:

Holotype: “Coll. I.R.Sc.N.B., Cambodia, Rattanakiri, prov., Phumi Kalai Thum, (13°49'60"N/106°57'0"E), 1-19. VI. 2007, material purchased from Li Jingke, I.G.:30.977” [♂ (KBIN)]

Additional material: none

Holotype: Male, 13.5×2.6 mm. Extremely elongated; dorsal side uniformly greenish-black, sternum almost pure black, abdomen dark greenish-aeueous; pubescence hardly appreciable, recumbent, very short grayish on elytral disk, similar but somewhat more conspicuous on ventral side (especially on prosternum), and long white on elytral apices, otherwise absent or unapparent.

Epistome impunctate but strongly microsculptured, broadly emarginated apically, rather indistinctly separated from front by fine carinula accompanied above with shallow transverse sulcus. Front somewhat wider than long, sides slightly subsinuately convergent towards epistome; almost entire upper ¾ occupied by deep transversely ovate lustrous and sparsely punctured depression, leaving only narrow pericocular and not much broader

supraepistomal zone flat, mat and densely punctulated; the depression is angularly extended to wide (V:H \approx 0.55) prominently (especially in posterodorsal aspect) biconvex vertex; eyes moderately protruding; antennae serrate from 4. joint, reaching to near posterior angles of pronotum.

Pronotum short (L:W \approx 0.75); sides subparallelsided from basal to apical fourth, strongly (almost straightly) convergent to definitely obtuse basal and less so to very slightly (in dorsal aspect) protruding apical angles; prescutellar lobe broadly trapezoidal, margin shallowly emarginate at middle; apical margin almost straight. Pronotal sculpture consists of very dense deep punctures partly confluent into more or less transverse rugae. Disk deeply and broadly depressed along midline, depression consists of two large rounded foveae; lateral depressions large and rather deep; prehumeral carinulae hardly discernible: very fine and running very close to lateral margins; marginal and submarginal carinae strongly S-shaped, widely separated anteriorly and joined before base. Scutellum small, twice wider than long, lustrous and almost impunctate, sharply carinate along anterior margin.

Elytra markedly elongated (L:W \approx 4.2), as wide as pronotum, subparallelsided in basal eighth, then very shallowly sinuately convergent to midlength (leaving sides of abdomen narrowly exposed), somewhat arcuately tapering to apical tenth and distinctly divergent just before broadly rounded/subtruncated and distinctly denticulate apices; sutural margins also apically divergent, both latero- and suturoapical angles broadly rounded. Basal foveae wide and deep, perisutural depressions broad and very well marked on basal half but totally vanishing behind midlength, suture finely carinulately elevated in apical third; punctulation very fine, dense, uniform; extremely short recumbent discal pubescence hardly discernible, apices adorned with rather sharply defined transverse spots of white, rather long, semierect setulae.

Gular lobe trapezoidal, indistinctly arcuately emarginate in medial part; prosternal process flat, narrow, apical acumination strikingly long and acute; 1. abdominal segment regularly convex, apex of anal sternite rounded; no pygidial mucro. Sternum finely and densely regularly punctulated, abdomen extremely so. Basal joint of metatarsi subequal in length to sum of remaining four.

Geographical distribution: NE-Cambodja; known only from the holotype.

Remarks: Slightly but distinctly spathulate elytral apices in combination with uniformly inconspicuous dorsal pubescence make the species easily recognizable within the subgenus. The closest relative seems to be *A. lubopetri* JD., but the original description (JENDEK 2000) – unfortunately somewhat ambiguous (*e.g.* pronotum is described as “*widest before middle*” while figs 9a and 9b show its maximum width at *ca.* basal third; elytra is said to be “*glabrous*” (also in the diagnosis of the entire group!) on the one hand but “*silky lustrous*” on the other: the latter strongly suggesting dense short recumbent pubescence similar to that in *A. cyaneoniger* SND., *A. lafertei* KERR. or, for that matter, *A. drumonti* sp.n.) – does not allow to decide whether the resemblance evidences systematic affinity or only superficial convergence. CHAMORRO & al. (2015) mention the elytra “*extending beyond the abdomen approximately the entire length of ventrite 5*” as a diagnostic feature of *A. lubopetri* JD. (distinguishing it *e.g.* from *A. pseudolubopetri* J.C.); this character seemed to me somewhat suspect, but as JENDEK (CHAMORRO & al. 2015, JENDEK & GREBENNIKOV 2011) has examined many specimens from a large area, I must accept it as taxonomically reliable. Anyway, also *A. pseudolubopetri* J.C., having the relations between elytra and abdomen normal (like in *A. drumonti* sp.n.), differs [judging mainly from pictures in JENDEK & CHAMORRO (2012) and CHAMORRO & al. (2015) – schematic, formal descriptions do not offer much “palpable”...] from the present species at least in but slightly biconvex vertex; strongly convergent middle parts of pronotal sides, subangularly rounded elytral apices with no “spathulate” tendency and some minor details

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