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New Agriline Buprestid Beetles (Coleoptera, Buprestidae) from Asia (II)

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Abstract Seven new agriline buprestid species are described from Japan, Taiwan, Malaysia and Nepal. A new synonymy and some new distributional records of agriline species are given.

In this paper, which is the second part of this series, I will describe seven agriline species as follows: four new species, *Agrilus toyoshimai*, *A. takahashii*, *A. naomii* and *A. babai*, from Japan; a new species, *A. senohi*, from Taiwan; a new species, *A. nepalensis*, from Nepal; and a new species, *A. nagaii*, from Borneo. A Taiwanese species, *Agrilus amphipyryrus* POCHON, 1965, will be newly regarded as a synonym of *Agrilus semiaurovittatus* Y. KUROSAWA, 1954. Some new distributional records of agriline species will be given.

The holotypes designated in this paper are deposited in the National Science Museum (Nat. Hist.), Tokyo.

Before going further, I wish to express my hearty thanks to Dr. Yoshihiko KUROSAWA for his constant guidance, and to Dr. Shun-Ichi UÉNO of the National Science Museum (Nat. Hist.), Tokyo, for his critical reading of the original manuscript. I am also indebted to Drs. Kintaro BABA, Yutaka JOHKEI and Sadahiro OHMOMO, Messrs. Kôyô AKIYAMA, Kôichi SUGINO, Toshirô TAKAHASHI, Ryôji TOYOSHIMA and Osamu YAMAJI for their kind offer of materials.

Agrilus toyoshimai sp. nov.

(Figs. 1, 8)

Body subcylindrical, entirely black.

Head slightly narrower than the base of pronotum; vertex with an inconspicuous median impression; frons arcuately but slightly produced in dorsal aspect, about 1.2 times as long as wide between eyes, evenly, transversely and obsoletely rugoso-punctate, evenly covered with semirecumbent cinereous hairs anteriorly, with an obsolete but distinct median impression below vertex, small and transverse pores just above antennal cavities; eyes large, with the internal rims sinuate, slightly converging below in frontal aspect; clypeal suture transversely carinate; clypeus about as wide as long between antennal cavities, clothed with semirecumbent cinereous hairs, with the anterior margin arcuately emarginate; antennal cavities

large; antennae slender, rather lax, eleven-segmented and serrate from the fourth segment, with the first segment stout, subglobular, the second equally stout to and slightly shorter than the first, the third less stout, about 0.7 times as long as the second, the fourth subtriangular, about as long as the second.

Pronotum about 1.2 times as wide as long, widest just before the middle; sides arcuately expanded near the middle, then sinuously but slightly convergent to posterior angles; anterior margin bisinuate, slightly narrower than the posterior, with median lobe broadly and arcuately produced; posterior margin trisinate, with median lobe bipartite into two small lobes by the ante-scutellar emargination; anterior angles acute and produced in dorsal aspect, acute and abased in lateral aspect; posterior angles subrectangular in dorsal aspect; prehumeral carinae absent; marginal carinae bisinuate, and sharply defined throughout; submarginal carinae subparallel to and moderately distant from marginal ones in anterior half, then gradually approximate to them posteriorly, though not joining them; disc convex, longitudinally depressed along marginal carinae, with two large median depressions; surface evenly but obsoletely rugoso-punctate, uniformly covered with very inconspicuous hairs. Scutellum with a transverse carina, the part before the carina being subtrapezoidal and distinctly declivous in front, the part behind the carina subtriangular.

Elytra about 3.1 times as long as wide, about 4.2 times as long as pronotum, widest behind the middle; sides slightly expanded behind humeri, slightly convergent to anterior two-fifths, arcuately and broadly expanded behind the middle, then arcuately convergent to the tips, which are separately rounded and finely dentate; humeri not prominent, without humeral carinae; basal margins carinate, with the lobes broadly and subtriangularly produced at the middle; sutural margin slightly elevated in posterior third; lateral margins unarmed; disc longitudinally deplanate along suture in anterior two-thirds, with large basal depressions; surface finely and evenly imbricato-punctate, densely and evenly covered with short yellowish hairs.

Ventral surface evenly and densely clothed with short, semirecumbent, cinereous hairs. Prosternum convex; gular lobe bilobed, with the anterior margin arcuately but slightly emarginate at the middle; prosternal process subparallel between anterior coxal cavities, then gradually attenuate to the pointed tip. Abdomen with anal segment broadly rounded at apex. Pygidium rounded at apex, with longitudinal median carina. Legs slender; posterior tarsi with the first segment distinctly longer than the following three united.

Length: 6.6 mm; width: 1.2 mm.

Holotype: ♀, Hida-kanayama, Gifu Pref., Japan, 27. VI. 1976, R. TOYOSHIMA & A. KATO lgt.

Notes. The present species is very closely allied to *Agrilus esakii* Y. KUROSAWA, 1964, from the Ryukyus, Japan, but can be distinguished from it by the following characteristics: 1) prehumeral carinae absent, while they are long in *A. esakii*; 2) gular lobe more weakly emarginate at the anterior margin.

Agrilus takahashii sp. nov.

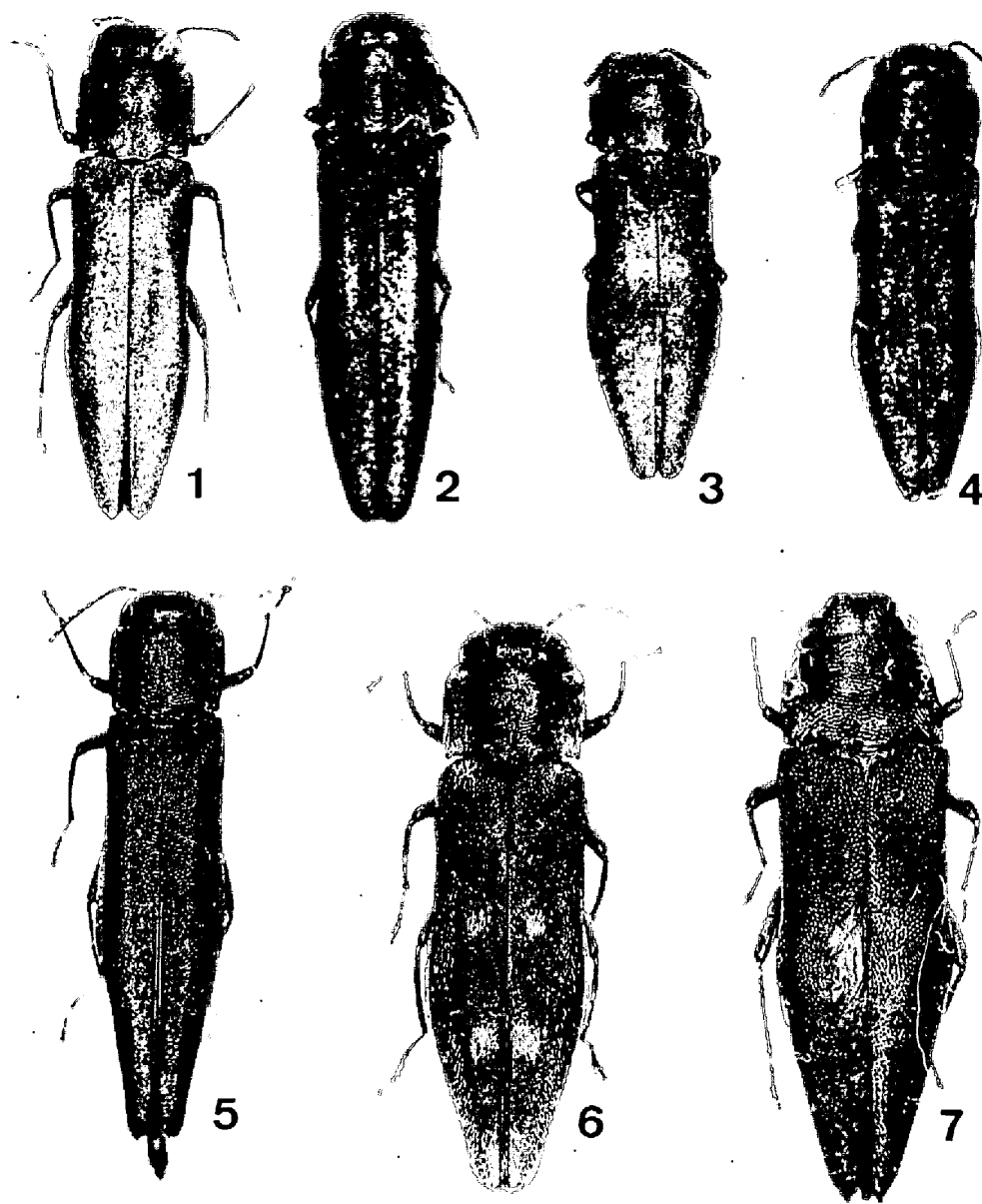
(Figs. 2, 9)

Male. Body elongate, subcylindrical, and entirely dark aeneous with slight greenish tinge except for greenish frons; ventral surface slightly brighter than dorsum.

Head slightly narrower than the base of pronotum; vertex with a very obsolete median groove; frons about 1.5 times as long as wide between eyes, evenly imbricato-punctate, clothed with semirecumbent cinereous hairs in apical half, with a broad median depression below vertex, small and transverse pores just above antennal cavities; eyes subparallel in frontal aspect, with the internal rims distinctly sinuate; clypeal suture transversely carinate; clypeus slightly wider than long between antennal cavities, with the anterior margin arcuately emarginate; antennal cavities large; antennae slender, rather compact, eleven-segmented and serrate from the fourth segment, with the first segment the longest and stoutest, the second equally stout to and slightly shorter than the first, about 1.2 times as long as the third, which is less stout, and the fourth subtriangular, about as long as the second.

Pronotum transverse, about 1.4 times as wide as long, widest near the middle; sides gradually expanded from posterior angles to middle, subparallel to just behind anterior angles, then roundly convergent to anterior angles; anterior margin bisinuate, about as wide as the posterior, with median lobe broadly and arcuately produced; posterior margin trisinate, with median lobe bipartite into two small lobes by the arcuate ante-scutellar emargination; anterior angles acute and produced in dorsal aspect, abased and pointed in lateral aspect; posterior angles subrectangular in dorsal aspect; prehumeral carinae arcuate, starting from posterior angles, extending to near the middle, though not connected with marginal ones; marginal carinae bisinuate; submarginal carinae subparallel to and moderately distant from marginal ones in anterior half, then approximate to them posteriorly, and joining them at the posterior fourth; disc convex, with longitudinal depressions along prehumeral and marginal carinae; median groove distinct, though becoming obsolete anteriorly; surface evenly rugoso-punctate. Scutellum with a transverse carina, the part before the carina declivous in front, median projection triangularly produced posteriorly.

Elytra about 3.1 times as long as wide, about 4.5 times as long as pronotum, widest just behind humeri; sides slightly expanded behind humeri, slightly convergent to anterior third, arcuately and broadly expanded behind the middle, then arcuately convergent to the tips, which is separately rounded and finely dentate; humeri without humeral carinae; basal margins carinate, with the lobes broadly and subtriangularly produced at the middle; sutural margin slightly elevated in posterior half; lateral margins broadly trisinate in lateral aspect; disc obsoletely depressed along suture in posterior third, with large basal depressions; surface evenly and densely imbricato-punctate, clothed with semirecumbent silver pubescence except for the areas along the sides.



Figs. 1-7. — 1, *Agrilus toyoshimai* sp. nov.; 2, *A. takahashii* sp. nov.; 3, *A. naonii* sp. nov.; 4, *A. babai* sp. nov.; 5, *A. nepalensis* sp. nov.; 6, *A. senohi* sp. nov.; 7, *A. nagaii* sp. nov.

Ventral surface finely punctured. Prosternum convex, densely clothed with long, silver-whitish hairs; gular lobe transverse, with the anterior margin bilobed, distinctly and arcuately emarginate at the middle; prosternal process gradually expanded to the apex, which is tricuspidate. Metasternum with a distinct median groove. Abdomen with anal segment rounded at apex. Pygidium rounded at apex.

Legs slender; posterior tarsi with the first segment distinctly longer than the following three united.

Female. Frons dark aeneous. Prosternum without long hairs.

Length: ♂, 4.7–5.5 mm; ♀, 6.0–6.5 mm. Width: ♂, 1.0–1.3 mm; ♀, 1.5–1.7 mm.

Host Plant. *Carpinus* sp. (Betulaceae).

Holotype: ♂, allotype: ♀, Akasai, Hyôgo Pref., Japan, 24. VI. 1979, M. TÔYAMA lgt. Paratypes: 1 ♂, Mt. Takahachi, Tottori Pref., Japan, 17. VI. 1979, K. SUGINO lgt.; 1 ♂, Mt. Kasuga, Nara Pref., Japan, 20. V. 1979 (host out), K. SUGINO lgt.; 1 ♂, same loc., 10. VI. 1979 (host out), K. SUGINO lgt.; 1 ♀, same loc., VI. 1980, Y. JOHKE lgt.; 1 ♀, Akasai, Hyôgo Pref., Japan, 23. VI. 1979, T. TAKAHASHI lgt.

Notes. The present species is very closely allied to *Agrilus tempestivus* LEWIS, 1893, from Japan and Korea, but easily distinguished from it by the following characteristics: 1) prehumeral carinae not connected with marginal ones, while in *A. tempestivus*, they join marginal ones; 2) prosternal process tricuspidate at apex, instead of being simply attenuate to the tip.

Agrilus satoi Y. KUROSAWA, 1954

Agrilus satoi Y. KUROSAWA, 1954, Bull. natn. Sci. Mus., Tokyo, 1: 85–87.

Specimen examined. 1 ♀, Takachiho, Mt. Kirishima, Kagoshima Pref., Japan, 2. VII. 1984, K. MORI lgt. (new to the fauna of Japan).

Distribution. Japan, Taiwan.

Agrilus naomii sp. nov.

(Figs. 3, 10)

Agrilus maculifer: TÔYAMA, 1981, Gekkan Mushi, Tokyo, (124): 32. (Nec SAUNDERS.)

Body subcylindrical, entirely dark aeneous, with slight cupreous tinge.

Head slightly narrower than the base of pronotum; vertex longitudinally rugoso-punctate; frons arcuately but slightly produced in dorsal aspect, about as long as wide between eyes, transversely rugoso-punctate, with an obsolete median impression below vertex, small and transverse pores just above antennal cavities; eyes with the internal rims sinuate, and slightly converging below in frontal aspect; clypeal suture transversely carinate; clypeus slightly broader between antennal cavities, with the anterior margin arcuately emarginate; antennal cavities large; antennae slender, compact, eleven-segmented and serrate from the fourth segment, with the first segment the stoutest, the second stout, slightly shorter than the first, about 1.5 times as long as the third, which is less stout, the fourth subtriangular, about as long as the third.

Pronotum transverse, about 1.5 times as wide as long, widest at the anterior third; sides arcuately expanded in anterior half, then obliquely converging to posterior angles; anterior margin bisinuate, about as wide as the posterior, with

median lobe arcuately produced; posterior margin trisinate, with median lobe arcuately but slightly emarginate just before scutellum; anterior angles acute and produced in dorsal aspect, abased and pointed in lateral aspect; posterior angles obtuse in dorsal aspect; prehumeral carinae gently sinuate in lateral aspect, extending to just before anterior angles, where they are connected with marginal ones; marginal carinae sinuate, and sharply defined throughout; submarginal carinae subparallel to and moderately distant from marginal ones in anterior third, then gradually approximate to them posteriorly, and joining them at the posterior fourth; disc convex, obsolete depressed behind the anterior lobe, broadly, transversely and shallowly depressed along the basal margin, and longitudinally but slightly depressed along prehumeral carinae; surface evenly rugoso-punctate. Scutellum with a transverse carina, the part before the carina declivous in front, median projection triangularly spinose posteriorly.

Elytra about 2.5 times as long as wide, about 4.5 times as long as pronotum, widest just behind the middle; sides slightly expanded behind humeri, very slightly convergent to anterior third, arcuately and broadly expanded behind the middle, then arcuately convergent to the tips, which are separately rounded and finely dentate; humeri not prominent, without humeral carinae; basal margins carinate, with the lobes broadly and arcuately produced at the middle; sutural margin slightly elevated in posterior thirds; lateral margins broadly trisinate in lateral aspect; disc longitudinally deplanate along suture, with shallow basal depressions; surface densely and finely imbricato-punctate, evenly covered with semirecumbent silver-whitish hairs except for the sutural areas between the anterior two-fifths and the posterior third, each with two small inconspicuous whitish hair spots just before and behind the hairless area.

Ventral surface evenly imbricato-punctate, and clothed with fine, inconspicuous, short, silver-whitish hairs. Prosternum convex; gular lobe with the anterior margin arcuately but slightly emarginate at the middle; prosternal process gradually attenuate to the tip, which is very narrowly and simply produced posteriorly. Abdomen with anal segment broadly rounded at apex. Pygidium rounded at apex.

Legs slender; posterior tarsi with the first segment about as long as the following three united.

Length: 5.5 mm; width: 1.5 mm.

Holotype: ♀, Okawa, Yakushima Is., Japan, 26. VII. 1976, S. NAOMI lgt. Paratype: ♀, Miyanoura, Yakushima Is., Japan, 3. VIII. 1962, H. YOKOYAMA lgt. (head broken).

Notes. The present species is allied to *Agrilus daimio* OBENBERGER, 1936, but can be distinguished from it by the following characteristics: 1) body dark aeneous with distinct cupreous tinge, instead of being black with aeneous or greenish tinge; 2) clypeus slightly narrower than that of *A. daimio*; 3) gular lobe very slightly emarginate, while in *A. daimio*, it is distinctly emarginate.

Agrilus babai sp. nov.

(Figs. 4, 11)

Body black, small but robust; head and elytra slightly tinged green; pronotum slightly tinged cupreous.

Head slightly narrower than the base of pronotum; vertex obsoletely imbricato-punctate, with an inconspicuous median impression; frons arcuately produced in dorsal aspect, slightly longer than wide between eyes, very obsoletely impressed medially below vertex, evenly and transversely rugoso-punctate, clothed with silver-whitish hairs along the anterior margin, with small and transverse pores just above antennal cavities; eyes with the internal rims almost straight, converging above in frontal aspect; clypeal suture transversely carinate; clypeus transverse, about 1.6 times as wide as long between antennal cavities, with the anterior margin arcuately emarginate; antennal cavities large; antennae slender, eleven-segmented and serrate from the fourth segment, with the first segment the stoutest and longest, about 1.2 times as long as the second, which is equally stout to the first, the third less stout, slightly shorter than the second, the fourth subtriangular, about as long as the third.

Pronotum about 1.4 times as wide as long, widest at the anterior third; sides arcuately expanded throughout, though very slightly sinuate just before posterior angles; anterior margin distinctly bisinuate, slightly narrower than the posterior, with median lobe arcuately produced; posterior margin trisinuate, with median lobe bipartite into two small lobes by the arcuate ante-scutellar emargination; anterior angles acute and produced in dorsal aspect, abased and pointed in lateral aspect; posterior angles slightly acute in dorsal aspect; prehumeral carinae distinctly sinuate, extending to just behind anterior angles, where they join the marginal ones; marginal carinae bisinuate, and sharply defined throughout; submarginal carinae subparallel to and moderately distant from marginal ones in anterior half, then gradually approximate to them posteriorly, and joining them at the posterior fourth; disc convex, ~~slightly depressed along prehumeral carinae, roundly depressed before scutellum;~~ surface evenly and transversely rugoso-punctate, sparsely clothed with inconspicuous, short, cinereous hairs. Scutellum with a transverse carina, the part before the carina being subtrapezoidal and distinctly declivous in front, the part behind the carina transverse and subtriangular.

Elytra about 2.7 times as long as wide, about 4.0 times as long as pronotum, widest just behind the middle; sides slightly expanded behind humeri, slightly convergent to anterior third, arcuately and broadly expanded behind the middle, then arcuately convergent to the tips, which are separately rounded and finely dentate; humeri without humeral carinae; basal margins carinate, with the lobes broadly and arcuately produced; sutural margin slightly elevated in posterior half; lateral margins unarmed; disc with large basal depressions; surface densely and evenly imbricato-punctate, evenly clothed with semirecumbent, short, cinereous hairs.

Ventral surface sparsely clothed with inconspicuous hairs. Prosternum convex, and transversely imbricato-punctate; gular lobe bilobed, with the anterior margin roundly emarginate at the middle; prosternal process slightly constricted between anterior coxal cavities, and tricuspidate at apex. Abdomen finely punctate, with anal segment rounded at apex. Pygidium rounded at apex, longitudinally carinate at the middle. Legs slender; posterior tarsi with the first segment about as long as the following three united.

Length: 4.4–5.2 mm; width: 1.0–1.4 mm.

Holotype: ♂, allotype: ♀, paratype: 1 ♂, Takeda, Ishigakijima Is., Ryukyus, Japan, 20. IV. 1981, K. BABA lgt.

Remarks. The present species is closely allied to *A. deguchii* TÔYAMA, 1985, from the Ryukyus, Japan, but can be distinguished from it by the following characteristics: 1) body black, instead of being aeneous; 2) prosternal process tricuspidate at apex, instead of being simply attenuate to the tip.

Agrilus blatteicollis BOURGOIN, 1922

Agrilus blatteicollis BOURGOIN, 1922. Bull. Soc. ent. Fr., 27: 168. — DESCARPENTRIES & VILLIERS, 1963, Bull. Inst. roy. Sci. nat. Belg., 39: 14.

Specimens examined. 1 ♂, Doi Suthep near Chiang Mai, NW Thailand, 6. VI. 1978, K. & H. AKIYAMA lgt.; 1 ♀, same loc., 9. VI. 1978, K & H. AKIYAMA lgt. (new to the fauna of Thailand).

Distribution. Tonkin, Hainan Is., Laos, Thailand, Bhoutan.

Agrilus lafertei KERREMANS, 1892

Agrilus lafertei KERREMANS, 1892, Ann. Soc. ent. Belg., 36: 212–213. — DESCARPENTRIES & VILLIERS, 1963, Bull. Inst. roy. Sci. nat. Belg., 39: 8.

Specimens examined. 1 ♀, Meo Village near Chiang Mai, NW Thailand, 31. V. 1978, K. & H. AKIYAMA lgt.; 2 ♂ 1 ♀, Mt. Doi Pui near Chiang Mai, NW Thailand, 23. V. 1983, S. OHMOMO lgt. (new to the fauna of Thailand). 1 ♂, Godavari near Kathmandu, Nepal, 3. VII. 1964, R. KANO lgt. (new to the fauna of Nepal).

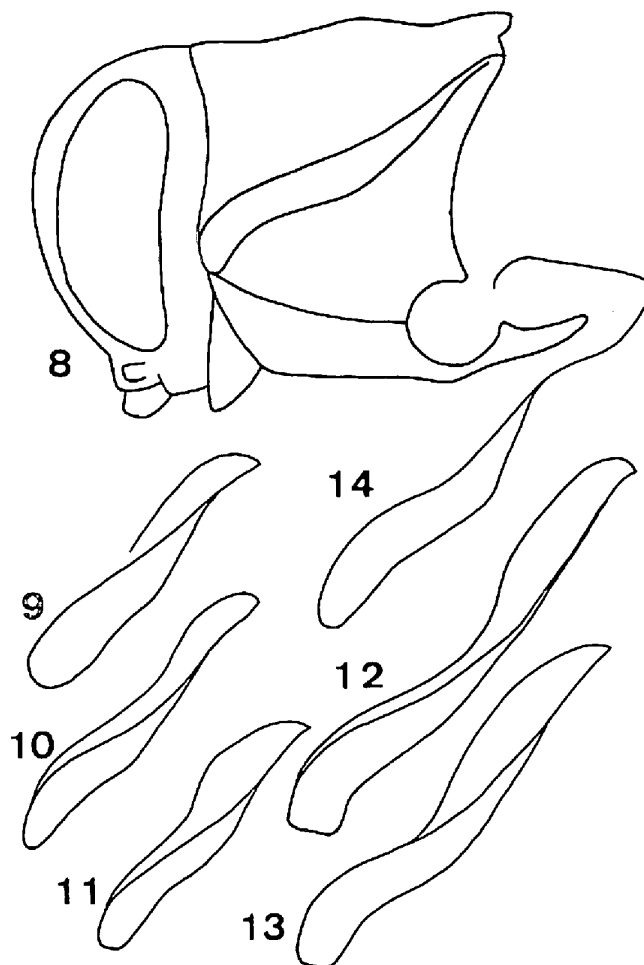
Distribution. Tonkin, Laos, Thailand, Burma, India, Nepal.

Agrilus nepalensis sp. nov.

(Figs. 5, 12)

Body subcylindrical; vertex black; frons green in male; pronotum cupreous except for blackish sides; elytra black; ventral surface, antennae and legs black, though brighter than dorsum.

Head slightly narrower than the base of pronotum; frons about as long as wide between eyes, evenly, densely and transversely rugoso-punctate, evenly clothed with



Figs. 8-14. — 8. *Agrilus toyoshimai* sp. nov.; head and prothorax in lateral aspect. — 9-14. *Agrilus* spp., carinae on prothorax in lateral aspect; 9, *A. takahashii* sp. nov.; 10, *A. naomii* sp. nov.; 11, *A. babai* sp. nov.; 12, *A. nepalensis* sp. nov.; 13, *A. senohi* sp. nov.; 14, *A. nagaii* sp. nov.

semirecumbent silver-whitish hairs, with obsolete and shallow median groove, small and transverse pores just above antennal cavities; eyes with the internal rims sinuate, slightly converging below in frontal aspect; clypeal suture transversely carinate; clypeus transverse, about 1.8 times as wide as long between antennal cavities, with the anterior margin arcuately emarginate; antennal cavities large; antennae slender, eleven-segmented and serrate from the fourth segment, with the first segment the stoutest and longest, slightly longer than the first, the third less stout, about as long as the second, the fourth subtriangular, about as long as the first.

Pronotum about 1.3 times as wide as long, widest just before the middle; sides arcuately expanded throughout, though slightly sinuate just before posterior angles; anterior margin bisinuate, about as wide as the posterior, with median lobe arcuately

produced; posterior margin trisinate, with median lobe shallowly emarginate before scutellum; anterior angles acute and rather strongly produced in dorsal aspect, abased and pointed in lateral aspect; posterior angles subrectangular in dorsal aspect; prehumeral carinae bisinuate, starting from posterior angles, extending to near anterior angles, where they are connected with marginal ones; marginal carinae sinuate; submarginal carinae subparallel to and moderately distant from marginal ones in anterior third, then gradually approximate to them posteriorly, and joining them at the posterior fifth; disc convex, longitudinally depressed along prehumeral carina, roundly and shallowly depressed behind the anterior lobe and before the posterior lobe; surface evenly and transversely rugoso-punctate. Scutellum with a transverse carina, the part before the carina being subtrapezoidal and declivous in front, median projection spinose posteriorly.

Elytra about 2.8 times as long as wide, about 4.6 times as long as pronotum, widest just behind humeri; sides slightly expanded behind humeri, slightly convergent to anterior third, arcuately and broadly expanded behind the middle, then obliquely but slightly convergent posteriorly, and subparallel just before the tips, which are separately rounded and finely dentate; humeri without humeral carinae; basal margins carinate, with the lobes arcuately produced at the middle; sutural margin slightly elevated in posterior two-thirds; disc longitudinally depressed along suture in anterior half, with the basal depressions large; surface evenly, densely and finely imbricato-punctate, and evenly covered with short, fine, semirecumbent yellowish hairs except for the areas along the sides.

Prosternum convex, densely imbricato-punctate, covered with fine inconspicuous hairs; gular lobe with the anterior margin arcuately but slightly emarginate at the middle; prosternal process subparallel between anterior coxal cavities, then gradually attenuate to the tips. Mesosternum evenly clothed with fine inconspicuous hairs, and covered with whitish powders laterally. Metasternum evenly clothed with fine inconspicuous hairs, and covered with whitish powders along the margins. Abdomen with the ventral segments bearing whitish powder spots laterally along the anterior margins, anal one rounded at apex. Pygidium rounded at apex. Legs slender; posterior tarsi with the first segment longer than the following three united.

Length: 9.3 mm; width: 2.1 mm.

Holotype: ♂, Nagarjun R. F., C. Nepal, 29. IV. 1983, T. SHIMOMURA lgt.

Notes. The present species is very closely allied to *A. imitans* LEWIS, 1893, from Japan, but can be distinguished from it by the following characteristics: 1) body slenderer; 2) prehumeral carinae more weakly sinuate.

Agrilus senohi sp. nov.

(Figs. 6, 13)

Body subcylindrical, entirely black with slight aeneous tinge; ventral surface brighter than dorsum.

Head slightly narrower than the base of pronotum; vertex obsoletely punctate, longitudinally but inconspicuously impressed medially; frons arcuately produced in dorsal aspect, about 1.4 times as long as wide between eyes, distinctly grooved medially below vertex for a short distance, small and transverse pores just above antennal cavities, transversely rugoso-punctate; eyes with the internal rims sinuate and subparallel, though very slightly converging above in frontal aspect; clypeal suture transversely carinate; clypeus transverse, about twice as wide as long between antennal cavities, with the anterior margin arcuately emarginate; antennal cavities large; antennae slender, eleven-segmented and serrate from the fourth segment, with the first segment the stoutest, slightly longer than the second, which is equally stout to the first, about 1.3 times as long as the third, the fourth subtriangular, about as long as the third.

Pronotum transverse, about 1.3 times as wide as long, widest at the anterior third; sides arcuately expanded in anterior half, then obliquely converging to posterior angles; anterior margin bisinuate, slightly narrower than the posterior, with median lobe arcuately produced; posterior margin trisinate, with median lobe arcuately but slightly emarginate just before scutellum; anterior angles acute and strongly produced in dorsal aspect, abased and pointed in lateral aspect; posterior angles subrectangular in dorsal aspect; prehumeral carinae gently arcuate in lateral aspect, extending to posterior three-fifths, where they are connected with marginal ones; marginal carinae sinuate, and sharply defined throughout; submarginal carinae subparallel to and moderately distant from marginal ones in anterior third, then gradually approximate to them posteriorly, and joining them at the posterior fourth; disc convex, slightly depressed behind the anterior lobe and just before scutellum, longitudinally depressed along prehumeral carinae; surface evenly rugoso-punctate, clothed with inconspicuous fine hairs. Scutellum with a transverse carina, the part before the carina declivous in front, posterior part subtriangular.

Elytra about 2.4 times as long as wide, about 4.1 times as long as pronotum, widest just behind the middle; sides slightly expanded behind humeri, very slightly convergent to anterior third, arcuately and broadly expanded behind the middle, then arcuately convergent to the tips, which are separately rounded and finely dentate; humeri without humeral carinae; basal margins carinate, with the lobes broadly and arcuately produced at the middle; sutural margin slightly elevated in posterior half; lateral margins broadly trisinate in lateral aspect; disc longitudinally but slightly deplanate along suture, with large basal depressions; surface densely and finely imbricato-punctate, longitudinally covered with semirecumbent silver-whitish hairs along the sides, though the hairs become sparser anteriorly, each with three whitish hair spots, the first spot in the basal depression, the second at the anterior two-fifths, and the last at the posterior third.

Ventral surface evenly and finely punctate, and clothed with fine, inconspicuous, short, silver-whitish hairs. Prosternum convex; gular lobe with the anterior margin

subtriangularly emarginate at the middle; prosternal process distinctly depressed medially, gradually expanded between anterior coxal cavities, then sinuously attenuate to the tip, which is very narrowly and simply rounded. Abdomen with anal segment broadly rounded at apex. Pygidium rounded at apex.

Legs slender; posterior tarsi with the first segment about as long as the following three united.

Length: 7.1 mm; width: 2.2 mm.

Holotype: ♀, Kenting Park, Pintung Hsien, Taiwan, 14. III. 1977, T. SENOH lgt. Paratypes: 2 ♀, Kuraru, Taiwan, 4. IV. 1965, S. MIYAMOTO lgt.

Notes. The present species is similar to *Agrilus suzukii* Y. KUROSAWA, 1985, from the Bonin Is., Japan, but can be easily distinguished from it by the different coloration.

Agrilus semiaurovittatus Y. KUROSAWA, 1954

Agrilus semiaurovittatus Y. KUROSAWA, 1954, Bull. natn. Sci. Mus., Tokyo, 1: 87-88.

Agrilus amphipyru POCHON, 1965, Ann. hist.-nat. Mus. natn. hung., 57: 275. *Syn. nov.*

Specimens examined. 1 ♀, Nanshanchi, Nantou Hsien, Taiwan, 5. V. 1979, M. TÔYAMA lgt.; 2 ♂ 3 ♀, same loc., 27. IX. 1980.

Distribution. Taiwan.

Agrilus nagaii sp. nov.

(Figs. 7, 14)

Body robust, entirely green except for blackish apical half of elytra; ventral surface tinged with gold.

Head narrower than the base of pronotum; vertex transversely rugoso-punctate, with an inconspicuous median groove; frons narrow, about 1.3 times as long as wide between eyes, evenly and transversely rugoso-punctate, sparsely clothed with semirecumbent, silver-whitish hairs along the anterior margin and eyes, with a distinct median groove below vertex, small and transverse pores just above antennal cavities; eyes with the internal rims slightly sinuate, slightly converging below in frontal aspect; clypeal suture transversely carinate; clypeus about as long as wide between antennal cavities, clothed with silver-whitish hairs, with the anterior margin subtruncate, though very slightly sinuate; antennal cavities large; antennae eleven-segmented, serrate from the fourth segment, with the first segment the stoutest, subglobular, slightly longer than the second, which is equally stout to the first, the third less stout, about 0.8 times as long as the second, the fourth subtriangular, about as long as the first.

Pronotum about 1.4 times as wide as long, widest near the middle; sides arcuately expanded throughout; anterior margin bisinuate, narrower than the posterior, with median lobe broadly and arcuately produced; posterior margin trisinuate, with median lobe obsoletely emarginate before scutellum; anterior angles

acute and produced in dorsal aspect, acute and abased in lateral aspect; posterior angles obtuse in dorsal aspect; prehumeral carinae strongly arcuate, extending to the middle, not connected with the marginal ones; marginal carinae sinuate, and sharply defined throughout; submarginal carinae subparallel to the marginal ones in anterior half, then gradually approximate to them posteriorly, and joining them at the posterior fourth; disc convex, with a large transverse depression before the posterior lobe, longitudinal depressions along prehumeral carinae; surface evenly and transversely rugoso-punctate. Scutellum with a transverse and sinuate carina, the part before the carina declivous in front, posterior part bearing a distinct depression, and median projection sharply spinose posteriorly.

Elytra about 2.7 times as long as wide, about 4.0 times as long as pronotum, widest just behind humeri; sides slightly expanded behind humeri, slightly convergent to anterior third, arcuately and broadly expanded behind the middle, then obliquely convergent to the tips, which form a long and sharp spine at middle; humeri not prominent, without humeral carinae; basal margins carinate, with the lobes arcuately produced; sutural margin slightly elevated in posterior third; disc with basal depressions; surface evenly imbricato-punctate, and clothed with semi-recumbent silver-whitish hairs along suture in posterior half.

Ventral surface covered with short fine hairs. Prosternum convex, and densely imbricato-punctate; gular lobe with the anterior margin arcuately emarginate at the middle; prosternal process constricted between anterior coxal cavities, then distinctly expanded posteriorly, and tricuspidate at apex. Abdomen with anal segment rounded at apex. Pygidium round at apex, with longitudinal median carina. Legs slender; posterior tarsi with the first segment about as long as the following three united.

Length: 8.0 mm; width: 2.2 mm.

Holotype: ♂, Crocker Range, 16 mi. NW Keningau, Sabah, E. Malaysia, 26. V. 1982, S. NAGAI lgt.

Remarks. The present species is easily distinguished from the other congeners by the remarkable coloration.

Agrilus gratiosus DEYROLLE, 1864

Agrilus gratiosus DEYROLLE, 1864, Ann. Soc. ent. Belg., 8: 124.

Specimen examined. 1 ♀, Kalawara, 32 km from Palu, C. Sulawesi, Indonesia, 17. V. 1984, M. TAO lgt. (new to the fauna of Sulawesi).

Distribution. Java, Sumatra, Borneo, Sulawesi.

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