

## Nineteen new *Agrilus* species from the Palaearctic and Oriental regions (Coleoptera: Buprestidae: Agrilinae)

Eduard JENDEK

Institute of Zoology, Slovak Academy of Sciences, Dúbravská cesta 9, SK–845 06 Bratislava, Slovakia. E-mail: jendek@stonline.sk

JENDEK, E. 2007. Nineteen new *Agrilus* species from the Palaearctic and Oriental regions (Coleoptera: Buprestidae: Agrilinae). *Entomol. Probl.* 37(1–2): 31–43. – Nineteen new species from the Palaearctic and Oriental regions are described. Illustrations of habitus and aedeagi are provided.

**Key words:** Coleoptera, Buprestidae, Agrilinae, *Agrilus*, new taxa, Palaearctic region, Oriental region.

### Introduction

Despite the fact, that more than thousand species of the genus *Agrilus* CURTIS, 1825 are described from the Palaearctic and Oriental region, their species richness is still poorly known. More than three hundred new taxa available for me are pending for their description. This contribution introduces the descriptions of the first series.

### Material and Methods

The material referred to in this study is preserved in the following collections:

EJCB – collection of E. Jendek, Slovak Academy of Sciences, Bratislava, Slovakia;

MHCB – collection of Michael Hornburg, Berlin, Germany;

NMPC Národní muzeum, Prague, Czech Republic;

NSCF – collection of N. Sugiura, Fukushima, Japan;

NSMT – National Science Museum (Natural History), Tokyo, Japan;

SOCT – collection of S. Ohmomo, Tsukuba, Japan;

USNM – The United States National Museum of Natural History, Smithsonian Institution, Washington D. C., USA;

ZIN – Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia.

Other abbreviations in the text: [] – used for my remarks.

Due to the uniformity of *Agrilus* species, the descriptions are kept concise and restricted to the distinctive features. Characters evident from illustrations are shortened or omitted.

### *Agrilus sugiurai* sp.nov.

Figs 1, 20

**Type locality.** Japan, NE Honshu, Miyagi-ken, Shiroishi-shi, Fukuoka-fukaya, Mizubashô-no-mori, 38.5N, 140.32E, alt. 635m [coordinates and altitude were updated by the collector].

**Type specimens.** Holotype ♂, NSMT: “Mizubasyouno mori, Fukuokafukaya Shiroishi city, Miyagi Prf. Japan, 28.vii.2005, Nobuo Sugiura leg.”. Paratypes (3 ♀♀): 1 ♀, EJCB, same locality as holotype but 2.viii.2005; 1 ♀, NSCF, same locality but 2.viii.2005; 1 ♀, SOCT, same locality but 1.viii.2005.

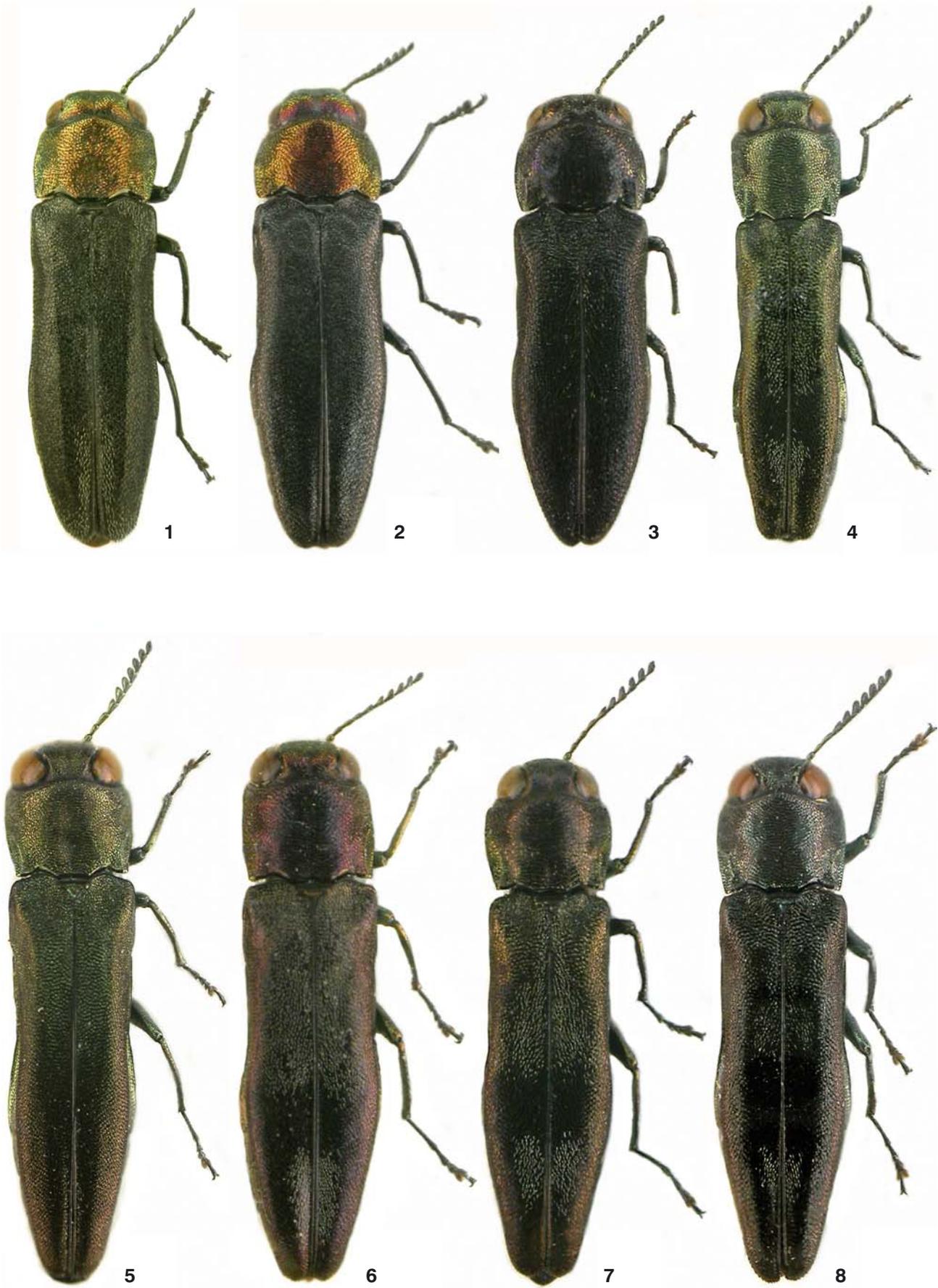
**Description of the holotype.** Body convex, subparallel; frons silky green; vertex and pronotum coppery-red; elytra and ventral side black, silky lustrous. Elytra with indication of whitish pubescence in humeral part and with narrow adsutural strip of short, white pubescence in apical third.

Head with eyes narrower than anterior pronotal margin; frontovertex with shallow medial sulcus and two lateral, spirally rugoso-punctate gibbosities. Eyes distinctly convex, small; antennae tenuous, long, reaching to posterior pronotal angles.

Pronotum transverse, convex, widest in middle; anterior and posterior margins subequal in width; lobe on anterior margin prominent, subangulate; sides evenly arcuate; posterior angles obtuse; marginal and submarginal carinae strongly convergent, conjoined in posterior third; disk with obvious postero-medial, smaller antero-medial and narrow lateral impressions; prehumeral costate basally, abate apically, reaching to one-third of pronotal length, feebly arcuate, distant from pronotal margin on apex. Scutellum large, anterior margin and sides arcuate, posterior margin sharply spinate, transverse carina present.

Elytra strongly convex, feebly attenuate at apex; apices broadly, separately arcuate, serrulate on margin.

Prosternal lobe of holotype asymmetric and teratoid (female paratypes with prosternal lobe robust, broadly and deeply arcuately emarginate); prosternal process large, distinctly dilated between coxae, apex spinate, disk flat with long erect pubescence. Basal ventrite between metacoxae with deep, subtriangular impression with sides distinctly raised. Apical ventrite narrowly, subangulately emarginate and impressed on tip; tip with cluster of semierect bristles. Metafemora incrassate, distinctly larger than mesofemora; tarsi short; metatarsi distinctly shorter than metatibiae; tarsomere 1 subequal in length to following two together.



Figs 1–8 Habitus of holotypes of: 1) *Agrilus sugiurai* sp.nov.; 2) *A. nagahatai* sp.nov.; 3) *A. doipui* sp.nov.; 4) *A. volkovitshi* sp.nov.; 5) *A. pseudograminis* sp.nov.; 6) *A. hiatus* sp.nov.; 7) *A. pao* sp.nov.; 8) *A. nokrek* sp.nov.

Aedeagus (Fig. 20).

Length: 5.6–6.5 mm (Holotype 5.9 mm).

**Etymology.** The specific name is dedicated to the collector of this species Mr. Nobuo Sugiura (Japan).

**Differential diagnosis.** Similar to *A. koyoi* OHMOMO, 2002 by robust body; small eyes; spiral structure of vertex; transverse, medially impressed pronotum; wide elytral apices; large prosternal process and short tarsi but differs from it mainly by color of pronotum and elytra; more prominent anterior pronotal lobe, longer antennae and by deep impression on basal ventrite.

***Agrilus nagahatai* sp.nov.**

Figs 2, 21

**Type locality.** Myanmar, Shan state, Taunggyi.

**Type specimens.** Holotype ♂, EJC: “Burma (Myanmar) SW Shan State, Taunggyi, J. Rejsek 1-18.6.1997”.

**Description of the holotype.** Head narrower; frontovertex obviously convex and protruded; antennae shorter, reaching to about half of pronotum.

Pronotum obviously transverse, posterior margin wider than anterior; sides strongly arcuate; disk distinctly convex without lateral impressions; posterior angles obtuse with subarcuate tip; prehumeral hair-like, faint on distal end.

Elytra without ornamental pubescence, deeply impressed in humeral part. Prosternal lobe large, protrusive outside, widely and deeply arcuately emarginate; prosternal process subparallel, distinctly impressed on disk; prosternum without long, erect pubescence. Basal ventrite entire, without sexual modifications; tip of apical ventrite with line of semierect setae.

Aedeagus (Fig. 21).

Length: 5.4 mm; width: 1.5 mm.

**Etymology.** Dedicated to my good friend, nature lover and photographer Yoshiyuki Nagahata (Japan).

**Differential diagnosis.** Closely similar to *A. sugiurai* sp.nov. from which it differs by characters given in the description.

***Agrilus doipui* sp.nov.**

Figs 3, 22

**Type locality.** Thailand, Chiang Mai province, Doi Pui Mt., 18°49'N, 98°54'E, 1600 m.

**Type specimens.** Holotype ♂, EJC: “THAI, Chiang Mai prov., 18°49'N, 98°54'E, 1600 m, Doi Pui Mt., 2-6.v.1996”.

**Description of the holotype.** Body robust, strongly convex, black, silky lustrous; head and pronotum with greenish tinge; frons and lateral parts of pronotum golden-green; elytra without ornamental pubescence.

Head about as wide as anterior pronotal margin; frontovertex very wide, feebly convex; vertex with distinct medial sulcus and two lateral, spirally rugoso-punctate gibbositities; eyes very small, convex, feebly projecting beyond head outline; antennae reaching to about half of pronotal length.

Pronotum transverse, strongly convex, widest in middle; anterior lobe prominent, slightly subangulate; sides evenly arcuate; hind angles obtuse, sharp on tip; disk with shallow, medial impression at base; lateral impressions vague; marginal and submarginal carinae strongly convergent, conjoined in posterior third; prehumeral sharply costate; strongly arcuate, almost conjoined with marginal carina in apical third of pronotum. Scutellum large, subpentagonal, hind projection sharply spinate, transverse carina present.

Elytra convex, subparallel, strongly attenuate on apex; apices narrow, separately arcuate.

Prosternal lobe large, faintly arcuately emarginate; prosternal process without erect pubescence, subparallel, feebly impressed on disk with sides subangulate, hind projection robust. Basal ventrite entire, last ventrite shallowly arcuately emarginate, with line of long bristles on tip.

Aedeagus (Fig. 22).

Length: 4.8 mm.

**Etymology.** Named in reference to the type locality.

**Differential diagnosis.** By the form of head and pronotum, this species is similar to *A. sugiurai* sp. nov. from which it differs mainly by smaller size; more attenuate elytral apex and by absence of modifications on basal ventrite.

***Agrilus volkovitshi* sp.nov.**

Figs 4, 23

**Type locality.** “China, Yunnan, 100 km W of Kunming, 1993, Diaolin Nat. Reservation”.

**Type specimens.** Holotype ♂, EJC: “CHINA, Yunnan, 22.V.-2.VI., 100km W of Kunming, 1993, Diaolin Nat. Reservation”. Paratypes (182 exs): 174 exs, EJC, NMPC, NSCF, NSMT, SOCT: with the same locality data as holotype; 1 ex, EJC: “Yunnan 1500-2500 m, 25.22N, 98.49E, 17-24/5, Gaoligong Mts., 1995”; 6 exs, EJC: “Yunnan 2300 m, 24.57N, 102.38E, Xishan Mts. 19/5 1993”; 1 ex, EJC: “Yunnan 2500-2700m, 25.58N 100.21E, Jizushan 6-10.7.1994”; 1 ex, ZIN: “China, Yunnan, Loc.2, Hwy 320, Kunming-Xiaguan, 8km WNW, Chuxiong, 25°07'30.9"N, 101°24'04.2"E, 1874 m, 18.05.2002, Konstantinov & Volkovitsh leg.”.

**Description of the holotype.** Body subcylindrical, shiny brown-green; elytra except pleural portions with strip of white pubescence disrupted in apical third; basal pubescence wider, oblong; apical one narrowly subtriangular, not reaching to apices.

Head conspicuously convex, without erect white pubescence; vertex narrow, longitudinally rugose, with feeble medial sulcus; eyes large, convex, not protuberant beyond head outline. Antennae slender, reaching just beyond half of pronotal length; antennomeres serrate, arcuately acuminate.

Pronotum obviously prolonged, convex, widest at anterior margin; anterior pronotal lobe obvious, not projecting beyond anterior angles; sides feebly convergent backward, slightly emarginate before obtusely acuminate posterior angles; disk strongly convex with deep, entire medial sulcus; prehumeral finely costate, long, evenly

arcuate, reaching to about half of pronotal length, abated near marginal carina; marginal and submarginal carinae strongly convergent, conjoined just before basal third of pronotal length. Scutellum large, subpentagonal with sharply elevated transverse carina and acute hind projection.

Elytra convex, weakly attenuate apically; apices broad, regularly, separately arcuate with serrulate margin.

Prosternal lobe large, shallowly arcuately emarginate, feebly declivous; prosternal process flat, subparallel between coxae, sides obtusely acuminate, hind process robust; basal ventrite with two almost coalescent, sharp tubercles adjoined to distal margin; last ventrite with narrow, sharp, subtriangular arcuation and weak impression on apex. Prosternal lobe, prosternum, metasternum and half of basal ventrite with white, dense, erect pubescence.

Metafemora incrassate; metatarsi slightly shorter than metatibiae; metatarsomere 1 subequal in length to following two together.

Aedeagus (Fig. 23).

Length: 4.2–6.2 mm (Holotype 5.4 mm).

**Etymology.** This species is named in a honor of my friend, collector of this species and excellent buprestidologist Mark Volkovitsh (Russia).

**Differential diagnosis.** *Agrilus volkovitshi* sp. nov. differs from the similar *A. reichardti* OBENBERGER, 1935 by the following characters: frons strongly convex, without long, erect pubescence; antennae slender and shorter, not reaching to posterior pronotal angles; pronotum without lateral impressions; elytra less prolonged; prosternal process flat, without sharply elevated angles; legs slender and aedeagus more asymmetric.

**Remark.** Specimens from Diaolin were collected on the foliage of young suckers of *Quercus* sp.

#### *Agrilus pseudograminis* sp.nov.

Figs 5, 24

**Type locality.** China, Shaanxi, Qinling mts., 6 km E of Xunyangba, 1000-1300 m.

**Type specimens.** Holotype ♂, EJCB: "China, 1000-1300m. Shaanxi, Qinling mts., Xunyangba (6km E), 23.v.-13.vi.1998, I. H. Marshal leg.". Paratypes (7 exs): 3 ♂♂, 4 ♀♀ EJCB, with same locality data as holotype.

**Description of the holotype.** Body subparallel, subcylindrical, dark brown-green with silky tinge; elytra with strip of white pubescence in anterior two-thirds (often caducous) and with very narrow, subtriangular one in posterior third.

Head large with strongly convex eyes slightly protuberant beyond head outline; vertex narrow with distinct medial sulcus; frons feebly concave, densely whitely pubescent with long erect hairs; antennae short not reaching posterior pronotal angles.

Pronotum widest in anterior third; anterior margin with obvious lobe not projecting beyond anterior angles; sides arcuately converging backward, arcuately emarginate before subrectangular posterior corners; disk moderately con-

vex with obvious, entire medial sulcus which is proximally enlarged; prehumeral costate, feebly arcuate, reaching to pronotal half, abate on distal end, scarcely conjoined with marginal carina; marginal and submarginal carinae strongly convergent, conjoined in basal third of pronotum.

Elytra feeble attenuate apically; apices broad, conjointly arcuate with distinct sutural spinule.

Prosternal lobe large, deeply arcuately emarginate; prosternal process robust, flat, strongly enlarged between coxae with subrectangularly acuminate lateral angles; basal ventrite without tubercles; last ventrite distinctly arcuately emarginate on apex with line of whitish semierect setae; medial part of prosternum, metasternum, half of basal ventrite and hind margin of mesofemora and metafemora with long, dense, white pubescence.

Sexual dimorphism: Female with shorter antennae; elytra larger, more attenuate apically; frons and ventral side without long pubescence; apex of last ventrite faintly emarginate.

Variability. Pronotum sometimes widest in middle, pronotal sides almost subparallel with posterior angles obtusely acuminate.

Aedeagus (Fig. 24).

Length: 5.2–6.8 mm (Holotype 6.8 mm).

**Etymology.** The species name is derived from the Greek prefix *pseudo-* (not actually but having the appearance of) and *graminis* to stress the similarity with *A. graminis* KIESENWETTER, 1857.

**Differential diagnosis.** *Agrilus pseudograminis* sp. nov. is habitually very similar to *A. graminis* by elytral pubescence and form of aedeagus but it differs from it by having antennae in male serrate and not triangularly lobate; by more transverse pronotum; by apices conjointly arcuate with distinct sutural spinule; by strongly expanded prosternal process and by absence of tubercles on basal ventrite in male.

#### *Agrilus hiatus* sp.nov.

Figs 6, 25

**Type locality.** Thailand, Chiang Mai province, Sanpakia village, 19°19'N, 98°50'E, 1400 m.

**Type specimens.** Holotype ♂, EJCB: "Thailand, Chiang Mai prov., 19°19'N, 98°50'E, 1400 m, Sanpakia vill., 1-15.V.1998". Paratypes (5 exs): 2 ♂♂, EJCB, same locality data as holotype; 1 ♂, EJCB: "NW Thai, 7-14.V.1992, Chiang Mai, Doi Suthep Pui, P. Pacholátko leg."; 1 ♀, EJCB: "Thailand N, 1-19.V.1998, Chiang Mai prov., Ban San Pakia vill., 19°19'N, 98°50'E, 1400 m, M. Bednařk leg."; 1 ♂, EJCB: "Lao-N, Phongsaly prov. 21°41'-2°N, 102°06'-08'E, 28.v.-20.vi.2003, Phongsaly env., ~1500m".

**Description of the holotype.** Body subparallel, strongly attenuate on apex; frons golden-green; vertex and pronotum dark carmine; elytra dark brown with silky tinge. Elytra with white ornamental pubescence widely disrupted in about apical third: forepart wide, extending almost to pleural margins, hind part narrowly subtriangular, not extending to apices.

Head strongly convex; vertex with medial sulcus; eyes slightly protuberant beyond head outline; frons with sparse, erect, whitish hairs; antennae tenuous, reaching to about half pronotal length, distal antennomeres with sharp outer angles.

Pronotum subquadrate, about as large than elytra; widest in middle; anterior lobe obvious, projecting beyond anterior angles; sides feebly subarcuate; posterior angles slightly obtusely acuminate; disk moderately convex with medial sulcus deeper and wider basally than apically, lateral impression very weak; prehumeral faintly costate, strongly arcuately conjoined with marginal carina in about half of pronotal length. Marginal and submarginal carinae strongly convergent, conjoined in basal fourth of pronotum.

Elytra moderately convex, strongly attenuate apically; apices evenly, narrowly, separately arcuate with serrulate margin.

Prosternal lobe large, broadly, shallowly arcuately emarginate; prosternal process flat, slender, subparallel between coxae with lateral angles obtusely acuminate; basal ventrite without tubercles; last ventrite slightly flattened on disk and sharply subtriangularly emarginate on tip. Medial part of prosternum, metasternum and proximal half of basal ventrite with long, very dense, white pubescence. Metafemora incrassate, distinctly larger than profemora, metatarsi distinctly shorter than metatibiae.

Aedeagus (Fig. 25).

Length: 4.7–5.5 mm (Holotype 5.4 mm).

**Etymology.** Hiatus (Latin) – a break or interruption in the continuity, refers to the form of elytral pubescence.

**Differential diagnosis.** *Agrilus hiatus* sp. nov. is habitually similar to *A. derasofasciatus* LACORDAIRE, 1835 from which it can be distinguished e.g. by smaller eyes; by anterior pronotal lobe projecting beyond anterior angles; by weak lateral pronotal impressions; by pronotum widest in middle, by subparallel prosternal process and by form of aedeagus.

#### *Agrilus pao* sp.nov.

Figs 7, 26

**Type locality.** Laos, Huaphanh province, 30 km S of Xam Neua, Phou Pan Mt. alt. 2000 m, 103°59'E, 20°13'N.

**Type specimens.** Holotype ♂, EJC: "Laos, Huaphanh pr., Phou Pan Mt., alt. 2000m, 30 km S of Xam Neua, 103°59'E, 20°13'N, P. Kresl leg. 12.-17.5.2004".

**Description of the holotype.** Body subparallel, feebly attenuate apically, dark brown-green; frons golden-green. Head obviously convex, frons with line of erect hairs laterally; antennae broader, reaching to hind posterior angles, distal antennomeres with obtuse outer angles.

Pronotum subcordiform, somewhat larger than elytra, widest in anterior third; sides strongly arcuate; posterior angles obtusely acuminate; disk convex with distinct mediobasal impression; prehumeral obsolete apically not conjoined with marginal carina.

Prosternal lobe weakly emarginate, almost truncate; prosternal process slender, subparallel between coxae,

impressed on disk with cluster of reddish, erect setae (similar to *A. graminis*) above coxae; basal ventrite slightly incrassate (lateral view); last ventrite not flattened on disk, very widely, shallowly arcuately emarginate. Ventral side without long, erect hairs.

Metatarsi markedly long, subequal in length with metatibiae.

Aedeagus (Fig. 26).

Length: 4.8 mm; width: 1.1 mm.

**Etymology.** The specific name is a random combination of letters.

**Differential diagnosis.** *Agrilus pao* sp. nov. is very closely related to *A. hiatus* sp. nov. from which it differs by characters given in the description.

#### *Agrilus nokrek* sp.nov.

Figs 8, 27

**Type locality.** NE India, Meghalaya, Nokrek National Park, 3 km S Daribokgiri, 1400 m, 25°27'N, 90°19'E.

**Type specimens.** Holotype ♂, EJC: "NE India, Meghalaya, 1400 m, Nokrek N.P. 3 km S Daribokgiri, 25°27'N, 90°19'E, 26.iv.1999, Dembický & Pacholátko leg.".

**Description of the holotype.** Body robust, moderately cuneiform, convex; color deep black-blue, lustrous; elytral pubescence white, widely demarcate in distal third: basal caducous in form of reverse "V" and distinct subquadrate apical.

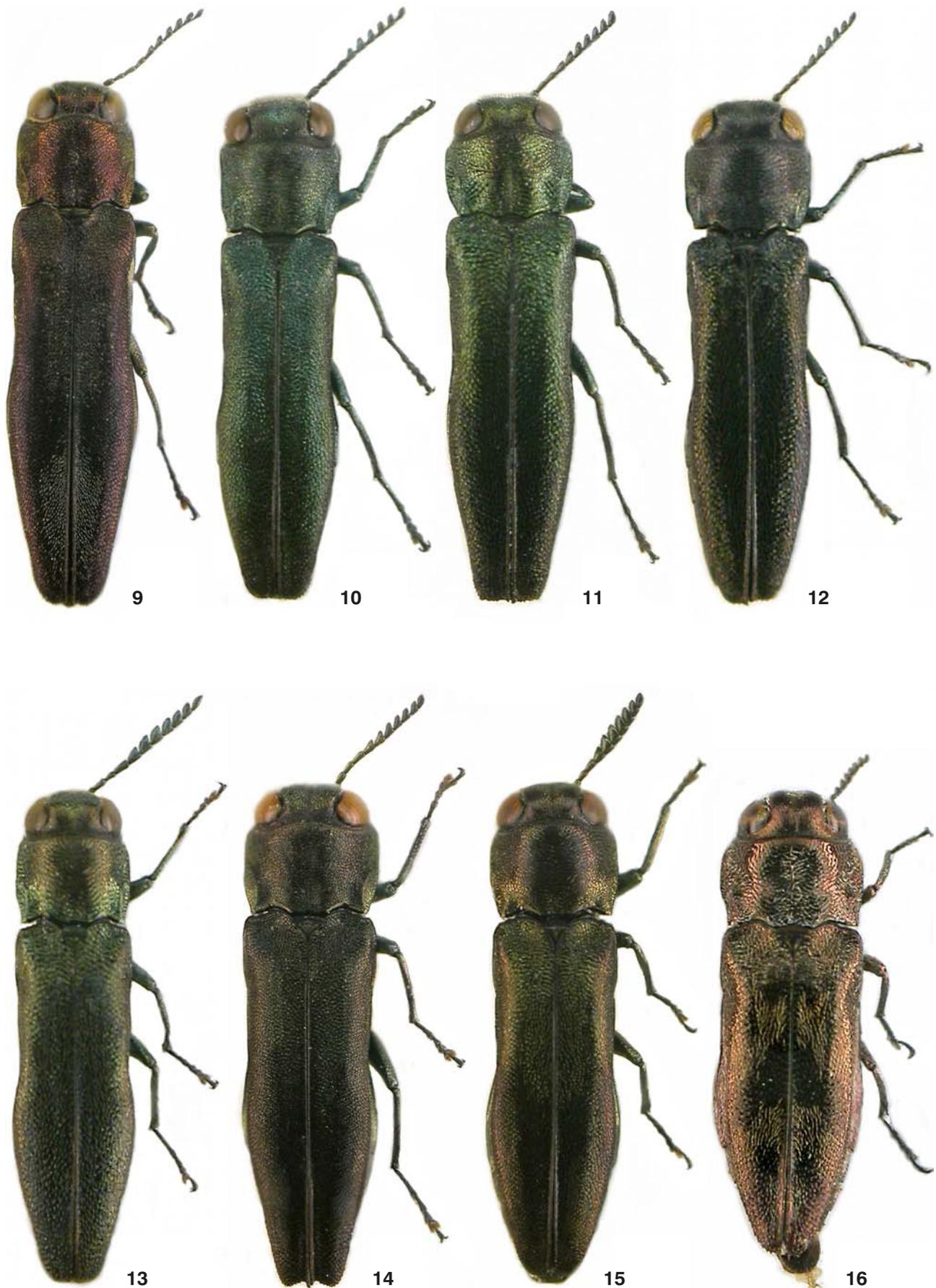
Head large, strongly convex; vertex narrow with deep medial sulcus, sides roughly spirally rugoso-punctate; frons with dark, short, erect, sparse setae; eyes strongly convex, slightly protuberant beyond head outline; antennae serrately-lobate distally, reaching somewhat beyond half of pronotal length.

Pronotum widest in middle; slightly wider than width of elytra; anterior and posterior margin subequal in length; anterior lobe large, projecting beyond anterior angles; sides evenly arcuate; posterior angles obtusely acuminate; disk convex with deep, large mediobasal and weak medioapical impression; prehumeral faintly costate proximally, obsolete distally, long, strongly arcuate, reaching to half of pronotal length, not conjoined with marginal carina. Marginal and submarginal carinae conjoined in basal fifth of pronotum. Scutellum large, anterior margin angulate, transverse carina sharply raised.

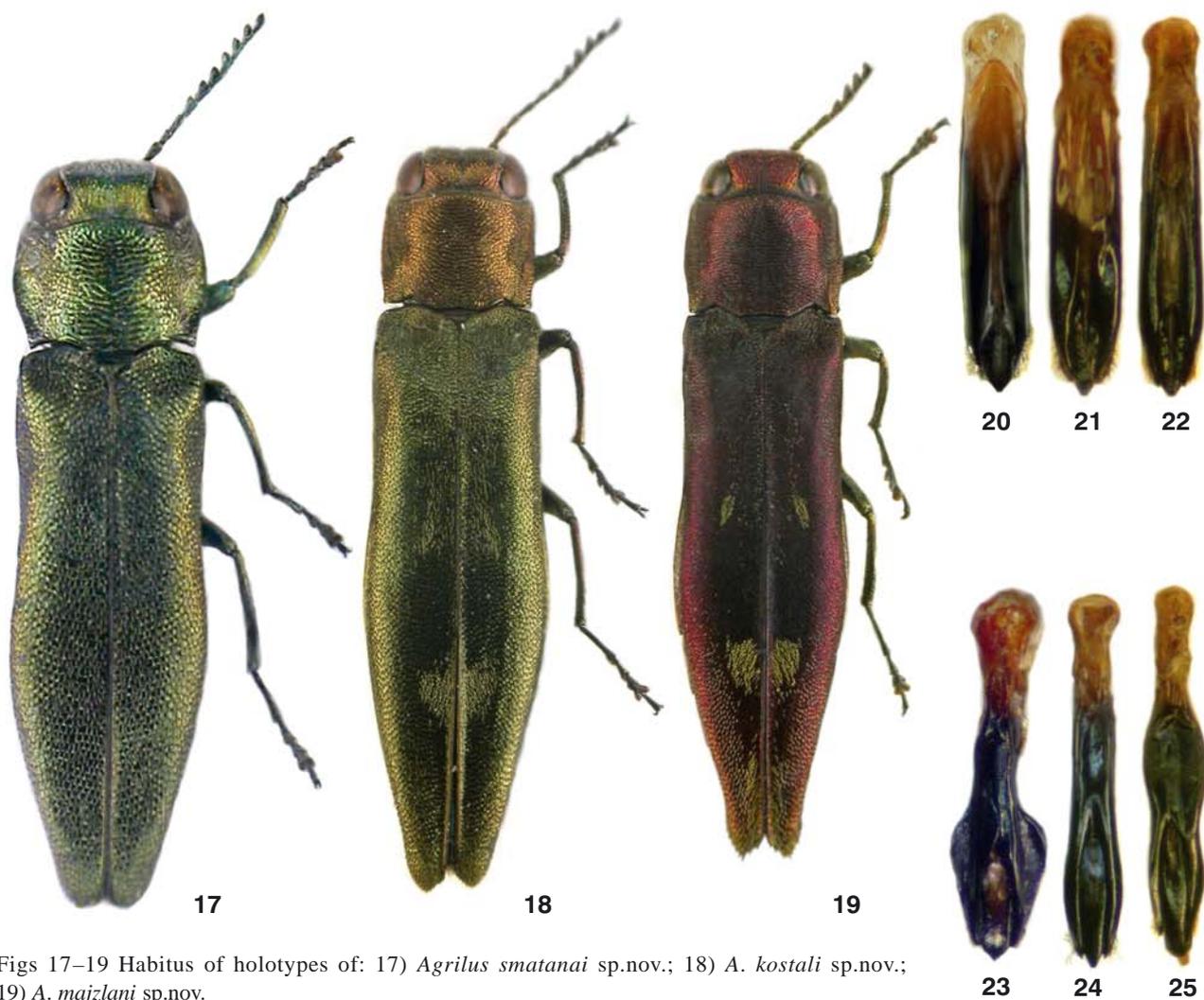
Elytra convex; apices narrowly, shallowly separately arcuate with serrulate margin.

Prosternal lobe very large, deeply arcuately emarginate; prosternal process vigorous, impressed on disk, strongly expanded between coxae, lateral angles obtusely acute; apical projection broadly acuminate; basal ventrite with fine tubercle abutted to distal margin; last ventrite with tear-like, erectly pubescent impression on disk, shallowly, widely, subtriangularly emarginate on tip. Sternal portions without long, erect hairs. Inner side of metatibiae with line of long, erect, pale hairs; metatarsi shorter than metatibiae.

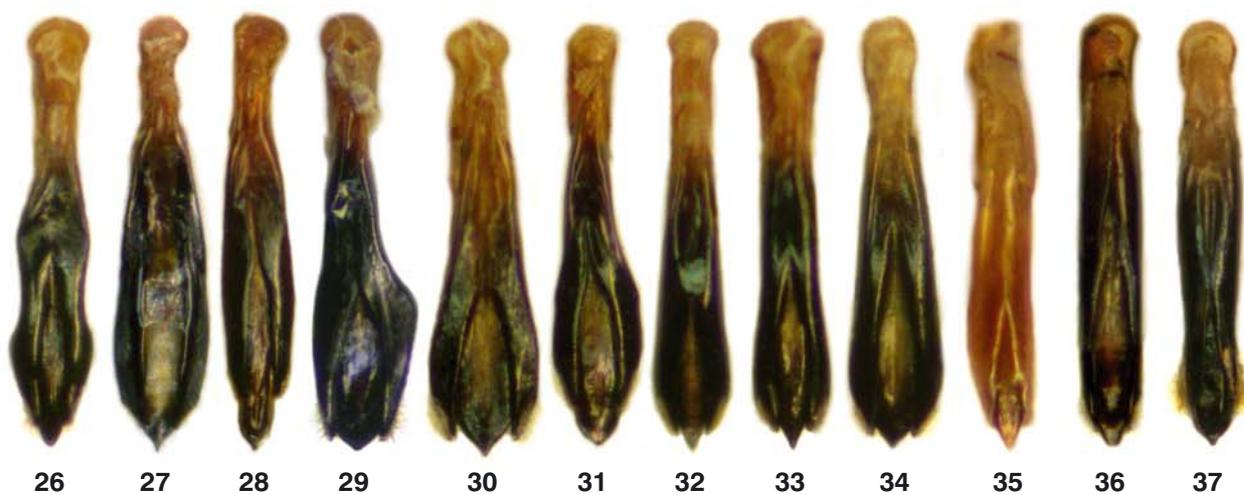
Aedeagus (Fig. 27).



Figs 9–16 Habitus of holotypes of: 9) *Agrilus sulcinotus* sp.nov.; 10) *A. pseudobscuricollis* sp.nov.; 11) *A. truncatus* sp.nov.; 12) *A. bituberculatus* sp.nov.; 13) *A. latipalpis* sp.nov.; 14) *A. suturicuspidatus* sp.nov.; 15) *A. foliatus* sp.nov.; 16) *A. hornburgi* sp.nov.



Figs 17–19 Habitus of holotypes of: 17) *Agrilus smatanai* sp.nov.; 18) *A. kostali* sp.nov.; 19) *A. majzlani* sp.nov.



Figs 20–37 Aedeagi of: 20) *Agrilus sugiurai* sp.nov.; 21) *A. nagahatai* sp.nov.; 22) *A. doipui* sp.nov.; 23) *A. volkovitshi* sp.nov.; 24) *A. pseudograminis* sp.nov.; 25) *A. hiatus* sp.nov.; 26) *A. pao* sp.nov.; 27) *A. nokrek* sp.nov.; 28) *Agrilus sulcinotus* sp.nov.; 29) *A. pseudobscuricollis* sp.nov.; 30) *A. truncatus* sp.nov.; 31) *A. bituberculatus* sp.nov.; 32) *A. latipalpis* sp.nov.; 33) *A. suturicuspidatus* sp.nov.; 34) *A. foliatus* sp.nov.; 35) *A. hornburgi* sp.nov.; 36) *Agrilus smatanai* sp.nov.; 37) *A. kostali* sp.nov.

Length: 5.9 mm.

**Etymology.** Named in reference to the type locality.

**Differential diagnosis.** Habitually and by form of aedeagus, *Agrilus nokrek* sp. nov. is closely related to *A. pacholatkoii* JENDEK, 1994 from which it differs by distal antennomeres less lobate; prosternal lobe less emarginate; inner side of mesotibiae and upper side of metatarsi without long, erect hairs and by lacking medial tomentose clusters on last three ventrites.

***Agrilus sulcinotus* sp.nov.**

Figs 9, 28

**Type locality.** Myanmar, SW Shan State, Taunggyi.

**Type specimens.** Holotype ♂, EJC: “Burma (Myanmar), SW Shan State, Taunggyi, J. Rejssek 1-18.6.1997”. Paratypes (3 ♀ ♀): 1 ♀, USNM: “Burma, Shan State, Taunggyi (backyard), N21°20' E95°59'10, VII.1952, G.B. Vogt”; 1 ♀, EJC: “China, Yunnan, 22.V.-2.VI., 100km W of Kunming, 1993, Diaolin Nat.Reservation, E.Jendek & O.Šauša leg.”; 1 ♂, ZIN: “China, Yunnan, Loc.31, Yundian, 132th km Hway 320 Kunming-Xiaguan, 24°59'06.0"N, 101°43'43.3"E, 1618 m, 10.06.2002, Konstantinov & Volkovitsh leg.”.

**Description of the holotype.** Body carmine-cupreous, subcylindrical, subparallel, slightly attenuate apically; elytra with whitish strip of pubescence not reaching to pleural margins, disrupted before apical third; basal part of pubescence oblong, apical one cuneiform, reaching almost to apices.

Head large; vertex coarsely rugose, with deep medial sulcus; frons almost flat; eyes large, convex, slightly projecting beyond head outline; antennae long, reaching almost to posterior pronotal angles.

Pronotum subquadrate, slightly wider than elytra, widest in middle; anterior margin subequal in length to posterior margin; anterior lobe prominent, not projecting beyond anterior angles; sides evenly arcuate; posterior angles obtusely acuminate; disk strongly convex with medial sulcus entire, deep and broader on base; lateral pronotal impressions shallow; prehumeral finely costate, strongly arcuate, diminished near marginal carina beyond pronotal half; marginal and submarginal carinae conjoined in basal third of pronotum. Scutellum with strongly elevated transverse carina.

Elytral apices evenly, shallowly, separately arcuate with serrulate margin. Prosternal lobe large, weakly arcuately emarginate; prosternal process wide, flat, enlarged between coxae with obtusely subarcuate lateral angles and broad hind projection; prosternum above coxae and proximal angle of metacoxae with cluster of whitish short, erect setae; basal ventrite without tubercles; apex of last ventrite flat with distinct subtriangular emargination; ventral side without long, erect pubescence. Metafemora incrassate, metatarsi somewhat shorter than metatibiae; basal tarsomere about as long as three following together.

Aedeagus (Fig. 28).

Length: 6.6–7.9 mm (Holotype 6.6 mm).

**Etymology.** The specific name is derived from Latin

words *sulcus* (a furrow or groove) and *notum* (a dorsal plate or sclerite of the thorax of an insect).

**Differential diagnosis.** *Agrilus sulcinotus* sp. nov. is similar to *A. graminis* by habitus, form of elytral pubescence and by cluster of erect setae on prosternum, but it can be easily distinguished by very deep, medial pronotal sulcus and by form of antennae in male.

***Agrilus pseudobscuricollis* sp.nov.**

Figs 10, 29

**Type locality.** China, Yunnan, 100 km W of Kunming, 1993, Diaolin Nat. Reservation.

**Type specimens.** Holotype ♂, EJC: “China, Yunnan, 22.V.-2.VI., 100 km W of Kunming, 1993, Diaolin Nat. Reservation”. Paratypes (31 exs), EJC: with the same locality data as holotype.

**Description of the holotype.** Body minute, subparallel; head and pronotum dull dark green; elytra without ornamental pubescence bluish-green with silky tinge.

Head large; vertex wide, convex, finely rugoso-punctate with distinct medial sulcus; frons superficially granulate, feebly convex, lower part of frons and genae with dense, whitish, decumbent pubescence. Eyes large, strongly convex, protuberant beyond head outline; antennae slender, reaching to about half of pronotum.

Pronotum subquadrate, widest before anterior margin; anterior lobe prominent, distinctly projecting beyond anterior angles; sides slightly converging backward, distinctly arcuately emarginate just before sharply acute posterior angles; disk convex with feeble, entire medial sulcus and with shallow lateral impressions; prehumeral obtusely costate, slightly arcuate, reaching about to third of pronotal length with distal end distant from marginal carina; marginal and submarginal carinae closely contiguous, conjoined in basal third. Scutellum pentagonal with sharply raised transverse carina.

Elytra subparallel, slightly attenuate on apex; apices broad, very weakly separately arcuate, almost truncate, margin serrulate.

Prosternal lobe narrow, feebly arcuately emarginate; prosternal process flat, subparallel between coxae with obtuse lateral corners; distal margin of basal ventrite with two sharp, discrete tubercles; apex of last ventrite distinctly impressed with sharp subtriangular emargination on tip. Medial part of prosternum, metasternum and proximal half of basal ventrite with long, white, erect pubescence.

Metafemora incrassate, metatarsi shorter than metatibiae; basal tarsomere about as long as three following together.

Sexual dimorphism: Female differs by larger body; shorter and broader antennae; wider vertex; lack of tubercles on basal ventrite and by glabrous ventral side.

Aedeagus (Fig. 29).

Length: 3.7–4.8 mm (Holotype 4.5 mm).

**Etymology.** Derived from the Greek prefix *pseudo-* (not actually but having the appearance of) and *obscuricollis* to stress the similarity with *A. obscuricollis* KIESENWETTER, 1857.

**Differential diagnosis.** From related *A. obscuricollis* differs mainly by slender body; longer pronotum; larger head with strongly protuberant eyes; basal ventrite with tubercles and by asymmetric aedeagus.

***Agrilus truncatus* sp.nov.**

Figs 11, 30

**Type locality.** China, Shanxi, Lüliang Shan, 1000 m, road Fangshan-Jiaocheng, Hengjian env.

**Type specimens.** Holotype ♂, EJC: “China, Shanxi, 9.VI.2000, Lüliang Shan, 1000 m, road Fangshan-Jiaocheng, Hengjian env.”. Paratypes (8 exs), EJC: 3♂♂ with same locality data as holotype; 2♂♂, 1♀: “China, W Shanxi, 9.VI.2000, 37.7N, 111.6E, Lüliang Shan, road Fangshan-Jiaocheng, HENGJIAN env., ~1000 m”; 1♂: “China: Beijing Reg., ca 1150 m, Xiaolongmen, 9-12.VI.2004, N 39°58.074’, E 115°25.882’, F. I. Trap, walnut / poplar woodland”; 1♂: “China, Beijing distr., Yan Shan, Dongling Mts., 39°58’N, E 115°26’ E, 1400 m, Xiaolongmen, 15-16.VI.2001”.

**Description of the holotype.** Body slender, olivaceous-green, silky lustrous; elytra without ornamental pubescence. Head large, strongly convex; vertex with deep median sulcus; frons with sparse, semierect, whitish pubescence. Eyes large, not protuberant beyond head outline.

Pronotum trapezoid, widest in anterior third, where wider than elytra across humeri; anterior pronotal lobe distinctly projecting beyond anterior angles; pronotal sides arcuate more anteriorly than posteriorly; posterior angles obtuse. Distal part of disk strongly convex; disk with deep lateral and shallow prebasal impressions. Prehumerus straight, obtusely costate, reaching about to half of pronotal length; distant from margin carina on distal end. Marginal and submarginal carinae strongly convergent and coalescent near posterior pronotal angles. Anterior margin and transverse carina of scutellum strongly arcuate.

Elytral apices abruptly truncate; margin denticulate with short spine on pleural and sutural margin.

Prosternal lobe strikingly narrow, slightly arcuately emarginate. Prosternal process large, obviously expanded between coxae with lateral angles and apex acute. Medial part of prosternum and prosternal process covered with dense, erect, white pubescence. Basal ventrite in distal fifth with two sharp, almost coalescent tubercles; apex of last ventrite deeply arcuately bisinuate.

Metafemora incrassate, metatarsi about as long than metatibiae; metatarsomere 1 subequal in length to following three together.

Aedeagus (Fig. 30).

Length: 4.3–5.2 mm (Holotype 4.8 mm).

**Etymology.** *Truncate* (to shorten by cutting off a part; cut short). Named for its truncate elytral apices.

**Differential diagnosis.** *Agrilus truncatus* sp. nov. is by general appearance and by truncate elytral apices closely related to *A. fissus* OBERBERGER, 1917 from which it differs mainly by deep lateral pronotal impressions; by form of tubercles on basal ventrite in male and by form of aedeagus, which is at *A. fissus* strongly asymmetric.

***Agrilus bituberculatus* sp.nov.**

Figs 12, 31

**Type locality.** China S, Shaanxi, Changan Co., Qinling Mts. N. slope, 33°56–59’N - 108°50’E, 800–1200 m.

**Type specimens.** Holotype ♂, EJC: “China S, Shaanxi, 14-16.6.1995, Qinling Mts. N. slope, 33.56-59’ / 108.50’ 800-1200 m, Changan Co.”. Paratypes (27 exs), EJC: 5♂♂, 8♀♀ with the same locality data as the holotype; 2♂♂, 3♀♀: “China, Beijing distr., Yan Shan, Dongling Mts., 39°58’ N, E 115°26’ E, 1400 m, Xiaolongmen, 15-16.VI.2001”; 1♂: “China, Beijing Shi, 4.vi., ~ 30km N Huairou, 2000, Yunmeng Shan, Forest Park, 40.6N, 116.7E”; 1♂: “China, Hebei/Nei Mongol, pass Chengde-Chifeng, 14-16.VI.2001, 41.6N, 118.2E”; 1♀: “China – Shaanxi, Lüeang, 22.5.-25.5.2000”; 1♂, 1♀: “China, Shaanxi prov., 21-23. June 1998, Quin Ling Shan mts, 1000m, road Baoji-Taibai vill., pass 40km S Baoji”; 2♀♀: “China – Yunnan [sic! should be Shaanxi], Lüyeang, 25.7.-30.7.1996”; 1♀: “China, Fujian prov. bor. occ., Shaowu env. 25 km road Shaowu-Taining 6-10.7.1991”; 1♂: “China, Fujian prov., Wuyi Shan Nat. Par., Sangan env. (900 m), 30.v.-12.vi.2001”.

**Description of the holotype.** Body gracile; head and pronotum dull black; elytra dark olivaceous without ornamental pubescence. Vertex convex, with shallow and wide medial sulcus. Pronotal disk evenly convex with very fine transverse structure and feeble, narrow lateral impressions. Prehumerus hair-like, flat with proximal and distal end coalescent in structure of disk.

Elytral apices truncate, margin denticulate with pleural angle arcuate and sutural one projecting to short spine.

Prosternal lobe very narrow, feebly arcuately emarginate; prosternal process narrow, slightly expanded between coxae with obtuse lateral corners. Medial part of prosternum, prosternal process and medial forepart of metasternum covered with dense, erect, whitish pubescence. Tubercles on basal ventrite clearly distant, distance between tubercles is subequal to their distance to margin of ventrite. Apex of last ventrite without impressions, broadly but shallowly bisinuate.

Aedeagus (Fig. 31).

Length: 3.5–5.0 mm (Holotype 3.7 mm).

**Etymology.** The species name is derived from the Latin words *bi-* (two) and *tuberculum* (a small rounded projection or excrescence) to stress one of the distinctive characters.

**Differential diagnosis.** *Agrilus bituberculatus* sp. nov. is by habitus and by truncate elytral apices very closed to *A. truncatus* sp. nov. from which it can be distinguished by characters given in the description.

***Agrilus latipalpis* sp.nov.**

Figs 13, 32

**Type locality.** China, Yunnan, 100 km W of Kunming, Diaolin Nat. Reservation.

**Type specimens.** Holotype ♂, EJC: “China, Yunnan, 22.V.-2.VI., 100 km W of Kunming, 1993, Diaolin Nat. Reservation”. Paratypes (39 exs), EJC: 28 exs with the same locality data as the holotype; 9 exs: “Yunnan 2000 m, 25.03N 101.55E,

Yipinglang 8-10/6.1993"; 2 exs: "Yunnan 8-10.Jun, Yipinglang, 1800 m, 25.05 N 101.53 E, 1993".

**Description of the holotype.** Body gracile, silky lustrous, dark olivaceous; elytra entirely covered with short, whitish, semierect pubescence. Head large, strongly convex; vertex longitudinally rugoso-punctate with faint medial impression; eyes large, strongly convex, protuberant beyond head outline. Antennomere 4–10 serrate ( $4 < 5 < 6 = 7 = 8 > 9 > 10$ ).

Pronotum almost subparallel with sides very feebly arcuate, widest in middle; anterior lobe weak, not projecting beyond anterior angles, posterior angles obtuse. Disk strongly convex with feeble lateral impressions and distinct medial sulcus narrowing anteriorly. Prehumerus sharply costate reaching to middle of pronotal length, slightly arcuate, clearly distant from pronotal carina on distal end. Marginal and submarginal carinae coalescent in basal third. Scutellum protrusive with sharp transverse carina.

Elytral apices conjointly subtruncately arcuate; prosternal lobe distinctly bisinuate; prosternal process wide, uniplanar with obtuse lateral angles and apex. Ventral side from prosternum to distal margin of basal ventrite with narrow medial strip of very dense, semierect pubescence. Basal ventrite very long with base clearly attenuate, distinctly longer than following three together, distal margin with two costate tubercles. Apex of last ventrite arcuately emarginate.

Metafemora slightly incrassate, metatarsi shorter than metatibiae; metatarsomere 1 subequal in length to following three together.

Aedeagus (Fig. 32).

Length: 3.6–4.8 mm (Holotype 3.8 mm).

**Etymology.** Derived from the Latin words *palpus* (an appendage attached to an oral part and serving as an organ of sense in insects, crustaceans, etc.) and *latus* (broad, wide, extensive). Named for its expanded antennomeres.

**Differential diagnosis.** Habitually very similar to *A. olivicolor* KIESENWETTER, 1857 from which it differs mainly by longer pronotum, expanded antennomeres and entire elytral pubescence. By expanded antennomeres is closely related to *A. takahashii* TÔYAMA, 1988 from which it can be distinguished mainly by weak anterior pronotal lobe, narrower prosternal process and mainly by absence of tubercles on basal ventrite in male.

#### *Agrilus suturicuspidatus* sp.nov.

Figs 14, 33

**Type locality.** CH-Guizhou NE, 20 km NW of Jiangkou, Fanjing Shan-Kuaichang.

**Type specimens.** Holotype ♂, EJCB: "CH-Guizhou NE, 27.V.-3.VI., 20 km NW of Jiangkou, 1995, Fanjing Shan-Kuaichang". Paratypes (47 exs) EJCB: 3 exs from the same locality as the holotype; 26 exs: "China, S-Shaanxi, Qinling Mts. - S slope, Xunyangba - S+W env., 33°28-37' / 108°23-33', 1400-2100 m, 5-9.6.[19]95"; 2 exs: "C-CHINA, Shaanxi, Qinling, Shan, 6km E of Xunyangba, 1000-1300m, 23.V.-13.VI. 2000"; 1 ex: "C-China, Shaanxi, Qinling, Shan, 6km N of Foping, 1150-1300m,

20-21.VI.2000"; 2 exs: "China-Yunnan [sic! should be Shaanxi], Lüyeang, 25.7.-30.7.1996"; 1 ex: "China-Shaanxi, Lüyeang, 8.6.-14.6.1996"; 2 exs: "China, 1000-1300 m, Shaanxi, Qinling mts., Xunyangba (6km E), 23.v.-13.vi.1998"; 1 ex: "China, Beijing distr., Yan Shan, Dongling Mts., 39°58' N, E 115°26' E, 1400 m, Xiaolongmen, 15-16.VI.2001"; 9 exs: "China, SW-Anhui, Yuexi Co., Miaodaoshan Mts., 600 - 1300 m, 18-20.7.[19]95, 30°48-50' / 116°05'".

**Description of the holotype.** Body robust, black with brown-green reflection. Elytra without ornamental pubescence. Head large with strongly convex eyes protuberant beyond head outline. Vertex convex with deep median sulcus; frons weakly impressed medially and covered with short erect pubescence.

Pronotum transverse, widest in distal third; sides almost subparallel in anterior three fourths, strongly arcuate at obtuse hind angles. Anterior margin strongly bisinuate, with prominent anterior lobe not projecting beyond anterior angles. Disk convex, finely transversally rugose, with feeble but wide lateral impressions and median sulcus which is disrupted at midpoint. Prehumerus costate, distinctly elevate, regularly arcuate, reaching almost to half of pronotal length, clearly distant from marginal carina at distal end. Marginal and submarginal carinae strongly convergent, coalescent around basal fourth. Scutellum with raised transverse carina.

Elytral apices separately arcuate with tip shifted to epipleural margin. Sutural margin on each elytron projecting to obvious spine.

Sternal lobe narrow, distinctly arcuately emarginate; prosternal process robust, feebly impressed on disk, strongly expanded between coxae with lateral sides and distal projection acute. Medial part of prosternum and prosternal process covered with dense, short pubescence. Basal ventrite with two minute, medial tubercles very closely adjoined to hind margin; distance between tubercles is subequal to their diameter. Apex of last ventrite very narrow, clearly arcuately emarginate and weakly impressed.

Metafemora distinctly incrassate, metatarsi somewhat shorter than metatibiae; metatarsomere 1 subequal in length to following three together.

Aedeagus (Fig. 33).

Length: 4.9–7.0 mm (Holotype 5.8 mm).

**Etymology.** The name is derived from the Latin words *cuspis* (a point, projection) and *sutura* (seam, suture) referring to the conspicuous adsutural projections of elytral apices.

**Differential diagnosis.** By habitus and by transverse pronotum *A. suturicuspidatus* sp. nov. is similar to *A. marginicollis* SAUNDERS, 1873 from which it differs mainly by spinate adsutural projection of elytral apex, by presence of tubercles on basal ventrite in male and by slender aedeagus.

#### *Agrilus foliatus* sp.nov.

Figs 15, 34

**Type locality.** China, Guizhou NE, 20 km NW of Jiangkou, Fanjing Shan-Kuaichang.

**Type specimens.** Holotype ♂, EJC: “CH-Guizhou NE 27.V.-3.VI. 20 km NW of Jiangkou 1995 Fanjing Shan-Kuaichang”. Paratypes (9 exs) EJC: 2 ♂♂, 4 ♀♀: with the same locality data as holotype; 2 ♀♀: “China-Shaanxi, Lüeang 33°07'N 106°05'E, 18.6.-24.6.[19]97”; 1 ♂: “China, N Sechuan, Shangliang, 24-29.5.2002”.

**Description of the holotype.** Body subparallel, apically abruptly attenuate, dark bronze, silky lustrous, lower part of frons golden-green; elytra in basal half with short, whitish strip of ornamental pubescence not reaching to epipleural sides. Head strongly convex; eyes slightly protuberant beyond head outline; vertex sparsely finely longitudinally rugoso-punctate, weakly impressed medially. Antennomere 4–10 subserrately foliate ( $4 < 5 < 6 = 7 = 8 > 9 > 10$ ).

Pronotum widest in middle; sides almost regularly arcuate, slightly emarginate at obtuse hind angles; anterior margin deeply bisinuate, anterior lobe obvious, somewhat projecting beyond fore pronotal angles. Disk strongly evenly convex with distinct medial sulcus, larger basally than apically; prehumeral feebly costate, strongly arcuate, reaching beyond half of pronotal length, distally coalescent with marginal carina. Marginal and submarginal carinae conjoined in basal fourth of pronotal length. Scutellum with sharply raised transverse carina. Elytra subparallel to apical third than strongly attenuate to almost conjointly arcuate apices.

Prosternal lobe large, shallowly arcuately emarginate; prosternal process robust, flat, strongly expanded between coxae, lateral angles and hind projection strong with blunt tips. Medial part of prosternum, prosternal process and proximal third of metathorax with dense white, long, erect pubescence. Basal ventrite in medial distal fourth with indication of two tubercles. Apex of last ventrite distinctly arcuately emarginate. Metatarsi slightly shorter than metatibiae; metatarsomere 1 somewhat shorter than following three together.

Aedeagus (Fig. 34).

Length: 3.9–5.5 mm (Holotype 5.5 mm).

**Etymology.** *Foliatus* (like a leaf, as in shape). The name refers to the leaf-like shape of antennomeres.

**Differential diagnosis.** By habitus and expanded antennomeres, *Agrilus foliatus* sp. nov. is closely related to *A. takahashii* TŌYAMA, 1988 from which it can be distinguished by ornamental elytral pubescence restricted to basal half and by having tubercles on basal ventrite.

#### *Agrilus hornburgi* sp.nov.

Figs 16, 35

**Type locality.** Myanmar, Mandalay Division, Nyaung U (Bagan-area), 21°09'45"N, 94°54'05"E, 90 m.

**Type specimens.** Holotype ♂, EJC: “Myanmar, Mandalay Division, Nyaung U (Bagan-area), 21°09'45"N, 94°54'05"EO, 90 m, 12.VII.2006, leg. M. Hornburg”. Paratypes (6 ♂♂, 14 ♀♀) (EJC, MHCB): with the same locality data as holotype.

**Description of the holotype.** Body cuneiform, strongly convex, dark bronze, brightly lustrous. Lower part

of head densely whitely pubescent; lateral sides of pronotum and elytra with sparse, recumbent, whitish pubescence; ornamental elytral pubescence “X”-shaped in basal half and in the form of two upturned “V”s in apical part. Head strongly convex; eyes large, not protuberant beyond head outline; vertex finely, sparsely, longitudinally rugose with fine medial sulcus. Antennae short, reaching to anterior pronotal angles, obtusely serrate from antennomere 5.

Pronotum cordiform, widest in anterior third; anterior lobe very weak, almost invisible; hind angles subrectangular. Disk strongly convex with fine medial sulcus disrupted in middle and with two very narrow lateral impressions. Prehumeral obtuse, feebly arcuate, reaching to basal pronotal third, not conjoined with marginal carina. Marginal and submarginal carinae subparallel. Scutellum large, convex, transversely micro-rugose on disk with distinct transverse carina and long, sharp scutellar projection. Elytral apices conjointly, narrowly arcuate with serrulate margin.

Prosternal lobe large, entire, strongly arcuate; prosternal process flat, subparallel between coxae with sharp and long apex. Medial part of prosternum, prosternal process and proximal third of metathorax with dense white, long, erect pubescence. Basal ventrite without tubercles, last ventrite sharply subtriangularly emarginate.

Metatarsi about as long than metatibiae; metatarsomere 1 subequal in length to following three together.

Aedeagus (Fig. 35).

Length: 3.2–4.5 mm (Holotype 3.5 mm).

**Etymology.** This species is named in honor of the collector of this species, Michael Hornburg (Germany).

**Differential diagnosis.** *Agrilus hornburgi* sp. nov. is very closely similar to *A. lituratus* (KLUG, 1829) from which it differs mainly by less convex head; by more transverse pronotum with strongly arcuate sides; by obtuse praehumerus and by different form of ornamental elytral pubescence.

#### *Agrilus smatanai* sp.nov.

Figs 17, 36

**Type locality.** Turkey, Antalya vil., In Dağ-Mts., Kilik env. [N 37°13.948', E 30°42.69' precised by collector] 500-800 m.

**Type specimens.** Holotype ♂, EJC: “Turkey, Antalya vil., In Dağ Mts., 2-4.VI.2003, Kilik env. 500-800 m, I. Smatana lgt.”. Paratypes (3 ♂♂, 3 ♀♀), EJC: with the same locality data as holotype.

**Description of the holotype.** Body subparallel, flattened above, silky green, lustrous; lower part of head, sides of pronotum and elytra with white pubescence, longer and denser on lateral parts of pronotum. Head large; frons feebly convex; vertex wide, finely, sparsely rugoso-punctate, distinctly convex with indication of medial sulcus; eyes slightly protuberant beyond head outline. Antennae tenuous, long, extending beyond half of pronotal length, sharply serrate from antennomere 4.

Pronotum slightly wider than elytra across humeri, widest in middle; sides evenly arcuate, finely emarginate

before obtuse hind angles; anterior lobe wide, not projecting beyond anterior angles. Disk strongly convex with deep lateral impressions and pit-like depressions in marginal part just before hind angles. Prehumerus absent. Marginal and submarginal carinae distinctly convergent, submarginal carina vanishes in basal fifth. Scutellum subpentagonal with elevated transverse carina and sharp hind projection. Elytral apices evenly, separately arcuate with serrulate margin.

Prosternal lobe deeply arcuately emarginate; prosternal process glabrous, parallel between coxae, deeply impressed on disk with raised serrulate margins; proximal third of metathorax with dense white, long, erect pubescence. Basal ventrite without tubercles; apex of last ventrite evenly arcuate. Metatarsi about as long than metatibiae; metatarsomere 1 subequal in length to following three together.

Aedeagus (Fig. 36).

Length: 4.3–5.8 mm (Holotype 5.5 mm).

**Etymology.** This species is named in a honor of my friend and collector of this species Ivan Smatana (Slovakia).

**Differential diagnosis.** By habitus, *A. smatanai* sp. nov. resembles species from the *A. roscidus* KIESENWETTER, 1857 species group. It can be distinguished by pit-like depressed pronotal sides near hind angles, by absence of prehumerus and by deeply impressed prosternal process with raised serrulate margins.

#### *Agrilus kostali* sp.nov.

Figs 18, 37

**Type locality.** China, W Sichuan, Jiulong Co., Taka He valley, 2500–4000 m, 28°45'–29°09' & 101°42'–50'.

**Type specimens.** Holotype ♂, EJC: “China, W Sichuan, Jiulong Co., Taka He valley, 2500–4000 m, 28°45'–29°09' & 101°42'–50', 2–10.VII. 2001”. Paratypes (4 ♂♂, 3 ♀♀), EJC: with the same locality data as the holotype.

**Description of the holotype.** Body elongate; head and pronotum golden-cupreous, elytra golden-green with silky tinge. Elytra along sutural margin with short, whitish and sparse ornamental pubescence, in proximal half in form of “X”, in distal third in form of two spots. Eyes convex, slightly protuberant beyond head outline; frons flat; vertex coarsely rugoso-punctate, slightly convex with distinct medial sulcus. Antennae tenuous, very long, extending to hind pronotal angles, sharply serrate from antennomere 4.

Pronotum subquadrate with sides almost sublineal, shortly and feebly emarginate before acute hind angles. Anterior lobe very weak not projecting beyond anterior angles; disk strongly convex with deep lateral and feeble anteromedial and posteromedial impressions. Prehumerus smooth, hair-like, slightly elevated in proximal, flat in distal part, bisinuate, very long, reaching nearly to anterior pronotal angles where is confluent with marginal carina. Marginal and submarginal carinae closed together, convergent, conjoined in proximal third. Scutellum with sharply raised transverse carina and short hind projection.

Elytra distinctly prolonged; disk convex and clearly impressed along sutural margin; apices separately subangulately arcuate with distinctly serrulate margin.

Sternal lobe robust, medially deeply arcuately emarginate; sternal process large, subparallel between coxae, sharply pointed on apex; disk deeply impressed with distinctly raised serrulate margins. Basal ventrite with indication of fine medial sulcus in proximal half; apex of last ventrite evenly arcuate with very fine indication of emargination. Metatarsi shorter than metatibiae; metatarsomere 1 longer than following three together.

Aedeagus (Fig. 37).

Length: 6.9–8.6 mm (Holotype 7.8 mm).

**Etymology.** I take pleasure in dedicating this species to Ing. Michal Košťál, head of the private university in Sládkovičovo (Slovakia).

**Differential diagnosis.** *Agrilus kostali* sp. nov. is very closely related to *A. plagiatus* GANGLBAUER, 1890 from which it can be distinguished mainly by larger body with more prolonged elytra with more projecting apices; longer antennae reaching to hind pronotal angles and by prehumerus extending to anterior angles.

#### *Agrilus majzlani* sp.nov.

Fig. 19

**Type locality.** China, Yunnan, Ninglang env., 27°19'N, 100°55'E.

**Type specimens.** Holotype ♀, EJC: “China, Yunnan, 6–10.VII., Ninglang env., 27°19'N, 100°55'E, 1992”.

**Description of the holotype.** Body convex, cuneiform; dorsal side darkly violet; head and pronotum with purplish tinge. Elytra with whitish ornamental pubescence consisting of two distant oblique spots before middle, two adjoined larger spots in apical third at sutural margin and pubescent apex of elytra. Ventral side with triangular tomentose patterns on lateral parts of sterna and abdominal segments. Frons and vertex slightly convex, coarsely rugoso-punctate; vertex with fine medial sulcus. Eyes slightly protuberant beyond head outline; antennae tenuous, sharply serrate from antennomere 4. Last 3 antennomeres of right antenna and 1 antennomere of left antenna absent.

Pronotal sides feebly arcuate, shortly but distinctly emarginate before sharp hind angles; anterior lobe distinct but not projecting beyond anterior angles. Disk strongly convex with entire, flat medial sulcus and distinct lateral impressions. Prehumerus very long, reaching to anterior angles, sharply costate and strongly arcuate at base, abated on distal end, hair-like and convergent with marginal carina. Marginal and submarginal carinae conjoined at posterior angles. Scutellum with sharply raised transverse carina and short hind projection.

Elytra strongly attenuate in apical third, apices slightly spatulate, subangulately arcuate on tip, with sharply serrate margin.

Sternal lobe deeply arcuately emarginate; sternal process subparallel between coxae, sharply pointed on apex, disk flat; apex of last ventrite evenly arcuate. Metatarsi shorter than metatibiae; metatarsomere 1 longer than following three together.

Length: 7.9 mm.

**Etymology.** Dedicated to Prof. Oto Majzlan PhD., as a tribute for his important contribution to the development of Slovak coleopterology.

**Differential diagnosis.** *Agrilus majzlani* sp. nov. is very closely related to *A. kostali* sp. nov. from which it differs mainly by darkly violet color, by different form of ornamental elytral pubescence, by more attenuate elytra and by spatulate apices, subangulately arcuate on tips.

## References

- JENDEK, E. 2006. New nomenclatorial and taxonomic acts, and comments. Buprestidae: Agrilus p. 60. Catalog: genus Agrilus Curtis, 1825, p. 388–403. In: Löbl, I. & Smetana, A. (eds.) Catalogue of the Palaearctic Coleoptera, Vol. 3, Stenstrup, Apollo Books.
- JENDEK, E. 2007. Taxonomic notes on the European species of the genus Agrilus (Coleoptera: Buprestidae: Agrilini). *Folia Heyrovskyana*, Series A, 14 (3): 109–112.

Manuscript received: 10. 7. 2007