Seven new species of Coomaniella Bourgoin, 1924 (Coleoptera: Buprestidae) with redefinition of species-groups and remarks on distribution and biology

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Abstract. Seven new species of the genus Coomaniella Bourgoin, 1924 are described from Southeastern Asia; six from the subgenus Coomaniella: C. calcarata sp. n., C. communis sp. n., C. copipes sp. n., C. lingafelteri sp. n., C. simulatrix sp. n., C. tarsalis sp. n.; and one from the subgenus Strbaniella Jendek & Kalashian, 1999: C. brevicornis sp. n. Habitus and diagnostic characters of all species are illustrated. New distributional records are given for C. biformis Bílý & Kalashian, 1994; C. biformissima Jendek & Kalashian, 1999; C. kubani Bílý & Kalashian, 1994; C. laoJendek & Kalashian, 1999; C. macropus Théry, 1929; C. marguieri Baudon, 1967 and C. violaceipennis Bourgoin, 1924. Two species-groups are disallowed: Marguieri species-group and Violaceipennis species-group and both species Coomaniella marguieri Baudon, 1967 and C. violaceipennis Bourgoin, 1924 are transferred to Chinensis species-group. Collection circumstances and potential adult and/or larval host plant are briefly discussed. The checklist of Coomaniella species is given.

Key words. Taxonomy, Coleoptera, Buprestidae, Coomaniellini, Coomaniella, new taxa, distribution, host plants.

INTRODUCTION

Coomaniella Bourgoin, 1924 is the only genus in the tribe Coomaniellini Bílý, 1974. This genus is known only from South and Southeastern Asia and comprises three subgenera: Coomaniella Bourgoin, 1924; Tuberniella Jendek & Kalashian, 1999 and Strbaniella Jendek & Kalashian, 1999. Species of Coomaniella are remarkable by the exceptionally large eyes, which are almost touching on the vertex in some males. Some species exhibit extraordinary sexual dimorphism affecting mostly antennomeres and tarsomeres. The genus was recently revised by Jendek & Kalashian (1999). Since then, two other taxonomic papers were published (Jendek 2002, 2005), the first describing C. janka Jendek, 2005, the second synonymizing C. aureopilosa Théry, 1931 with C. violaceipennis Bourgoin, 1924. This paper describes seven new species thus rising the number of species in the genus to 31. The differential diagnosis is based exclusively on the male characters while females of most species can not be reliably distinguished.

MATERIAL AND METHODS

Subgeneric and species-group subdivision follows those proposed by Jendek & Kalashian (1999). Because all new species are thoroughly illustrated, descriptions are kept brief and focused on the selected diagnostic characters or characters not apparent from the images. Male genitalia are not used for differential diagnostic because of being very uniform and very feebly sclerotized.

Locality label data are cited verbatim and enclosed in “quotation marks”. Examined material is grouped alphabetically by country. New country and provincial records are highlighted in bold. Distribution is given alphabetically from the country to the next subordinate unit (province). The name spelling for the country and its administrative subdivision is adopted from the Norm ISO 3166-2 published by the International Organization For Standardization (1998).

ABBREVIATIONS FOR COLLECTIONS

BMNH The Natural History Museum, London, United Kingdom
CNC Canadian National Collection of Insects, Ottawa, Canada
EJCB Collection of E. Jendek, Ottawa, Canada
IEBR Institute of Ecology and Biological Resources, Hanoi, Vietnam
NMPC National Museum (Natural History), Prague, Czech Republic

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COLLECTION CIRCUMSTANCES AND REMARKS ON “RENDEZVOUS” TREE

At present, very little is known on the biology of Coomaniella. Specimens of C. purpurascens from West Bengal, India, were reported from Chukrasia tabularis (Meliaceae) by Jendek (2002). Jendek & Kalashian (1999) reported an Ailanthus-like tree as a plant on which adults of C. biformis Bílý & Kalashian, 1994, C. biformissima Jendek & Kalashian, 1999, C. kubani Bílý & Kalashian, 1994, C. lao Jendek & Kalashian, 1999 and C. sausa Jendek & Kalashian, 1999 were collected in Laos. Coomaniella janka Jendek, 2005 was found on leaves of Rhus (Anacardiaceae) in Henan, China (Jendek, 2005). Svatopluk Bílý (NMPC) reared specimens of C. purpurascens Baudon, 1966 from the wooden pencil about 3 cm in diameter, sold as a souvenir in Thailand (pers.com).

In years 2011–2012, collecting expeditions in Vietnam brought, along with new species, additional information on the biology of Coomaniella. Large series of specimens of several species were collected in Vietnam in Cuc Phuong National Park, Ninh Binh Province and at two different altitudes, 1422 m and 987 m, in Phia-Oac Mountains, Cao Bang Province (see examined material).

The collecting site in Cuc Phuong National Park was an abandoned orchard. Specimens were found on the Albizzia-like trees 5–15 m tall and on the nearly vegetation, mostly banana leaves. In the Phia-Oac Mountains, specimens were collected from the small, healthy, roadside trees, 3–5 m tall (Figs 23–30). These trees are named “rendezvous” trees because, typically, specimens of several species were found assembled on them. Though flying very fast, adults dwelled motionlessly for a long time exclusively on the underside of leaves, often many specimens or species side by side. The mating in this position was also observed. Adults were present in the highest abundance during the hottest part of the sunny, sweltering weather, usually between 10 am and 4 pm. They were not observed during cold, rainy or windy days. After visual examination, specimens could be easily collected from the “rendezvous” tree by a sweeping net. Collected specimens were often promptly replaced by newly arriving wave of specimens landing on the tree.

No exit holes or galleries were found on “rendezvous” trees. Adult feeding on leaves was not recorded but is not excluded. The reason for specimens assembling remains unclear. The “rendezvous” trees from the site in Phia-Oac Mountains, altitude 987 m (Figs 28–30) were determined as Choeospondias axillaris (Anacardiaceae), which is native to South, Southeast and East Asia, from India to China and Japan. The undetermined tree from the same locality but altitude 1422 m, seems very similar. So far, all published Coomaniella host records (see above) pertain to plants with compound leaves.

TAXONOMIC SECTION

Coomaniella Bourgoin, 1924
Subgenus Coomaniella Bourgoin, 1924

Biformis species-group

Coomaniella biformis Bílý & Kalashian, 1994
Fig. 27 (imago in situ)


Coomaniella biformissima Jendek & Kalashian, 1999


Distribution. LAOS: Bolikhamxai; VIETNAM: Ninh Binh.

Kubani species-group

Coomaniella kubani Bílý & Kalashian, 1994

Seven new species of *Coomaniella* Bourgoin, 1924

Figs 1–6. Habitus of *Coomaniella*. *C. lingafelteri* sp. n.: 1. Holotype ♂, 6.4 mm 4. Paratype ♀, 6.8 mm; *C. tarsalis* sp. n.: 2. Holotype ♂, 9.6 mm 5. Paratype ♀, 10.8 mm; *C. communis* sp. n.: 3. Holotype ♂, 6.2 mm 6. Paratype ♀, 8.2 mm.
**Coomaniella lingafelteri** sp. n.

Fig. 1 (habitus ♂); Fig. 4 (habitus ♀)

**Description of holotype.** Size: 6.4 mm. **Body.** Frons golden–green; vertex golden–orange; pronotum purple; elytra black–violet with golden-yellow epipleural (anterior ¾ of elytra), humeral and sutural (anterior 1/3 of elytra) parts. Dorsal side with short, semierect, pale pubescence. **Head.** Vertex between eyes in narrowest part reduced to 2–3 rows of punctures; antennae very long, reaching to elytral humeri; first antennomere and apical three antennomeres golden–green, remaining ones ochreous. **Pronotum** strongly transverse, widest in middle, sides evenly arcuate, anterior lobe conspicuous, subangulate; disk with obvious, deep, lateral impressions and smaller anteromedial impression. **Scutellum** subpentagonal with obtuse angles. **Elytra** with apices subtruncate and armed with spines on each side, interspace between spines very faintly sinuate. **Tarsi.** Protarsus short, more than twice shorter than protibia; protibia without apical spur; apical, inner margin of protibia with long, erect hairs; tarsomere 1 feebly incrassate, without spine on anterior outer margin, about as long as next three tarsomeres combined; apical inner margin of mesotibia and lateroventral part of mesotarsomere 1 with obvious, long, erect hairs; mesotarsomere 1 strikingly, irregularly incrassate; shorter than following tarsomeres combined. apical half of mesotibia and metatarsomeres 1 with long, sparse, whitish hairs underneath; metabasal with obvious apical spur; metatarsus without distinct modifications; metatarsomere 1 shorter than following tarsomeres combined.

**Variability.** Size: 5.4–7.2 mm. Pronotum varies from golden-orange to purple; lateral spines on elytral apices sometimes obscure or missing; interspace between them sometimes subtruncate. **Sexual modifications.** Females are generally larger and more robust; vertex between eyes in narrowest part reduced to 5–6 rows of punctures; antennae and tarsi without obvious modifications. Ovipositor long and thin.

**Diagnosis.** Coomaniella lingafelteri sp. n. belongs to the *Kubani* species-group based on the very long, ochreous antennae and incrassate mesotarsomere 1. It differs from *C. kubani* by having the metallic color of all tarsomeres, which are in *C. kubani* partly ochreous. It can be distinguished from the closest *C. bicolor* Jendek & Kalashian, 1999 by the different dorsal color and by the shape of the incrassate mesotarsomere 1, which is much wider than that in *C. bicolor*.

**Material examined. Holotype,** ♂ (CNC): “Vietnam, Cao Bang Prov., Phia-Oac Mountain Rd, 1422 m, +22° 36’ 15.60”, +105° 53’ 0.60”, 30 April - 5 May 2012, leg. Jendek, Lingafelter, Pham”. **Paratypes:** 41 (CNC, EJCB, IEBR, USNM, ZFMK) from the same locality as holotype.

**Host plant.** Unknown.

**Distribution.** VIETNAM: Cao Bang.

**Etymology.** Patronymic; the species was named in honour of Steve Lingafelter (USNM), an eminent expert on Cerambycidae, one of the collectors of this species.

**Marguieri species-group**

**Remarks.** This species-group was proposed by Jendek & Kalashian (1999) for two species: *Coomaniella marguieri* Baudon, 1967. Recently collected additional specimens allowed re-examination of the species concept. *Coomaniella marguieri* is transferred to *Chinensis* species–group and the *Marguieri* species–group is disallowed. See also remarks below *C. marguieri*.

**Violaceipennis species-group**

**Remarks.** This species-group was proposed by Jendek & Kalashian (1999) based on a single available specimen (holotype) of *C. marguieri* Baudon, 1967. Recently collected additional specimens allowed re-examination of the species concept. *Coomaniella violaceipennis* is transferred to *Chinensis* species–group and the *Violaceipennis* species–group is disallowed. See also remarks below *C. violaceipennis*.

**Chinensis species-group**

**Coomaniella violaceipennis** Bourgoin, 1924


**Distribution.** VIETNAM: Ha Giang, Ninh Binh, Vinh Phuc.
**Coomaniella marguieri** Baudon, 1967

*Fig. 14 (habitus ♂)*

**Diagnosis.** *C. marguieri* belongs to the *Chinensis* species-group by lacking the obvious, male sexual modifications on tarsomeres. This species is unique by the following combination of characters: body is dorsally golden-green, pronotum sometimes golden-orange; elytral apices and epipleura with bluish tinge; vertex between eyes in male reduced to 1–2 rows of punctures in narrowest part; antennae and tarsi in male without obvious sexual modifications; protibia and metatibia in male are armed with a long apical spine on the inner side. It can be distinguished by the golden-green color and by the presence of tibial spines from *C. chinensis* Jendek & Kalashian, 1999. By the golden color of ventral side, *C. marguieri* resembles *C. janka*, but it can be distinguished by having the protibial spine and by lacking protruding spine on the protarsomere 1.

**Variability.** Size: 7.2–9.6 mm. Pronotum widest at middle or in posterior third; pronotal sides in male from arculate to almost straight (holotype); elytral apices bispinose with straight or sinuate interspace.

**Sexual modifications:** Males are generally smaller, slender and more flat than females.


**Distribution.** VIETNAM: Ninh Binh; THAILAND: Chiang Mai.

**Remarks.** This enigmatic species was described from a single male. Jendek & Kalashian, 1999 redescribed the holotype preserved in BMNH. The holotype is remarkable by having much prolonged elytra and especially the narrow pronotum with the sides almost straight. For this reason, the *Marguieri* species-group was proposed exclusively for this species. Recent finding of additional specimens, including females, revealed that the shape of pronotal sides varies in this species. *Coomaniella marguieri* is transferred to the *Chinensis* species-group (see Diagnosis).

**Coomaniella tarsalis** sp. n.

*Fig. 2 (habitus ♂); Fig. 5 (habitus ♀); Fig 15 (protarsus); Fig. 22 (mesotarsus)*

**Description of holotype.** Size 9.6 mm. Body deep-blue dorsally with greenish parts on pronotal sides, across humeri and along suture in basal 1/3 of elytra; pronotum and elytra with inconspicuous, sparse pubescence; ventral side golden-green. Head. Vertex in narrowest part reduced to one row of punctures; antennae not modified, reaching to half of pronotal length. Pronotum strongly transverse; sides strongly, evenly arcuate, widest in middle; anterior pronotal lobe missing; anterior margin narrower than posterior; disk with obvious, deep, lateral impressions covered with white efflorescence. Scutellum cordiform with truncate anterior margin. Elytra with distinct lateral spines on apices, interspace between them obviously sinuate or subangulate. Tarsi. Protibia without spur; protarsus as long or longer than half of protibia; protarsomere 1 distinctly incrassate and about as long as following three tarsomeres combined; apical inner side of protibia and lateroventral portions of protarsomere 1 with long, erect hairs, apex of protarsomere 1 truncate without spine on outer side; mesotarsomere 1 obviously incrassate, enlarged apically and about as long as following three tarsomeres combined, apical inner side of mesotibia and lateroventral side of mesotarsomere 1 with long, erect hairs; metatibia on apical inner side with long spur; metatarsomere 1 longer then following tarsomeres combined.

**Variability.** Size: 9.0–11.1 mm. The white pronotal efflorescence is often vanished. Shape of elytral apices varies from bispinose with sinuate interspace to bispinose with subangulate interspace. Sexual modifications. Females are generally larger and more robust; narrowest part of the vertex between eyes reduced to 5–6 rows of punctures; pronotum widest in posterior third.

**Diagnosis.** *Coomaniella tarsalis* sp. n. belongs to the *Chinensis* species-group based on the lack of spine on the protarsomere 1. It can be distinguished by the color and by the incrassate pro- and mesotarsomere 1. The female of *C. tarsalis* sp. n. can be recognized from other similar species by the longer metatarsomere 1.


**Distribution.** VIETNAM: Ninh Binh.

**Etymology.** The specific name is derived from the Greek noun *tarsos* (flat of the foot); it refers to the strikingly modified tarsi of the species.
Coorniella communis sp. n.

Description of holotype. Size 6.2 mm. Body. Head golden-green; pronotum and elytra blue; pronotal sides with golden-blue tinge; ventral side with pale, sparse, semierect pubescence. Head. Vertex between eyes in narrowest part reduced to two rows of punctures; antennae reaching to about half of pronotal length. Pronotum transverse, distinctly narrower than elytra across humeri, widest in middle; sides strongly, evenly arcuate; disk with obvious, deep lateral impressions, very narrowly separate in middle. Scutellum subpentagonal with corners obtuse; impressed on disk. Elytra with apices truncate and armed with small lateral spines; interspace very faintly sinuate. Legs. Protarsus not shortened, longer than half of protibia; protibia and protarsomere 1 without long, whitish hairs, protibia without apical spur; protarsomere 1 very faintly, dorsally incrustate, without spine on outer margin; mesotibia with small, obscure, apical spur; mesotarsomere 1 slightly, ventrally incrustate, distinctly prolonged and slightly subtriangular, with apical inner margin not acuminate, shorter than following tarsomeres combined; apical half of mesotibia and lateroventral portions of mesotarsomere 1 with long, sparse, whitish hairs underneath; metatibia with obvious apical spur; metatarsus without obvious modifications; metatarsomere 1 long but shorter than following tarsomeres combined. Ventral side. Basal part of abdomen just behind metaxocae distinctly attenuate.

Variability. Size: 5.8–8.2 mm. Elytral pubescence is partly obscure in some specimens; shape of elytral apices varies considerably, lateral spines are obliterate or almost absent, interspace between spine is straight, sinuate or sometimes subangulate.

Sexual modifications. Female is generally larger and more robust; vertex between eyes in narrowest part reduced to 5–6 rows of punctures; antennae shorter, legs without modifications.

Diagnosis. Coorniella communis sp. n. belongs to the Chinensis species-group by the general habitus and by the protarsomere 1 without spine on the outer margin in male. It is very close to C. chinensis Jendek & Kalashian, from which it can be distinguished by the less conspicuous pubescence on ventral side; longer and slender legs; apex of mesotibia and mesotarsus 1 with conspicuous, long, whitish hairs on the underside, length of hairs is distinctly longer than diameter of mesotarsomere 1; mesotarsomere 1 distinctly longer and only slightly subtriangular; metatibia in male not bent; mesotarsomere 1 distinctly subparallel, longer and more slender; basal part of abdomen just behind metaxocae distinctly attenuate but without medial sulcus.


Macropus species-group

Coorniella lao Jendek & Kalashian, 1999


Coorniella macropus Théry, 1929


Distribution. VIETNAM: Cao Bang, Vinh Phuc.

Coorniella copipes sp. n.

Description of holotype. Size 7.5 mm. Body. Head golden-green, pronotum golden with greenish tinge laterally, elytra deeply violet with turquoise epipleural, humeral and sutural margins, sutural coloration in form of sharply delimited narrow wedge reaching to one fourth of anterior elytral length. Head. Vertex between eyes in narrowest...
Seven new species of *Coomaniella* Bourgoin, 1924

Figs 7–11. Habitus of *Coomaniella*. 7. Holotype ♂, 7.5 mm 10. Paratype ♀, 7.6 mm; *C. calcarata* sp. n. 8. Holotype ♂, 9.0 mm; *C. simulatrix* sp. n. 9. Holotype ♂, 7.8 mm 11. Paratype ♀, 8.7 mm.
Table 1. Differential diagnosis of Coomaniella copipes sp. n., C. calcarata sp. n. and C. simulatrix sp. n.

<table>
<thead>
<tr>
<th></th>
<th>C. copipes sp. n.</th>
<th>C. calcarata sp. n.</th>
<th>C. simulatrix sp. n.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antennae (length)</td>
<td>reaching to posterior pronotal angles</td>
<td>reaching to half of pronotal length</td>
<td>reaching to half of pronotal length</td>
</tr>
<tr>
<td>Pronotum (color)</td>
<td>golden</td>
<td>Dark-violet with golden-green lateral parts</td>
<td>Dark-violet with golden-green lateral parts</td>
</tr>
<tr>
<td>Protibia in male (pubescence on apical margin)</td>
<td>absent</td>
<td>present</td>
<td>present</td>
</tr>
<tr>
<td>Mesotarsomere 1 in male (shape)</td>
<td>strikingly incrassate, subparallel, apical end obviously wider than basal</td>
<td>strikingly incrassate, distinctly subtriangular, apical end obviously wider than basal</td>
<td>faintly incrassate, slightly subtriangular rarely subparallel, apical end subequal or slightly wider than basal</td>
</tr>
<tr>
<td>Mesotarsomere 1 in male (pubescence on ventral side)</td>
<td>absent</td>
<td>present</td>
<td>present</td>
</tr>
</tbody>
</table>

part reduced to two rows of punctures; antennae long, reaching to posterior pronotal angles. Pronotum transverse, distinctly narrower than elytra across humeri, widest in middle; sides strongly, evenly arcuate; disk with obvious, deep lateral impressions very narrowly separate in the middle. Scutellum subpentagonal with corners obtuse. Elytra without obvious pubescence; apices subtruncate, with small lateral spines; interspace very faintly sinuate. Legs. Protarsus obviously short, more than twice shorter than protibia; protibia without apical spur and long hairs on apical end; protarsomere 1 incrassate, with the apical spine on outer margin reaching beyond anterior margin of protarsomere 2; mesotibia with long, reddish apical spur; mesotarsomere 1 strikingly incrassate, subparallel, dorsoventrally flattened, longer and wider than following tarsomeres combined, with inner apical margin obviously sharply acuminate, dorsally without obvious pubescence; apex of mesotibia and first three metatarsomeres with long, sparse, whitish hairs underneath; metatibia with apical spur; metatarsus without obvious modifications; metatarsomere 1 about as long as following tarsomeres combined.

Variability. Size: 7.5–7.6 mm.

Sexual modifications. Female with golden-orange pronotum; vertex between eyes in narrowest part reduced to four rows of punctures; antennae distinctly shorter.

Diagnosis. Coomaniella copipes sp. n. belongs to the Macropus species-group by having the protarsomere 1 with the spine on the outer margin in male. It is very similar to C. calcarata sp. n. and C. simulatrix sp. n. by the general habitus and by the form of the male mesotarsomere 1. It can be distinguished by the characters given in the Table 1.

Material examined. Holotype, ♂ (CNC): “Vietnam, Cao Bang Prov., Phia-Oac Mountain Rd, 1422 m, +22° 36’ 15.60”, +105° 53’ 0.60”, 30 April - 5 May 2012, leg. Jendek, Lingafelter, Pham”. Paratypes: 3 (EJCB, USNM) from the same locality as holotype.

Distribution. VIETNAM: Cao Bang.

Etymology. The specific name is derived from Latin nouns copis (cleaver, knife) and pes (foot); it refers to the curiously modified mesotarsus 1 of the species.

Coomaniella calcarata sp. n.

Fig. 8 (habitus ♂); Fig 16 (protarsus); Fig. 21 (mesotarsus)

Description of holotype. Size 9.0 mm. Body. Head golden-blue with golden-green tinge in lower part; pronotum dark-violet with golden-green posterolateral parts; elytra deeply violet with blue epipleural, humeral and sutural margins; sutural coloration in form of vaguely delimited narrow wedge reaching to one fourth of anterior elytral length. Head. Vertex between eyes in narrowest part reduced to two rows of punctures; antennae long, reaching beyond half of pronotal length. Pronotum transverse, distinctly narrower than elytra across humeri, widest in middle; sides strongly, evenly arcuate; disk with obvious, deep lateral impressions very narrowly separate in the middle.
Scutellum subpentagonal with corners obtuse. Elytra without obvious pubescence; apices subtruncate, with small lateral spines; interspace very faintly sinuate. Legs. Protarsus obviously short, more than twice shorter than protibia; protibia with long hairs on apical inner margin, without apical spur; protarsomere 1 incrassate, with obvious apical hook-like spine on outer margin reaching anterior margin of protarsomere 3, tip of spine bent inwards; mesotibia with long, reddish apical spur; mesotarsomere 1 strikingly incrassate, strongly subtriangular, dorsally convex, ventrally flattened, longer than following tarsomeres combined, with inner apical angle obviously obtusely acuminate, dorsally with obvious pubescence; apical half of mesotibia and first three metatarsomeres with...
long, sparse, whitish hairs underneath; metatibia with api-
cal spur; metatarsus without obvious modifications;
metatarsomere 1 about as long as following tarsomeres
combined.

Variability. Size: 8.7–9.0 mm. The single male paratype
differs by blue color of elytral disk and golden-green col-
or of epipleural, humeral and sutural margins.

Sexual modifications. Female unknown.

Diagnosis. Coomaniella calcarata sp. n. is very closely re-
lated to C. copipes sp. n. and C. simulatrix sp. n. by the
general habitus and by the form of the male mesotar-
somere 1. It can be distinguished from them by the char-
acters given in the Table 1.

Bang Prov., Phia-Oac Mountain Rd, 1422 m , +22° 36’
15.60”, +105° 53’ 0.60”, 30 April - 5 May 2012, leg. Jen-
dek, Lingafelter, Pham”. Paratypes (CNC, EJCB, IEBR,
USNM): 3 from the same locality as holotype; 1 ♂: “N
Vietnam, Cao Bang prov., Phia-Oac Mts, Phia-Den env.,
N22°34’01”, E105°52’14”, 30.v.-7.vi.2011, 800-1200m,
E. Jendek leg.”.

Distribution. VIETNAM: Cao Bang.

Etymology. The specific name is derived from Latin ad-
jective calcaratus, -a, -um (having a calcar or calcaria;
spurred); it refers to the obviously spurred meso- and
metatibia of the species.

Coomaniella simulatrix sp. n.
Fig. 9 (habitus ♂); Fig. 11 (habitus ♀); Fig 17 (protarsus);
Fig. 19 (mesotarsus); Fig. 26 (imago in situ)

Description of holotype. Size 7.8 mm. Body. Head gold-
en-blue in upper half, golden-green in lower part; pronon-
tum dark-violet with golden-green lateral parts; elytra
deply violet with blue epipleural and sutural margins; su-
tural coloration in form of very vaguely delimited narrow
wedge reaching to one fifth of anterior elytral length.

Head. Vertex between eyes in narrowest part reduced to
two rows of punctures; antennae reaching to about half
of pronotal length. Pronotum transverse, distinctly nar-
rower than elytra across humeri, widest in middle; sides
strongly, evenly arcuate; disk with obvious, deep lateral
impressions very narrowly separate in the middle. Scutel-
lum subpentagonal with corners obtuse; impressed on
disk. Elytra without obvious pubescence; apices subtrun-
cate, with small lateral spines; interspace distinctly sinu-
ate. Legs. Protarsus obviously short, more than twice
shorter than protibia; protibia with few sparse long hairs
on apical inner margin, without apical spur; protarsomere 1
incrassate, with obvious apical hook–like spine on outer
margin reaching anterior margin of protarsomere 3, tip of
spine bent inwards; mesotibia with long, reddish apical
spur; mesotarsomere 1 strikingly incrassate, finely subtri-
angular, dorsally feebly convex, ventrally flattened,
longer than following tarsomeres combined, with inner
apical angle obviously sharply acuminate, dorsally with
obvious pubescence; apical half of mesotibia and first
three metatarsomeres with long, sparse, whitish hairs un-
derneath; metatibia with apical spur; metatarsus without
obvious modifications; metatarsomere 1 about as long as
following tarsomeres combined.

Variability. Size: 7.2–10.2 mm. Color of elytra varies
from blue-violet to reddish-violet, differently colored an-
terolateral marginal portions of elytra vary in extend from
clearly delimited to obscure; incrassation of mesotar-
somere 1 faint in some males.

Sexual modifications. Female with vertex between eyes
in narrowest part reduced to 4–6 rows of punctures; an-
tennae distinctly shorter.

Diagnosis. Coomaniella simulatrix sp. n. is very closely re-
lated to C. calcarata sp. n. and C. copipes sp. n. by the
general habitus and by the form of the male mesotars-
somere 1. It can be distinguished by the characters given
in the Table 1.

Bang Prov., Phia-Oac Mountain Rd, 1422 m, +22° 36’
15.60”, +105° 53’ 0.60”, 30 April - 5 May 2012, leg. Jen-
dek, Lingafelter, Pham”. Paratypes (CNC, EJCB, IEBR,
USNM) from the same locality as holotype.

Distribution. VIETNAM: Cao Bang.

Etymology. The specific name is Latin noun simulatrix,
-icis which is feminine form of simulator meaning pre-
tender. It refers to the similarity of this species with C.
copipes sp. n. and C. calcarata sp. n.

Subgenus Strbaniella Jendek & Kalashian, 1999

Coomaniella brevicornis sp. n.
Fig. 12 (habitus ♂); Fig. 13 (habitus ♀)

Description of holotype. Size: 11.0 mm. Body cuneiform,
slender; head, elytra, ventral side and appendices
golden–green, pronotal sides golden-orange. Head. Ver-
tex roughly punctate, in narrowest part between the eyes
reduced to 5–6 rows of punctures; antennae very short,
reaching scarcely to anterior pronotal corners. Pronotum


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Seven new species of *Coomaniella* Bourgoin, 1924


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distinctly narrower than elytra in humeral section, widest at anterior third; anterior pronotal margin subequal to posterior; disk feebly convex, without lateral impressions, anterior angles with small, smooth, shiny portions. **Scutellum** oval with truncate anterior margin and finely impressed dish. **Elytra** roughly, densely tuberculate with striae obsolete; elytral apices subtruncate with lateral spines, outer spine longer than inner one. **Tarsi**. Protibia with short, inconspicuous spur; protarsus distinctly longer than half of protibia; protarsomere 1 not incrassate and shorter than following three tarsomeres combined; apex of protibia and protarsomere 1 without long hairs, apex of protarsomere 1 without spine on outer anterior margin; mesotarsomere 1 faintly incrassate, shorter than following three tarsomeres combined; lateroventral side of mesotarsomere 1 with long, erect hairs; metatibia on apical inner margin with obvious spur; metatarsomere 1 not incrassate, shorter than following tarsomeres combined. **Ventral side**. Last ventrite subtruncate on apex and markedly overlapped by elytral apices, the length of protruded portion is subequal to length of last ventrite.

**Variability.** Size: 11.0–14.0 mm. Two male paratypes have pronotum widest at middle and elytral sides golden–orange.

**Sexual modifications.** Females are generally larger and more robust; head strongly convex; eyes less convex; vertex in narrowest part reduced to 6–7 rows of punctures; anterior pronotal margin distinctly narrower than posterior; tarsi without obvious modifications. Ovipositor long and thin.

**Diagnosis.** This species, together with *C. prolonga* Jendek & Kalashian, 1999, belongs to the subgenus *Strbaniaella*. The male of *C. brevicornis* sp. n. can be distinguished by the following combination of characters: pronotum and lateral sides of the elytra-orange; pronotum in widest part distinctly narrower than the elytra across humeri; pronotal sides less arcuate; disk feebly convex without large lateral impressions; mesotarsomere 1 faintly incrassate, shorter than following three tarsomeres combined and covered with sparse, long, erect hairs; metatibial spur obvious; elytral apices faintly arcuate, shorter than following three tarsomeres combined; lateroventral side of mesotarsomere 1 with long, erect hairs; metatibia on apical inner margin with obvious spur; metatarsomere 1 not incrassate, shorter than following tarsomeres combined. **Ventral side.** Last ventrite subtruncate on apex and markedly overlapped by elytral apices, the length of protruded portion is subequal to length of last ventrite.


**Host plant.** Unknown. The holotype was collected by sweeping the crowns of *Albizia* like trees. Paratypes from Ban Nape were found laying the eggs into the bark of large trunk of unknown tree.

**Distribution.** LAOS: Bolikhamsai, Houaphan. VIETNAM: Ninh Binh.

**Etymology.** The specific name is derived from Latin adjective brevis (short) and the noun cornu (horn); it refers to the strikingly short antennae of the species.

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**CHECKLIST OF THE GENUS COOMANIELLA BOURGOIN, 1924**

**Subgenus Coomaniella Bourgoin, 1924**

*Biformis* species-group

*C. biformis* Bílý & Kalashian, 1994
*C. biformissima* Jendek & Kalashian, 1999

*Modesta* species-group

*C. modesta* Bourgoine, 1924
*C. purpurascens* Baudon, 1966

*Kubani* species-group

*C. bicolor* Jendek & Kalashian, 1999
*C. kubani* Bílý & Kalashian, 1994
*C. lingafelteri* sp. n.
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**Siniaevi** species-group
- *C. siniaevi* Jendek & Kalashian, 1999

**Chinensis** species-group
- *C. chinensis* Jendek & Kalashian, 1999
- *C. communis* sp. n.
- *C. marguieri* Baudon, 1967
- *C. tarsalis* sp. n.
- *C. violaceipennis* Bourgoin, 1924

**Macropus** species-group
- *C. calcarata* sp. n.
- *C. copipes* sp. n.
- *C. daoensis* Jendek & Kalashian, 1999
- *C. isolata* Jendek & Kalashian, 1999
- *C. janka* Jendek, 2005
- *C. lao* Jendek & Kalashian, 1999
- *C. macropus* Théry, 1929
- *C. nativa* Jendek & Kalashian, 1999
- *C. orlovi* Jendek & Kalashian, 1999
- *C. pacholatkoi* Jendek & Kalashian, 1999
- *C. simulatrix* sp. n.
- *C. sausa* Jendek & Kalashian, 1999

Species incertae sedis
- *C. jeanvoinei* Théry, 1929
- *C. marseuli* Obenberger, 1940

**Subgenus Tuberniella** Jendek & Kalashian, 1999
- *C. abeillei* Obenberger, 1940
- *C. taiwanensis* Baudon, 1966

**Subgenus Strbaniella** Jendek & Kalashian, 1999
- *C. brevicornis* sp. n.
- *C. prolonga* Jendek & Kalashian, 1999

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