

A new species of the subgenus *Isocollyris* Naviaux, 1994
(Coleoptera: Cicindelidae, *Neocollyris*) from northern Vietnam

Новый вид подрода *Isocollyris* Naviaux, 1994
(Coleoptera: Cicindelidae, *Neocollyris*) из Северного Вьетнама

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Ключевые слова: Coleoptera, Cicindelidae, *Neocollyris*, *Isocollyris*, Северный Вьетнам, таксономия, новый вид.

Abstract. A new tiger beetle species, *Neocollyris (Isocollyris) paradoxa* sp.n., described from northern Vietnam, is clearly distinguished from related species by its body colouration and uncommon ε-shaped aedeagus with distinct ventral spine.

Резюме. Из Северного Вьетнама описывается новый вид жука-скакуна *Neocollyris (Isocollyris) paradoxa* sp.n. От других видов подрода новый вид отличается окраской и необычной ε-образной формой эдеагуса с явно выраженным вентральным выступом.

Subgenus *Isocollyris* was established by second author in 1994 in the revision of *Collyris* sensu lato [Naviaux, 1994]. According to this study, subgenus comprised 19 species from north-eastern India, central and south-eastern China, northern Vietnam, Taiwan and Ruy-Kyu Islands. Later many species of *Isocollyris* were described [Naviaux, 1999, 2004; Sawada, Wiesner, 2003], and for one species a new data about male were published [Matalin, 2002] as well. So, at present time 31 species are known in subgenus *Isocollyris*. All of them well distinguished from other species of *Neocollyris* by clearly dilated apex of aedeagus which looks like a bud («Édage avec l'extrémité distale en forme de bouton incliné, quelquefois arrondi») [Naviaux, 1994: 194]. In present paper one new species of subgenus *Isocollyris* from northern Vietnam is described.

Holotype of the new species is deposited in collection of Zoological Institute of Russian Academy of Science, Saint-Petersburg.

Neocollyris (Isocollyris) paradoxa
Matalin et Naviaux, sp.n.

Plate VIII: 1, Figs 1–3, 5, 7, 9.

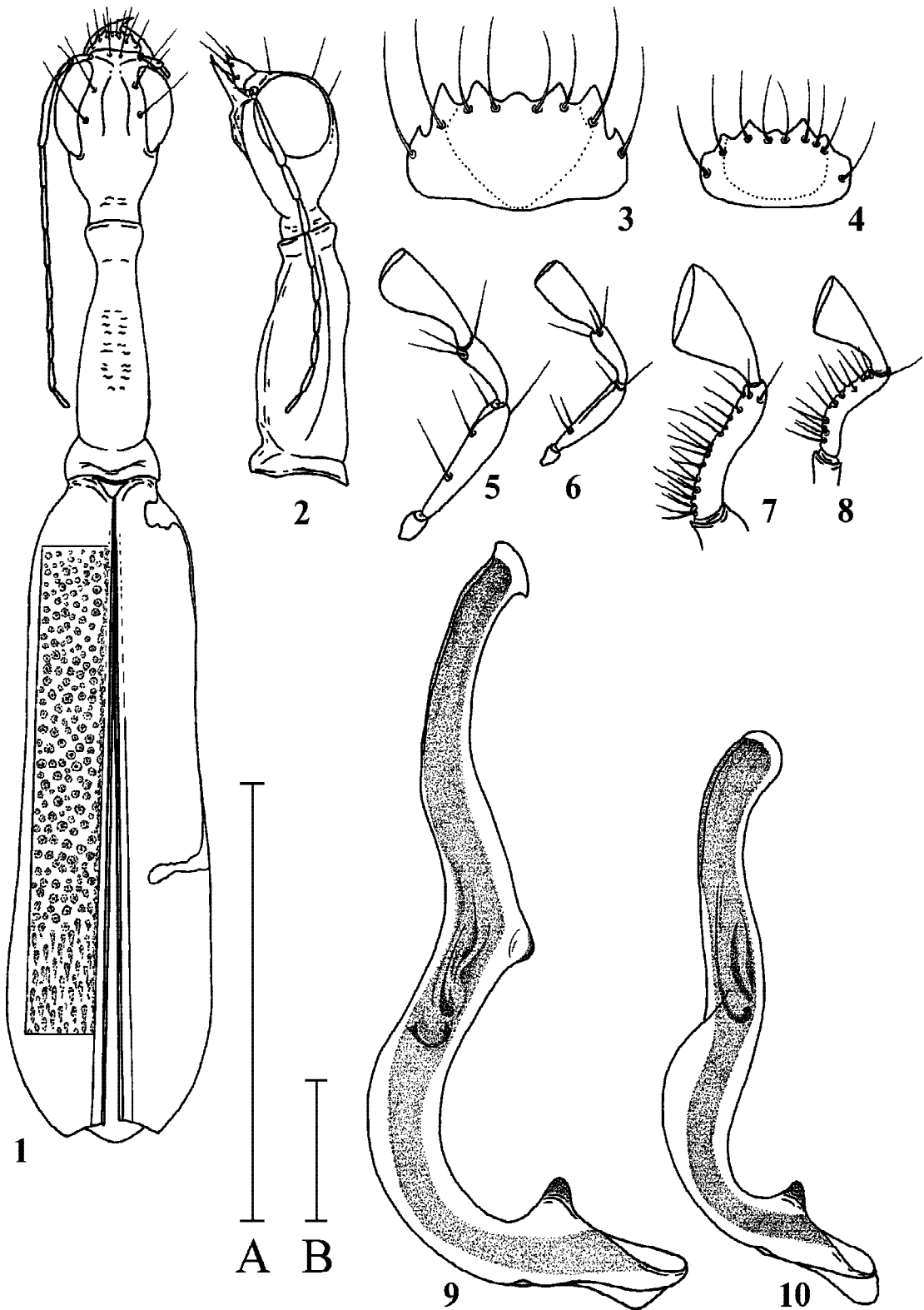
Material. Holotypus, ♂, labelled: «N Vietnam, Hoa Binh Prov., Mai Châu distr., Pa Co, 1100–1200 m, 27–28.IV.2002, leg. S. Belokobyl'skiy».

Description. Total length (without labrum) — 12.8 mm (Plate VIII: 1).

Head dark violet; elongate, 1.2 times as long as wide; clypeus triangular with two long setae on top side, deposited on upper level of antennal condyle; vertex moderately depressed, not dilated; occiput long, distinctly convergent to head base. Eyes relatively large, oval, but not prominent; supraorbital area with two long setae and few unclear short transversal wrinkles near posterior one. Interocular cavity parallel in frontal part, but distinctly divergent on vertex, relatively deep but short, hardly stretching from anterior ocular seta (Figs 1–2). Labrum dark brown with inversely triangular yellow central part; transverse, 2.14 times as wide as long, with five anterior teeth: two long lateral pairs and single shorter central tooth, as well as a pair of small basal teeth, and eight submarginal setae: six anterior and two basal ones (Fig. 3). Mandibles reddish-brown with yellowish external part basally; maxillary palpi light brown, 2nd palpomere with yellowish internal area (Fig. 5); labial palpi yellowish except light brown dolabriform apical joint (Fig. 7). Antennae filiform, 1.4 times as long as pronotum, but not projected to the base; scape dark brown except pale apex, with a single long seta on the top; 2nd joint brown with pale base; 3–8th antennomeres yellowish with dark brown apices, 9–11th ones dark brown; apical half of 5th and all remaining antennomeres finely pubescent.

Pronotum deep violet with bluish tinge basally; very long, 3.33 times as long as wide, with distinct concave lateral edge in apical fourth (Fig. 1) and barely visible hump in anterior part (Fig. 2). Surface glabrous, smooth, with few shallow transversal wrinkles in anterior half of disc; basal sulcus deep; midline indistinct. Proepisternum deep violet, pubescent with the sparse long white setae basally; thoracic segments black with light bluish and golden-greenish reflection; mesothorax with long white soft hairs; mesepisternum with deep rounded pit basally; metepisternum with long deep punctured groove; metepimerum with anteroapical deep pit.

Elytra 3.5 times as long as wide, slightly dilated in the apical third; apices distinctly noticed, sutural teeth unclear. Elytral disk bright bicolored, green tinged in basal third and



Figs 1-10. Details of *Isocollyris* spp.: 1 — habitus (dorsal view); 2 — head and pronotum (left lateral view); 3-4 — labrum; 5-6 — right maxillar palpi; 7-8 — right labial palpi; 9-10 — aedeagus (right lateral view); 1-3, 5, 7, 9 — *N. (I.) paradoxa* sp.n., holotype, ♂; 4, 6, 8, 10 — *N. (I.) ingridae*, holotype, ♂. Scale bars: A — 5 mm for 1-2; B — 0.5 mm for 3-10.

Figs 1-10. Детали строения видов подрода *Isocollyris*: 1 — габитус (сверху); 2 — голова и переднеспинка (сбоку слева); 3-4 — верхняя губа; 5-6 — правый максиллярный щупик; 7-8 — правый нижнегубной щупик; 9-10 — эдеагус (сбоку справа); 1-3, 5, 7, 9 — *N. (I.) paradoxa* sp.n., голотип, ♂; 4, 6, 8, 10 — *N. (I.) ingridae*, голотип, ♂. Масштабные линейки: А — 5 мм для 1-2; В — 0,5 мм для 3-10.

cooper-purple in media-apical part (Plate VIII: 1), with long narrow yellow humeral spot and transverse yellow medial fascia in centre of disk; scutellum black; sculpture well developed but not coarse and presented by numerous relatively deep punctures distinctly smoothing in basal third and apically; suture except basal third clearly bordered (Fig. 1).

Abdominal sternites brownish-black with light blue-violet reflection. Coxae dark brown except yellow apical part; trochanters pale; femorae, tibiae and tarsi yellowish-brown except dark brown apical third of tibia and 4–5th tarsomeres; tibia with long soft white setae along inner side.

Aedeagus relatively large, 3.21 times shorter than elytra, ε -shaped, with distinct dilated apex and clear ventral spine; internal sack with short flagellum and small oval sclerite (Fig. 9).

Female unknown.

Derivato nominis. A new species is named because of its uncommon ε -shaped aedeagus.

Diagnosis. *Neocollyris (Isocollyris) paradoxa* sp.n. differs by two unique characters: uncommon ε -shaped aedeagus and a distinct spine on its ventral surface. The similar shape of aedeagus is known in Indian *Neocollyris (Isocollyris) ingridae* Naviaux, 2004 only (Fig. 10), while aedeagus with ventral spine is founded in Chinese *Neocollyris (Isocollyris) naviauxi* Sawada et Wiesner, 2003.

However from both of them a new species well distinguished by larger size: 12.8 mm in *N. (I.) paradoxa* sp.n.; 9.5–11.3 mm in *N. (I.) ingridae*; 9.2–11.0 mm in *N. (I.) naviauxi*, and coloration of body: dark violet head and pronotum with bicoloured bright green and cooper-purple elytra in *N. (I.) paradoxa* sp.n., blue-green head and pronotum with bright green elytra in *N. (I.) ingridae* (Plate VIII: 1–2), and blue head and pronotum with green, copper-green or blue-green elytra in *N. (I.) naviauxi*.

Moreover, a new species can be easily recognised from *N. (I.) ingridae* by central inversely triangular yellow part on labrum (Figs 3–4), more elongate head: ratio of length/width is 1.2 in *N. (I.) paradoxa* sp.n., while 1.0 in *N. (I.) ingridae*; relatively broad elytra: ratio of length/width is 3.5 in *N. (I.) paradoxa* sp.n. while 3.66 in *N. (I.) ingridae*; shorter antennae: ratio of pronotum/antennae length is 1.4

in *N. (I.) paradoxa* sp.n., while 1.7 in *N. (I.) ingridae*; broader apical joints of maxillar (Figs 5–6) and labial (Figs 7–8) palpi as well as sharply curved aedeagus with distinct ventral spine (Figs 9–10).

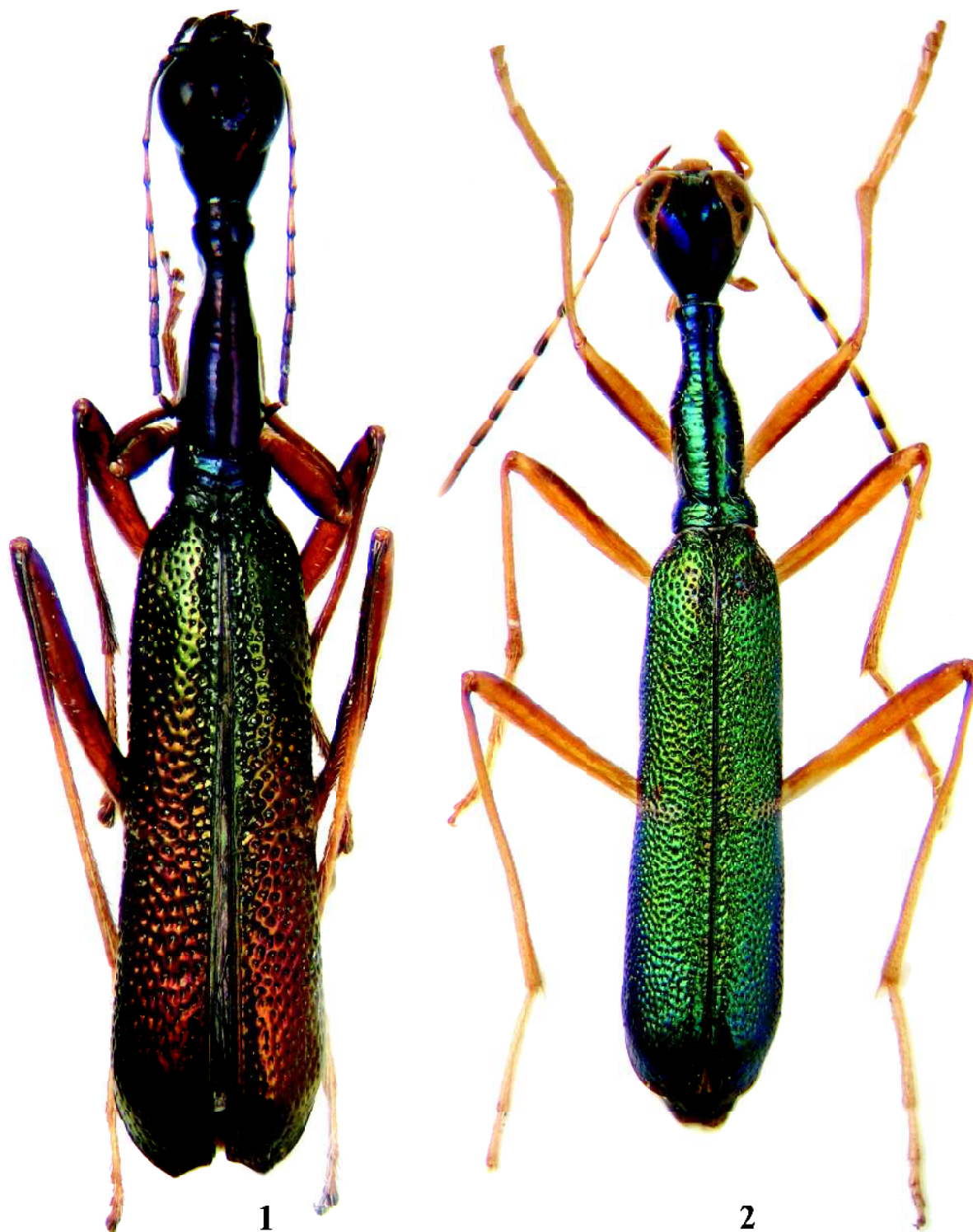
From *N. (I.) naviauxi* a new species differs by longer pronotum: ratio of length/width is 3.33 in *N. (I.) paradoxa* sp.n., while 1.9 in *N. (I.) naviauxi* [Sawada, Wiesner, 2003: Figs 1–2]; sharp of labrum with distinct coloration [Sawada, Wiesner, 2003: Fig. 8], and specific shape of aedeagus: ε -shaped in *N. (I.) paradoxa* sp.n. and straight in *N. (I.) naviauxi* [Sawada, Wiesner, 2003: Fig. 5].

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A.V. Matalin, R. Naviaux. P. 11–13. Plate VIII: 1–2. *Neocollyris* spp., habitus: 1 — *N. (Isocollyris) paradoxa* sp.n., holotype, ♂; 2 — *N. (Isocollyris) ingradae*, holotype, ♂.
А.В. Маталин, Р. Навьё. С. 11–13. Вклейка VIII: 1–2. *Neocollyris* spp., габитус: 1 — *N. (Isocollyris) paradoxa* sp.n., полоти́п, ♂; 2 — *N. (Isocollyris) ingradae*, голо́тип, ♂.