

***Anotylus erythrinus* nom.n. and the  
male of *A. liliputanus* (BERNHAEUER, 1936)  
(Coleoptera: Staphylinidae: Oxytelinae)**

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**Abstract**

*Anotylus erythrinus* nom.n. (Coleoptera: Staphylinidae: Oxytelinae) is proposed as a replacement name for *Oxytelus rufotestaceus* CAMERON, 1929: 444, a junior secondary homonym of *Oxytelopsis rufotestacea* CAMERON, 1925: 176. *Oxytelus rufotestaceus* is redescribed and a lectotype is designated for it. A very similar species, *Anotylus liliputanus* (BERNHAEUER, 1936) previously known only from its female holotype is redescribed based on a male specimen. For both redescriptions photographs of the habitus, as well as sculpture and other details are provided; terminalia and male genitalia are depicted by line drawings.

**Key words:** Coleoptera, Staphylinidae, Oxytelinae, *Anotylus*, taxonomy, lectotype, Oriental Region, Malaysia, Philippines.

**Introduction**

The synonymization of *Anotylus* THOMSON, 1859 with *Oxytelopsis* FAUVEL, 1895 (MAKRANCZY 2006) resulted in a number of homonymies, which were left untreated because most taxa involved were then unknown to the author and, as it turned out later, a couple of replacements proved to be unnecessary (MAKRANCZY 2017).

The species comprising the former *Oxytelopsis* recently got revised as the *Anotylus cimicoides* species group, and although the name *Oxytelopsis rufotestaceus* CAMERON, 1925 is now regarded as a synonym of *Anotylus pseudopsinus* (FAUVEL, 1895), the junior name still needs replacement.

By study of the lectotype and available material a redescription is provided, together with a recently discovered male specimen of a rather similar (but not necessarily closely related) species, *Anotylus liliputanus* (BERNHAEUER, 1936), formerly known only from its female holotype. The extremely small size and relative lack of external diagnostic traits in these two species necessitates their treatment and illustration of the male characters, allowing other similar, tiny and reddish-brown species to be distinguished from them.

The material is deposited in the Natural History Museum, London, UK (BMNH) and in the Field Museum of Natural History, Chicago, USA (FMNH). Measurements are defined as follows: HW = head width with eyes; TW = head width at temples; PW = maximum width of pronotum; SW = approximate width of shoulders; AW = maximum width of abdomen; HL = head length from front margin of clypeus to the beginning of neck at middle-line; EL = eye length; TL = length of temple; PL = length of pronotum in the middle-line; SL = length of elytra from shoulder; SC = length of elytra from hind apex of scutellum; FB = forebody length (combined length of head, pronotum and elytra); BL = approximate body length. The genital preparation techniques are detailed in MAKRANCZY (2006). Drawing was done with a Jenalab (Carl Zeiss, Jena) compound microscope and drawing tube (camera lucida). For the colour habitus photographs a Nikon D4 camera with Mitutoyo PlanApo 10x/20x ELDW lens was used, and layers were combined with ZereneStacker. The verbal descriptions are based exclusively on the male specimens.

Label data for types are listed verbatim, a backslash (\) separates labels, and a semicolon (;) separates lines. Text within square brackets ([...]) is explanatory and is not part of the original label text.

***Anotylus erythrinus* nom.n.**

*Oxytelus rufotestaceus* CAMERON 1929: 444 (preoccupied by *Anotylus rufotestaceus* (CAMERON 1925: 176)).

*Anotylus rufotestaceus*: HERMAN 1970: 419, 2001: 1384.

TYPE MATERIAL: **Lectotype** ♂ (here designated): “Type [red margined disc, curator label] \ [small red rectangle] \ Perak \ O; rufotestaceus; Type [in maroon] Cam. \ M. Cameron.; Bequest.; B.M. 1955-147. \ Lectotypus; Oxytelus; rufotestaceus Cameron; des. Makranczy, 2017 \ *Anotylus*; *erythrinus* Makranczy, n. nov.; det. Makranczy, 2017” (BMNH).

**ADDITIONAL MATERIAL EXAMINED:**

**MALAYSIA:** Pahang, Bentong [approx. 03°31.5'N 101°54.5'E, 100 m], IV.1977, leg. L.E. Watrous (2 ♀♀, BMNH).

**REDESCRIPTION:** Measurements (in mm, male, n = 1): HW = 0.395; TW = 0.395; PW = 0.395; SW = 0.405; AW = 0.42; HL = 0.25; EL = 0.095; TL = 0.12; PL = 0.27; SL = 0.35; SC = 0.31; FB = 1.05; BL = 1.69; (females, n = 2): HW = 0.32 (0.32–0.325); TW = 0.30 (0.30–0.305); PW = 0.35 (0.35–0.355); SW = 0.36 (0.36–0.365); AW = 0.39 (0.38–0.40); HL = 0.22 (0.21–0.22); EL = 0.08 (0.08–0.085); TL = 0.07 (0.07–0.075); PL = 0.23 (0.23–0.235); SL = 0.33 (0.33–0.335); SC = 0.30 (0.30–0.305); FB = 0.81 (0.80–0.81); BL = 1.43 (1.38–1.47). Habitus as in Fig. 1. Forebody moderately lustrous, covered with strong but somewhat smoothed microsculpture (head with disc in part finely rugulose microsculptured, almost dull), abdomen lacking microsculpture, more lustrous. Body reddish medium to light brown (head not or insignificantly darker), elytra very slightly darkening towards apex. Legs, antennae and mouthparts reddish medium to light brown, basal third of antennae and femora somewhat lighter. Head (male: Fig. 5, females: Figs. 6–7) with temples slightly dilating after moderately large but not so bulging eye, broadly rounded, yet somewhat angled; with extremely thin rim on anterior margin, clypeus very slightly projecting forward and truncate anteriorly, bordered by transverse semi-rectangular impression (epistomal suture) laterally and posteriorly, surface smooth and shiny. Supraantennal tubercles also shiny, moderately developed, anterior edge slightly obtuse-angled but broadly rounded. Microsculpture on vertex strong but indistinct (somewhat colliculate but sometimes areolate), rugulose on neck. Intra-ocular sulcus well developed, following outline of temples but before neck turning towards middle of disc on a short distance; inside sulcus impressed with oblique strigose microsculpture. Head with small bristles behind supraantennal tubercles (near anterior edge of eye) and on vertex near temples. Antenna (male) as in Fig. 2. Neck separated by a constriction, dorsally turning into an antero-medial impression. Pronotum inverse trapezoid, anterior and posterior corners sharply angled, disc indistinctly 5-sulcate, anterior and side margins slightly sinuate (almost straight) posterior margin gently curved. Rather prominent (thick) marginal bead on side appearing double-edged, with tiny bristles at anterior corners, at 2/5 of side length and before posterior corners. Surface roughly but indistinctly strigose and uneven in longitudinal midline with less prominent median furrow. Elytra with narrowly rounded shoulders, sides slightly dilating, gently curved (more posteriorly than anteriorly), hind margins almost straight with extremely thin marginal bead. Sutural ridges rather wide but smooth and flat, disc roughly rugose-punctate. Lateral longitudinal ridge stronger but not sharp. Legs moderately short, protibia without preapical constriction, with row of stronger spines, evenly spaced on apical part, pro- and mesotibia with several spinulose rows, metatibia also with longitudinal ctenidium of spinules in distal half. Abdomen with sides moderately arcuate, widest at segments III–IV, mesal paratergites moderately broad, posterior edge of tergite VII with thin palisade fringe, sternite VIII as in Fig. 9, segments IX–X with rhomboid fusion as in Fig. 10, tergite X as in Fig. 11, and aedeagus as in Figs. 12–13.

ETYMOLOGY: The Greek word “erythrinus” means reddish, used here in its Latinized form.

DISTRIBUTION: The species is only known from peninsular Malaysia (Perak, Pahang).

### *Anotylus liliputanus* (BERNHAEUER, 1936)

*Oxytelus* (*Anotylus*) *liliputanus* BERNHAEUER 1936: 85.

*Anotylus liliputanus*: HERMAN 1970: 418, 2001: 1366.

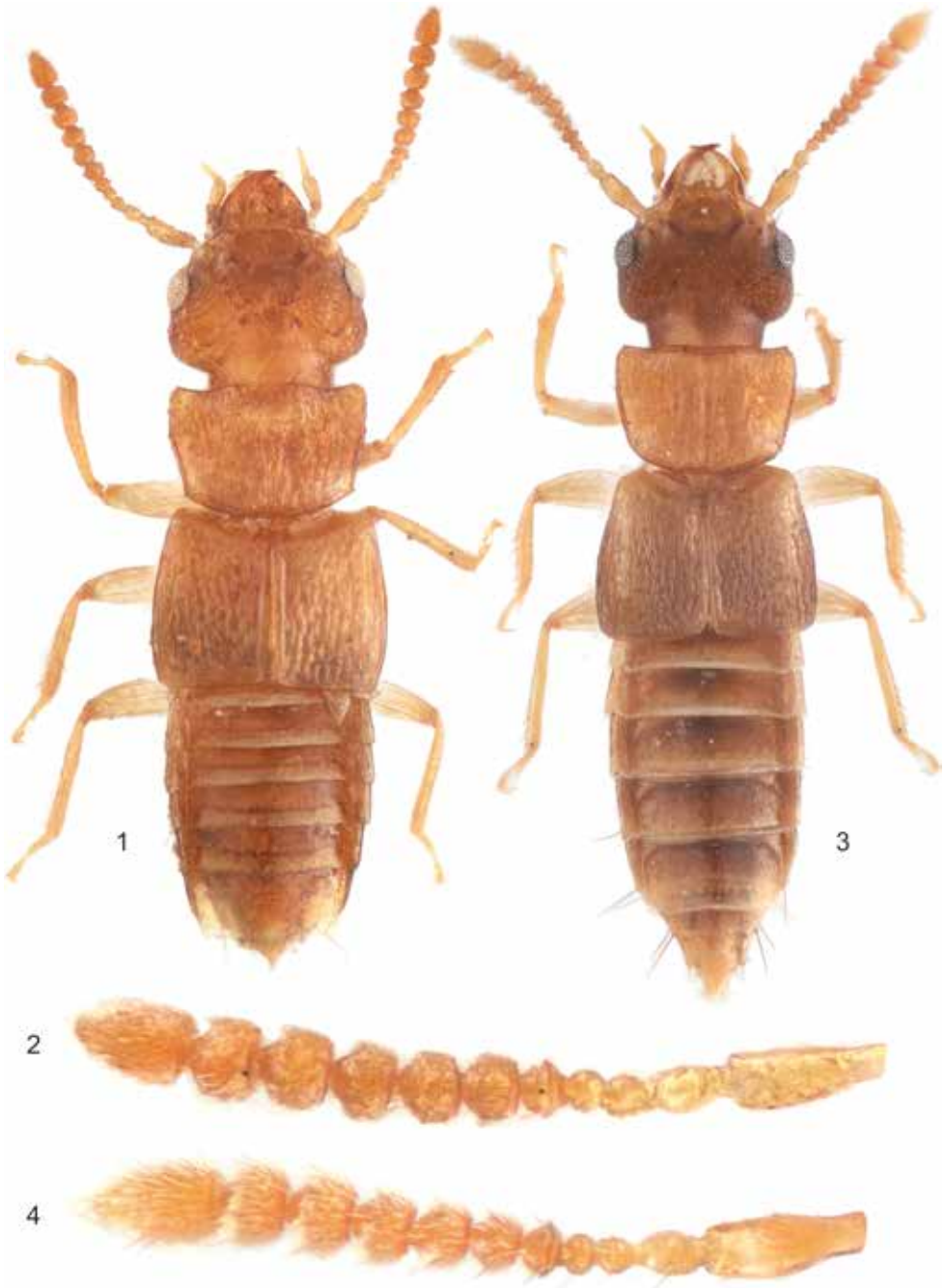
TYPE MATERIAL: **Holotype** ♂: “Los Banos [14°10'N 121°13'E]; Luzon \ Philippinen; coll. Boettcher; don. Staudinger \ liliputanus; Brnh. Typ.[us] un.[icus] \ liliputanus; Bernh. Typus; unic. *Anotylus* \ Chicago NHMus; M. Bernhauer; Collection \ *Anotylus*; liliputanus Bn \ Holotype; teste A. Westrich 2015; GDI Imaging Project \ Photographed; Kelsey Keaton 2015; Emu Catalog \ FMNHINS; 3048518; Field Museum; Pinned” (FMNH).

#### ADDITIONAL MATERIAL EXAMINED:

**PHILIPPINES:** Laguna Prov., Mt. Makiling, ca. 4 km SE Los Baños [approx. 14°08.5'N 121°13'E, 430 m], 7.V.1977, leg. L.E. Watrous, berlese, rotten figs (1 ♂, FMNH).

REDESCRIPTION: Measurements (in mm, male, n = 1): HW = 0.36; TW = 0.35; PW = 0.36; SW = 0.36; AW = 0.40; HL = 0.24; EL = 0.085; TL = 0.105; PL = 0.26; SL = 0.33; SC = 0.30; FB = 0.86; BL = 1.64; (female, n = 1): HW = 0.28; TW = 0.265; PW = 0.30; SW = 0.32; AW = 0.35; HL = 0.21; EL = 0.07; TL = 0.06; PL = 0.21; SL = 0.30; SC = 0.28; FB = 0.71; BL = 1.24. Habitus as in Fig. 3. Forebody with very moderate, greasy lustre (mostly finely but strongly microsculptured), abdomen more lustrous. Head reddish medium to dark brown (darker in impressions mediad supraantennal tubercles, lighter along anterior edge), pronotum light to medium brown. Elytra anteriorly medium brown at shoulders, mediad and posteriorly slightly darkening. Abdomen mostly medium brown, dark brown in transverse impressions behind basal ridges. Legs, antennae and mouthparts light brown. Head (Fig. 8) with eyes moderately large but not particularly bulging, temples on anterior 1/3 straight then rounded; with extremely thin rim on anterior margin, clypeus slightly sinuate anteriorly, bordered by tiny anterior emarginations and transverse oval impression (epistomal suture) laterally and posteriorly, surface insignificantly microsculptured. Tips of supraantennal tubercles also shiny, moderately developed, anterior edge slightly obtuse-angled but broadly rounded. Microsculpture strong but fine colligate, more strigose postero-laterally, turning rugulose on neck. Intra-ocular sulcus poorly developed, from inner edge of eye following outline of temples but vanishing well before neck; inside sulcus microsculpture somewhat stronger but not significantly different. Head with rather large bristles behind supraantennal tubercles (near anterior edge of eye) and on vertex near temples. Antenna (male) as in Fig. 4. Neck separated by a constriction, dorsally turning into a medial/antero-medial impression. Pronotum posteriorly constricting semi-rectangular, anterior corners somewhat sharp but superficially appearing as narrowly rounded, sides and posterior margin slightly curved, posterior angles broadly rounded, disc indistinctly sulcate but besides median furrow only two nearby parallel sulci discernible. Rather prominent (thick) marginal bead on side appearing double-edged, with smaller bristles at anterior corners, larger ones at 2/5 of side length and even larger ones near posterior corners. Surface finely but distinctly strigose on entire disc. Elytra with moderately rounded shoulders, sides dilating, gently curved, hind margins almost straight with thin marginal bead. Sutural ridges moderately thin, smooth and flat, disc rugulose-punctate. Lateral longitudinal ridge consisting a few stronger protruding strigae. Legs moderately short, protibia with slight preapical constriction bordered by a few stronger spines, pro- and mesotibia with several spinulose rows, metatibia also with longitudinal ctenidium of spinules in distal half. Abdomen with sides moderately arcuate, widest at segments III–IV, mesal paratergites moderately broad, posterior edge of tergite VII with rather (evenly) wide palisade fringe, sternite VIII as in Fig. 14, tergite IX as in Fig. 15, tergite X as in Fig. 16 and aedeagus as in Figs. 17–18.

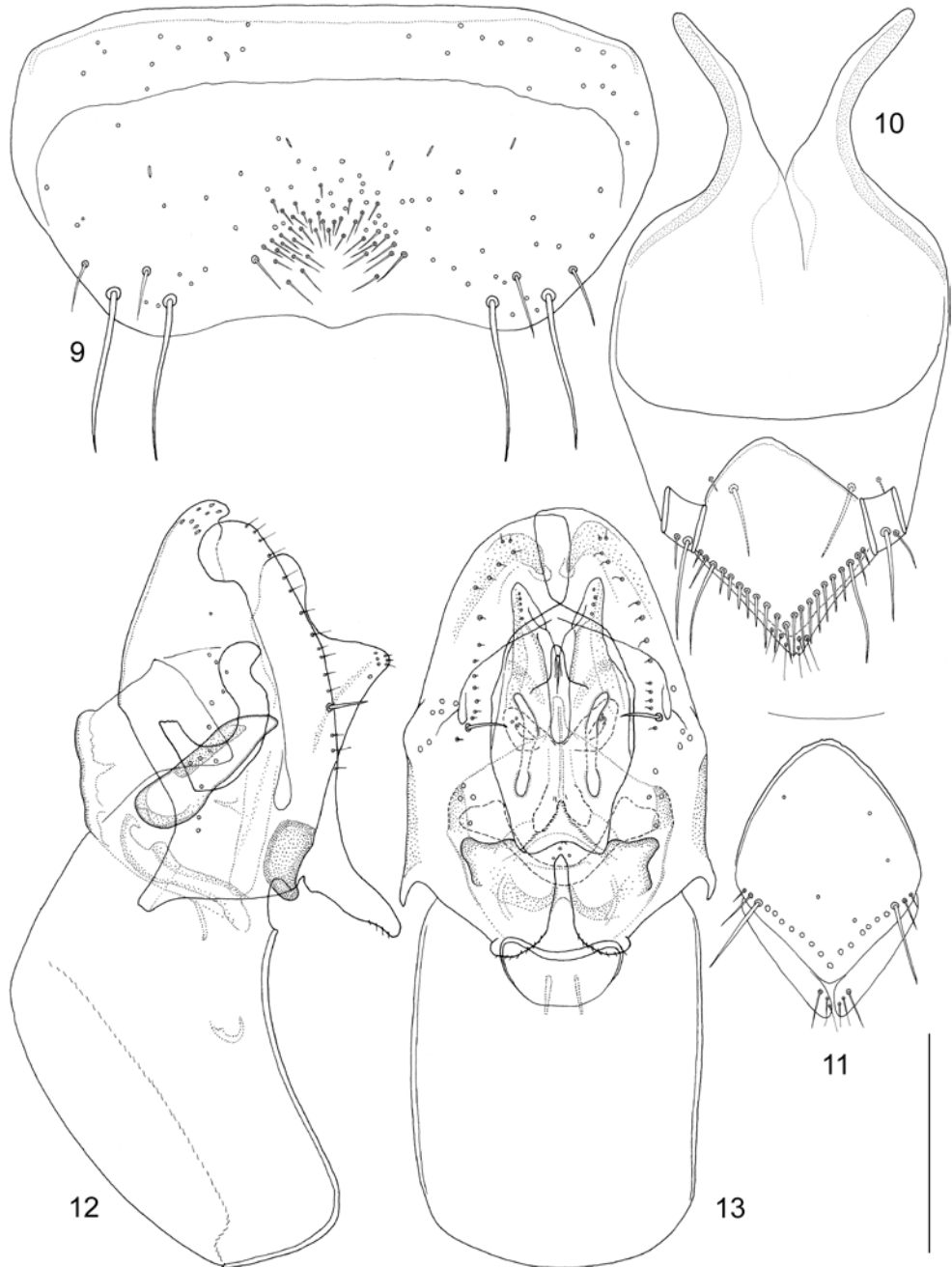
DISTRIBUTION: This species is known only from the Philippines (southern Luzon).



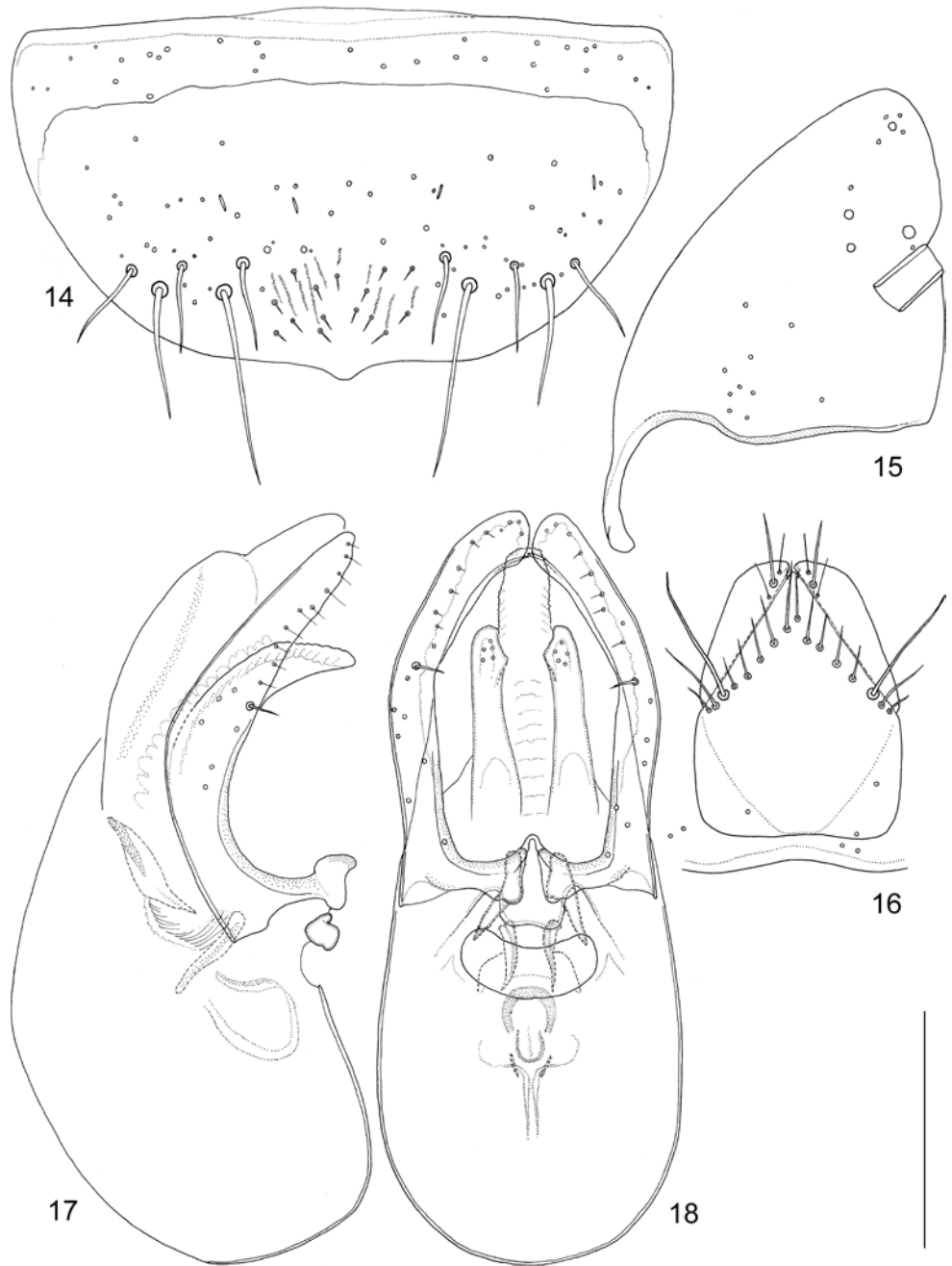
Figs. 1–4: *Anotylus erythrinus* (1–2) and *A. liliputanus* (3–4): 1, 3) habitus ( $\sigma$ ); 2, 4) antenna ( $\sigma$ ).



Figs. 5–8: *Anotylus erythrinus* ♂ (5), and ♀ ♀ (6–7), *A. liliputanus* ♂ (8): head and pronotum; the lighting used in Figs. 5–6 differs from the lighting used for Figs. 7–8.



Figs. 9–13: *Anotylus erythrinus* (♂): 9) sternite VIII; 10) segments IX–X; 11) tergite X; 12) aedeagus, lateral view, 13) same, frontal view. Scale bar = 0.075 mm for 12–13, 0.10 mm for 9, 0.11 mm for 10–11.



Figs. 14–18: *Anotylus liliputanus* (♂): 14) sternite VIII; 15) tergite IX; 16) tergite X; 17) aedeagus, lateral view, 18) same, frontal view. Scale bar = 0.06 mm for 17–18, 0.10 mm for 14–16.

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### References

- BERNHAEUER, M. 1936: Die Staphyliniden der Philippinen (Gattung *Oxytelus*). – The Philippine Journal of Science 61 (1): 81–87.
- CAMERON, M. 1925: New Staphylinidae from the Dutch East Indies. – Treubia 6 (2): 174–198.
- CAMERON, M. 1929: New Staphylinidae from the Malay Peninsula. – Journal of the Federated Malay States Museums 14 (3–4): 436–452.
- HERMAN, L.H. 1970: Phylogeny and reclassification of the genera of the rove-beetle subfamily Oxytelinae of the World (Coleoptera, Staphylinidae). – Bulletin of the American Museum of Natural History 142 (5): 343–454.
- HERMAN, L.H. 2001: Catalog of the Staphylinidae (Insecta: Coleoptera). 1785 to the end of the second millennium. – Bulletin of the American Museum of Natural History 265: 1–4218.
- MAKRANCZY, Gy. 2006: Systematics and phylogenetic relationships of the genera in the *Carpelimus* group (Coleoptera: Staphylinidae: Oxytelinae). – Annales Historico-Naturales Musei Nationalis Hungarici 98: 29–119.
- MAKRANCZY, Gy. 2017: Review of the *Anotylus cimicoides* species group (Coleoptera: Staphylinidae: Oxytelinae). – Acta Zoologica Academiae Scientiarum Hungaricae 63 (2): 143–262.

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