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Representatives of the Genus *Thinobius* Kiesenwetter, 1844 (Coleoptera, Staphylinidae, Oxytelinae) from Tropical Africa. *Thinobius endroedyi*, a New Species from Namibia

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Abstract—The paper presents a description of the new species, *Thinobius* (s. str.) *endroedyi* from Namibia. The lectotype of *Th.* (s. str.) *iridiventris* Bernhauer, 1934 is designated, and a supplemented description of this species is provided. A key to the representatives of the genus *Thinobius* from tropical Africa is given.

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Until present, only 3 species of the genus *Thinobius* Kiesenwetter have been known for tropical Africa: *Th. iridiventris* Bernhauer, 1934 from the central regions of Namibia, *Th. trivialis* Cameron, 1947 from southwestern Eritrea, and *Th. torquatus* Smetana, 1967 from the Republic of South Africa. In the course of the revision of the genus *Carpelimus* Leach, 1819 of tropical Africa (Gildenkov, 2007a, 2007b, 2011, 2012a, 2012b, 2013), I have examined numerous collections of various museums. Among the material of *Carpelimus* in the Transvaal Museum of Natural History, a large-sized species of the genus *Thinobius* from Namibia was found. As there are no experts on the fauna of *Thinobius* of tropical Africa, I decided to study this species. After the study of the descriptions of all the species of *Thinobius* from tropical Africa (Bernhauer, 1934; Cameron, 1947; Smetana, 1967), it was found that the species is most similar to *Th. iridiventris*, also described by Bernhauer from Namibia. Recent examination of the type material of *Th. iridiventris* from Field Museum of Natural History has shown that the species found in Namibia is new to science.

The depositories of the material are designated as follows: cMG, the private collection of Mikhail Gildenkov, Smolensk, Russia; FMNH, Field Museum, Chicago, USA; TMNH, the Transvaal Museum of Natural History, Pretoria, the Republic of South Africa. The labels are given in the original transcription; the sign "|" designates the end of a line.

The dissections, measurements, and figures were performed using a MBS-10 microscope equipped with an eyepiece-micrometer and a measuring grid. The slides of the genitalia were cleaned with 10% KOH and fixed in euparal. In the descriptions, the length to width ratio for the head, pronotum, and elytra is given using the standard units: 7 standard units = 0.1 mm; consequently, 1 standard unit constitutes about 0.0143 mm.

Thinobius (s. str.) ***iridiventris*** Bernhauer, 1934 (figure, *1–3*)

Material. Lectotype (designated here): ♂, central Namibia, Okahandja City: "Okahandja 2–18.iii.1928." "S. W. Africa | R.E. Turner. Brit. Mus., 1928–178." "*iridiventris* Brnh. Cotypus *Thinophilus*" "Chicago NHMus M. Bernhauer Collection" "Lectotypus *Thinobius iridiventris* Bernhauer, 1934 | des. M. Gildenkov, 2014" "*Thinobius* (s. str.) *iridiventris* Bernhauer, 1934 | det. M. Gildenkov, 2014" (FMNH).

Paralectotype (designated here): 1 ♀, "Okahandja 2–18.iii.1928." "S. W. Africa | R.E. Turner. Brit. Mus., 1928–178." "*Thinobius iridiventris* Brnh Cotyp." "*iridiventris* Brnh. Typus *Thinophilus*." "Chicago NHMus M. Bernhauer Collection." "Paralectotypus *Thinobius iridiventris* Bernhauer, 1934 | des. M. Gildenkov, 2014." "*Thinobius* (s. str.) *iridiventris* Bernhauer, 1934 | det. M. Gildenkov, 2014" (FMNH).

Non-type material (it is not a paralectotype because the date on the label does not correspond to that given in the description (Bernhauer, 1934 : 496)): 1 ex. "Okahandja 19–29.iii.1928." "S. W. Africa | R.E. Turner. Brit. Mus., 1928–178." "*iridiventris*

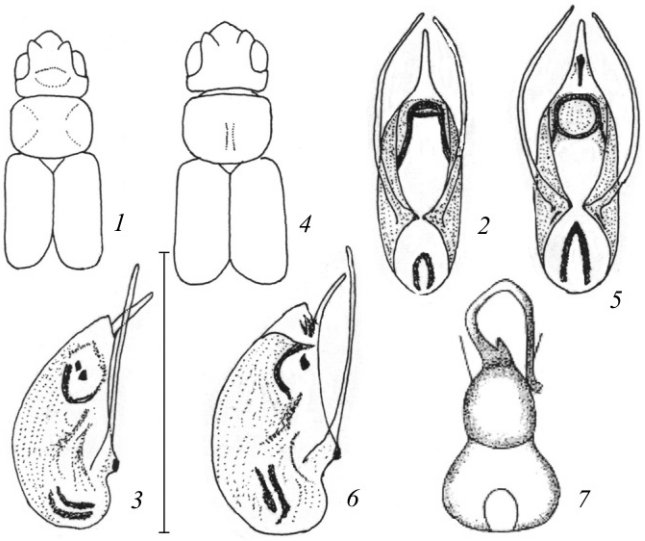
Brh. | det. Bernhauer." "Chicago NHMus M. Bernhauer Collection." "*Thinobius* (s. str.) *iridiventris* Bernhauer, 1934 | det. M. Gildenkov, 2014" (FMNH).

Description. Male (lectotype). Body flattened, about 1.4 mm long, brown, with weakly shining integument. Head, pronotum, and abdomen dark brown; elytra, legs, and antennae yellowish brown; tarsi yellow; elytra dark brown in area of scutellum. Body covered with short pale hairs.

Head flattened, trapeziform; ratio of its length from posterior margin to anterior margin of clypeus to its maximum width about 15 : 19. Neck constriction distinct. Temples rectangular with rounded apices, well-developed. Eyes medium-sized, weakly convex. Eye diameter in dorsal view subequal to length of temple. Head across eyes about as wide as across temples (figure, *1*). Surface of head covered with extremely delicate, very fine and dense punctation; punctures hardly distinguishable; microsculpture in form of delicate shagreenity. Vertex area with rounded depression. Antennae rather long. 1st segment elongate, cylindrical, its length more than twice its maximum width; 2nd segment conical, slightly longer than wide, less than half as long as and distinctly narrower than 1st; 3rd segment weakly conical, distinctly shorter than 2nd, slightly wider than long; 4th cylindrical, wider than long, clearly wider than 3rd and 5th segments; 5–8th segments cylindrical, about as long as wide, similar in size; 9th and 10th segments weakly conical, about as long as wide, distinctly larger than preceding ones; 11th segment as wide as 10th, longer than wide, pointed at apex, slightly shorter than 9th and 10th segments combined; 9–11th segments forming loose club.

Pronotum flattened, with rounded base, subparallel-sided, widest at mid-length (figure, *1*); ratio of its length to its maximum width about 16 : 21. Surface of pronotum, similarly to that of head, covered with extremely delicate, very fine and dense punctation; punctures hardly distinguishable; microsculpture in form of delicate shagreenity.

Elytra long, matte; ratio of their length to their combined width about 29 : 25. Inner angle of elytral apex rounded; elytra slightly diverging along suture (figure, *1*). Surface of elytra covered with extremely delicate, very fine and dense punctation; punctures not distinguishable; microsculpture in form of delicate, rather dense shagreenity better developed than that on head and pronotum.



Thinobius iridiventris (orig.) (*1–3*), *Th. endroedyi* (orig.) (*4–6*), *Th. torquatus* (after: Smetana, 1967) (*7*) [(*1*, *4*) contour of head, pronotum, and elytra; (*2*, *5*) aedeagus, ventral view; (*3*, *6*) aedeagus, lateral view; (*7*) aedeagus, dorsal view. Scale (mm): *1*, *4*, 1; *2*, *3*, *5*, *6*, 0.25; *7*, without scale.

Abdomen covered with smooth transverse shagreenity, rather strongly shining.

Aedeagus of a characteristic structure (figure, *2*, *3*).

Female (paralectotype). Sex dimorphism in coloration, size, and proportions of body absent.

Variability not found.

Differential diagnosis. Similar to *Th. torquatus* in size, but differs in a distinctly paler coloration, less strongly developed eyes, shorter 2nd antennal segment, and, especially, in the structure of the aedeagus (figure, *2*, *3*, *7*). *Thinobius iridiventris* is similar to *Th. trivialis* in coloration, but clearly differs in a distinctly larger size, shorter 2nd antennal segment, and longer 5–10th antennal segments. It is very closely related to *Th. endroedyi* (see below).

Distribution. Namibia.

Thinobius (s. str.) ***endroedyi*** Gildenkov, sp. n. (figure, *4–6*)

Material. Holotype: ♂, southwestern Namibia, Namib Desert, Tirasberge, southeastern extremity of Namib Naukluft National Park, "SW. Afr; C. Namib des. Numis Wasser 26.03 S–16.15 E" "9.8.1989; E-Y:, 2642 shorewash, rockpool leg. Endrödy and Klimaszew." "Holotypus *Thinobius endroedyi* Gildenkov, sp. n. | M. Gildenkov des., 2012" (TMNH).

Paratypes: 1 ♂, 4 ♀, 5 ex. “SW. Afr; C. Namib des. Numis Wasser 26.03 S–16.15 E” “9.8.1989; E-Y: 26|42 shorewash, | rockpool leg. Endrödy and Klimaszew.” “Paratypus *Thinobius endroedyi* Gildenkov, sp. n. | M. Gildenkov des., 2012” (TMNH; 1 ♂, 1 ♀, 1 ex.—cMG).

Description. Male (holotype). Body flattened, about 1.6 mm long, blackish brown, with weakly shining integument. Head, pronotum, and abdomen blackish brown; elytra and base of abdomen only slightly paler than head and pronotum, dark brown; legs and antennae brown; tarsi yellow. Body covered with short pale hairs. Head weakly convex, trapeziform; ratio of its length from posterior margin to anterior margin of clypeus to its maximum width about 17: 20. Neck constriction distinct. Temples rectangular with rounded apex, well developed. Eyes medium-sized, weakly convex; eye diameter in dorsal view subequal to length of temple. Head across eyes about as wide as across temples (figure, *4*). Surface of head covered with extremely delicate, very fine and dense punctation; punctures hardly distinguishable; microsculpture in form of delicate shagreenity. Antennae rather long. 1st segment elongate, cylindrical, its length more than twice its maximum width; 2nd segment conical, elongate, about twice as long as wide, more than 0.67 times as long as and distinctly narrower than 1st segment; 3rd segment conical, elongate, about 1.5 times as long as wide, clearly shorter and narrower than 2nd; 4th weakly conical, slightly longer than wide; 5th similar to 4th; 6–8th segments weakly conical, about as long as wide, similar in size; 9th and 10th weakly conical, about as long as wide, much larger than preceding segments; 11th segment as wide as 10th, longer than wide, pointed at apex, slightly shorter than 9th and 10th segments combined; 9–11th segments forming loose club.

Pronotum weakly convex, with rounded base, subparallel-sided, widest at mid-length (figure, *4*). Ratio of length of pronotum to its maximum width about 18 : 22. Surface of pronotum, similarly to that of head, covered with extremely delicate, very fine and dense punctation; punctures hardly distinguishable; microsculpture in form of delicate shagreenity.

Elytra long, matte. Ratio of length of elytra to their common width about 30 : 28. Inner angle of elytral apex rounded; elytra slightly diverging along suture (figure, *4*). Surface of elytra covered with extremely delicate, very fine and dense punctation; punctures not distinguishable; microsculpture in form of delicate, rather dense shagreenity better developed than that on head and pronotum.

Abdomen covered with smooth transverse shagreenity, rather strongly shining.

Aedeagus of a characteristic structure (figure, *5*, *6*).

Female (paratype). Sex dimorphism in coloration, size, and proportions of body absent.

Variability not found.

Differential diagnosis. *Thinobius endroedyi* is very closely related to *Th. iridiventris*, which is evident from the structure of the aedeagus in these species (figure, *2*, *3*, *5*, *6*). However, these species rather strongly differ in appearance: *Th. endroedyi* clearly differs in a larger size, considerably darker coloration, distinctly longer 2nd antennal segment (the 1st segment is less than 1.5 times as long as the 2nd one; in *Th. iridiventris*, it is more than twice as long as the 2nd segment), longer 4th antennal segment (in *Th. iridiventris*, it is distinctly wider than long), a rather convex pronotum (in *Th. iridiventris*, the pronotum is flattened), and in the absence of an oval depression on the vertex. *Thinobius endroedyi* also clearly differs from *Th. iridiventris* in the details of the aedeagus structure (figure, *2*, *3*, *5*, *6*). *Thinobius endroedyi* is somewhat similar to *Th. torquatus* in the coloration and structure of the antennae, but differs in a larger size, in less strongly developed eyes, and, especially, in the structure of the aedeagus (figure, *5*, *6*, *7*).

Distribution. Namibia.

Etymology. The species is named after Dr. Sebastian Endrödy-Younga, who in his day was the main and honored curator of the Coleoptera collection of Transvaal Museum, an expert in the systematics of beetles, and who collected the type series of the new species.

A Key to the Species of the Genus Thinobius of Tropical Africa

1. Elytra about 1.3 times as long as pronotum. Antennae short; 4–10th segments wider than long. Body 1 mm long, pale; pronotum reddish brown; elytra yellowish brown. 1st antennal segment as long as 2nd. Eye diameter in dorsal view subequal

to length of temple. Eastern Africa: Eritrea .... *Th. trivialis.*

—Elytra more than 1.6 times as long as pronotum. Antennae longer, some of 4–10th segments not wider than long ..... 2.

2. Pale; elytra yellowish brown. 1st antennal segment more than twice as long as 2nd; 4th distinctly wider than long; 5–8th segments about as long as wide. Aedeagus as in figure, *2*, *3*. Body length 1.4 mm. Pronotum flattened. Eye diameter in dorsal view subequal to length of temple. Southern Africa: Namibia ..... *Th. iridiventris.*

—Dark, elytra dark brown. 1st antennal segment less than 1.5 times as long as or only slightly longer than 2nd; 4th not wider than long; 5th longer than wide. Structure of aedeagus different ..... 3.

3. Small, body length about 1–1.25 mm. 7th and 8th antennal segments slightly longer than wide. Eye diameter in dorsal view clearly exceeding length of temple. Aedeagus as in figure, *7*. The Republic of South Africa ..... *Th. torquatus.*

—Larger, body length about 1.5–1.6 mm. 7th and 8th antennal segments about as long as wide. Eye diameter in dorsal view subequal to length of temple. Aedeagus as in figure, *5*, *6*. Pronotum weakly convex. Southern Africa: Namibia ..... *Th. endroedyi.*

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REFERENCES

1. Bernhauer, M., "The Staphylinid Fauna of South Africa," Ann. South African Mus. **30** (4), 481–509 (1934).
2. Cameron, M., "New Species of Staphylinidae (Col.) from Erythraea," Atti Mus. Civ. Stor. Nat. Trieste **16**, 95–96 (1947).
3. Gildenkov, M.Yu., "A Review of the Subgenus *Carpelimus* s. str. (Coleoptera, Staphylinidae) from Tropical Africa," Zool. Zh. **86** (9), 1073–1085 (2007) [Entomol. Rev. **87** (7), 893–906 (2007a)].
4. Gildenkov, M.Yu., "A Review of the Fauna of the Subgenus *Troginus*, Genus *Carpelimus* (Coleoptera, Staphylinidae), from Tropical Africa," Zool. Zh. **86** (11), 1315–1327 (2007b) [Entomol. Rev. **87** (7), 907–918 (2007b)].
5. Gildenkov, M.Yu., "A New Species of *Carpelimus* Leach, 1819 from the Palaearctic Region and Supplements to the Review of the Fauna of the Subgenus *Carpelimus* (s. str.) of Tropical Africa (Coleoptera, Staphylinidae, Oxytelinae)," Izv. Smolensk. Gos. Univ. **4** (16), 64–72 (2011).
6. Gildenkov, M.Yu., "A Preliminary Review of the Subgenus *Bucephalinus* Koch, 1934, Genus *Carpelimus* Leach, 1819, for Tropical Africa (Coleoptera, Staphylinidae, Oxytelinae)," Izv. Smolensk. Gos. Univ. **3** (19), 245–256 (2012a).
7. Gildenkov, M.Yu., "New Species of the Subgenus *Trogophloeus* Mannerheim, 1930, Genus *Carpelimus* Leach, 1819, for Tropical Africa (Coleoptera, Staphylinidae, Oxytelinae)," Izv. Smolensk. Gos. Univ. **4** (20), 266–294 (2012b).
8. Gildenkov, M.Yu., "A Review of the Members of the Subgenus *Trogophloeus* Mannerheim, 1930, Genus *Carpelimus* Leach, 1819, for Tropical Africa (Coleoptera, Staphylinidae, Oxytelinae)," Izv. Smolensk. Gos. Univ. **1** (21), 242–251 (2013).
9. Smetana, A., "Zwei neue afrikanische *Thinobius*-Arten (Col., Staphylinidae)," Annot. Zool. Botan. **37**, 1–3 (1967).