

Far Eastern Entomologist

Дальневосточный энтомолог

Journal published by Far East Branch
of the Russian Entomological Society
and Laboratory of Entomology,
Institute of Biology and Soil Science,
Vladivostok

Number 195: 1-6

ISSN 1026-051X

April 2009

TO THE KNOWLEDGE OF THE SUBGENUS *TEMNOCERINUS* LEGALOV, 2007 (COLEOPTERA, RHYNCHITIDAE: *TEMNOCERUS* THUNBERG, 1815)

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A review of the subgenus *Temnocerinus* including a key of 4 species and figures of 2 species is given. *Temnocerus californicus* sp. n. is described from USA (California). *Coenorrhinus sanguinipes* Voss, 1932 is considered as a synonym of *Temnocerus aureus* (LeConte, 1876). *Temnocerus insularis* (Fall, 1929) and *T. levirostris* (Fall, 1929) are transferred from nominate subgenus to subgenus *Temnocerinus* Legalov, 2007.

KEY WORDS: Coleoptera, Rhynchitidae, *Temnocerus*, *Temnocerinus*, taxonomy, new species, USA.

А. А. Легалов. К познанию подрода *Temnocerinus* Legalov, 2007 (Coleoptera, Rhynchitidae: *Temnocerus* Thunberg, 1815) // Дальневосточный энтомолог. 2009. N 195. С. 1-6.

Дан обзор видов подрода *Temnocerinus*, включая определительную таблицу 4 видов и иллюстрации 2 видов. Из США (Калифорния) описан *Temnocerus californicus* sp. n. *Coenorrhinus sanguinipes* Voss, 1932 рассматривается как синоним *Temnocerus aureus* (LeConte, 1876). *Temnocerus insularis* (Fall, 1929), и *T. levirostris* (Fall, 1929) перемещены из номинативного подрода в подрод *Temnocerinus* Legalov, 2007.

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INTRODUCTION

The genus *Temnocerus* Thunberg, 1815 is one of the most difficult for determination groups of the family Rhynchitidae because of all species are characterized by unarmed endophallus (Legalov, 2003a, 2003b, 2006a, 2006b).

The subgenus *Temnocerinus* Legalov, 2007 has been established for two species from USA: *Temnocerus aureus* (LeConte, 1876), and *T. sanguinipes* (Voss, 1932), but last species was misidentified by me (Legalov, 2007). Recently I study the figures of type specimen (male) of *Rhynchites aureus* in the site (<http://insectdatabases.oeb.harvard.edu>) and find that Hamilton (1971) correctly synonymised *Coenorrhinus sanguinipes* Voss, 1932 with *T. aureus*. Species listed by me as *T. aureus* (Legalov, 2007) is a new one. The description of new species is given below. The holotype of new species is deposited in the Staatliches Museum für Tierkunde (Germany: Dresden). Two species, *Temnocerus insularis* (Fall, 1929) and *T. levirostris* (Fall, 1929), also have been assigned to this subgenus.

FAMILY RHYNCHITIDAE GISTEL, 1848

Subfamily Rhynchitinae Gistel, 1848

Tribe Rhynchitini Gistel, 1848

Genus *Temnocerus* Thunberg, 1815

Temnocerus Thunberg, 1815: 110 [type species: *Attelabus planirostris* Fabricius, 1801 (= *Curculio nanus* Paykull, 1792) designated by Croth, 1870].

NOTES. Genus consists of 40 species in 4 subgenera (Legalov, 2007, 2009).

Subgenus *Temnocerinus* Legalov, 2007

Temnocerinus (pro subgenus of *Temnocerus*) Legalov, 2007: 126 [type species: *Rhynchites aureus* LeConte, 1876, by original designation].

DIAGNOSIS. This subgenus differs from other subgenera by the red-brown or brown-pale legs, usually long, semierect setae on the body, and aedeagus strongly narrowed to apex.

SPECIES INCLUDED. 4 species from USA.

Key to species

- 1 (2) Legs red-brown. Antennae located further from the rostrum basis 3
- 2 (1) Legs brown-pale. Antennae located more close to the rostrum basis 5
- 3 (4) Body of the large sizes (2.8-3.7 mm) with almost adpressed setae (figs. 1, 6).
Pronotum narrower (fig. 1). Antennae closer located to the basis of the rostrum
(fig. 1). Apex of the aedeagus more weakly narrowed *T. aureus*

- 4 (3) Body of the small sizes (2.0 mm) with semierect setae (figs. 2, 5). Pronotum wider (fig. 3). Antennae more close located to the basis of the rostrum (fig. 3). Apex of the aedeagus more strongly narrowed (fig.10) *T. californicus* sp. n.
- 5 (6) Rostrum strongly cylindrical, nearly straight, glabrous *T. levirostris*
- 6 (5) Rostrum not strongly cylindrical, weakly curved, not glabrous *T. insularis*

***Temnocerus (Temnocerinus) aureus* (LeConte, 1876)**

Figs 1, 6, 10

Rhynchites aureus LeConte, 1876: 7 [lectotype – ♂, “Cala.”, “Type, 276”, “*R. aureus* Lec.”, deposited in Harvard University, Museum of Comparative Zoology (USA: Cambridge), photos are studied by the author].

Coenorhinus sanguinipes Voss, 1932: 184 [syntypes, “Nevada, Morrison” deposited in Museum für Naturkunde der Humboldt-Universität (Germany: Berlin) and Universität von Hamburg, Zoologisches Institut und Zoologisches Museum (Germany: Hamburg), not studied by the author]. Synonymised by Hamilton, 1971: 988.

MATERIAL. USA: Oregon, Klamath Co., 7 km E of Bly, 14.VI 1984, 1 ♀ (leg. R. Danielson); in the Lund University (Sweden: Lund).

DISTRIBUTION. USA (Arizona, California, Colorado, Nevada, Oregon, Utah).

***Temnocerus (Temnocerinus) californicus* Legalov, sp. n.**

Figs 2-5, 7-9

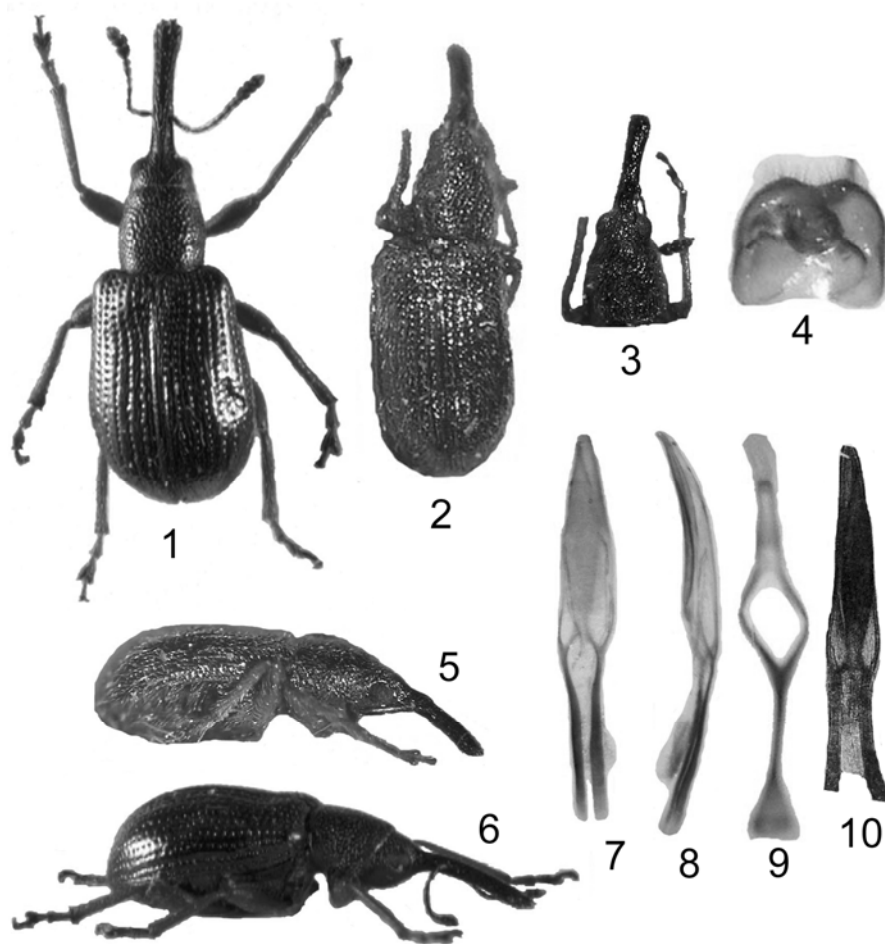
Temnocerus sanguinipes nec (Voss, 1932): Legalov, 2007: 126 (misidentification).

MATERIAL. Holotype – ♂, “Californie”, “Betermin Senyes”, “Staatl. Museum für Tierkunde, Dresden “, “15696”; in Staatliches Museum für Tierkunde (Germany: Dresden).

DESCRIPTION. MALE: Body black-brown, with bronze luster, with long, semi-erect setae. Antennae dark brown. Legs red-brown. Male: Rostrum long, 5.09 times as long as wide, 1.3 times as long as pronotum, weakly curved, weakly expanded to the apex, lustrous. Antennae located in first third of the rostrum. Forehead wide, convex, punctate. Eyes large, convex. Temples short. Antennae long, reaching pronotum middle. Scapus and 1st segment of the funicle oval. 2nd-5th segments narrower-oval. 6th and 7th segments trapezoid. Clava shorter than funicle, thick. 1st segment shorter than 2nd segments. 3rd segment longer than 2nd segments, weakly pointed. Pronotum 1.08 times as long as wide. Sides almost direct. Disk little flattened, densely punctate. Scutellum rectangular. Elytra elongated, 1.67 times as long as wide. Greatest width behind middle. Humeri weakly smoothed. Intervals wide, convex. Striae deep. Points in them large and dense, deep. Scutellar striole present. Thorax punctate. Metepisternum narrow. Abdomen convex, rugosity-punctate. 1st and 2nd ventrites wide. 3rd-5th ventrites narrower. Pygidium convex, punctate. Legs long.

Femora thin. Tibiae thin, weakly curved. Tarsi long. 1st segment long. 2nd segment triangular. 3rd segment bilobed. Clausal segment elongated. Claws with teeth. Length of body: 2.0 mm.

DISTRIBUTION. USA (California).



Figs 1-4. *Temnocerus* (fig. 10 after Hamilton, 1971, other figures original): 1) *T. aureus*, body of female dorsally; 2) *T. californicus*, body dorsally; 3) *T. californicus*, rostrum, head and pronotum dorsally; 4) *T. californicus*, 8th tergite; 5) *T. californicus*, body laterally; 6) *T. aureus*, body of female laterally; 7) *T. californicus*, aedeagus dorsally; 8) *T. californicus*, aedeagus laterally; 9) *T. californicus*, tegmen dorsally; 10) *T. aureus*, aedeagus dorsally.

***Temnocerus (Temnocerinus) insularis* (Fall, 1929)**

Rhynchites insularis Fall, 1929: 293 [holotype – ♂, “25066”, deposited in Harvard University, Museum of Comparative Zoology (USA: Cambridge), not studied by the author].

DISTRIBUTION. USA (Arizona, California, Colorado).

***Temnocerus (Temnocerinus) levirostris* (Fall, 1929)**

Rhynchites aureus var. *levirostris* Fall, 1929: 293 [holotype – ♀, “25067”, deposited in Harvard University, Museum of Comparative Zoology (USA: Cambridge), not studied by the author].

DISTRIBUTION. USA (California).

ACKNOWLEDGEMENTS

I wish to thank K.-D. Klass (Dresden), R. Danielsson (Lund) and E. Chabanenko (Novosibirsk) for help with the work.

REFERENCES

- Croth, G.R. 1870. The genera of Coleoptera studied chronologically (1802-21). – Transactions of the Entomological Society of London 3: 213-241.
- Fall, H.C. 1929. New North American species of *Rhynchites* (Coleoptera) – Bulletin of the Brooklyn Entomological Society 24(5): 292-294.
- Hamilton, R.W. 1971. The genus *Pselaphorhynchites* (Coleoptera: Rhynchitidae) in America, North of Mexico. – Annals of the Entomological Society of America 64: 982-996.
- LeConte, J.L. 1876. In: LeConte, J.L. & Horn, G.H. The Rhynchophora of America, north of Mexico. – Proceedings of the American Philosophical Society 15(96): i-xvi + 1-455.
- Legalov, A.A. 2003a (2002). A new species of the genus *Temnocerus* Thunberg, 1815 (Coleoptera, Rhynchitidae) from Japan. – Russian Entomological Journal 11(4): 409-410.
- Legalov, A.A. 2003b. Taxonomy, classification and phylogeny of the leaf-rolling weevils (Coleoptera: Rhynchitidae, Attelabidae) of the world fauna. Novosibirsk. CD-R. No 0320301200. 733+350 p. (641 Mb.). (In Russian)
- Legalov, A.A. 2006a. Three new species of the leaf-rolling weevils (Coleoptera: Rhynchitidae, Attelabidae) from Russia, China and Korea. – Baltic Journal of Coleopterology 6(1): 15-22.
- Legalov, A.A. 2006b. To the knowledge of the genus *Temnocerus* Thunberg, 1815 (Coleoptera: Rhynchitidae). – Far Eastern Entomologist 165: 1-14.
- Legalov, A.A. 2007. Leaf-rolling weevils (Coleoptera: Rhynchitidae, Attelabidae) of the world fauna. Novosibirsk: Agro-Siberia. 523 p.
- Legalov, A.A. 2009. New species and new records of the Rhynchitid-beetles (Coleoptera, Rhynchitidae) from Asia. – Amurian Zoological Journal 1(1): 30-36.
- Thunberg, C.P. 1815. De Coleopteris rostratis commentatio. – Nova Acta Regiae Societatis Scientiarum Upsaliensis 7: 104-125.

Voss, E. 1932. Monographie der Rhynchitinen-Tribus Rhynchitini. 2. Gattungsgruppe: Rhynchitina. V. 1. Teil der Monographie der Rhynchitinae-Pterocolinae (41. Beitrag zur Kenntnis der Curculioniden). – Koleopterologische Rundschau 18(3-4): 153-189.