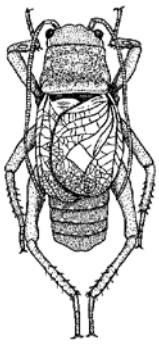


Far Eastern Entomologist

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 165: 1-14 ISSN 1026-051X October 2006

TO THE KNOWLEDGE OF THE GENUS *TEMNOCERUS* THUNBERG, 1815 (COLEOPTERA: RHYNCHITIDAE)

A. A. Legalov

Institute of Systematic and Ecology of Animals, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, 630091, Russia

Two new species are described: *T.* (*Temnocerus*) *dundai* Legalov, **sp. n.** from China and *T.* (*Pseudotemnocerus*) *cubensis* Legalov, **sp. n.** from Cuba. A key to the Palaearctic species of the nominotypical subgenus is given and distribution of these species are clarified.

KEY WORDS: Coleoptera, Rhynchitidae, *Temnocerus*, key, new species.

А. А. Легалов. К познанию рода *Temnocerus* Thunberg, 1815 (Coleoptera: Rhynchitidae) // Дальневосточный энтомолог. 2006. N 165. С. 1-14.

Описаны два новых вида: *T.* (*Temnocerus*) *dundai* Legalov, **sp. n.** из Китая и *T.* (*Pseudotemnocerus*) *cubensis* Legalov, **sp. n.** с Кубы. Приведена определительная таблица палеарктических видов номинативного подрода и уточнено распространение этих видов.

Институт систематики и экологии животных СО РАН, Новосибирск, 630091, Россия.

INTRODUCTION

The species of the genus *Temnocerus* are distributed mainly in Northern Hemisphere, but *T. yunnanicus* is found in South Asia (China: Yunnan) and *T. bolivicus* is described from South America (Bolivia). Three species, *T. coeruleus*, *T. longiceps*,

and *T. nanus*, are widespread northwards to Norway. The North American species of the genus were revised by R.W. Hamilton (1971). The list of American species with data on distribution have been published (O'Brien & Wibmer, 1982; Wibmer & O'Brien, 1986). The European species were studied by L. Dieckmann (1974). The Japanese fauna was reviewed by K. Morimoto (1958) and Y. Sawada (1993, 1997). The description of new subgenera and species, as well as the data on distribution of some species were published by author recently (Legalov, 1998, 1999, 2002, 2003a, 2003b, 2005, 2006; Legalov & Opanassenko, 2000).

The main purposes of present paper are to describe two new species, to give a key to the Palaearctic species of the nominotypical subgenus, and to clarify the distribution of these species based on the examined material.

The following abbreviations are used in the text for the of museums, institutions and private collections as depositaries for types and other material examined:

DEI – Deutsches Entomologisches Institut (Munchenberg, Germany);

HNHM – Hungarian Natural History Museum (Budapest, Hungary);

IBSS – Institute of Biology and Soil Science, Far East Branch of the Russian Academy of Sciences (Vladivostok, Russia);

ISEA – Institute of Systematic and Ecology of Animals, Siberian Branch of the Russian Academy of Sciences (Novosibirsk, Russia);

MZLU – Lund University (Lund, Sweden);

NMPC – National Museum of Natural History (Prague, Czech Republic);

RDP – Radek Dunda collection (Prague, Czech Republic);

VKM – Vladimir Korasev collection (Minsk, Belarus);

VSM – Vladimir Savitsky collection (Moscow, Russia);

ZISP – Institute of Zoology, Russian Academy of Sciences (St-Petersburg, Russia).

Present study have been supported by the grant of the RFBR No 06-04-90816-Mol_a.

Genus *Temnocerus* Thunberg, 1815

Temnocerus Thunberg, 1815: 110. [Type species – *Attelabus planirostris* Fabricius, 1801 (= *Curculio nanus* Paykull, 1792)].

COMPOSITION. There are 39 species from 3 subgenera. A nominotypical subgenus *Temnocerus* s. str. consists of 17 species: *T.* (*T.*) *coeruleus* (Fabricius, 1798) from Palaearctic, *T.* (*T.*) *semicyaneus* (Bedel, 1884) from Algeria, *T.* (*T.*) *japonicus* (Morimoto, 1958) from China, Russia and Japan, *T.* (*T.*) *longiceps* (C.G. Thomson, 1888) from Palaearctic; *T.* (*T.*) *morimotoi* (Sawada, 1997) from Japan, *T.* (*T.*) *nanus* (Paykull, 1792) from West Palaearctic, *T.* (*T.*) *rubripes* (Reitter, 1916) from Central and East Palaearctic, *T.* (*T.*) *yunnanicus* Legalov, 2003 and *T.* (*T.*) *dundai* Legalov, **sp. n.** from China, *T.* (*T.*) *sibiricus* Legalov, 2006 from East Siberia, and *T.* (*T.*) *aeratus* (Say, 1831), *T.* (*T.*) *cyanellus* (LeConte, 1876), *T.* (*T.*) *dilatarostris* (Hamilton, 1971), *T.* (*T.*) *insularis* (Fall, 1929), *T.* (*T.*) *levirostris* (Fall, 1929), *T.* (*T.*) *macrophthalmus* (Schaeffer, 1908), *T.* (*T.*) *aureus* (LeConte, 1876) from North America.

Subgenus *Paratemnocerus* Legalov, 2003 [type species – *Rhynchites subglaber* Desbrochers des Loges, 1897] includes the type species known from Kazakhstan, Mongolia and Russia, *T.* (*P.*) *terminassianae* Legalov, 2003 from Japan, *T.* (*P.*) *fossifrons* (LeConte, 1876), and *T.* (*P.*) *naso* (Casey, 1885) from USA.

Subgenus *Pseudotemnocerus* Legalov, 2003 [type species *Rhynchites regularis* Sharp, 1889] includes 18 species: *T.* (*P.*) *abdominalis* (Voss, 1932) from Mexico, *T.* (*P.*) *aeratoides* (Fall, 1901) from USA, *T.* (*P.*) *auletoides* (Sharp, 1889) from Guatemala, *T.* (*P.*) *bolivicus* Legalov, 2003 from Bolivia, *T.* (*P.*) *chiriquensis* (Sharp, 1889) and *T.* (*P.*) *confertus* (Sharp, 1889) from Panama, *T.* (*P.*) *cubensis* Legalov, **sp. n.** from Cuba, *T.* (*P.*) *debilis* (Sharp, 1889) from Mexico, Belize and Honduras, *T.* (*P.*) *elusus* (Blatchley, 1916) from USA, *T.* (*P.*) *guatemalenus* (Sharp, 1889) from Belize, El Salvador, Guatemala and Honduras, *T.* (*P.*) *lindae* (Hamilton, 1971) from USA, *T.* (*P.*) *oculatus* (Sharp, 1889) from Guatemala, *T.* (*P.*) *perplexus* (Blatchley, 1916) from Canada and USA, *T.* (*P.*) *pusillus* (Sharp, 1889) from Costa Rica and Panama, *T.* (*P.*) *regularis* (Sharp, 1889) from Mexico, *T.* (*P.*) *striafrons* (Hamilton, 1971) from USA, *T.* (*P.*) *subviridanus* (Voss, 1930) from Brazil, *T.* (*P.*) *thesaurus* (Sharp, 1889) from Mexico.

Key to the subgenera of the genus *Temnocerus*

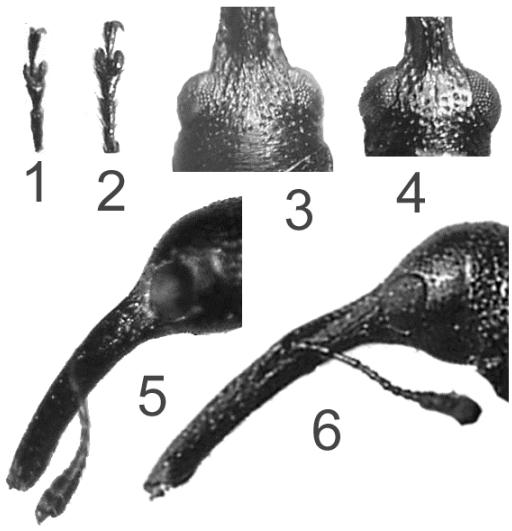
1. Elytra strongly widened back. Apex of the aedeagus elongated. Eyes weakly convex or nearly not convex. North Asia, Japan, North America . . . . . ***Paratemnocerus*** Legalov, 2003
– Elytra weakly or not widened back (figs. 17-18, 21-22). Apex of the aedeagus not elongated. Eyes strongly or often weakly convex (fig. 4) 2
2. Head and rostrum from the base to antennae matte (figs. 23-24). Humeri smoothed (figs. 21-22). Sides of the elytra more rounded (figs. 21-22). South America, Central and southern part of North America . . . . . ***Pseudotemnocerus*** Legalov, 2003
– Head and rostrum not matte, shining, largely enough punctuate (fig. 3-4). Humeri usually not smoothed (figs. 17-18). Elytra almost rectangular (figs. 17-18). Palaearctic, North America, North Africa . . . . . ***Temnocerus*** s. str.

Subgenus *Temnocerus* Thunberg, 1815

A key to the nine Palaearctic species of nominotypical subgenus is given below.

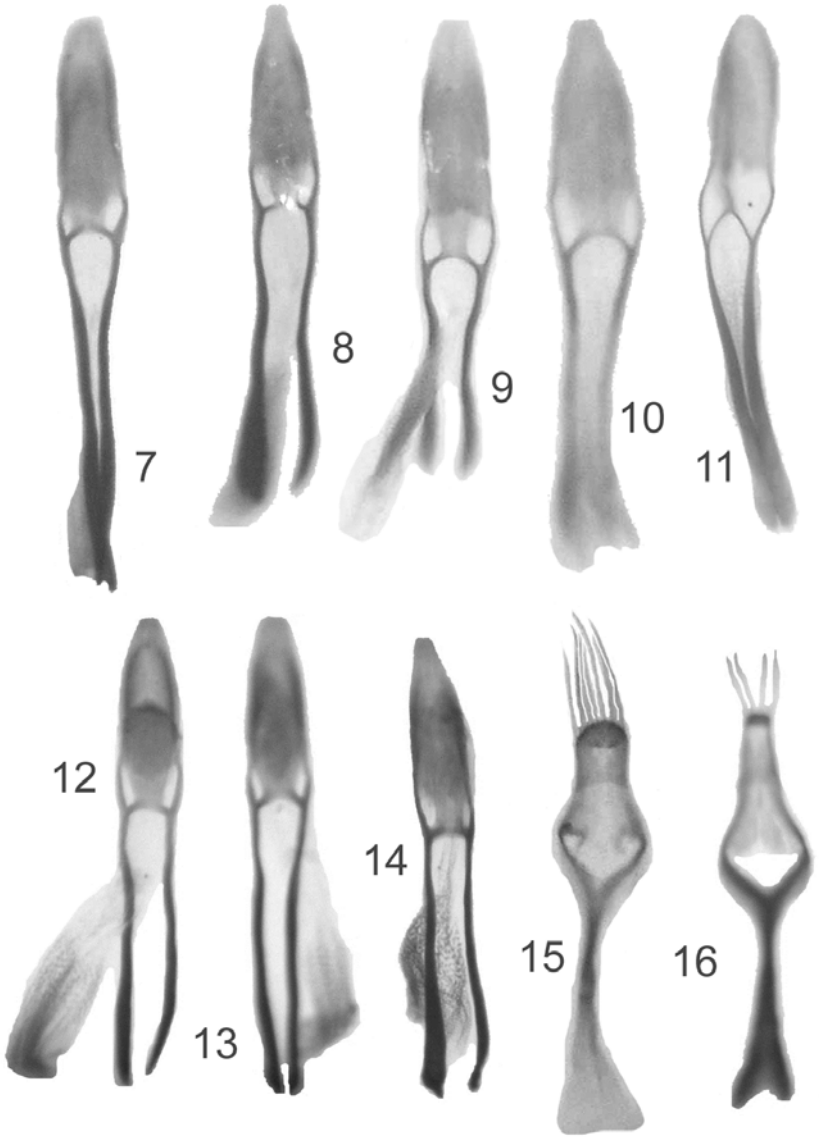
Key to the Palaearctic species of the subgenus *Temnocerus* s. str.

1. Protibiae with mucro. Macrosetae at apex of the tegmen always long (as in fig. 16) 2
– Protibiae without mucro. Macrosetae at apex of the tegmen usually short (fig. 16), only in *T. longiceps* long (fig. 16) 3



Figs 1-6. *Temnocerus*: 1) *T. dundai* sp. n., metatarsi of male dorsally; 2) *T. nanus*, metatarsi of male dorsally; 3) *T. longiceps*, head dorsally; 4) *T. sibiricus*, head dorsally; 5) *T. rubripes*, rostrum and head laterally; 6) *T. longiceps*, rostrum and head laterally.

2. Head and pronotum bronze. Aedeagus slightly narrowed to apex (fig. 7) . . . . . 1. ***T. semicyaneus***
– Body bronze. Aedeagus more strongly narrowed to apex (fig. 8) . . . . . 2. ***T. coeruleus***
3. Tarsi narrow (fig. 1) 4
– Tarsi wider (fig. 2) 5
4. Body bronze. Rostrum shorter. Aedeagus more poorly narrowed to apex (fig. 19) . . . . . 3. ***T. dundai*** sp. n.
– Head and pronotum bronze. Elytra dark blue. Rostrum longer. Aedeagus more strongly narrowed to apex (fig. 9) . . . . . 4. ***T. yunnanicus***
5. Forehead densely rugosity-punctate (fig. 3). Female rostrum longer (figs. 5, 6) 6
– Forehead punctuate (fig. 4). Female rostrum shorter (fig. 18) 7
6. Length of body 2.2-3.7 mm. Apex of the tegmen with long macrosetae (fig. 16). Clava narrower. Rostrum weakly bent in place of the attachment of the antennae (fig. 6). Aedeagus (fig. 10) . . . . . 5. ***T. longiceps***
– Length of body 1.9-2.3 mm. Apex of the tegmen with short macrosetae. Clava wider. Rostrum regular intervals curved (fig. 5). Aedeagus (fig. 11) . . . . . 6. ***T. rubripes***
7. Protibiae longer and thin, weakly curved. 1st segment of tarsi longer. Aedeagus longer (fig. 12) . . . . . 7. ***T. japonicus***



Figs 7-16. *Temnocerus*: 7) *T. semicyaneus*, aedeagus dorsally; 8) *T. coeruleus*, aedeagus dorsally; 9) *T. yunnanicus*, aedeagus dorsally; 10) *T. longiceps*, aedeagus dorsally; 11) *T. rubripes*, aedeagus dorsally; 12) *T. japonicus*, aedeagus dorsally; 13) *T. nanus*, aedeagus dorsally; 14) *T. sibiricus*, aedeagus dorsally; 15) *T. japonicus*, tegmen dorsally; 16) *T. longiceps*, tegmen dorsally.

– Protibiae shorter and wide, almost direct. 1st segment of tarsi shorter. Aedeagus shorter (figs. 13-14) 8

8. Forehead more densely punctate. Aedeagus narrower, more narrowed to apex (fig. 13). Macrosetae at apex of the tegmen shorter . . . . . 8. ***T. nanus***

– Forehead more spaciously punctate. Aedeagus wider, more strongly narrowed to apex (fig. 14). Macrosetae at apex of the tegmen longer . . . . . 9. ***T. sibiricus***

1. *Temnocerus* (*Temnocerus*) *semicyaneus* (Bedel, 1884)
Fig. 7

MATERIAL. ALGERIA: "Algier", 3 ex. (HNHM).
DISTRIBUTION. Algeria.

2. *Temnocerus* (*Temnocerus*) *coeruleus* (Fabricius, 1798)
Fig. 8

MATERIAL. SPAIN: Picos de Europa, Enterrias, 1200 m, 22.V 1991, 1 ex. (HNHM) (leg. Podlussany). GREECE: Evritania, Mt. Timfristos, 4 km E Karpinisi, 11.VI 1982, 1 ex. (MZLU) (leg. Danielson). UKRAINE: Crimea, Simferopol'skii District, 12.V 1927, 1 ex. (ZISP) (leg. Kuznetsov). TURKEY: Samsun, 15 km W of Kaak, 4.VII 1993, 1 ex. (RDP). AZERBAIJAN: Pirkuri, 12.VI 1986, 1 ex. (ZISP) (leg. Dravidian). KAZAKHSTAN: Zapadno-Kazakhstanskaya oblast': Urda, *Eleagnus*, 6.VI 1953, 1 ex. (ZISP) (leg. Rafes); same locality, *Alnus*, 11.V 1953, 1 ex. (ZISP) (leg. Rafes); Severo-Kazakhstanskaya oblast': Borovoe, 28.VI 1932, 1 ex. (ZISP) (leg. Popov); Karagandinskaya oblast': 60 km NW Zhana-Arka, Karagash, 19.V 1962, 1 ex. (ZISP) (leg. Medvedev); Ulutau Mt., 26.VI 1958, 1 ex. (ISEA) (leg. Loginova). RUSSIA: Kaliningradskaya oblast': Rybachii, 23.VII 1958, 1 ex. (ZISP) (leg. Kryzhanovsky); Arkhangel'skaya oblast': Verkhov'e, Mud'juga River, VII 1983, 1 ex. (ZISP) (leg. Korotyaev); Leningradskaja oblast': St-Petersburg (= Leningrad), *Salix*, 24.VII 1984, 1 ex. (ZISP) (leg. Korotyaev); Stavropolskii krai: Stavropol', 1 ex. (ZISP) (leg. Pravdin); Krasnodarskii krai: Gelendzhik, 10.IV 1903, 1 ex. (ZISP) (leg. Kirichenko); Staraja Kuban', 11.V 1985, 1 ex. (ZISP) (leg. Korotyaev); Ubinskaya, 2.VI 1974, 1 ex. (ZISP) (leg. Korotyaev); Novorossiisk, 2.VI 1928, 1 ex. (ZISP) (leg. Baeckmann); Adygeya.: Maikop, 3.VI 1936, 1 ex. (ZISP) (leg. Shaposhnikov); Shendzhii, 25.V 1972, 1 ex. (ZISP) (leg. Korotyaev); 10 km N Adygeisk, 8.VI 1974, 1 ex. (ZISP) (leg. Korotyaev); Kabardino-Balkariya: Samarkovo, 800 m, 18.V 1967, 1 ex. (ZISP) (leg. Kryzhanovsky); Dagestan: Makhachkala, 24.VI 1973, 1 ex. (ZISP) (leg. Richter); Saratovskaya oblast': D'yakonovka, 25.V 1986, 1 ex. (ZISP) (leg. Kasparyan); Kurskaya oblast': Tsentral'no-Cherniozemnyi Reserve, 13.VI 1957, 2 ex. (ZISP) (leg. Arnoldi); Chuvashiya: Charyli, 31.VII 1929, 1 ex. (ZISP); Sverdlovskaya oblast': Ekaterinburg [= Sverdlovsk], *Malus*, 3.VI 1990, 1 ex. (ISEA) (leg. Popova); env. Severoural'sk, Denezhkin Kamen' Mt., mountain tundra, 14.VII 2001, 1 ex. (ZSMN) (leg. Ermakov); Altaiskii krai: Kamen'-na-Obi, 5.VI 1929, 1 ex. (ISEA) (leg. Pogodina); Zyat'kovo, 21.VI 1956, 3 ex. (ISEA) (leg.

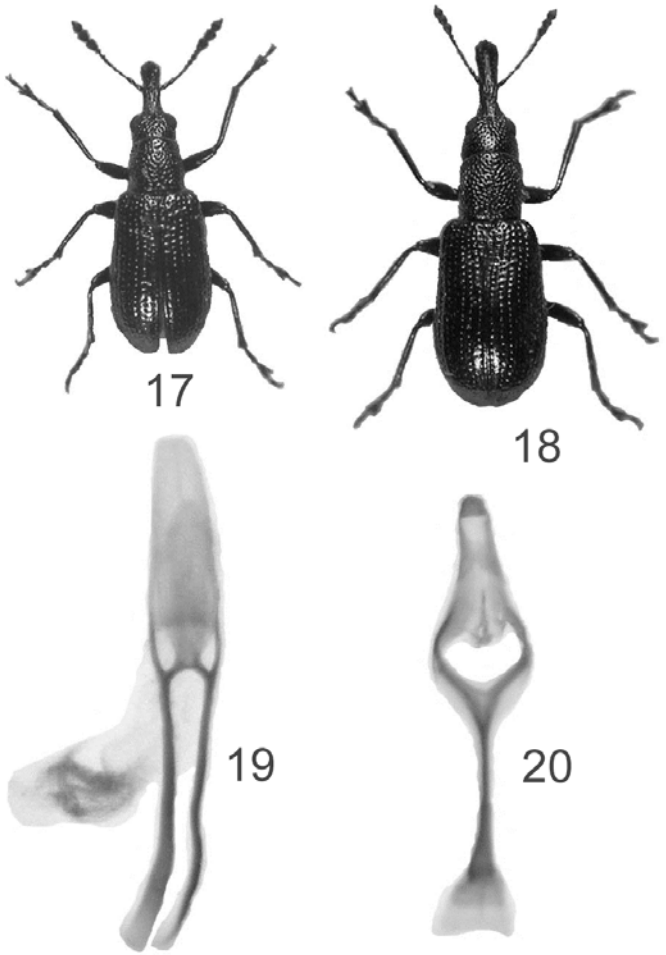
Cherepanov); Krasnodubrovskii, 22.VI 1958, 1 ex. (ISEA) (leg. Cherepanov); Topchikha, 1932, 1 ex. (ISEA); Ust'yanovka, 20-21.VI 2001, 1 ex. (ISEA) (leg. Legalov); Karbolikha, 22-23.VI 2001, 1 ex. (ISEA) (leg. Legalov); Tuva: env. Sush, Mezel' River, 800-1000 m, 15.VI 2002, 3 ex. (VSM) (leg. Vashenko); Irkutskaya oblast': Irkutsk, 8.VIII 1933, 1 ex. (ZISP) (leg. Drobov); Primorskii krai: env. Spassk-Dal'nii, 8-11.VII 1995, 1 ex. (ISEA) (leg. Belokobylsky); 20 km SW Putsilovka, 23-24.VI 1993, 1 ex. (ZISP) (leg. Belokobylsky); Ussuri River, Verkhne-Mikhailovskaya, 1899, 1 ex. (ZISP) (leg. Suvorov).

DISTRIBUTION. Algeria, Austria, Azerbaijan, Bosnia-Herzegovina, Bulgaria, Belarus, Croatia, Czechia, Denmark, Finland, Georgia, Germany, Great Britain, Greece, Hungary, Ireland, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Moldova, Norway, Poland, Russia, Slovakia, Slovenia, Sweden, Switzerland, Netherlands, Turkey, Ukraine.

3. *Temnocerus* (*Temnocerus*) *dundai* Legalov, sp. n.
Figs 1, 17-20

MATERIAL. Holotype – ♂ (NMPC), CHINA: Yunnan, Weishan st., 25.10° N, 100.21° E, 1000-2500 m, 22-25.VI 1992 (leg. Vit Kuban). Paratypes: 1 ♂ (ISEA), 3 ♂ (RDP), 1 ♀ (ISEA), 2 ♀ (RDP), all with the same label.

DESCRIPTION. Body black, with copper lustre, with sparsely, short, semierect setae. Legs, antennae and apex of the rostrum dark brown. MALE: Rostrum short, 3.83-4.4 times longer than wide, weakly curved, weakly toward apex, lacking lustre. Topmost third almost smooth. Other part of the rostrum weakly long punctate. Antennae located almost in the middle of the rostrum. Forehead wide, weakly convex, punctate. Eyes large, convex. Temples long, transversal-wrinkled. Antennae long, reaching the middle of the pronotum. Scapus and 1st segment of the funicle oval. 2-5th segments narrow. 2nd segment equal to the 1st segment. 2nd segment longer than 3rd segment. 6th segment short oval. 7th segment almost conical. Clava much shorter than the funicle, thicker. 1st segment longer than 2nd segment. 3rd segment longer than 2nd segment and shorter than 1st segment, pointed. Pronotum weakly elongated, 1.05-1.09 times longer than wide. Sides almost direct. Disk little flattened, large and densely punctate. Intervals lacking lustre. Scutellum almost square, small punctate. Elytra elongated, 1.38-1.58 times longer than wide; maximal width behind the middle. Humeri weakly smoothed. Striae weakly with finely and densely points. Scutellar stria advanced. Intervals narrow, weakly convex, smooth. Prothorax punctate. Mesepisternum and mesothorax weakly punctate. Metepisternum narrow, more largely punctate. Metathorax sparsely punctate. Abdomen convex, finely and sparsely rugoso-punctate. 1st and 2nd ventrites wide. 3-4th ventrites narrow. 5th ventrite narrower. 2nd-4th ventrites weakly flattened in the middle. Pygidium convex, finely and sparsely punctate. Legs long. Femora and tibia thin. Protibia elongated and narrow, almost direct. Meso- and metatibiae thicker and short. Tarsi long and narrow, a little bit shorter than tibiae. 1st segment long, longer than 2nd segment. 2nd



Figs 17-20. *Temnocerus dundai* sp. n.: 17) body of male dorsally; 18) body of female dorsally; 19) aedeagus dorsally; 20) tegmen dorsally.

segment triangular. 3rd segment bilobed. 5th segment elongated. Claws with long teeth. Length of body: 2.1-2.3 mm. FEMALE: Similar with male, but rostrum longer, 4.33-4.67 times longer than wide. Antennae attached in the middle of the rostrum. Eyes more finely, weaker convex. Pronotum 1.0-1.05 times longer than wide. Elytra 1.5-1.58 times longer than wide. Abdomen stronger convex. Length of body: 2.1-2.7 mm.

DIAGNOSIS. The differences of a new species from other Palaearctic species are given in the key above.

ETYMOLOGY. New species is named to Radek Dunda (Prague).

DISTRIBUTION. China (Yunnan).

4. *Temnocerus* (*Temnocerus*) *yunnanicus* Legalov, 2003
Fig. 9

MATERIAL. CHINA: Yunnan, Cangshau Mts., env. Zhanghe Temple, 10 km WSW of Dali, 2867-3324 m, 21.V 2002, 1 ♂ (ZISP) (leg. Volkovich); Hing-Way, 320 km WNW of Chuxiong, 1874 m, 19.V 2002, 1 ♀ (ZISP), 1 ♀ (ISEA) (leg. Volkovich). (Holotype and paratypes).

DISTRIBUTION. China (Yunnan).

5. *Temnocerus* (*Temnocerus*) *longiceps* (C. G. Thomson, 1888)
Figs 3, 6, 10, 16

MATERIAL. FRANCE: "Gallia", 1883, 1 ex. (HNHM) (leg. Merkl). AUSTRIA: Feistritz, Styria, 1 ex. (HNHM) (leg. Fodor). KAZAKHSTAN: Zapadno-Kazakhstanskaya oblast': Eltyshevka River, *Populus alba*, 14.VI 1949, 1 ex. (ZISP) (leg. Rudol'f); Severo-Kazakhstanskaya oblast': Borovoe, 17.VII 1932, 1 ex. (ZISP) (leg. Popov). RUSSIA: Permskii krai: Molebnyi Kamen' Mts., mountain taiga, 6.VII 2002, 1 ex. (ISEA); Cheljabinskaya oblast': Kusegach, 21.VI 2000, 2 ex. (ZSMN) (leg. Gus'kova); Sverdlovskaya oblast': Pervoural'skii District, 10.VI 2000, 1 ex. (ISEA) (leg. Velikanova); env. Severoural'sk, Denezhkin Kamen' Mt., mountain tundra, 14.VII 2001, 1 ex. (ZSMN) (leg. Ermakov); Khanty-Masiiskii Autonomous Region: Yuganskii Reserve, Kamennyi, *Salix*, 12.VIII 1994, 1 ex. (ISEA); Tyumen'skaya oblast': env. Dubrovnoe, 7.VII 2001, 1 ex. (ISEA) (leg. Sitnikov); Kuchak Lake, 20.VII 1997, 1 ex. (VSM) (leg. Petrov); Tomskaya oblast': Kireevskoe, *Salix*, 13.VII 1980, 3 ex. (ISEA) (leg. Zaikova); same locality, *Salix*, 3.VII 1983, 1 ex. (ISEA) (leg. Legalov).

DISTRIBUTION. Austria, Belgium, Czechia, Denmark, Finland, France, Germany, Great Britain, Italy, Kazakhstan, Latvia, Lithuania, Norway, Poland, Russia, Slovakia, Sweden, Switzerland, Netherlands, Ukraine.

6. *Temnocerus* (*Temnocerus*) *rubripes* (Reitter, 1916)
Figs 5, 11

MATERIAL. RUSSIA: Tuva: 20-25 km S of Balgasyn, 1000 m, 10.VII 1993, 1 ex. (ISEA) (leg. Logunov); Chadan, 21.VI 1972, 1 ex. (ZISP) (leg. Korotyaev); Irkutskaya oblast': Irkutsk, 1898, 1 ex. (ZISP) (leg. Jakovlev); west shore of Baikal Lake, 5 km N of Kultuk, forest margin, 21.VI 1997, 1 ex. (ZISP) (leg. Sokolov); Burjatiya: S of Kjakhta [= Troitskosavsk], Burgutui, 8.VI 1907, 1 ex. (ZISP) (leg. Kozhevnikov); Chitinskaya oblast': Daurskii Reerve, Torei Lake, Utycha, 3.VI 2000, 1 ex. (ISEA) (leg. Korsun); Chita, 1911, 1 ex. (ZISP) (leg. Tonkikh); Amurskaya oblast': Tambovskii District, 26.VI 1929, 1 ex. (ZISP) (leg. Vereshagin); Primorskii krai: 20 km S of Khorol', 6.VII 1974, 1 ex. (ZISP) (leg. Loginova); Barabash-Levada, 25.V 1989, 1 ex. (ZSMN) (leg. Kireichuk). CHINA: Manchuria, Langashi, 28.V-10.VI, 20.VI-11.VII 1905, 2 ex. (ZISP) (leg. Jakovlev).

DISTRIBUTION. China, Mongolia, Russia.

7. *Temnocerus* (*Temnocerus*) *japonicus* (Morimoto, 1958)
Figs 12, 15

MATERIAL. RUSSIA: Chitinskaya oblast': 10 km S of Sretensk, 4.VII 2002, 1 ex. (ZSMN) (leg. Chernyshev); 5 km NE of Pogranichnyi, Verkhnyaya Bar'ya Rever, 14.VII 2002,1 ex. (ZSMN) (leg. Chernyshev); Talacha River, 3.VI 2002, 1 ex. (ISEA) (leg. Chernyshev); Amurskaya oblast': 40 km SW of Svobodnyi, Zeya River, 29.VII 2003, 2 ex. (ZISP) (leg. Belokobylsky); 40 km W Svobodnyi, Klimoutsy, *Betula*, 18.VI, 4.VII 1958, 2 ex. (ZISP) (leg. Zinov'ev); 75 km W Svobodnyi, Simonovo, *Betula*, 23.VII 1959, 1 ex. (ZISP) (leg. Zinov'ev); Malaya Pera River – Bol'shaya Ergel' River, 3.VI 1958, 1 ex. (ZISP) (leg. Zinov'ev); Vasil'evka, 13.VII 1977, 1 ex. (IBS) (leg. Konovalova); Evreiskaya Avtonomnaya oblast': Malyi Khingan, Radde, Amur River, 12-15.VII 2003, 1 ex. (ZISP) (leg. Belokobylsky); Kul'dur, 8-9.VII 2003, 1 ex. (ZISP) (leg. Belokobylsky); Khabarovskii krai: Chirki, 24.VII 1972, 1 ex. (IBSS) (leg. Kovalev); Primorskii krai: Barabash-Levada, forest, 24.V 1989, 1 ex. (ZISP) (leg. Belokobylsky); 30 km SE Ussuriisk, 12-17.VII 2001, 1 ex. (ZISP) (leg. Belokobylsky); Gornotaezhnoe, *Malus*, 4.VI 1989, 1 ex. (ZISP) (leg. Kireichuk); Kamenushka, 27.VI 1980, 1 ex. (ZISP); Komarovka, 20.VII 1985, 1 ex. (VKM) (leg. Pisansiko); Ussuriisk [= Nikol'sk-Ussuriiskii], 7.VII 1899, 1 ex. (ZISP) (leg. Suvorov); env. Spassk-Dal'nii, 8-11.VII 1995, 1 ex. (ZISP) (leg. Belokobylsky); 20 km Spassk-Dal'nii, Evseevka, 13-17.VII.1995, 2 ex. (ZISP) (leg. Belokobylsky); 20 km ESE Spassk-Dal'nii, Sinii Mts., 16.VII 1998, 1 ex. (ZISP) (leg. Belokobylsky); Novokachalinsk, 22.v 1989, 1 ex. (ZISP) (leg. Belokobylsky); the same locality, 21-27.VII 1995, 2 ex. (ZISP) (leg. Belokobylsky); Kamen'-Rybolov, 29-30.V, 18.VI 1908, 2 ex. (ZISP) (leg. Chersky); Khanka Lake, Troitskoe, 6.VI 1909, 1 ex. (ZISP) (leg. Chersky); Vladivostok, 1.VII 1927, 1 ex. (ZISP) (leg. Lukjanovich); env. Glazovka, 21.VI 2005, 1 ex. (ISEA) (leg. Shokhrin); Lazovskii Reserve, "Ostrov Petrova", *Betula*, 21-23.VI 2005, 5 ex. (ISEA) (leg. Legalov); Tigrovaya River, 16.VI 1927, 1 ex. (ZISP) (leg. Sokolov); 5 km SE Samarka, 70 km N Chuguevka, Gordeevskaya Mt., 300 m, 29.V 1993, 1 ex. (DEI) (leg. Zerche); Sakhalinskaya oblast': Sakhalin: Juzhno-Sakhalinsk, *Betula*, 14.VI 1968, 1 ex. (ZISP) (leg. Loktin); env. Novoaleksandrovsk, 5.VI 1968, 1 ex. (ZISP) (leg. Loktin); Chekhova Mt., 15.VII 1968, 2 ex. (ZISP) (leg. Loktin); Kunanshir: Golovina volcano, 26.VII 1973, 1 ex. (ZISP) (leg. Kerzhner); env. Golovina, Dubovoe, 18.VII 1973, 1 ex. (ZISP) (leg. Kerzhner). CHINA: Manchuria, 1904, 1 ex. (ZISP) (leg. Stark).

DISTRIBUTION. Japan, China (first record), Russia (East Siberia – first record, south part of the Russian Far East).

8. *Temnocerus* (*Temnocerus*) *nanus* (Paykull, 1792)
Figs 2, 13

MATERIAL. KAZAKHSTAN: Pavlodarskaya oblast': Ul'yas, 27.VI 1928, 1 ex. (ZISP) (leg. Belizin); Severo-Kazakhstanskaya oblast': Borovoe, 17.VII 1932, 1 ex.

(ZISP) (leg. Popov). RUSSIA: Chuvashiya: Anaksyar, 16.VII 1928, 1 ex. (ZISP); Sverdlovskaya oblast': env. Ekaterinburg, 9.VI 1910, 1 ex. (ZISP) (leg. Jacobson); Kemerovskaya oblast': Tisul', 4-17.VI 1911, 3 ex. (ZISP) (leg. Gorchakovskii); Berchikul', 15-31.VII 1903, 1 ex. (ZISP); Altaiskii krai: 12 km SW Akimovka, Baikal Mt., 29.V. 2004, 1 ex. ISEA) (leg. Sorokina); Gornyi Altai: Charbai, 14-21.VI 1998, 1 ex. (ISEA) (leg. Zinchenko); env. Teletskoe Lake, Obogo, 12.VII 1999, 1 ex. (ISEA); the same locality, 4.VI 2000, 1 ex. (ISEA); Yailyu, 18.VI 1963, 1 ex. (ISEA) (leg. Opanassenko); Krasnoyarskii krai: Bol'shoe Lake, *Betula*, 5.VII 1986, 1 ex. (ZISP) (leg. Janovskii).

DISTRIBUTION. Algeria, Austria, Belgium, Bosnia-Herzegovina, Belarus, Croatia, Czechia, Denmark, Estonia, Finland, France, Germany, Great Britain, Hungary, Italy, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Norway, Poland, Romania, Russia, Spain, Sweden, Switzerland, Netherlands, Turkey, Turkmenistan, Ukraine, former Yugoslavia.

9. *Temnocerus* (*Temnocerus*) *sibiricus* Legalov, 2006
Figs 4, 14

MATERIAL. RUSSIA: Krasnoyarskii krai: N of Krasnoyarsk, Sukhoi Buzim, 12.VI 1903, 2 ex. (ZISP) (leg. Salstrem); Irkutskaya oblast': Pivovarikha, 15.VIII 1990, 1 ex. (ISEA); Irkutsk, 24.VI 1937, 1 ex. (ZISP) (leg. Rodionoff); Usol'e, 20.VII 1910, 1 ex. (ZISP) (leg. Startseva); Baikal Lake, 28.VI 1911, 1 ex. (ZISP) (leg. Krjukova); Buryatiya: env. Kjakhta [=Trooitzkosavsk], Chamnegadaii, *Betula*, 3.VI 1928, 1 ex. (ZISP) (leg. Lukjanovich); Chitinskaya oblast': Gutai, 10.VII 1998, 1 ex. (ISEA) (leg. Korsun).

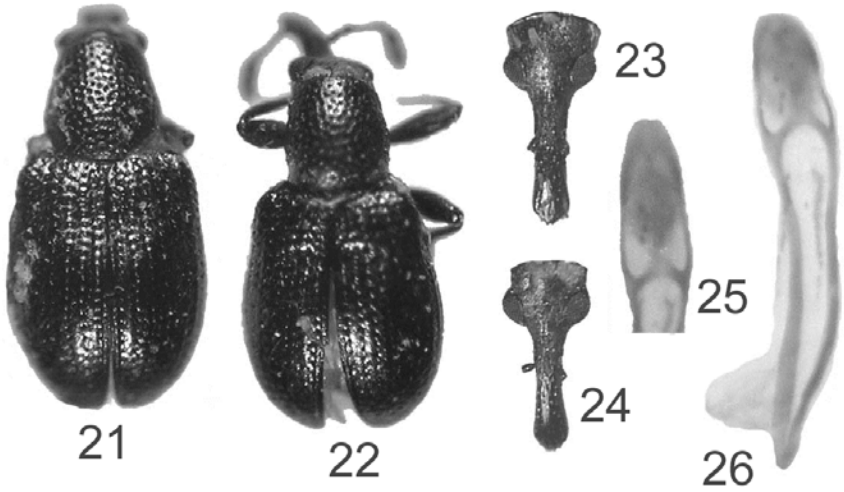
DISTRIBUTION. Russia.

Subgenus *Pseudotemnocerus* Legalov, 2003

***Temnocerus* (*Pseudotemnocerus*) *cubensis* Legalov, sp. n.**
Figs 21-26

MATERIAL. Holotype – ♂ (ZISP), CUBA: La Habana Prov., Guanabo, 29.XI 1986 (leg. Nartschuk). Paratypes: Cuba, Pinar del Rio Prov., Parque Nac. La Guira, 4.XII 1981, 2 ♀ (ZISP), 1 ♀ (ISEA) (leg. Golovach); Pinar del Rosario, *Hibiscus elatus* plantation, grassland bush, 3.XII 1981, 2 ♀ (ZISP), 1 ♀ (ISEA) (leg. Golovach).

DESCRIPTION**.** Body dark, with dark bronze lustre, with sparsely, short setae. MALE: Rostrum short, 3.2 times longer than wide, weakly curved, weakly toward apex. Topmost third smooth. Other part of the rostrum finely and densely punctate. Antennae located on the middle of the rostrum. Forehead wide, convex, matte, sparsely and finely punctate. Eyes large, convex, more strongly convex, closer to temples. Temples short, smooth. Antennae long, reaching the middle of the pronotum. Scapus and 1st segment of the funicle long oval. 2-4th segments narrow, almost equal length.



Figs 21-26. *Temnocerus cubensis* sp. n.: 21) body of male dorsally; 22) body of female dorsally; 23) head and rostrum of male dorsally; 24) head and rostrum of female dorsally; 25) apex of aedeagus dorsally; 26) aedeagus dorsally.

2nd segment shorter than 1st segment. 5th and 6th segments short oval. 7th segment almost conical. Clava much shorter than the funicle, thicker. 1st segment little longer than 2nd segment. 3rd segment longer than 2nd segment, weakly pointed. Pronotum elongated, length/width = 1.14. Sides weakly curved. Disk weakly convex, finely and densely punctate. Intervals lacking lustre. Scutellum wide, triangular. Elytra elongated, 1.16 times longer than wide; sides weakly arcuate; maximal width in the middle. Disk for the scutellum weakly pressed. Humeri weakly smoothed. Striae weakly dense points. Scutellar stria advanced. Intervals wide, weakly convex, smooth. Prothorax densely and largely punctate. Mesepisternum and mesothorax sparsely punctate. Metepisternum narrow, densely punctate. Metathorax sparsely punctate. Abdomen convex, finely and sparsely punctate and weakly wrinkled. 1st-3rd ventrites wide. 4th ventrite narrow. 5th ventrite narrower. 2nd-4th ventrites weakly flattened on the middle. Pygidium convex, sparsely punctate. Legs long. Femora and tibiae thin. Protibia elongated and narrow. Meso- and metatibiae thicker and short. Tarsi long, little shorter than tibiae. 1st segment long, considerably longer than 2nd segment. 2nd segment long triangular. 3rd segment bilobed. 5th segment elongated. Claws with long teeth. Length of body: 1.7 mm. FEMALE: Similar with male, but rostrum longer, 5.0-6.0 times longer than wide. Antennae located more close to the basis of the rostrum. Eyes finer, weaker convex. Pronotum length/width = 1.19-1.25. Elytra 1.07-1.25 times longer than wide, more strongly widened behind the middle. Abdomen stronger convex. Length of body: 1.4-1.8 mm.

DIAGNOSIS**.** New species is very similar to *T.* (*P.*) *regularis* (Sharp, 1889), but distinguished by the antennae attached more close to the basis of the rostrum, by narrower pronotum, by more strongly widened elytra, and by hardly stronger the narrowed apex of the aedeagus.

DISTRIBUTION. Cuba.

ACKNOWLEDGMENTS

I wish to thank N. Azarova (Vladivostok), L. Behne (Munchenberg), S. Chernyshev (Novosibirsk), R. Danielson (Lund), G. Davidian (St-Petersburg), R. Dunda (Prague), A. Ermakov (Ekaterinburg), L. Gus'kova (Cheljabinsk), V. Korasev (Minsk), B. Korotyaev (St-Petersburg), O. Korsun (Chita), A. Lelej (Vladivostok), O. Merkl (Budapest), V. Savitsky (Moscow), S. Krivets (Tomsk), V. Sorokina (Novosibirsk), P. Sitnikov (Tyumen'), S. Strorozhenko (Vladivostok) and V. Zinchenko (Novosibirsk) for help in the work.

REFERENCES

Dieckmann, L. 1974. Beiträge zur Insektenfauna der DDR: Coleoptera – Curculionidae (Rhinomacerinae, Rhynchitinae, Attelabinae, Apoderinae). – Beiträge zur Entomologie 24(1-4): 5-54.

Hamilton, R.W. 1971. The genus *Pselaphorhynchites* (Coleoptera: Rhynchitidae) in America, North of Mexico. – Annals of the Entomological Society of America 64: 982-996.

Legalov, A.A. 1998. [The fauna of Curculionoidea beetles of families Nemonychidae, Urodonidae, Anthribidae, Attelabidae, Apionidae and Dryophthoridae of West Siberia]. – [The invertebrates of animals of the South Transural region and the neighbouring territories]. Kurgan: 216-221. (In Russian).

Legalov, A.A. 1999. [A review of the fauna of beetles of the superfamily Curculionoidea (Coleoptera) of the Dahurian State Nature Reserve]. – [Insects of Dauria and adjacent territories]. Novosibirsk 2: 119-137. (In Russian).

Legalov, A.A. 2002. [Checklist of weevils of Family Nemonychidae, Urodontidae, Rhynchitidae, Attelabidae and Brentidae (Coleoptera, Curculionoidea) from Asian part of Russia]. – [Fauna of Russian Far East]. Blagoveshchensk 4: 105-116. (In Russian).

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. № 0320301200. 733+350 p. (641 Mb.). (In Russian).

Legalov, A.A. 2005. [New and interesting records of the leaf-rolling weevils (Coleoptera: Rhynchitidae, Attelabidae) of Russian fauna]. – [Fauna of Russian Far East]. Blagoveshensk 5: 47-54. (In Russian).

Legalov, A.A. 2006. [Annotated list of the leaf-rolling weevils (Coleoptera: Rhynchitidae, Attelabidae) of the Russian fauna]. – [Proceedings of the Russian Entomological Society]. St. Petersburg 77: 200-210. (In Russian)

Legalov, A.A. & Opanassenko, F.I. 2000. A review of the fauna of the superfamily Curculionoidea (Coleoptera) of Novosibirsk province. – Entomological Review 80(3): 282-303.

Morimoto, K. 1958. Description of a new species of the genus *Pselaphorhynchites* Schilsky (Col., Attelabidae, Rhynchitinae). – Mushi 32(10): 97-100.

O'Brien, C.W. & Wibmer, G.J. 1982. Annotated checklist of the weevils (Curculionidae sensu lato) of North America, Central America, and the West Indies (Coleoptera: Curculionoidea). – Memoirs of the American Entomological Institute 34: i-ix + 1-382.

Sawada, Y. 1993. A systematic study of the family Rhynchitidae of Japan (Coleoptera, Curculionoidea). – Humans and Nature 2: 1-93.

Sawada, Y. 1997. A new species of the genus *Pselaphorhynchites* from Mt. Tachibana, Fukuoka (Coleoptera, Curculionoidea, Rhynchitidae). – Esakia 37: 117-119.

Thunberg, C.P. 1815. De Coleopteris rostratis commentatio. – Nova Acta Regiae Societatis Scientiarum Upsaliensis 7: 104-125.

Wibmer, G.J. & O'Brien, C.W. 1986. Annotated checklist of the weevils (Curculionidae sensu lato) of South America (Coleoptera: Curculionoidea). – Memoirs of the American Entomological Institute 39: i-xvi + 1-563.