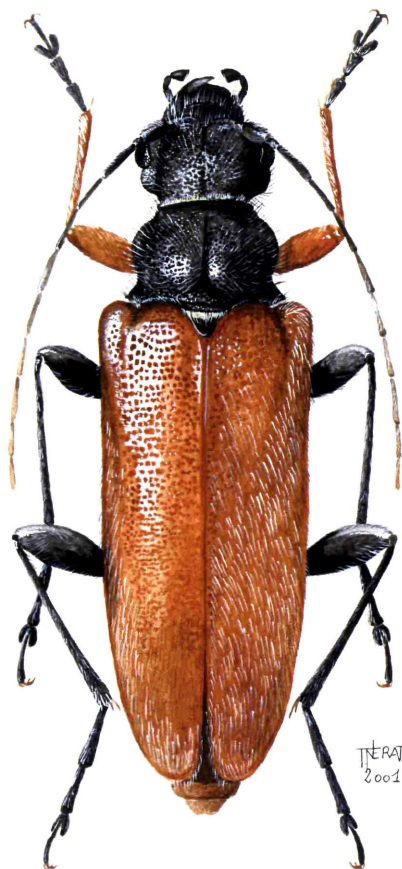


Les cahiers

Magellanes

Review of *Cortodera* species close to *C. reitteri* Pic, 1891
& *C. ruthena* Plavilstshikov, 1936, part 2
(Coleoptera, Cerambycidae)



MIKHAIL L. DANILEVSKY

№8

Review of *Cortodera* species close to *C. reitteri* Pic, 1891 and *C. ruthena* Plavilstshikov, 1936, Part II. (continued) (Coleoptera, Cerambycidae)

by Mikhail L. DANILEVSKY

Cortodera semenovi Plavilstshikov, 1936 (Figs. 9-10)

Type locality. - Kondoma River Valley southwards Novokuznetsk, Russia.

Cortodera semenovi Plavilstshikov, 1936 : 266, 284-285, 537, 540 (Altai); Gressitt, 1951 : 79; Kostin, 1973 : 141; Tsherepanov, 1979 : 229, 231-232; Lobanov & al., 1981 : 799.

Cortodera semenovi ab. *clementzi* Plavilstshikov, 1936 : 285, 537, 540 (Shabashkaia env.).

Cortodera semenovi ab. *atra* Plavilstshikov, 1936 : 285, 537, 540 (Kondoma River).

Description. - Body length in males : 8.7- 9.5 mm, in females : 9.9-10 mm; body width in males : 2.9-3 mm, in females : 3.3-3.4 mm.

Only five specimens, two males and 3 females are known. Each one is rather peculiar in colour, body proportions, relative length of antennal joints and so on. Only two specimens were collected in one locality, but even in this case it is difficult to be sure whether both are conspecific.

Body relatively big, black, often with red apex of abdomen, elytra usually orange-yellow.

Head with distinct temples, which can be strongly exposed posteriorly (Fig. 9c, ab. *clementzi*, female); palpi dark-brown, with more or less dilated (in males ax-like) apical joints. Antennae in lectotype (Fig. 9a, male) and in ab. *atra* (Fig. 9b, female) dark brown with lightened three apical joints; another male and ab. *clementzi* with totally reddish antennae, slightly darkened basally; third female (from near Abakan, Fig. 10) with unicoloured red antennae; in males reaching posterior elytral fourth, in females reaching posterior elytral third; in males 1st, 3^d and 4th joints about equal in length and much shorter than 5th; in ab. *atra* and ab. *klementzi* 1st joint about as long as 5th, longer than 3^d, which is longer than 4th; in female from near Abakan 1st joint about as long as 3^d, shorter than 5th and longer than 4th; 2nd joint usually about as long as wide or slightly longer than wide.

Prothorax totally black, or with brownish anterior and posterior borders (specially in female from near Abakan); slightly widened near middle and here more or less narrower than at base; in males about 1.1 times wider than long, in females about 1.3 times wider than long. Pronotum strongly convex, in females slightly pressed inwards along middle; pronotal punctuation very dense with the distance between punctures less than diameter of each (lectotype and most of females) or punctuation much denser with conjugated punctures (another male and female from near Abakan); smooth elongated area in the middle very small and narrow, indistinct or totally absent. Pronotal pubescence in males consists of long pale erect setae with only a few short adpressed setae near base; in females shorter erect setae mixed with sparse semierect and adpressed setae, or adpressed setae nearly absent. Scutellum black or braun, small, more or less triangular about as long as wide, or transverse, or elongated with several short setae or glabrous.

Elytra in males tapering posteriorly, in females parallelsided, never narrowed in the middle; in males from about 2.6 (lectotype) to 2.2 times wider than long; in females - from 2.1 to 2.0; with moderately long, pale, semierect pubescence; in males numerous long erect setae are distributed from elytral base to about middle, in females several erect setae present near humeri. In lectotype elytra orange-yellow with dark-brown suture and slightly darkened curved elytral margin near humeri; another male with unicolored yellow elytra; in ab. *clementzi* and female from near Abakan orange-yellow elytra with slightly darkened suture near scutellum; in ab. *atra* elytra dark-brown with darker areas along suture near scutellum and along curved elytral margin.

Legs totally dark-brown or dark-brown with slightly lightened bases of anterior tibiae; in ab. *clementzi* and female from near Abakan totally orange-yellow with slightly darkened tarsi and femora apices.

Abdomen with dense long erect and partly semierect and adpressed setae; black with partly red last visible segment (lectotype), or last segment red and 4th segment partly red (another male and ab. *clementzi*), or abdomen totally dark-brown (ab. *atra* and female from near Abakan). Last abdominal sternite in males rounded (lectotype) or with very small emargination, pygidium very widely rounded, postpygidium truncate (lectotype) or with very small emargination; in females last abdominal sternite and tergite widely rounded, or in ab. *clementzi* and female from near Abakan with last sternite widely truncate with small emargination.

Distribution (Fig. 18 : 31-33). - Two rather distant regions in the south of West Siberia. Two localities in the north of Altai Mountain system : Kondoma River Valley to the south from Novokuznetsk (Kemerovo region of Russia) and Shabashskaia environs in Biisk district (Altai region of Russia). One locality to the north from West Saian Mountain system : Khakassia Republic of Russia, Abakan environs.

Remarks. - The species is rather close to *C. analis*. The main distinguishing character used by N. N. Plavilstshikov (1936) (exceptionally long elytra) and then repeated by other authors (Gressitt, 1951; Kostin, 1973; Tsherepanov, 1979) is a feature of a single male (lectotype) and so not valid. Besides lectotype elytra are with relatively shorter ground pubescence and less shining. Another male is characterized by very dense partly conjugated punctuation. Both known males differ by about equal length of 1st, 2nd and 3rd antennal joints and orange-yellow or yellow elytra. All three females differ by less developed or nearly totally absent semierect and adpressed pronotal setae (erect setae are dominating), elytra also less shining. In *C. analis* prothorax always totally black with never lightened anterior and posterior borders; elytra always much darker, totally black, even in *C. semenovi* ab. *atra* elytra much lighter, brown.

The unique female from near Abakan looks similar to certain females of *C. ruthena turgaica*. It differs (as all females of *C. semenovi*) by less dense pronotal punctuation with dominating erect pubescence, while in *C. ruthena* adpressed pronotal pubescence is dominating. Besides in female from near Abakan the temples are much less exposed than in females of *C. ruthena turgaica*, but in *C. semenovi* ab. *clementzi* temples are also strongly exposed.

Still the specific separation of *C. semenovi* is rather doubtful. All five specimens look like a set of exceptional aberrations of *C. analis*. Two subspecies can be recognized.

***Cortodera semenovi semenovi* Plavilstshikov, 1936** (Fig. 9)

Type locality. - Kondoma River Valley southwards Novokuznetsk, Russia.

Description. - Body length in males : 8.7 mm or 9.5 mm (lectotype), in females : 9.9 mm (ab. *clementzi*) or 10 mm (ab. *atra*); body width in males : 2.9 mm or 3 mm (lectotype), in females : 3.4 mm (ab. *clementzi*) or 3.3 mm (ab. *atra*).

Females of the nominative subspecies are characterized by orange-yellow elytra which can be dark-brown. Body black with usually totally black prothorax or anterior and posterior pronotal margins slightly lightened; legs totally dark-brown (ab. *atra*) or totally orange-yellow with slightly darkened tarsi and femora apices (ab. *clementzi*); apical abdominal segment may be red; head with long strongly exposed (ab. *clementzi*) or short, obliterated temples (ab. *atra*); antennae never totally red with 1st joint about as long as 5th, longer than 3^d, which is longer than 4th; pronotum with less dense not conjugated punctuation, with dominating erect setae, only a few semierect setae present near hind margin; elytra from 2.1 (ab. *clementzi*) to 2.0 (ab. *atra*) times longer than wide.

Materials. - Male, LECTOTYPE (present designation), « Altai, Kuznetsky Alatau, fl. Kondoma », 6. 1913, Sobolevsky *leg.*; 1 female, PARALECTOTYPE (present designation), ab. *atra*, with same label; male, « Siberia, m. occ. » (Zoological Museum of Moscow State University); 1 female, PARALECTOTYPE (present designation), ab. *clementzi*, Altai region, Biisk distr., Shabashskaia, 6, 1898, Klementz *leg.* (Zoological Institute, S. Petersburg).

Distribution (Fig. 18 : 31-32). - South of West Siberia, two localities in the north of Altai Mountain system : Kondoma River Valley to the south from Novokuznetsk (Kemerovo region of Russia) and Shabashskaia environs in Biisk district (Altai region of Russia).

Remarks. - I am nearly sure that a paralectotype female of ab. *atra* was originally described as *Leptura (Vadonia) atramentaria sibirica* Plavilstshikov, 1915. Both syntypes of *L. (Vadonia) a. sibirica* (two females from the type locality of *Cortoderra semenovi*) are unknown, and the original description totally fits to the female of *C. semenovi* ab. *atra*. *Anoplodera atramentaria* (Ganglbauer, 1889) from Gansu (China) is not close to this taxon - holotype now in J. Vorisek (Czechia, Jirkov) collection (Miroshnikov, 1998).

***Cortodera semenovi shavrovi* ssp. n.** (Fig. 10)

Type locality. - Abakan env., Khakassia, Russia.

Description. - Body length : 10 mm, width : 3.3 mm.

Female. Body black with widely lightened anterior and posterior prothorax margin; elytra orange-yellow, about 2.1 times longer than wide; legs totally orange-yellow with slightly darkened tarsi and femora apices; head with temples short, obliterated. The unique known female differs from all known females of the nominative subspecies by pronotum with very dense partly conjugated punctuation with more developed semierect setae distributed from about middle to hind margin; antennae totally red with different proportions of basal joints: 1st joint about as long as 3^d, shorter than 5th and longer than 4th; scutellum light-brown; apical abdomen segment totally black.

Materials. - HOLOTYPE, female, « Minusinsk reg., N Askyz, Abakan, 11.6.1900, A. Jakobson leg. » (Zoological Institute, S. Petersburg).

Distribution (Fig. 18 : 33). - One locality is known to the north from West Saian Mountain system : Khakassia Republic of Russia, Abakan environs.

Derivatio nominis. - The new taxon is dedicated to a well known Moscow Cerambycidae collector of the XXth century, engineer and aircraft designer V. Shavrov, who presented his collection to Zoological Institute in S. Petersburg. The described female was originally preserved in his collection.

***Cortodera ruthena* Plavilstshikov, 1936** (Figs 11-14)

Type locality. - Uralsk env., North-West Kazakhstan.

Cortodera ruthena Plavilstshikov, 1936 : 286-287 (« Uralsk »); Kostin, 1973 : 141; Tsherepanov, 1979 : 229, 232; Lobanov & al., 1981 : 799.

Description. - Body length in males : 5.5-9.1 mm, in females : 6.5-11.3 mm (the largest and the smallest females are without locality labels and could hardly be attributed to any subspecies); body width in males : 1.8-2.9 mm, in females : 2.2-3.7 mm.

Body small, usually totally black, very rarely orange yellow (only one female from Central Kazakhstan), antennae totally reddish or brownish, or often darkened distally: from dark-brown to black, or contrary dark-brown with pale distal portion; palpi usually brownish with dark-brown more or less dilated apical joints; prothorax often with reddish anterior and posterior margins, very rarely black prothorax with large lateral red areas (a female from near Arkalyk in Kazakhstan); elytra yellow, orange-yellow, brown-yellow; legs totally black with brownish bases of anterior tibiae, or totally red or yellow, or black with red anterior femora and tibiae, or with partly reddish middle and posterior femora and tibiae; abdomen in males sometimes with yellow pygidium, postpygidium and partly yellow last sternite, in females posterior borders of the last visible segment can be reddish.

Head sometimes with long and dilated temples, strongly angled posteriorly.

Prothorax in males and in females from 1.1 to 1.4 times wider than long; with small lateral tubercles or slightly widened near middle, sometimes in the middle wider than at base; pronotum usually with very dense contiguous punctuation, sometimes punctuation a little sparser, but interspaces always smaller than punctures; small smooth longitudinal area usually present, but sometimes absent; pronotal pubescence rather variable, usually with erect setae mixed with dense adpressed setae; erect pubescence more numerous in males, often totally absent in both sexes. Pronotal pubescence often arranged in two lateromedial longitudinal groups.

Elytra in males from 2 to 2.3 times longer than wide, strongly narrowed posteriorly, in females from 2 to 2.3 times longer than wide, parallel-sided or slightly widened near middle or behind middle, densely punctated, with or without dark spot on curved humeral margin, often suture black, or lateral margin and suture black; elytral setae are usually moderately short, semierect, or all elytral setae adpressed, or more or less numerous erect setae present near base, sometimes several erect setae are distributed along all elytral length.

Abdomen always with mixed erect and adpressed pubescence; pygidium, postpygidium and posterior margin of the last visible abdominal sternite rounded or postpygidium with small emargination, or pygidium truncate and postpygidium with deeper emargination, or last sternite also with small emargination; in females posterior margins of the last abdominal tergite and sternite usually more or less widely rounded, very rarely truncate or with very small emarginations.

Materials. - 18 males and 48 females listed below in the descriptions of subspecies; besides 2 very old females without locality labels (Zoological Institute, S. Petersburg).

Distribution (Fig. 17 : 2, 4-5, 8-9, 13; Fig. 18 : 4-8, 12, 17, 19-26). - East Ukraine : Dnepropetrovsk (Bulakhovka), Lugansk (Kruzhilovka) and Donetsk (Bogorodichnoe, North Donetz River Valley) regions. Central and South Russia : Rostov reg. (Chertkovo, Mitiakinskaia), Volgograd reg. (Alekseevskaia, Kalach - Koper, Sarepta), Cheliabinsk reg. (Miass). West, North-West, North and Central Kazakhstan : Uralsk reg. (Furmanovo, Uralsk, Kolovertnoe), Kustanai reg. (Naurzum nat. reserve, Tersakan River Valley near Arkalyk, Zharkol Lake env.), Astana reg. (Kulanutpes River Valley near Tengiz Lake), Karaganda reg. (Taldy-Manak River Valley near Zhana-Arka).

Remarks. - The original description was based on three series of specimens from rather different localities : Uralsk, Kalach - Koper and Filonovskaia on Buzuluk. I have found 6 syntypes : 1 female - « Kalach - Koper, 21-31.5.1910, V. Kizeritzky leg. », 1 female - Buzuluk River near Filonovskaia, 8.6.1911 (Zoological Institute, S. Petersburg) and 4 females from Uralsk environs in Plavilstshikov's collection (Zoological Museum of Moscow State University) : one with black elytra and three with yellow elytra. One of the females from near Uralsk with yellow elytra (with label : « Uralsk, 5.VI.08, Zhuravlev leg. ») is designated by me as lectotype, and I regard Uralsk environs as type locality of the species. The other two females with yellow elytra are designated as paralectotypes.

The female with black elytra from Uralsk, marked and described by N. N. Plavilstshikov as *C. ruthena* ab. *zhuravlevi* Plav., 1936 : 286, belongs to another species close to *C. villosa* Heyden, 1876. The new taxon is now described by A. Miroshnikov.

The other syntypes from « Kalach-Koper » and from Filonovskaia belong to a new subspecies and are described below. Males of *Cortodera ruthena* were unknown to N. N. Plavilstshikov and original description of « males » was

based on females with longer antennae and narrower prothorax. That is why the main distinguishing character of *C. ruthena* according N. N. Plavilstshikov is the body form with parallelsided elytra in males. Real males of *C. ruthena* with elytra strongly narrowed backwards and rather long antennae does not fit to the original description, where elytra are parallelsided in both sexes « bis zum letzten Viertel parallel » and male antennae reaching only posterior elytral third.

Two males were represented in N. N. Plavilstshikov's collection, but both were not identified by N.N. Plavilstshikov as *C. ruthena*, and so are not regarded by me as paralectotypes.

The unique male of *C. ruthena* (Fig. 11a) with same label as lectotype has two identification labels : first by N. N. Plavilstshikov's hand « *kiesenwetteri* Pic? » and second by M. Pic's hand : « *Cortodera umbripennis* Reitter, probable, espèce très variable ».

Another male (Fig. 12a) from Volgograd region (Alexeevskaja) is in very poor condition (both antennae broken) and has N. N. Plavilstshikov's identification label : « *Cortodera umbripennis* Rtt. ».

***Cortodera ruthena ruthena* Plavilstshikov, 1936 (Fig. 11)**

Type locality. - Uralsk env., North-West Kazakhstan.

Description. - Body length in males : 8.7-9 mm, in females : 7.1-9.7 mm; body width in males about : 2.9 mm, in females : 2.3-3 mm.

The taxon is characterized by relatively pale colour.

Body always black with often reddish anterior and posterior prothorax margins; posterior margins of the last visible abdomen segments usually also reddish; male antennae pale-brown with darker basal half, female antennae usually with 1-5th or 1-7th joints pale-reddish, others - brownish; elytra yellow or orange-yellow, with humeral dark spots indistinct or nearly indistinct, in males suture brown anteriorly; legs orange-yellowish or brown with lightened anterior tarsi, tibiae and femora apex; or with slightly darkened distally middle and posterior tibiae, femora and tarsi; or only posterior tibiae, femora and tarsi darkened.

Head with poorly developed temples. Male antennae reach posterior elytral fourth, in females elytral third; 1st joint shorter than 5th, longer than 4th, and about as long as or slightly shorter than 3^d; 2nd joint longer than wide.

Prothorax in males about 1.2 times wider than long, in females - 1.3-1.4 times; evenly rounded laterally, without distinct tubercles; pronotum with very dense contiguous punctuation, elongate smooth area always present; in females dense adpressed pronotal pubescence slightly arranged in two latero-medial groups; erect pronotal setae present, but not very numerous, in males longer and denser.

Elytra in males 2-2.1 times longer than wide, in females - 2-2.2 times; covered by moderately short semierect setae, in females a few long erect setae present near base, in males erect setae more numerous.

In males last abdominal sternite and postpygidium slightly emarginated, pygidium widely rounded; in females last abdominal sternite and tergite usually rounded but sometimes sternite with small emargination.

Materials. - Female, LECTOTYPE (present designation), Uralsk, 5.6.1908, S. Zhuravlev *leg.*; 2 PARALECTOTYPES (present designation), females with same labels; 1 male, with same label; 1 female, Sarepta; 1 female, « Rossia mer.-or. » - most probably also from Sarepta (Zoological Museum of Moscow State University); 1 female, right side of Ural River Valley to the south from Kolovertnoe, 5.6.1951, Romadina *leg.*; 1 female, Uralsk region, Malaia Embulatovka River near Rozhkovo, 26.5.1949 (Zoological Institute, S. Petersburg); 1 male and 2 females, Sarepta, Christoph *leg.* (collection of G. Sama, Cezena, Italy).

Distribution (Fig. 18 : 12, 20-22). - Four populations are known. North-West Kazakhstan : three localities in Ural River Valley, Uralsk environs, Rozhkovo environs and Kolovertnoe environs. South-East of European Russia : Volgograd environs.

Remarks. - The small number of known males may be the evidence of predominantly parthenogenesis in the taxon. The attribution of Sarepta population to the nominative subspecies must be regarded as preliminary, because a few known specimens of the taxon does not allow to make certain separation.

Cortodera ruthena rossica ssp. n. (Fig. 12)

Type locality. - Kalach env., Voronezh distr., Russia.

Description. - Body length in male : 8.5 mm, width : 2.9 mm; in females : 7-9.3 mm; body width : 2.4-3.1 mm;

The subspecies is characterized by relatively dark brown-yellow elytra with usually distinct black spot on curved humeral margin and strongly bicoloured legs in females (numerous females and only one male in very bad condition are known).

Body always black, posterior prothorax margin before scutellum sometimes reddish as well as posterior margins of the last visible abdomen segment; antennae in male with seven basal joint dark-brown (other joints missing), in females usually with 1-4th joints red, or 1-5th or 1-6th joints pale-reddish or red, others - brownish or black, sometimes antennae nearly black with only 3^d joint red and two first joints red internally, or totally dark-brown (unique female); elytra often rather dark with black suture and lateral margins; legs red-orange with black or brown tarsi and distal parts of middle and hind femora, sometimes bases of anterior femora also black; middle and hind tibiae often darkened distally, sometimes middle and hind legs totally black and anterior femora with black bases, very rarely (male) all legs totally dark-brown.

Head with poorly developed temples. Antennae in females reach posterior elytral third; 1st joint shorter than 5th, longer than 4th, and about as long as 3^d; 2nd joint slightly longer than wide; a single known male (only 7 basal joints available) with 5th joint much shorter than 1st, about equal to 4th and longer than 3^d.

Prothorax in male about 1.3. times wider than long; in females 1.2-1.3 times; evenly rounded laterally, without distinct tubercles, sometimes slightly angulated near middle; pronotum with very dense contiguous punctuation, elongate smooth area nearly always present (in male indistinct); dense adpressed pronotal pubescence slightly arranged in two latero-medial groups; erect pronotal setae present and sometimes rather numerous, but sometimes absent.

Elytra in male about 2 times longer than wide, in females 2-2.3 times; in females with moderately short semierect setae, a few erect setae present near elytral base or absent, or distributed along whole elytral length.

Last abdominal sternites and tergites in females usually rounded, or sometimes truncate or with very small emarginations; in male last sternite shallowly emarginated, pygidium distinctly emarginated, postpygidium widely truncate.

Materials. - HOLOTYPE (paralectotype of *C. ruthena*), female, « Kalach - Koper, 21-31.5.1910, V. Kizeritzky leg. »; 36 PARATYPES (1 male and 35 females) : 1 female (paralectotype of *C. ruthena*), Buzuluk River near Filonovskaia, 8.6.1911 (Zoological Institute, S. Petersburg); 4 females, « Rossia mer., prov. Donensis, Alexeevskaja », 20.6.1923, 19.6.1929, 26.6.1929; 1 male and 1 female, « Gebiet Donskaja, Alexeevskaja, 26.6.1929, A. Menstschikow »; 2 females, Ukraine, Donetsk reg., Bogorodichnoe, North Donetz River Valley, 17.6.1952, S. Medvedev leg.; 1 female, Lugansk reg., Kruzhilovka, 1.6.1953, S. Medvedev leg. (Zoological Museum of Moscow University); 1 female, Rostov reg., Chertkovo, Streletzkaia Steppe, 12.6.1952, K. Arnoldi leg.; 3 females, Volgograd reg., Alexeevskaja env., near Buzuluk riv. mouth, 16.6.1997, O. Brekhov leg.; 3 females, Rostov reg., Mitiakinskaia (to the west from Tarasovsky), 3-9.6.1997, M. V. Nabozhenko leg.; 1 female, Ukraine, Dnepropetrovsk reg., Pavlograd distr., Bulakhovka, 6.1993, V.A. Barsov leg. (author's collection); 1 female, Rostov reg., Chertkovo distr., Tikhaja, 13.6.1987, P. P. Ivliev leg.; 3 females, Rostov reg., Tikhaja Zhuravka, 5.6.1994, P. P. Ivliev leg.; 10 females, Rostov reg., Mitiakinskaia, 3-9.6.1997, M. V. Nabozhenko leg.; 4 females, same locality, 6.1997, M. V. Nabozhenko leg. (collection of Rostov University).

Distribution (Fig. 17 : 2, 4-5, 8-9, 13; Fig. 18 : 4-8). - Central and South Russia : Rostov region (Chertkovo, Tikhaja Zhuravka, Mitiakinskaia) and Volgograd region (Alekseevskaja, Kalach - Koper, Filonovskaia, Sarepta). East Ukraine : Dnepropetrovsk (Bulakhovka, Pavlograd distr.), Lugansk (Kruzhilovka) and Donetsk (Bogorodichnoe, North Donetz River Valley) regions.

Remarks. - I prefer to designate a female as holotype, because the unique known male is in very poor condition (both antennae broken), dorsal pubescence nearly totally missing. The subspecies is characterized by females with usually bicoloured antennae (lightened basally) and strongly bicoloured legs. The unique male in known materials can be the evidence of partly parthenogenetic reproduction of the taxon.

***Cortodera ruthena komarovi* Danilevsky, 1996, stat. n.** (Fig. 13)

Type locality. - Furmanovo, Uralsk region, North-West Kazakhstan.

Cortodera komarovi Danilevsky, 1996 : 63-64 (Furmanovo, Uralsk reg.)

Description. - Body length : 7.7-9.1 mm, width : 2.5-2.9 mm.

The taxon is characterized by pale yellow elytral colour, totally dark-brown legs (with sometimes pale bases of anterior tibiae) and lightened distal antennal portions. Only males are known.

Males. Body entirely black (pronotum may be reddish before scutellum, last abdominal segment also often reddish), with yellow elytra.

Temples moderately long. Antennae totally brown or often with lightened apical half; 1st joint usually darker than others; 1st joint shorter than 5th, but longer than 4th, which is slightly longer or slightly shorter than 3rd; 2nd joint slightly longer than wide.

Prothorax from 1.2 to 1.3 times wider than long, with sides slightly angulated laterally; pronotum with very dense regular punctures, with short and narrow smooth elongated line near base; covered with dense, moderately long semierect and erect setae.

Elytra from 2 to 2.2 times longer than wide, covered with moderately short adpressed pubescence, with several long erect setae near base.

Last abdominal sternite apically rounded; postpygidium distinctly emarginated, pygidium truncate or very slightly concave.

Materials. - 10 males (including HOLOTYPE and 3 PARATYPES), N. W Kazakhstan, Uralsk reg., Furmanovo, 20.6.1992, A. Lobov *leg.* (author's collection).

Distribution (Fig. 18 : 19). - Only one population known in West Kazakhstan between Ural and Volga river valleys in Furmanovo environs (about 200 km south-westwards Uralsk).

Remarks. - My description of *C. komarovi* (represented only by males) as a separate species was connected with the absence of males of *C. ruthena* in materials studied by me. Now I had the possibility to study 2 males of *C. ruthena* newly discovered in Moscow Zoological Museum and a male from Sarepta (G. Sama's collection; Cezena, Italy), and the species identity of *C. komarovi* and *C. ruthena* became evident, though *C. komarovi* looks peculiar enough to regard it as a separate subspecies : *C. ruthena komarovi*, *stat. n.*

The main distinguishing character of *C. r. komarovi* from *C. r. ruthena* or *C. r. rossica* is very dark, nearly black colour of legs; antennae are usually lightened distally; head is relatively shorter than in *C. r. ruthena* or *C. r. rossica*, with longer more exposed temples.

***Cortodera ruthena turgaica*, ssp. n. (Fig. 14)**

Type locality. - Arkalyk env. near Zharkol Lake, Kazakhstan.

Description. - Body length in males : 5.5-9 mm, in females : 6.5-10 mm; body width in males : 1.8-2.9 mm, in females : 2.2-3.4 mm.

The taxon is characterized by the strong development of temples, which are long, usually a little diverging posteriorly and angled.

Body black, but sometimes totally red (one female from near Zharkol, fig. 10 : b). In a female from Kokshetau Mt. body with red large lateral prothorax area and with red ante-

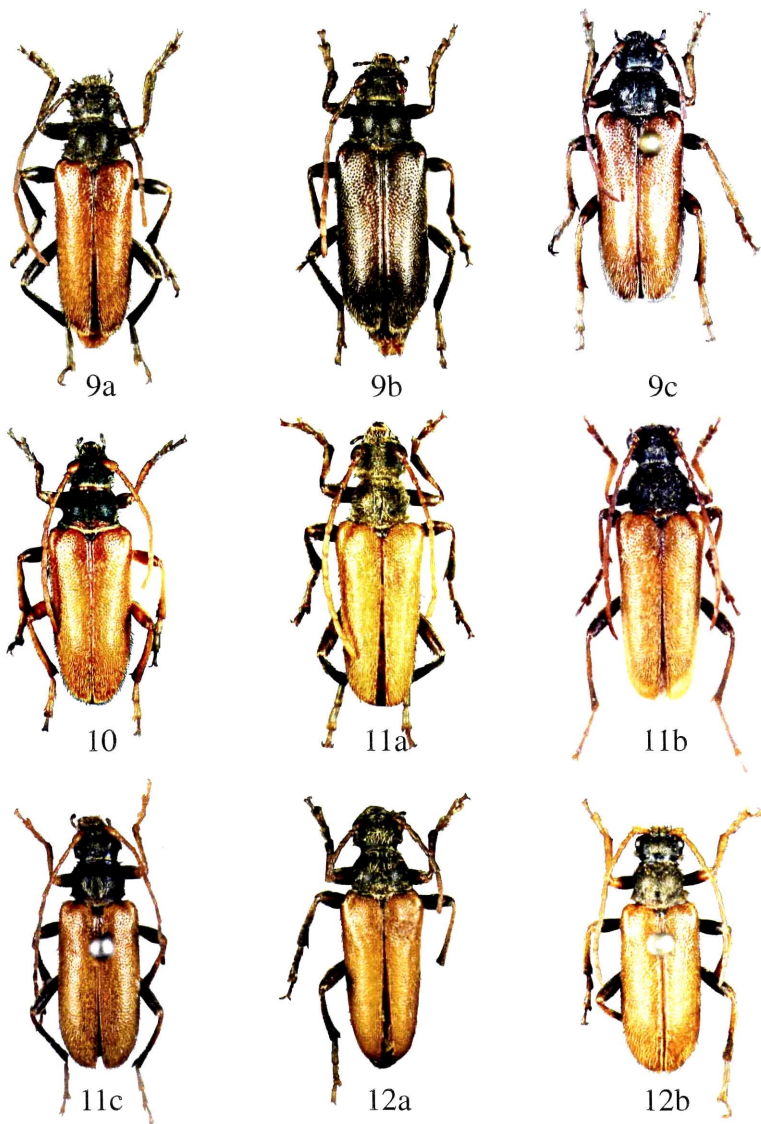


Fig. 9. *C. semenovi semenovi* : a - male, lectotype (Altai, Kuznetzky Alatau, Kondoma River, 6.1913, Sobolevsky leg.); b - female, paralectotype, ab. *atra*, with same label; c - female, paralectotype, ab. *klementzi* (Altai Reg., Biisk distr., Shabashskaia env., 6.1898, Klementz leg.). Fig. 10. *C. semenovi shavrovi*, ssp. n.; female, holotype (Khakassia, Abakan, 11.6.1900, A. Jakobson leg.). Fig. 11. *C. ruthena ruthena* : a - male (Uralsk, 5.6.1908, Zhuravlev leg.); b - male (Sarepta, Christoph leg.); c - female, lectotype (Uralsk, 5.6.1908, Zhuravlev leg.). Fig. 12. *C. ruthena rossica*, ssp. n. : a - male, paratype (Central Russia, Buzuluk River, Alexeevskaja, 26.6.1929, A. Menshikov leg.); b - female, holotype (Kalach - Khoher, 25-31.5.1910, V. Kizeritzky leg.)

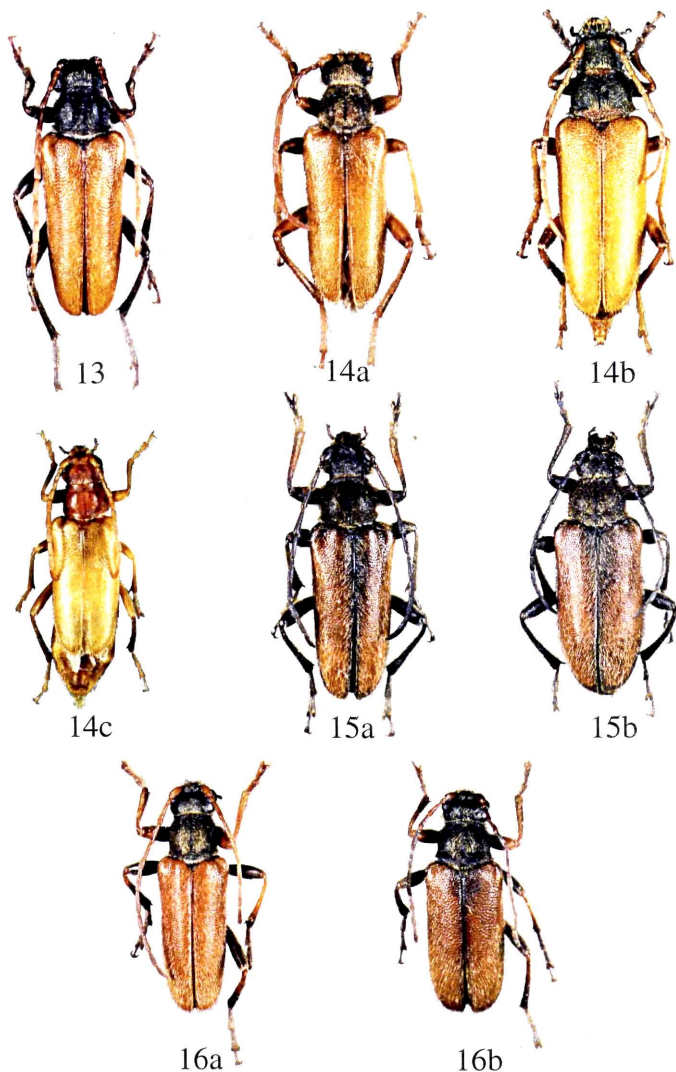


Fig. 13. *C. ruthena komarovi*, stat. n. : male, holotype (West Kazakhstan. Furmanovo, 20.6.1992, A. Lobov leg.). Fig. 14. *C. ruthena turgaica*, ssp. n. : a - male, holotype (Kazakhstan, Arkalyk env., steppe near Zharkol Lake, 27.7.1958, Falkovitch leg.); b - female, paratype, Kazakhstan, Arkalyk env., Kokshetau Mts near Tersakan River, 29.5.1957, A. Emelianov leg.; c - female, paratype, Kazakhstan, 10 km to the north from Zharkol Lake, 23.7.1957, L. Arnoldi leg.) Fig. 15. *C. khatchikovi*, sp. n. : a - male, holotype (Rostov region, Tarasovsky, Gorodishchevo forest farm, 10.8.1993, E. Khatchikov leg.); b - female, paratype with same label. Fig. 16. *C. moldovana*, stat. n. : a - male, holotype (Moldova. Dubossary env., 22.5.1965, V. Ianushev leg.); b - female, paratype with same label.

rior and posterior pronotal margins and red last abdominal segment. In three males (from near Zharkol Lake and from Naurzum) body brown with several paler areas : on head (genae, temples, near antennal insertion), prothorax (pronotum near smooth line), scutellum and abdomen (last segment, medial and posterior areas of 2nd-4th sternites).

Antennae totally pale orange, or brown with lightened distal joints, or brown with lightened 2nd-4th joints. Elytra brown with black suture, or yellow, or orange-yellow, with humeral dark spots present or absent. All legs orange-yellowish, or pale-yellowish with brown distal portions of middle and hind femora and brown bases of middle and hind tibiae, or black with red anterior femora and tibiae and red basal halves of other femora, or totally dark-brown with only anterior tibiae bases lightened, or reddish with brown anterior tarsi and brown distal portions of all femora.

Antennae in males reach posterior elytral fourth, in females - posterior elytral third; male antennae often with very short 3^d and 4th joints: 1st joint shorter than 5th or about equal to 5th, much longer than 4th or 3^d, 3^d a little longer than 4th; in male from Zhana-Arka 3^d and 4th joints are not shortened, 1st joint shorter than 5th, about equal to 4th which is slightly longer than 3^d; small red female from near Zharkol has very short antennae reaching only elytral half with shortened 3^d-5th joints, 1st joint much longer than 3^d, 4th or 5th, 5th longer than 3^d, which is slightly longer than 4th; in females from Miass and Kokshetau Mt. 3^d and 4th joints are also not shortened, 1st joint shorter than 5th, but longer than 3^d, which is slightly longer than 4th; 2nd joint slightly longer than wide.

Prothorax in males from 1.1 to 1.4 times wider than long, in females - 1.3-1.4 times; with more or less distinct lateral tubercles, and sometimes in the middle wider than at base; pronotum with very dense contiguous punctuation or with sparser punctuation with distinct interspaces (two very small males from near Zharkol Lake and from Naurzum); elongate smooth area always present; dense adpressed pronotal pubescence usually slightly arranged in two latero-medial groups; erect pronotal setae present or totally absent (male from Miass), sometimes erect pronotal setae very numerous (male from Zhana-Arka and holotype male from Zharkol).

Elytra in males from 2.1 to 2.3 times longer than wide, in females - 2.0-2.2 times; usually covered with adpressed setae or with semierect setae, a few erect setae present near elytral base or absent.

Postpygidium, pygidium and last abdominal sternite, as well as last abdominal female sternite and tergite rounded or with very small emarginations.

Male genital structures (males from Zhana-Arka and from Naurzum were examined) are similar to genital structures of *C. r. komarovi*.

Materials. - HOLOTYPE, male, Kazakhstan, Arkalyk env., steppe near Zharkol Lake, 27.7.1958, Falkovitch *leg.* (Zoological Institute, S. Petersburg); 7 PARATYPES : 1 female, Kazakhstan, 10 km to the north from Zharkol Lake, 23.7.1957, L. Arnoldi *leg.*; 1 male, Kazakhstan, Kurgaldzhinsky Nat. Reserve (near Tengiz Lake), Kulanutpes River Valley, 8.6.1962, L. Arnoldi *leg.*; 1 male, Kazakhstan, Karaganda reg., Taldy-Manak River Valley to the south from Zhana-Arka, 11.6.1958, Tobias *leg.*; 1 female, Kazakhstan, Arkalyk env., Kokshetau Mts near Tersakan River, 29.5.1957, A. Emelianov *leg.* (Zoological Institute, S. Petersburg); 1 female, « Ural, Miassy (Miass in Cheliabinsk reg.?).

26.6.1931, A. Menshikov *leg.* » (Zoological Museum of Moscow State University); 1 male, Kazakhstan, Kustanai reg., Naurzum Natural Reserve, 27.6.1940, A. Kamensky *leg.* (collection of A. Miroshnikov, Krasnodar); 1 male, Kazakhstan, near Zharkol Lake, 12.7.1958, Dorokhina *leg.* (author's collection).

Distribution (Fig. 18 : 17, 23-26). - The subspecies covers a very large area in Central and North Kazakhstan from Arkalyk and Naurzum in Kustanai region to Tengiz Lake in Astana region and Zhana-Arka in Karaganda region. One specimen is known from Russia (South Urals in Miass environs, Cheliabinsk region).

Remarks. - A few known specimens of the subspecies are rather different. Still marginal aberrations seem to be connected by transitional forms. Sometimes very different specimens were collected in one locality or in close localities. So, all described specimens, including the rather peculiar female from Urals, represent a natural taxon. *C. r. turgaica* is clearly connected with *C. r. komarovi* by the male from Zhana-Arka with dark legs and antennae lightened distally. This male differs from *C. r. komarovi* by strongly developed temples.

Etymology. - A large part of the subspecies area is situated in the Turgai lowland and Turgai plateau of Kazakhstan.

***Cortodera khatchikovi* sp. n.** (Fig. 15)

Type locality. - Tarasovsky distr., Rostov reg., Russia.

Description. - Body length in male : 9.8 mm, width : 3.1 mm; in female : length : 10.3 mm, width : 3.5 mm.

Body, legs and antennae totally black, only anterior femora red in basal internal half, with small red spot in the middle of external side; elytra dark-brown with black suture and epipleura, curved margin anteriorly also black; elytra anteriorly near scutellum and along suture strongly darkened.

Body small, head with frons and vertex with very dense contiguous punctures; interantennal tubercles very small; temples poorly developed. Antennae reaching posterior elytral fourth in male or third in female; 1st joint shorter than 5th, about as long as 3^d, and longer than 4th in male; or 1st, 3^d and 5th joints about equal in length and longer than 4th in female; 2nd joint slightly longer than wide.

Prothorax from 1.2 (male) to 1.3 (female) times wider than long, with rounded sides; pronotum convex, with very dense partly contiguous regular punctuation, with short and narrow smooth elongated line near base; covered with very dense, long erect setae, in female with (in male without) several semierect setae. Scutellum triangular, about as long as wide in male or transverse in female.

Elytra with dense regular punctures, interspaces smaller than punctures; covered with short adpressed and semierect pubescence, with several long erect setae near base, much more numerous in male; from 2.2 (male) to 2 (female) times longer than basal width, with sides converging posteriorly in male or nearly parallelsided in female, slightly widened after middle; apices narrowly (male) or widely (female) rounded.

Legs with 1st joint of hind tarsi longer than 2nd and 3rd together.

Ventral body side with erect and adpressed pubescence. Male abdomen with last sternite rounded, pygidium and postpygidium widely truncate; in female last visible tergite and sternite rounded.

Aedeagus strongly widened distally with acute apex, parameres curved to each other with strongly widened scalpriform lobes.

Materials. - HOLOTYPE, male, Rostov region, Tarasovsky, Gorodishchevo forest farm, 10.8.1993, E. Khatchikov *leg.*; 1 PARATYPE, female with same label (author's collection).

Distribution (Fig. 18 : 4). - Only one population known in Rostov region of South Russia in Tarasovsky district.

Remarks. - The new species looks a little similar to *C. ruthena*, but in *C. ruthena* prothorax is always with numerous adpressed setae; legs can never be totally black with partly red anterior tibiae; aedeagus of *C. khatchikovi* is more similar to aedeagus of *C. moldovana*, but parameres are totally unique.

***Cortodera moldovana* Danilevsky, 1996, stat. n. (Fig. 16)**

Type locality. - Dubossary env., Moldova.

Cortodera flavimana moldovana Danilevsky, 1996 : 64-65 (Moldova, near Dubossary).

Description. - Body length in males : 6.5-8.7 mm, in females : 6.4-7.8 mm; body width in males: 2.1-2.8 mm, in females: 2.1-2.7 mm.

The species is characterized by pronotal pubescence arranged in two latero-medial groups, colour patterns and genital structures similar to *C. flavimana* (Waltl, 1838) and body form and size similar to *C. ruthena*, but antennae much longer as in *C. flavimana* with similar proportions of joints.

Body always black, prothorax totally black, posterior margins of the last visible abdomen segments sometimes lightened; antennae usually brown or dark-brown with 1-4th or 1-5th joints pale reddish-orange, 1st joint can be also darkened, sometimes (in black form) antennae nearly totally dark-brown with lightened internally 1-4th joints; elytra orange yellow, with distinct humeral dark spots, often with black suture or totally black (only black females are known). Legs black with red anterior femora and tibiae; or dark-brown with orange anterior femora, tibiae and lightened basal parts of middle and hind tibiae or basal parts of femora also lightened; or legs totally red-orange with only tarsi darkened; in black forms only anterior legs red with black basal parts of femora.

Head with poorly developed temples. Antennae in males reaching posterior elytral 5th or longer, in females - posterior elytral third; in males 1st joint much shorter than 5th, and slightly shorter than 4th which is a little shorter than 3rd; in females 1st joint shorter than 5th, slightly longer than 4th and a little shorter than 3rd.

Prothorax evenly rounded laterally, without distinct tubercles; pronotum with very dense contiguous punctuation, elongate smooth area always present; dense adpressed pronotal pubescence distinctly arranged in two latero-medial groups; erect pronotal setae present and sometimes very numerous; elytra with semierect setae, a few erect setae present near elytral base, or erect setae more numerous and sometimes are distributed along elytral surface.

Postpygidium widely truncate or slightly emarginated, pygidium and last sternite rounded or with very small emarginations; in females last abdominal sternite and tergite rounded or with very small emarginations.

Aedeagus strongly widened before the acute apex; parameres relatively long with strongly dilated distal lobes, curved towards each other (a little similar to *C. khatchikovi*, sp. n.).

Materials. - HOLOTYPE, male, Moldova, Dubossary env., 22.5.1965, V. Ianushev leg.; 9 PARATYPES : 2 males and 7 females with same labels (author's collection).

Distribution (Fig. 17: 14). - Up to now only one population is known : Moldova, Dubossary environs.

Remarks. - The taxon was described as a subspecies of *C. flavimana* (Waltl, 1838). The eastern-most population of *C. flavimana* is situated just in the border region between Romania and Moldova (I have not seen specimens from here); colour patterns and the special character of pronotal pubescence are very similar in both taxa; the antennae of *C. moldovana* are similar to *C. flavimana* with similar proportions of joints and relatively much longer than in *C. ruthena*, moreover aedeagus of *C. moldovana* is strongly widened before apex as in *C. flavimana* (males from Macedonia were examined), while aedeagus of *C. ruthena* (males of *C. ruthena komarovi* and *C. ruthena rossica* were examined) is distinctly narrower. Parameres of *C. moldovana* (relatively long with strongly dilated distal lobes, curved towards each other) are rather special and strongly differ from both *C. ruthena* (with short lobes, gradually tapering distally and relatively straight) and *C. flavimana* (with distal lobes long, slightly curved and slightly dilated), being similar to parameres of *C. khatchikovi*, sp.n. The body size and form of *C. moldovana* are very similar to *C. ruthena*. *C. moldovana* is easily distinguished from *C. khatchikovi*, sp. n. by different character of body pubescence with less developed erect pubescence of pronotum and elytral base.

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Fig. 18. Localities of *Cortodera* taxa in Russia and Kazakhstan :

1 - Salsk (*C. r. reitteri*); 2 - Rostov-on-Don (*C. r. reitteri*); 3 - Uspenskaia, Matveev-Kurgan distr., Rostov reg. (*C. r. reitteri*); 4 - Mitiakinskaia (*C. ruthena rossica*) and Gorodishchevo forest farm, Tarasovsky distr., Rostov reg. (*C. khatchikovi*); 5 - Tikhaia Zhuravka, Chertkovo distr., Rostov reg. (*C. r. reitteri*, *C. ruthena rossica*); 6 - Kalach - Khoper, Rostov reg. (*C. ruthena rossica*); 7 - Alexeevskaja, Rostov reg. (*C. ruthena rossica*); 8 - Filonovskaia, Rostov reg. (*C. ruthena rossica*); 9 - Saratov (*C. r. reitteri*); 10 - Olkhovka, Volgograd reg. (*C. r. reitteri*); 11 - Trekhostrovskaja, Volgograd reg. (*C. r. reitteri*); 12 - Sarepta, Volgograd (*C. reitteri*, *C. ruthena ruthena*); 13 - Astrakhan (*C. k. kiesenwetteri*); 14 - Samara (*C. kiesenwetteri subtruncata*); 15 - Pugachev (*C. kiesenwetteri subtruncata*); 16 - Alkino, Bashkiria (*C. ciliata milaenderi*); 17 - Miass, Cheliabinsk reg. (*C. ruthena turgaica*); 18 - Arkaim Nat. Reserve, Cheliabinsk reg. (*C. reitteri mikhailovi*); 19 - Furmanovo, Uralsk reg. (*C. ruthena komarovi*); 20 - Kolovertnoe, Uralsk reg. (*C. r. ruthena*); 21 - Uralsk (*C. r. ruthena*); 22 - Rozhkovo, Uralsk reg. (*C. r. ruthena*); 23 - Naurzum Nat. Reserve, Kustanai reg. (*C. ruthena turgaica*); 24 - Arkalyk env. near Zharkol Lake (*C. ruthena turgaica*); 25 - Kurgaldzhinsky Nat. Reserve near Tengiz Lake (*C. ruthena turgaica*); 26 - Zhana-Arka, Karaganda reg. (*C. ruthena turgaica*); 27 - Leninogorsk (*C. analis*); 28 - Sibinka River (*C. ciliata ciliata*); 29 - Soloneshnoe (*C. analis*); 30 - Shebalino (*C. analis*); 31 - Biisk (*C. semenovi semenovi*); 32 - Kondoma River (*C. semenovi semenovi*); 33 - Abakan (*C. semenovi shavrovi*).

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