

**P O L S K I E   P I S M O   E N T O M O L O G I C Z N E**  
P O L I S H   J O U R N A L   O F   E N T O M O L O G Y

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**Two new species of *Cionus* CLAIRVILLE, 1798  
(Coleoptera: Curculionidae: Cionini) from Turkey**

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**ABSTRACT.** *Cionus ponticus* sp. n. from Pontic Mts. and *C. wanati* sp. n. from Taurus Mts., both in Turkey, are described and illustrated. Lectotypes are designated for *Cionus caucasicus* REITTER, 1888 and for *Cionus donckieri* PIC, 1898. Faunistic data on the latter two species are given..

**KEY WORDS:** Coleoptera, Curculionidae, Cionini, new species, lectotype designation, Turkey.

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I thank warmly all Colleagues who helped me: Otto MERKL (Budapest, Hungary) for his kind reception during my stay in Hungarian Natural History Museum in Budapest and for the loan of both type and non type material; Roberto CALDARA (Milan, Italy) for letting me study the material that he managed to loan from Museum National d'Histoire Naturelle Paris; Marek WANAT (Wroclaw, Poland) for photos and specimens from his collection for study; Friedhelm BAHR (Viersen, Germany) for complete set of *Cionus* original descriptions; Roman BOROVEC (Nechanice, Czech Republic), Enzo COLONNELLI (Rome, Italy), Attila PODLUSSANY (Budapest, Hungary), Fabio TALAMELLI (San Giovanni in Marignano, Italy), and Jerzy SZYPULA (Wroclaw, Poland) for the loan of materials from their own collections.

## SYSTEMATICS

*Cionus ponticus* sp. n.**Material examined**

Holotype: male, dissected: 29.04.1998 NW Turkey; Bolu Daglari; W Bolu; leg. P. Białooki / *Cionus ponticus* sp. n.; holotype; design. P. Białooki 2005. Paratypes: 21 exx., the same data as holotype; 14.05.2001 NW Turkey; Abant env.; SW Bolu; leg. P. Białooki, 2 exx. 01.06.2001 N Turkey; Tokat env.; leg. P. Białooki, 1 ex.; the same data, leg. J. Szyplula, 1 ex.; 22.06.2002 NW Turkey; Abant env.; SW Bolu; leg. P. Białooki, 7 exx.

Holotype deposited in Natural History Museum, Wrocław University, Wrocław, Poland.

**Diagnosis**

Similar to *Cionus caucasicus* RTT., but easily distinguishable species. Shares with this species small body size and dark color of vestiture. Differs strikingly from *C. caucasicus* in much more robust rostrum in both sexes (Figs 3, 4), more robust elytrae (Figs 1, 2), shape of median lobe of aedeagus (Figs 5, 6), and shape of spermatheca (Figs 7, 8).

**Description**

Male. Body length 2.9-3.1 mm.

Rostrum exceptionally robust, about 1.6 $\times$  as long as pronotum length, slightly curved, apical portion very clearly narrowed in lateral view, in dorsal view subparallelsided, slightly constricted at base and antennal insertion, apical part slightly expanded to the apex; rostrum surface densely punctured with longitudinal punctures, only in part obscured by short, narrow, recumbent dark scales, directed backwardly; apical portion with tiny hairs directed toward apex; apical one-fourth shiny, with single, small punctures.

Antennae inserted at 1.6 $\times$  of rostrum width at insertion (in both sexes) from apex; scape straight, evenly and slightly widened apically, about 1.35 $\times$  as long as funicle length; first two funicular joints subequal, first one considerably more robust, curved basally, with max. width about one-third behind apex, second one with max. width at apex, joints 3-5 subisodiametric; club elongate, 2.4 $\times$  as long as broad, with well visible sutures, little longer than last four funicular joints combined; frons about one-third of rostrum width at base; eyes at the level of head surface.

Pronotum about 1.55 $\times$  as broad as long, broadest at base, sides narrowed apically, in basal part subparallel, in apical part much more tapered; in lateral view slightly convex; covered with short, narrow, light brown and whitish scales creating a complicated, subtle pattern; not obscuring completely integument with small, dense punctures, strikingly smaller than that on rostrum.

Elytrae robust, widest at midlength,  $1.2\times$  as long as broad and  $1.9\times$  as broad as pronotum, somewhat expanded behind shoulders, then slightly arcuated, apex broadly, somewhat acutely rounded; in lateral view basal portion flattened. Elytrae covered with recumbent (in fact semierect, but in all literature such scales are referred to as recumbent, in contrast to upright, long, narrow scale-like setae present in certain species of the genus), short, narrow, light brown and whitish scales, not completely obscuring integument; odd interstices additionally with variable in size spots of black, velvet-like scales, intermixed with spots of whitish scales; first (i.e. sutural) interstice with rather large sutural macula and moderately large hind one; first two rows considerably curved near central sutural macula and straight near hind sutural macula; large spot of whitish scales on first interstice just behind central macula and before hind one; scales on odd interstices more protruding than on even interstices; rows consist of rather large punctures, separated within row by distance smaller than puncture diameter; interstices flat, on average, odd ones broader than even ones.

Legs moderately robust, femora dark brown, inermis, usually with deceptive tuft of scales, sometimes weakly obtusely angled; tibiae with no mucro, red-brown; tarsi with very wide third, bilobed joint; claws very clearly of unequal length.

Ventral part of body covered with hair-like scales, strikingly narrower than those on dorsal part of body, much more sparse; as a result integument well visible; more robust scales only in extreme outer parts of ventrites; anterior margin of prosternum slightly incised, rostral channel in front of contiguous fore coxae unclear; mesocoxae separated by distance clearly shorter than fore coxae diameter; hind coxae separated by distance twice as broad as mesocoxae separation. First ventrite as long as 2, 3, and 4 combined, second one about  $1.5\times$  as long as 3 and 4 combined, last one about as long as 3 and 4 combined; suture between 1 and 2 ventrite obsolete in the middle, reduced to smooth, not punctured stripe; first ventrite deeply, second one slightly impressed.

Aedeagus as in figure 5.

Females differ from males in clearly robuster elytrae, slightly more robust rostrum with distinct, short longitudinal crevice between antennal insertions (unclear or reduced in males), in almost equally long claws and in regularly convex ventrites, with no concavity on first two ventrites; body on average somewhat larger.

Spermatheca as in figure 7.

## Biology

Usually found in wet habitats on undetermined semiaquatic species of Scrophulariaceae.

## Distribution

Western Pontic Mts. (N Turkey).

*Cionus wanati* sp. n.**Material examined**

Holotype: male, dissected: 26.05.2001 S Turkey; Camliyayla env.; N Icel; leg. P. Białooki / *Cionus wanati* sp. n.; holotype; design. P. Białooki 2005; paratypes: the same label, 32 exx. Holotype deposited as *C. ponticus* sp. n.

**Diagnosis**

Within the genus, the new species belongs to the species group with very peculiar shape of aedeagus (Figs 13, 15), consisting of *Cionus donckieri* Pic, 1898, *C. hypsibatus* WINGELMUELLER, 1914 and *C. leonhardi* WINGELMUELLER, 1914. It is difficult to use aedeagus features while determining species of the group, as it is poorly differentiated. The new species differs strongly from *C. hypsibatus* and *C. leonhardi* in the presence of upright scale-like setae on elytral interstices. From *C. donckieri* Pic, which has perpendicular scale-like setae too, the new species differs in the absence of a unique character, present in males of *C. donckieri* only: hind tibiae, except for the normal apical comb of setae have also a linear row of setae, perpendicular to the usual comb of setae, on the inner surface of tibia, in apical one-fifth of tibia length. Moreover, the new species differs from *C. donckieri* in much shorter, more robust tibiae and different vestiture. *C. donckieri* has denser, longer yellow scales almost completely obscuring integument, protruding setae are clearly longer, about as long as interstices width; sutural maculae, especially fore spot, and all dark spots on interstices, usually significantly or completely reduced (Fig. 10), so most frequently elytrae are uniformly yellow, with small hind sutural macula only; in contrast *C. wanati* has both sutural maculae large, always fully developed, erect setae shorter, dark spots on interstices numerous, never significantly reduced, light recumbent scales not yellow but grey-brown (Fig. 9). Females of the new species differ from females of *C. donckieri* strongly in much shorter rostrum, 1.5× and 1.8× as long as pronotum length, respectively (Figs 11, 12).

**Description**

**Male.** Body length 4.0-4.2 mm.

Rostrum short, 1.1× as long as pronotum length, in dorsal view subparallel, hardly constricted at base and slightly tapered in apical part, slightly but visibly bent at antennal insertion in lateral view, ventral margin hardly arcuate, apical portion of rostrum clearly narrowed distad in lateral view; surface of dorsal part with moderately coarse punctures, clearly longitudinally elongated, in part coalesced; apical part with dense punctures, mat, except for extreme top shining; covered with small, semierect, narrow elongate scales, not

obscuring sculpture, directed in basal portion of rostrum backwardly, around antennal insertion toward rostrum axis, apical portion with scales directed toward apex of rostrum; lateral parts of apical portion of rostrum with protruding scales, directed toward apex.

Antennae inserted at the distance  $1.5\times$  of rostrum width at insertion, from apex; scape straight, moderately, evenly expanded apically,  $1.4\times$  of funicle length, first two funicular joints subequal, first one clearly more robust, little more than twice as long as wide, second one about  $2.5\times$  as long as wide, third and fourth ones little longer than broad, fifth one isodiametric; club as long as four last funicular joints combined, moderately elongate,  $2.2\times$  as long as broad, with well visible sutures; frons about  $0.4\times$  of basal rostrum width; eyes fully at level of head surface.

Pronotum about  $1.45-1.55\times$  as wide as long, broadest at base, in basal part clearly less tapered than in apical portion, covered with recumbent elongate scales, not fully obscuring strongly shining integument, with very small, sparse punctures, strikingly smaller than rostrum punctures; in lateral view apical part clearly at an angle to basal portion.

Elytrae clearly elongate, widest in midlength,  $1.2-1.3\times$  as long as broad, in dorsal view sides subparallel behind shoulders, apex not regularly rounded, rather obtusely subtriangular; about  $1.7\times$  as broad as pronotum width; in lateral view regularly convex; body surface almost fully obscured by recumbent, elongate, grey scales; odd interstices and shoulders with dark spots, variable in size and shape; all interstices with almost perpendicular scale-like setae, clearly shorter than interstice width, dark within the limits of dark spots, otherwise grey, distributed irregularly, not in rows; interstices flat, shining, with minute, sparse punctures, smaller than on pronotum; rows with large, dense punctures, obscured by recumbent scales; certain interstices, usually 4, 5 and especially 6 behind shoulders with several large punctures similar to those in rows, quite irregularly placed, obscuring the course of rows; both elytral and sutural maculae moderately large, never significantly reduced.

Legs robust, femora dark brown, fore femora with rather small, triangular tooth, middle and hind femora with large tooth, middle femora tooth acute, hind femora tooth with clearly obtuse apex; all tibiae without mucro, red brown, strongly expanded apically; claws very clearly of unequal length, especially in fore tarsi; ungular joint longer than the rest of tarsus.

Ventral part of body covered with the same recumbent vestiture as dorsal part; anterior margin of prosternum deeply incised, with clear rostral channel in front of contiguous fore coxae; mesocoxae separated by distance of fore coxae diameter, hind coxae separated by distance twice longer than mesocoxae interspace; first ventrite as long as 2, 3 and 4 combined, 5 as long as 2 and 3 combined; first and second ventrites with broad, shallow, ill defined common concavity.

Aedeagus (Figs 13, 15) similar to that of *C. donckieri* (Figs 14, 16).

Females differ from males in much longer rostrum (Fig. 11),  $1.5\times$  as long as pronotum length, antennae inserted at  $2.5\times$  of rostrum width at insertion, from the top of rostrum;

apex of rostrum less coarsely punctured and more shining; rostrum at antennal insertion usually slightly bent or evenly arcuated, always tapered apically in lateral view; ventrites without concavity; claws of almost equal length, ungular joint as long as the rest of tarsus; on average a little larger body.

### Biology

Biology unknown; all specimens collected from *Verbascum* sp. in dry habitat at elevation 1.200 m asl.

### Distribution

So far, known from locus typicus only, in central Taurus Mts. (S Turkey).

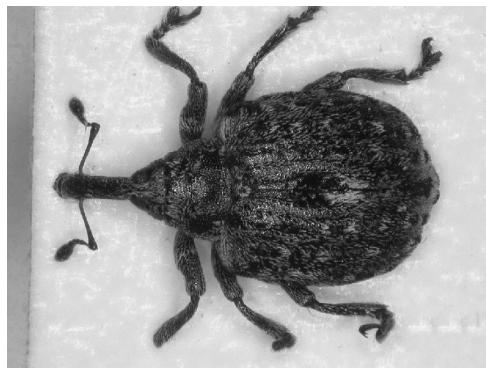
### Etymology

The new species is dedicated, with great pleasure, to Dr. Marek WANAT (Wrocław, Poland), an outstanding specialist in Apionidae.

### Lectotype designations

*Cionus caucasicus* REITTER was described from unspecified number of specimens. According to Dr. MERKL (Hungarian Natural History Museum, Budapest), there are 7 syntypes of which I studied only 4. As the rest of syntypes may consist of other species (as is standard case in *Cionus*), I hereby designate the lectotype. It is a female, in good condition, with the following labels: n. sp. Abastumen/ Abastum leg. Korb./ Holotypus 1888; *Cionus caucasicus* m.1888 [museal label with red margins]/ coll. Reitter [printed]/*Cionus caucasicus* REITTER, 1888; lectotype; design. P. Białooki 2005. Deposited in Natural History Museum Budapest.

*Cionus donckieri* PIC was described from unknown number of specimens. Moreover, in the original description, there is virtually no information that could help identify the type(s). In order to fix the name, I hereby designate the lectotype. It is a male, in rather poor condition but with well visible crucial diagnostic features: bright, yellow vestiture with completely reduced dark elytral spots, without anterior sutural macula and especially hind tibiae apical comb of setae, unique within *Cionus*, with the following labels: Tokat / 8/ n. sp. pr. Merkli xx/ type / C. Donckieri PIC/ Reitt. vid/ Wingelmuller vid...[illegible]/ *Cionus Donckieri* PIC male (Sahlbergi...[illegible])[all above labels handwritten]/ TYPE [printed red label]/ coll. Pic/ *Cionus donckieri* PIC, 1898; lectotype; design. P. Białooki 2005. Deposited in Natural History Museum Paris.



**Fig. 1.** *Cionus ponticus*, female.



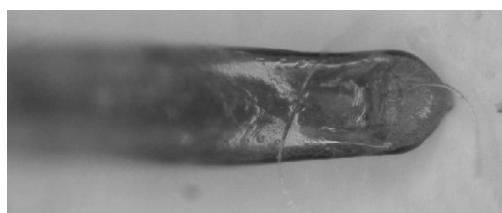
**Fig. 2.** *Cionus caucasicus*, female.



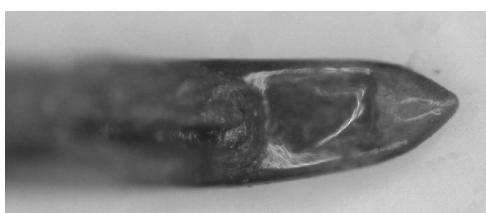
**Fig. 3.** *Cionus ponticus*, female, rostrum,  
dorsal view.



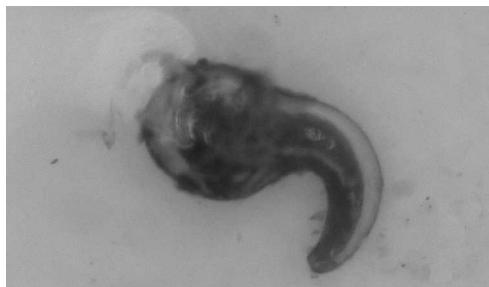
**Fig. 4.** *Cionus caucasicus*, female, rostrum,  
dorsal view.



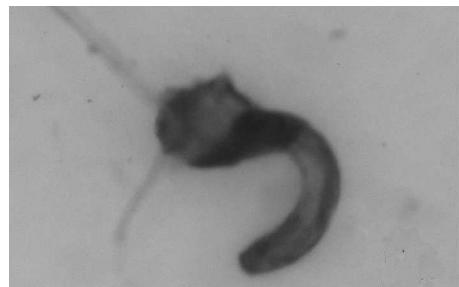
**Fig. 5.** *Cionus ponticus*, aedeagus, dorsal view.



**Fig. 6.** *Cionus caucasicus*, aedeagus, dorsal view.



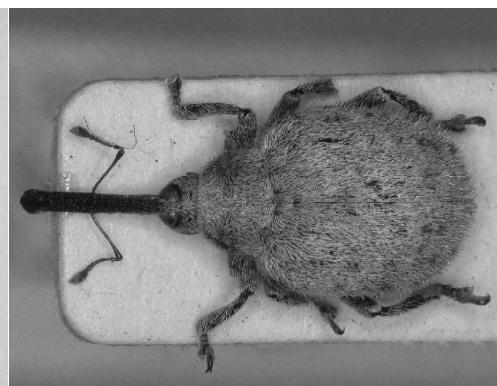
**Fig. 7.** *Cionus ponticus*, spermatheca.



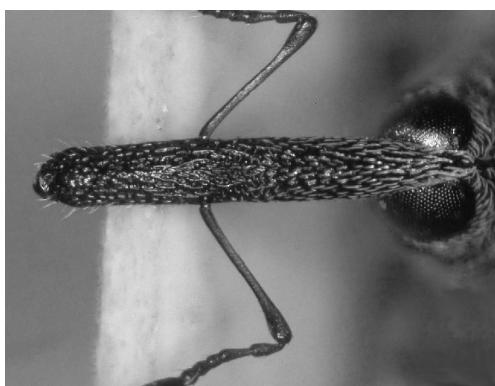
**Fig. 8.** *Cionus caucasicus*, spermatheca.



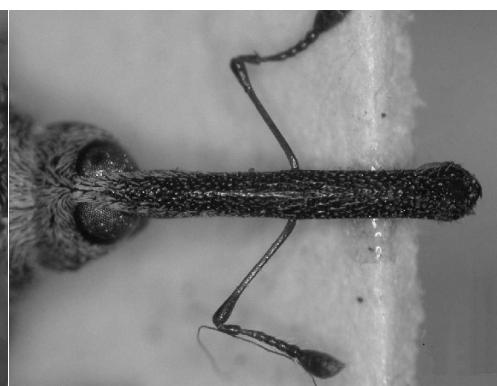
**Fig. 9.** *Cionus wanati*, female.



**Fig. 10.** *Cionus donckieri*, female.



**Fig. 11.** *Cionus wanati*, female, rostrum,  
dorsal view.



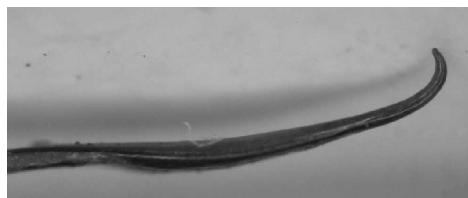
**Fig. 12.** *Cionus donckieri*, female, rostrum,  
dorsal view



**Fig. 13.** *Cionus wanati*, aedeagus, dorsal view.



**Fig. 14.** *Cionus donckieri*, aedeagus, dorsal view.



**Fig. 15.** *Cionus wanati*, aedeagus, lateral view.



**Fig. 16.** *Cionus donckieri*, aedeagus, lateral view.

#### Faunistic data on *C. caucasicus* and *C. donckieri*

##### *C. caucasicus*

Turkey: Bolu env., Halada lgt., coll. RB; Abant Lake env., SW Bolu, leg., coll. PB; Ilgaz Gec. S [of] Kastamonu, leg., coll. PB; Tosya Ilgaz Gec., SE [of] Kastamonu, leg., coll. PB; Tamdere, vil. Giresun, leg., coll. AP; Ikizdere, S [of] Rize, leg., coll. PB; Yalnizcam, vil. Ardahan, leg., coll. AP; Hamsikoy, vil. Trabzon, leg., coll. EC; Gumushane, 40.22.62N, 39.46.99E, leg., coll. EC; 5km S of Tortum, vil. Erzurum, leg., coll. EC; Georgia: Abkhasia, leg. Fencl [? illegible], coll. RB; Bakunieni, 2000m, leg. Vasarhelyi, coll. AP; Armenia: Mt. Arailer, leg. V et M Savitski, coll. EC; N Sevan Lake, Shogar env., leg., coll. RB; Russia: W Caucasus, 20km S Krasnaja Poljana, S Aibga Mt., leg.?, coll. PB;

Typical mountainous species, collected most frequently at elevations about 2000m asl (1000–2500m asl). Only exceptionally observed on *Verbascum*, normally occurs in very moist or semiaquatic habitats along streams, sometimes together with *C. ponticus* sp. n. Known to occur in the mountains along southern and eastern shores of the Black Sea, and in Armenia.

*C. donckieri*

Turkey: Bergama, vil. Izmir, leg. Rozner, coll. AP; Tokat, N Turkey (locus typicus), coll. Pic (MNHP); Cakmak, vil. Nigde, leg., coll. AP; Refahiye, prov. Erzincan, leg. Rozner, coll. AP; Barla env., NE Isparta, leg., coll. PB; Kayser, SE [of] Kastamonu, leg., coll. PB; Krater Meke, vil. Konya, leg. Prodek, coll. FT; Aydinlar, N Erdemli, vil. Icel, leg., coll. PB;

Prefers relatively low elevations, up to 1200m asl. I collected this species always on unidentified species of *Verbascum*, together with *Cionus schultzei* Rtt. and/or *C. pulvrosus* Gyll. and/or *C. olivieri* Rosnh. Distributed probably throughout Asia Minor as known localities indicate.

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