

**Three new *Chiloneus* species from Libya and Spain
(Coleoptera: Curculionidae: Entiminae: Sciaphilini)**

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Abstract. Three new species of *Chiloneus* are described, illustrated and compared with closely related species: *C. cyrenaicus* sp. nov. from Libya, *C. belloii* sp. nov. and *C. omiasformis* sp. nov. from Spain. *D. cinerascens* (Rosenhauer, 1856), *D. franzi* González, 1970 and *D. mediterranea* González, 1970 are transferred to the genus *Chiloneus*, new combinations, as a valid species. *Chiloneus cinerascens* (Rosenhauer, 1856) is recorded from Morocco for the first time, as well as *C. ruficornis* (Allard, 1869) from Egypt and *C. vaulogeri* (Pic, 1896) from Libya; moreover *Chiloneus* is recorded for the first time from Egypt and for the second time from Libya.

INTRODUCTION

The present paper follows the examination of the material collected by the second author in still very poorly explored Libya (Borovec et Weill 2013). We have for this study extensive material of 65 specimens of *Chiloneus* belonging to two species, one of them has been already known from Tunisia, the second is described here as new to science. *Chiloneus* is a genus stated from Libya only once without precise identification of species. The mentioned specimen was collected in 1972, within the framework of the entomological survey of G. Fiori and E. Mellini in Tripolitania (Magnano 1974).

MATERIAL AND METHODS

The total length of examined specimens was measured in profile from the anterior border of the eyes to the apex of the elytra, excluding the rostrum. Ratios between width and length of rostrum, pronotum, elytra and antennal and tarsal segments are of maximum width and length of the respective parts in dorsal view. Dissected female genitalia were embedded in Solakryl BMX (Medika, Prague); male genitalia were mounted dry. Genitalia are mounted on the same card as the respective specimen. The terminology of rostrum and genitalia follows Oberprieler et al. (2014).

The material is deposited in the following collections (identified by the acronyms):

BMNH Natural History Museum, London, United Kingdom;

GOVI collection of Giuseppe Osella, Verona, Italy;

HWBG collection of Herbert Winkelmann, Berlin, Germany;

JKHC collection of Jiří Krátký, Hradec Králové, Czech Republic;

JRPF collection of Jean-Claude Ringenbach, Pardies Piétat, France;
NHMW Naturhistorisches Museum Wien, Austria;
PKSC collection of Petr Kresl, Spùle, Czech Republic;
PWPF collection of Patrick Weill, Pau, France;
RBSC collection of Roman Borovec, Sloupno, Czech Republic;
SMTD Senckenberg Museum für Tierkunde, Dresden, Germany.

TAXONOMIC PART

As mentioned by Alonso-Zarazaga (1984), distinguishing *Desbrochersella* Reitter, 1906 and *Chiloneus* Schoenherr, 1842 is very difficult. Following tribal definitions, distinguishing both genera is possible on the basis of the shape of antennal scrobes, which are in lateral view in *Desbrochersella* short, triangular, weakly or strikingly open posteriad with ventral border not curved downward, directed towards eye but not reaching it, while in *Chiloneus* they are long and slender, with at least ventral border curved before eye downward, in several species clearly furrow-shaped. This splitting of both genera is in some species less distinct when considering the fact that in some *Chiloneus* species scrobes are short and not distinctly furrow-shaped. This distinguishing is less obvious than in similarly confused genera *Foucartia* Jacquelin du Val, 1854 and *Argoptochus* Weise, 1883. Alonso-Zarazaga (1984), studied type species of both genera - *Desbrochersella baetica* (Schaufuss, 1862) and *Chiloneus meridionalis* (Boheman, 1840), and proposed another character to distinguish them one from another. *D. baetica* has its frons separated from the epifrons by a distinct raised crescent-shaped line and the epistome separated from the frons in the same way. The apical portion of rostrum thus includes two raised, crescent-shaped lines. On the contrary, *Chiloneus meridionalis* has the same separation between the frons and epifrons, but missing inner crescent-shaped line between the frons and epistome. Using this well visible character, Alonso-Zarazaga correctly transferred eight species of *Desbrochersella* to *Chiloneus*. This status of both genera was also used in the Catalogue of Palaearctic Coleoptera (Borovec 2013). After the examination of extensive *Chiloneus* material, we can see that in *Desbrochersella*, the two crescent-shaped lines in the fronto-epistomal area are constant, whereas in *Chiloneus* inner crescent-shaped lines can vary in some species. For example *C. solaris* Pesarini, 1970 and *C. brevithorax* Desbrochers des Loges, 1875 have flat frons, clearly without inner crescent-shaped line, *C. pennatus* (Faust, 1885) and *C. chevrolati* Tournier, 1874 have inner crescent-shaped line weakly insinuated, less distinct and in *C. lonai* Pesarini, 1970 and *C. infuscatus* (Chevrolat, 1861) frons exhibits well developed inner crescent-shaped line separating the epistome from the frons, although both species have clearly furrow-shaped scrobes in lateral view. Thus, in several species it is impossible to combine both characters, antennal scrobes and structure of the fronto-epistomal area, due to the variability of the posterior carina in the epistome of *Chiloneus* species. For example *D. franzi* González, 1970, has scrobes distinctly furrow-shaped (*Chiloneus*-formed), but two crescent-shaped lines (*Desbrochersella*-formed). Following strictly the shape of antennal scrobes without other character consideration, which allows to separate Omiini Shuckard, 1840 with *Desbrochersella* from Sciaphilini Sharp, 1891 with *Chiloneus*, we propose to

transfer *D. cinerascens* (Rosenhauer, 1856), *D. franzi* and *D. mediterranea* González, 1970 to *Chiloneus*, as *Chiloneus cinerascens* (Rosenhauer, 1856) comb. nov., *Chiloneus franzi* (González, 1970) comb. nov. and *Chiloneus mediterraneus* (González, 1970) comb. nov. On the contrary, some small species of *Chiloneus* described from northwestern Africa by former French authors, must be transferred from *Chiloneus* to *Desbrochersella*, which is the topic of a coming soon paper based on the examination of *Chiloneus* type material deposited in the Muséum National d' Histoire Naturelle, Paris.

***Chiloneus cyrenaicus* sp. nov.**

(Figs. 1A, 4-9)

Type material. Holotype (♂): 'LIBYE, RAS EL HILAL, 27-III-2005, P. Weill [lgt.]' (PWPF). Paratypes: (1 ♀): the same data as holotype (PWPF); (1 ♂): 'LIBYA - CYRENAICA, AL QUBBA-RAS EL HILAL ROAD, 21-IV-2003, J. C. RINGENBACH [lgt.]' (JRPF).

Description. Body length: holotype 4.02 mm, paratypes 4.25-4.31 mm.

Body dark brownish, epistome and frons paler, light brownish, antennae yellowish red, femora dark brownish, tibiae and tarsi rusty reddish brown. Elytra moderately densely covered by short-oval, whitish grey appressed scales with weak pearly sheen and somewhat smaller, narrower light brownish oval appressed scales, drop-shaped, with weak cupreous sheen. Scales almost covering integument, 5-6 across width of one interval, in spots irregularly scattered, whitish grey scales creating irregular longitudinal stripes in intervals 6 and 7. Pronotum and head with rostrum sparsely covered by the same two kinds of appressed scales with scattered short, piliform whitish grey setae, pronotum with paler scales creating two irregular wide longitudinal lateral stripes and one slender median longitudinal stripe. Elytra with one regular inconspicuous row of semiappressed to semierect setae, slender, about parallel-sided, as wide as light brownish appressed scale, at basal half semiappressed and very short and hardly visible only in lateral view, at apical half semierect, about as long as 1/3 width of one interval in males and slightly shorter than half width of one interval, distance of two setae 2-3 times bigger than length of one seta. Antennae and legs with short appressed whitish setae.

Rostrum (Figs. 4, 5) very wide and short, 1.72-1.79 times as wide as long, at base 1.15-1.21 times as wide as at apex, at basal third tapered anteriorly with straight sides, then deeply and abruptly constricted by antennal scrobes, at apical half subtrapezoidal, weakly enlarged anteriorly. Epifrons wide, at middle 0.7-0.8 times as wide as rostrum at the same place, with weakly developed borders, at base as wide as space between eyes, distinctly tapered anteriorly with concave sides, flat, slightly transversally shallowly depressed. Frons large, occupying anterior half of rostrum, subtrapezoidal, posteriorly distinctly carinate, with straight posterior border, flat, glabrous, unpunctured, with only delicately indicated small arch of epistome in the middle. Antennal scrobes in dorsal view L-shaped, creating deep lateral constriction of rostrum; in lateral view narrow, furrow-shaped with well edged dorsal and ventral borders, shortly directed against the eyes and then curved down, almost reaching ventral border of rostrum. Interocular space with small, ill-defined fovea, regularly vaulted. Head and rostrum shiny, finely and regularly punctured, distance of punctures slightly shorter than diameter of

one puncture. Eyes vaulted, moderately protruding from outline of head. Head and rostrum in lateral view weakly vaulted, frons declined, toothlike elevated at posterior border.

Antennae very slender, scapes 1.1-1.2 times as long as funicles, regularly curved, at apical quarter somewhat gradually enlarged, at apex distinctly narrower than clubs. Funicle segments 1 and 2 long and slender, conical; segment 1 2.0-2.1 times as long as wide, 1.2-1.3 times as long as segment 2, which is 2.0-2.1 times as long as wide; segments 3 and 4 1.1-1.2 times as long as wide; segment 5 isodiametric; segment 6 1.1 times as wide as long; segment 7 1.2 times as wide as long; clubs slender, spindle-shaped, 2.4-2.5 times as long as wide.

Pronotum (Fig. 1A) 1.25-1.29 times as wide as long, widest at midlength, with regularly rounded sides, equally tapered anteriorly and posteriorly, with anterior and posterior border equally wide, behind anterior border weakly constricted. Disc shiny, double punctured, with rough punctures with diameter slightly longer than distance between two punctures and very small and fine, almost indistinct punctures in intervals between them. Pronotum in lateral view weakly vaulted.

Scutellum small, triangular, densely squamose than base of elytra.

Elytra (Fig. 1A) long-oval, in males 1.39-1.42 times as long as wide, in female 1.44 times as long as wide, widest at midlength, with regularly curved sides, apically tapered, at base slightly wider than pronotal base. Striae distinctly punctured, in males deeper with punctures coarser than in females with punctures smaller, less deepened; intervals shiny, in males slightly vaulted, in females almost flat. Elytra in lateral view distinctly regularly vaulted.

All femora unarmed. Tibiae slender; apex of protibiae with straight lateral edge, at apex distinctly enlarged inside, mucronate, with fringe of very short and fine yellowish setae. Tarsi slender; segment 2 1.1-1.2 times as wide as long; segment 3 1.4-1.5 times as wide as long and 1.4-1.5 times as wide as segment 2; onychium 1.1 times as long as segment 3; claws solidly fused at basal half.

Penis (Fig. 6) in ventral view widest at base, regularly tapered apically with slightly concave sides, apical part subtriangular, distinctly tapered with visibly concave sides, tip narrowly rounded; in lateral view weakly and regularly curved, dorsal side more curved than ventral, apex lengthened, slightly curved outside, extremely slender.

Female genitalia. Spermatheca (Fig. 7) with slender and curved cornu; corpus large, rounded, nodulus indistinct, ramus isodiametric. Gonocoxites (Fig. 8) flat, wide and short, regularly tapered apically with short and robust styli with tuft of styli at apex. Sternite VIII (Fig. 9) with long apodeme, widest at midlength and with small, umbrella-shaped plate with ill-defined basal margin, with dense fringe of short and long setae.

Biology. The three specimens were collected by beating low branches of bushes (Fig. 22). One specimen was collected on *Quercus coccifera* Linnaeus, 1753.

Etymology. The new species name is derived from the name of the Libyan province where all the specimens were collected.

Distribution. Species known only from Libya. The three specimens of the new species were collected in two distinct places of the oriental province of Cyrenaica. An intensive prospection of the other part of Libya (Tripolitania and Fezzan) did not allow us to collect other specimens of this species. The endemic occurrence in Cyrenaica is demonstrated, again.

Differential diagnosis. By its bigger size and long and slender, densely squamose elytra *C. cyrenaicus* sp. nov. is similar to the group of *C. brevithorax* species known from Cyprus (Fig. 1B), *C. hoffmanni* (González, 1970) known from Malta, *C. infuscatus* (Chevrolat, 1861) known from Algeria, *C. jonicus* Kraatz, 1859 known from Greece, *C. meridionalis* (Boheman, 1840) known from Sicily and *C. solarii* Pesarini, 1970 known from Linosa and Malta. By short semiappressed setae at basal half of elytra hardly visible in lateral view and dorsally distinctly constricted rostrum *C. cyrenaicus* sp. nov. is easily distinguishable from *C. infuscatus* and *C. meridionalis* with elytra at basal half with conspicuous, long, semierect setae and rostrum not constricted, from the both also by shorter funicle segments and a different shape of the penis. *C. cyrenaicus* sp. nov. is possible to distinguish from *C. hoffmanni* and *C. solarii* by shorter and wider rostrum, distinctly constricted (*C. hoffmanni* and *C. solarii* have rostrum longer and slenderer, at most 1.54 times as wide as long and weakly constricted), frons subtrapezoidal with posterior border straight (*C. hoffmanni* and *C. solarii* have frons U-shaped with posterior border arched) and by a different penis (*C. hoffmanni* has penis with short apex and *C. solarii* has penis shorter and wider in ventral as well as lateral view with longer apical part). By the same characters on rostrum *C. cyrenaicus* sp. nov. can also be distinguished from *C. jonicus*, moreover it could also be distinguished by elytral vestiture from only oval appressed scales (*C. jonicus* has oval appressed scales and piliform setae) and by a shorter penis laterally with slenderer apex (*C. jonicus* has longer penis with apex at base wider). *C. cyrenaicus* sp. nov. can also be distinguished from *C. brevithorax* by its shorter and wider rostrum, 1.72-1.79 times as wide as long, distinctly constricted (*C. brevithorax* has rostrum longer and slenderer, 1.47-1.63 times as wide as long, weakly constricted), frons subtrapezoidal with posterior border straight (*C. brevithorax* has frons U-shaped with posterior border arched), antennal scrobes laterally reaching almost ventral border of rostrum (*C. brevithorax* has scrobes reaching ventral level of eyes), elytral vestiture from only oval appressed scales (*C. brevithorax* has oval appressed scales and piliform setae).

***Chiloneus belloii* sp. nov.**

(Figs. 2A, 10-12)

Type material. Holotype (♂): 'E [Spain] - Jaen, Sierra Magina, N 37° 42' 683", W 003° 27' 094", 9-IV-[20]03, m. 1600, vaglio sotto Berberis sp., leg. [C.] Bellò' (GOVI). Paratype: (1 ♂): the same data as holotype (GOVI).

Description. Body length holotype 2.63 mm, paratype 2.75 mm.

Body black, epistome and frons brownish, antennae and legs red brownish, clubs in holotype slightly darker. Elytra and pronotum moderately densely covered by appressed slender and long, deeply to the basis divided, bifid scales, with weak greenish or cupreous sheen, not hidden integument, elytral scales slightly longer than half width of one interval. Head with rostrum having shorter, piliform appressed setae. Each interval with one dense regular row of long and slender, piliform erect setae, brownish, somewhat longer than width of one interval, distance of two setae distinctly shorter than length of one seta. Semierect setae on pronotum half as long as elytral ones, semierect setae on head with rostrum half as long as pronotal ones. Antennae and legs with inconspicuous, short, semierect whitish setae.

Rostrum (Figs. 10, 11) 1.56-1.61 times as wide as long, from base regularly weakly tapered anteriorly, with straight sides, at base 1.14-1.19 times as wide as at apex. Epifrons narrow, at middle 0.6-0.7 times as wide as rostrum at the same place, with borders weakly carinate, weakly concave, anteriorly more enlarged than posteriorly, flat, at base distinctly narrower than space between eyes. Frons large, U-shaped, reaching almost half of rostral length, shiny, glabrous, transversally shallowly deepened, posteriorly carinate. Epistome small, posteriorly indistinctly carinate, glabrous, shiny. Antennal scrobes in dorsal view L-shaped, visible as angleform furrow, not constricted in outline of rostrum; in lateral view furrow-shaped with worse developed dorsal border, angle-shaped, curved down, reaching slightly level of ventral border of eyes. Interocular space with small, indistinct fovea, regularly vaulted. Head and rostrum shiny, finely and regularly punctured, distance between two punctures slightly longer than diameter of one puncture. Eyes moderately small, weakly vaulted, protruding from outline of the head. Head and rostrum in lateral view almost flat, only frons declined.

Antennal scapes slender, 1.1 times as long as funicles, regularly curved, at apical quarter weakly enlarged, at apex weakly narrower than clubs. Funicle segments 1 and 2 long, conical; segment 1 2.2-2.4 times as long as wide and 1.5-1.7 times as long as segment 2, which is 1.6-1.7 times as long as wide; segments 3 and 4 1.4-1.5 times as long as wide;

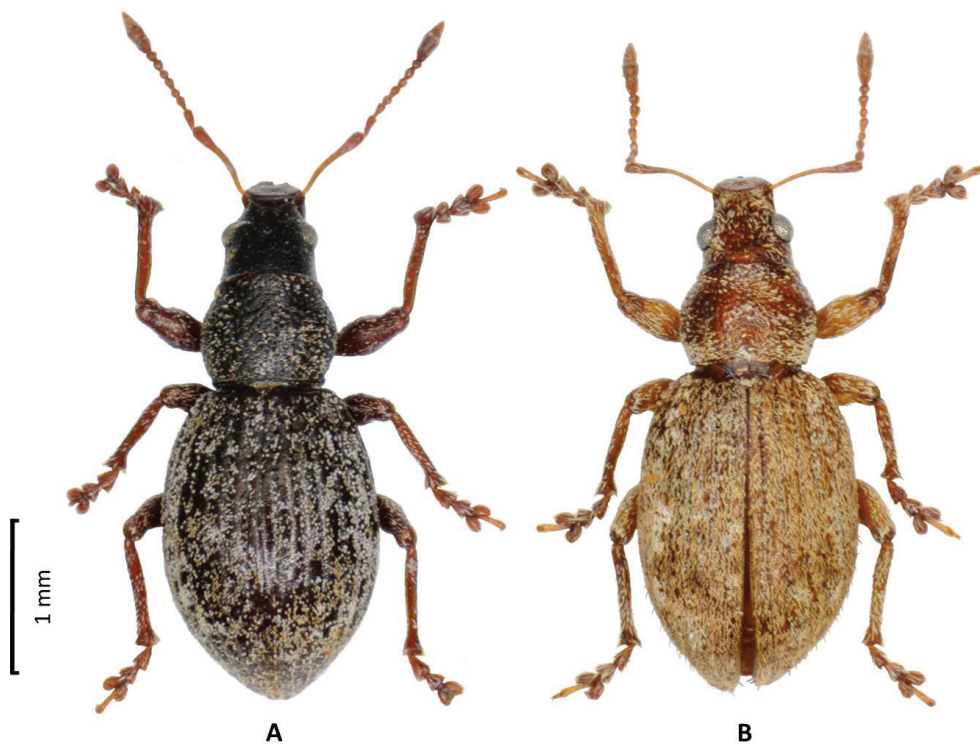


Fig. 1. A- *Chiloneus cyrenaicus* sp. nov.; B- *Chiloneus brevithorax* Desbrochers des Loges.

segments 5 and 6 1.2-1.3 times as long as wide; segment 7 1.1 times as long as wide; clubs spindle-shaped, 2.4-2.6 times as long as wide.

Pronotum (Fig. 2A) 1.36-1.39 times as wide as long, widest at midlength, with strongly rounded sides, anteriorly slightly narrower than posteriorly. Disc shiny, finely and regularly punctured, diameter of one puncture slightly bigger than distance between two punctures. Pronotum in lateral view vaulted.

Scutellum small, triangular, setose.

Elytra (Fig. 2A) oval, 1.29-1.32 times as long as wide, widest at midlength, with regularly rounded sides, shiny. Striae narrow, punctured; intervals flat and wide. Elytra in lateral view regularly vaulted.

All femora unarmed. Tibiae slender; apex of protibiae with straight lateral edge, at apex distinctly enlarged inside, mucronate, with fringe of short and fine yellowish setae. Tarsi slender; segment 2 isodiametric; segment 3 1.2-1.3 times as wide as long; onychium 1.2-1.3 times as long as segment 3; claws connected at short basal part.

Penis (Fig. 12) in ventral view widest at base, apically regularly tapered with weakly concave sides, apex T-shaped with small, sharp, laterally prominent tips. In lateral view slender, regularly tapered and curved.

Female genitalia unknown.

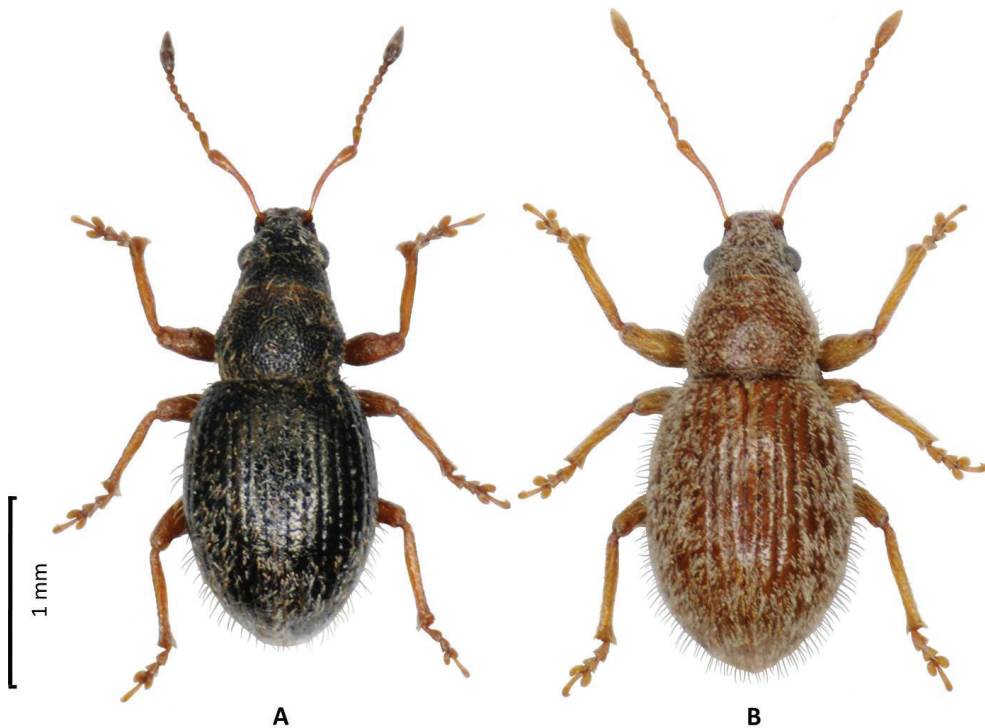


Fig. 2. A- *Chiloneus belloi* sp. nov.; B- *Chiloneus mediterraneus* (González).

Etymology. Species is dedicated to its collector, our friend, very good weevil specialist in Peritelini, Cesare Bellò (Castelfranco Veneto, Italy).

Distribution. Known only from Spain, Jaén (Andalucía).

Differential diagnosis. By elytral appressed scales deeply divided to the base, *C. belloi* sp. nov. is very similar to *C. mediterraneus* (Fig. 2B) and *C. pennatus* (Faust, 1885). Distinguishing characters from the first species are stated below, in the key. From the latter it is easily distinguishable by appressed and raised setae (as it is stated in the key), but also by shorter funicles (*C. pennatus* has funicles with long and slender segments), and penis with distinct laterally prominent tips (*C. pennatus* has its penis rounded at apex, with very small, almost indistinct lateral tips).

***Chiloneus omiasformis* sp. nov.**
(Figs. 3A, 14-19)

Type material. Holotype (♂): 'SPAIN: Jaen. Sierra de Cazorla. Nr. Nava S. Pedro. 12.iv.1963' (BMNH). Paratypes: (2 ♀♀): 'SPAIN: Jaen, Sierra de Cazorla. Nr. Nava del Asno. 28.iv.1963' (BMNH).

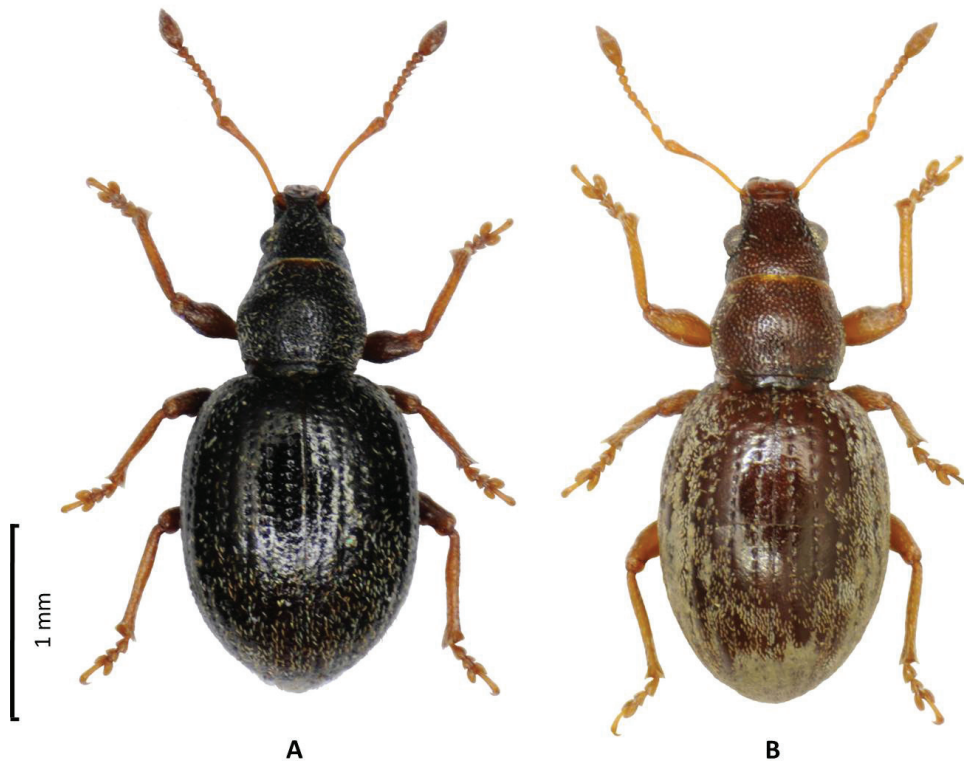


Fig. 3. A- *Chiloneus omiasformis* sp. nov.; B- *Chiloneus chevrolati* Tournier.

Description. Body length holotype 2.59 mm, paratypes 2.81-3.03 mm.

Body black; legs and antennae rusty red brownish, only femora somewhat darker. Elytra with very sparse, short, piliform, appressed setae, with weak green greyish and cupreous sheen, about as long as third to quarter of width of one interval and 2. on the disc semiappressed, on the posterior declivity semierect, inconspicuous, short, piliform, greyish setae, creating one row on each interval, hardly visible in lateral view, about as long as a third of width of one interval. Pronotum, head and rostrum with identical sparse appressed setae as elytra and with very short, semiappressed setae, hardly visible laterally.

Rostrum (Figs. 14, 15) 1.33-1.40 times as wide as long, at basal two thirds distinctly tapered anteriorly with weakly concave sides, at apical third rounded around antennal insertions, at base 1.11-1.14 times as wide as at apex. Epifrons very narrow, at midlength 0.48-0.54 as wide as rostrum at the same place, with weakly concave sides, well edged, more enlarged anteriorly than posteriorly, shallowly longitudinally deepened, at base distinctly narrower than distance between eyes. Frons large, U-shaped, reaching almost half rostral length, shiny, glabrous, transversally deepened, posteriorly carinate, carina less distinct at middle part. Epistome small, posteriorly slightly carinate, glabrous, shiny. Antennal scrobes in dorsal view shortly L-shaped, visible as short angleform furrow, not constricted outline of rostrum; in lateral view with dorsal border parallel with dorsal border of rostrum and ventral border curved down, creating short shallow furrow, hardly reaching level of ventral border of eyes. Head with small fovea in the middle, regularly vaulted. Eyes small, distinctly vaulted, prominent from outline of head. Head and rostrum shiny, finely and densely punctured, diameter of one puncture slightly shorter than distance between two punctures. Head and rostrum in lateral view almost flat, only frons declined.

Antennal scapes slender, 1.2 times as long as funicles, regularly curved, in males at apical quarter, in females at apical fifth weakly gradually enlarged apically, at apex distinctly narrower than clubs. Funicle segments 1 and 2 long and slender, conical; segment 1 1.9-2.0 times as long as wide, 1.4 times as long as segment 2, which is 1.6-1.7 times as long as wide; segments 3 and 4 1.1 times as long as wide; segment 5 isodiametric; segment 6 1.1 times as wide as long; segment 7 1.2 times as wide as long; clubs spindle-shaped, 1.9-2.2 times as long as wide.

Pronotum (Fig. 3A) slender, 1.12-1.22 times as wide as long, widest at midlength, with distinctly rounded sides, anteriorly only slightly more tapered than posteriorly. Disc shiny, finely and regularly punctured, diameter of one puncture about equal to distance between two punctures. One female with slender median longitudinal, ill-defined unpunctured stripe. Pronotum in lateral view distinctly regularly vaulted.

Scutellum small, triangular, glabrous.

Elytra (Fig. 3A) oval, 1.32-1.41 times as long as wide, with regularly rounded sides, shiny; striae finely punctured; intervals wide, flat. Elytra in lateral view moderately vaulted.

All femora unarmed. Tibiae long and slender, lateral edge of protibiae straight, short apical portion enlarged inward, mucronate, with fringe of very short and fine setae. Tarsi slender, segment 2 1.2-1.3 times as wide as long; segment 3 1.3 times as wide as long and 1.3-1.4 times as wide as segment 2; onychium 1.1-1.2 times as long as segment 3; claws solidly fused at basal half.

Penis (Fig. 16) in ventral view widest at base, anteriorly regularly tapered with almost straight sides, apex subtriangular with slightly concave sides. In lateral view regularly curved, widest at apical third, apex slender, lengthened, weakly curved.

Spermatheca (Fig. 17) with long, slender and regularly curved cornu; nodulus absent, ramus short, turned down.

Etymology. The slender epifrons resembling dorsally rostrum of *Omius* species suggested the Latin name of this new species.

Distribution. Known only from Spain, Jaén (Andalucía).

Differential diagnosis. By having elytra with inconspicuous vestiture without conspicuous erect setae it is similar to *C. chevrolati* Tournier, 1874 (Fig. 3B), *C. cinerascens*, *C. rufithorax* and *C. sitonoides* (Reitter, 1915). Distinguishing characters allowing for its separation from the first two Iberian species are stated in the key below. *C. omiasformis* sp. nov. can be distinguished from *C. rufithorax* by more slender elytra, identical in both sexes (*C. rufithorax* has elytra in males short-oval, in females globular), slender epifrons, at base distinctly narrower than space between eyes (*C. rufithorax* has epifrons wide, at base almost as wide as space between eyes), piliform appressed elytral setae (*C. rufithorax* has elytral setae short-oval), longer and more slender tarsi, with onychium equally long as tarsal segment 3 (*C. rufithorax* has tarsi shorter and more robust, with onychium shorter than segment 3) and penis ventrally more tapered at apical part than along the length, irregularly curved in lateral view (*C. rufithorax* has its penis ventrally regularly tapered from base to apex, regularly curved in lateral view). *C. omiasformis* sp. nov. can be distinguished from *C. sitonoides* by its slender rostrum, 1.33-1.40 times as wide as long (*C. sitonoides* has rostrum 1.67 times as wide as long), with concave sides with weakly laterally expanded apical part (*C. sitonoides* has rostrum evenly tapered anteriorly with almost straight sides), by very slender epifrons, at midlength 0.48-0.54 as wide as rostrum at the same place (*C. sitonoides* has wide epifrons, at midlength 0.73 times as wide as rostrum at the same place), at base distinctly narrower than space between eyes (*C. sitonoides* has epifrons wide, at base almost as wide as space between eyes) and by slenderer pronotum, 1.12-1.22 times as wide as long (*C. sitonoides* has pronotum 1.40 times as wide as long).

By rostrum apically rounded around antennal scrobes, slender epifrons and shiny oval elytra *C. omiasformis* sp. nov. is suggestive of *Omius* species, for example females of *O.*

Figs. 4-21. *Chiloneus cyrenaicus* sp. nov.: 4- head with rostrum in dorsal view. Scale = 0.50 mm; 5- head with rostrum in lateral view. Scale = 0.50 mm; 6- penis in ventral and lateral view. Scale = 0.50 mm; 7- spermatheca. Scale = 0.25 mm; 8- gonocoxites. Scale = 0.25 mm; 9- sternite VIII in females. Scale = 0.50 mm. *Chiloneus belloii* sp. nov.: 10- head with rostrum in dorsal view. Scale = 0.50 mm; 11- head with rostrum in lateral view. Scale = 0.50 mm; 12- penis in ventral and lateral view. Scale = 0.50 mm. *Chiloneus mediterraneus* (González): 13- penis in ventral and lateral view. Scale = 0.50 mm. *Chiloneus omiasformis* sp. nov.: 14- head with rostrum in dorsal view. Scale = 0.50 mm; 15- head with rostrum in lateral view. Scale = 0.50 mm; 16- penis in ventral and lateral view. Scale = 0.25 mm; 17- spermatheca. Scale = 0.25 mm; 18- gonocoxites. Scale = 0.25 mm; 19- sternite VIII in females. Scale = 0.50 mm. *Desbrochersella baetica* (Schaufuss): 20- head with rostrum in dorsal view. Scale = 0.50 mm; 21- head with rostrum in lateral view. Scale = 0.50 mm.

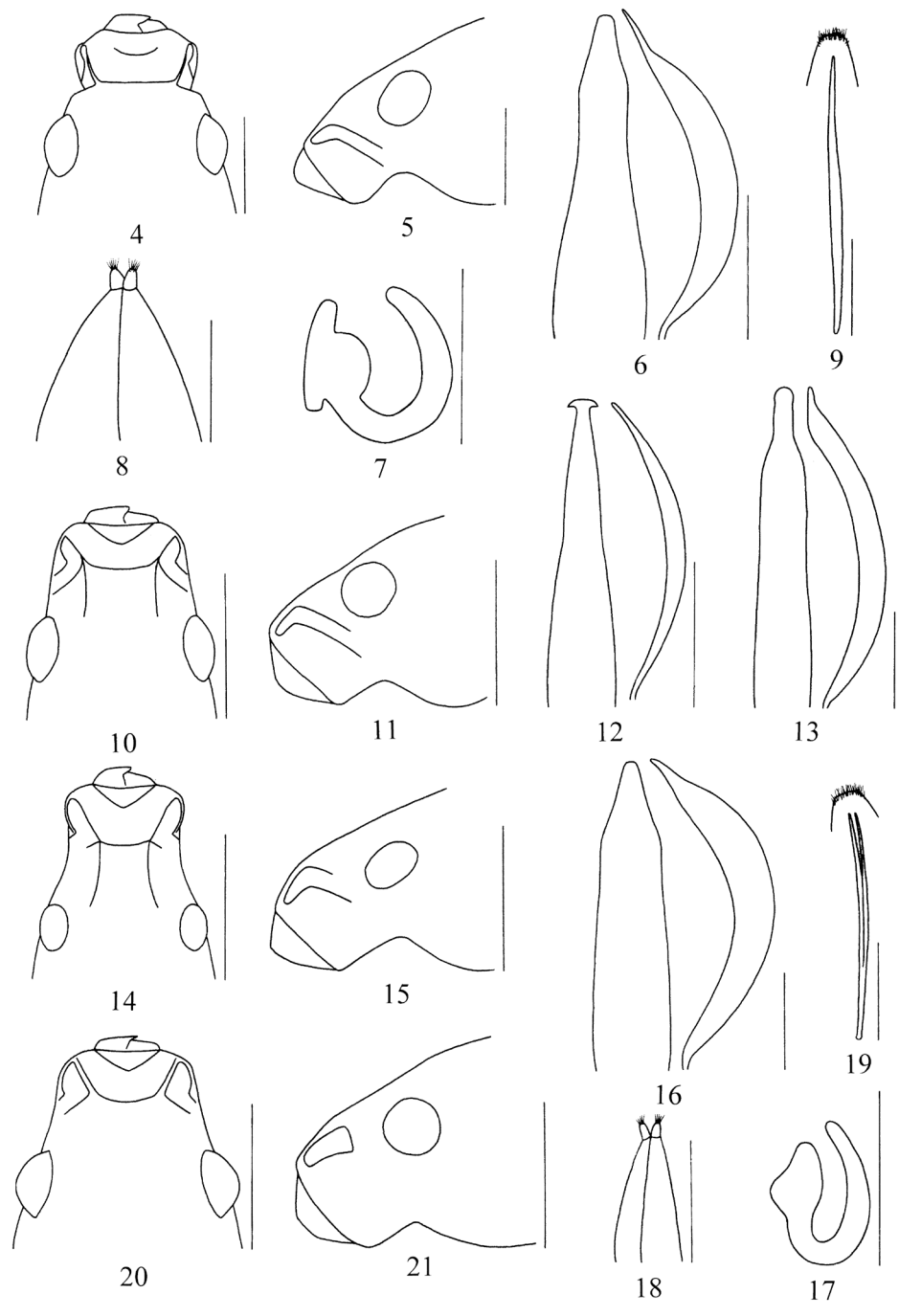




Fig. 22. Ras El Hilal view, type locality of *Chiloneus cyrenaicus* sp. nov.

chelmosensis (Meschnigg, 1939) or *O. oertzeni* (Stierlin, 1887). But it is distinguishable from all *Omius* species by presence of posteriorly carinate frons (*Omius* has frons indefinite, at most weakly declined, but not carinate posteriorly), antennal scrobes dorsally L-furrow-shaped and laterally furrow-shaped, curved down (*Omius* has scrobes dorsally reniform, laterally triangular, not curved down), but also by female genitalia with gonocoxites with styli and sternite VIII with plate narrowly umbrella-shaped with ill-defined posterior margin and apodeme terminated inside of it, while *Omius* has gonocoxites without styli and sternite VIII with plate oval, with apodeme creating posterior margin.

KEY TO *CHILONEUS* OF IBERIAN PENINSULA

1. Appressed scales on elytra deeply divided into two or three piliform lobes apically 2
 - Appressed setae on elytra piliform, lanceolate or short oval, not divided 4
2. Adherent scales on elytra trifid. Elytral setae semiappressed, short. Size 3.3-3.6 mm *C. pennatus* (Faust, 1885)
 - Adherent scales on elytra bifid. Elytral setae perpendicularly erect, long 3
3. Funicles longer; segment 2 2.0-2.1 times as long as wide; segment 3 and 4 1.7-1.8 times as long as wide. Penis with apex slender, rounded, in lateral view wider with apex dorsally curved (Fig. 13). Fig. 2B. Size 2.9-3.4 mm. *C. mediterraneus* (González, 1970)
 - Funicles shorter; segment 2 1.6-1.7 times as long as wide; segment 3 and 4 1.4-1.5 times as long as wide. Penis with apex T-shaped, with laterally prominent tips, in lateral view slender, regularly curved (Fig. 12). Fig. 2A. Size 2.6-2.8 mm. *C. belloii* sp. nov.

4. Elytra with scale-shaped, subspatulate erect setae. Pronotum coarsely punctate. Size 3.5-4.1 mm.
 *C. franzi* (González, 1970)
- Elytra with slender, piliform erect setae. Pronotum finely punctate. 5
5. Epifrons narrow, at base distinctly narrower than space between eyes, at midlength half as wide as width of rostrum at the same place (Fig. 14). Fig. 3A. Smaller, 2.6-3.0 mm..... *C. omiasformis* sp. nov.
- Epifrons wide, at base about as wide as space between eyes, at midlength as wide as three quarters of width of rostrum at the same place. Bigger, 3.1-4.3 mm. 6
6. Elytra with semierect long setae, well visible in lateral view also at disc, about as long as half width of one interval. Appressed elytral setae piliform. Size 3.5-4.3 mm..... *C. cinerascens* (Rosenhauer, 1856)
- Elytra with very short semiappressed setae, hardly visible in lateral view only at short apical part. Appressed elytral scales long-oval. Fig. 3B. Size 3.1-3.7 mm..... *C. chevrolati* Tournier, 1874

ADDITIONAL MATERIAL EXAMINED

Chiloneus cinerascens (Rosenhauer, 1856)

Material examined: 1 ♀, Morocco or. bor., Beni Snassen mts., Gorges du Zegzel, 13.xii.1997, T. Lackner lgt. (RBSC); 10 ♀♀, Morocco, Moyen Atlas, Aguelmane Azigza, 1500 m, 19.ii.1999, D. Wrase lgt. (HWBG); 5 ♀♀, Spain, Sierra Ronda, Mte Arastepa, leg. H. Franz (NHMW).

Remarks. Spanish material creates two different phenotypes in several characters and this means that either the species is remarkably variable, or the five females from Sierra Ronda belong to a different species. To solve the problem, the examination of a male is very important. The species has still been known only from southern Spain; it is new to Morocco.

Chiloneus mediterraneus (González, 1970)

Material examined: 1 ♂, Spain bor., Aragonia, Zaragoza, E of Sastago, 240 m, 20.iv.2010, P. Kresl lgt. (PKSC); 2 ♂♂, Spain, Castellón, Peniscola, S.ra de Irta, 4.xi.2000, H. Pierotii lgt. (GOVI); 1 ♂ 1 ♀, Spain, Castellón, M. Xert, H. Pierotii lgt. (GOVI); 1 ♀, Spain, Valencia, Alcira, La Murta, 30.x.2000, H. Pierotii lgt. (GOVI); 1 ♂, Spain, Tarragona, Pla des Motilats, 28.x.2000, C. Bellò (GOVI); 6 spec., Spain, Valencia (SMTD).

Chiloneus franzi (González, 1970)

Material examined: 1 ♂, Spain, Alicante, Sierra de Aitana, 1300-1500 m, 23.vi.1997, R. Borovec lgt. (RBSC); 1 ♂, Spain, Valencia, Alcira, La Murta, 30.x.2000, H. Pierotti lgt., (GOVI).

Chiloneus ruficornis (Allard, 1869)

Material examined: 2 ♂♂, Egypte, Hauser lgt., (NHMW).

Remarks. The species has still been known only from Algeria; it is new to Egypt; the genus *Chiloneus* is recorded for the first time from Egypt here.

Chiloneus vaulogeri (Pic, 1896)

Material examined: 4 ♀♀, Tunisia c., Djebel Biada, 45 km E of Gafsa, 900 m, 26.iv.1998, R. Borovec lgt. (RBSC); 1 ♀, the same locality, J. Krátký lgt. (JKHC); 4 spec., Libya, West Khums, 17.x.2008, P. Weill lgt. (PWPF); 47 spec., Libya, Ouest Khums, 30.x.2009, P. Weill lgt. (PWPF); 1 spec., Libya, Ouest Khums, 16.x.2009, P. Weill lgt. (PWPF); 4 spec., Libya, Qaser Khiar, 17.i.2009, P. Weill lgt. (PWPF); 2 spec., Libya, Nd. Tarunah, 06.ii.2009, P. Weill lgt. (PWPF); 4 spec., Libya, Jadu, 18.iv.2009, P. Weill lgt. (PWPF).

Remarks. The species has still been known only from Tunisia; it is new to Libya.

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