



RESEARCH ARTICLE

***Rhinusa* Stephens: a taxonomic revision of the species belonging to the *R. tetra* and *R. bipustulata* groups (Coleoptera Curculionidae)**

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**Abstract:** The species of *Rhinusa* Stephens, 1829 (Curculionidae, Curculioninae, Mecinini) belonging to the *R. tetra* and *R. bipustulata* groups are revised. Four of them from Middle East are new to science. The *R. bipustulata* group includes five species: *R. bipustulata* (Rossi, 1792); *R. pelletieri* **sp. nov.**; *R. scrophulariae* Caldara, 2009; *R. algerica* (Brisout de Barneville, 1862); *R. emmrichi* (Bajtenov, 1979), whereas the *R. tetra* group includes nine species: *R. tetra* (Fabricius, 1792); *R. verbasci* (Rosenschoeld, 1838); *R. ensifer* **sp. nov.**; *R. moroderi* (Reitter, 1906); *R. weilli* **sp. nov.**; *R. comosa* (Rosenschoeld, 1838); *R. acifer* **sp. nov.**; *R. asellus* (Gravenhorst, 1807); *R. tenuirostris* (Stierlin, 1888). The following new synonym is proposed: *Rhinusa bipustulata* (Rossi, 1792) (= *Gymnetron municipale* Voss, 1960 **syn. nov.**). The neotype of *Rhynchaenus asellus* Gravenhorst, 1807 was designated. Moreover, the following lectotypes are designated: *Cionus spilotus* Germar, 1821; *Gymnetron bipustulatum* var. *germari* Faust, 1889; *Gymnetron bodenheimeri* Wagner, 1926; *Gymnetron cylindrirostre* Gyllenhal, 1838; *Gymnetron nasutum* Rosenschoeld, 1838; *Gymnetron plagiatum* Gyllenhal, 1838; *Gymnetron polonicum* Rosenschoeld, 1838; *Gymnetron tenuirostre* Stierlin, 1888. A key to the species, diagnoses of species groups, descriptions or redescriptions, notes on type specimens, synonymies, comparative notes, distribution, bionomics when available, photographs of habitus and drawings of rostra, terminalia and other useful characters for taxonomy are provided.

**Key words:** Curculionidae, Mecinini, *Rhinusa*, taxonomic revision, new species, new synonymy.

## Introduction

Based on a cladistic analysis the species included in the Palaearctic genus *Rhinusa* Stephens, 1829 (Coleoptera: Curculionidae: Curculioninae: Mecinini) were recently divided into eight well supported species groups and two monobasic groups belonging to three separate and more inclusive assemblages (Caldara *et al.* 2010). The first assemblage includes two groups (*R. bipustulata* and *R. tetra* groups), whereas the second and third assemblages include two (*R. antirrhini* and *R. linariae* groups) and six groups (*R. pilosa*, *R. herbarum*, *R. neta*, *R. vestita*, *R. mauritii* and *R. melas* groups), respectively. The first assemblage includes all species living on species of Scrophulariaceae, with the two groups occurring on two closely related plant genera, *Scrophularia* (*R. bipustulata* group) and *Verbascum* (*R. tetra* group), whereas the other two assemblages include species living exclusively on species of the family Plantaginaceae, tribe Antirrhineae.

In the groups of *R. bipustulata* and *R. tetra* there are several of the most common species in the genus, which are often collected in large series, with a broad distribution in the Palaearctic Region. Therefore, dealing with this genus in the last ten years, I had the opportunity to examine thousands of specimens and many types of the described species. A paper primarily dealing with nomenclature and synonymies of some species of the *R. tetra* group was recently published (Caldara *et al.* 2012). Other synonymies were reported by Caldara (2013).

The aim of the present paper is to perform a complete taxonomic revision of all the species belonging to these two groups.

## Material and methods

About 3,000 specimens of *Rhinusa* were examined for this study, including specimens of the type series of most taxa. Neotypes and lectotypes were designated as appropriate, according to Art. 74 and 75 of the International Code of Zoological Nomenclature (ICZN 1999), and all other specimens of the type series were labelled as paralectotypes. Since for the identification of some species it is necessary to have female specimens, for all new species we decided to designate a female as the holotype. All taxa already described and here treated were recently listed by Caldara (2013).

The rank of subspecific or infraspecific names was established according to Art. 45.5 and 45.6 of ICZN (1999) and unavailable names were noted.

*Abbreviations.* E: elytra; P: pronotum; R: rostrum; l: length; w: width.

*Measurements.* Measurements were made using an ocular micrometer in a Wild M8 stereoscopic microscope. Body length was measured from the anterior margin of the pronotum along the midline to the apex of the elytra. The length of the rostrum (Rl) was measured in lateral view from the apex (excluding mandibles) to the anterior margin of the eye; its relative length was expressed as the ratios length/width and length: length of rostrum/length of pronotum. The length of the pronotum (Pl) was measured along the midline from the apex to the base, whereas its width (Pw) was measured transversely at the widest point. The width of the pronotum was expressed as the ratio: width/length. The length of the elytra (El) was measured along the midline from the transverse line joining the most anterior point of the humeri to the apex, whereas its width (Ew) was measured transversely at the widest point. The proportions of the elytra were also expressed as a ratio: length/width.

*Description.* When available, a male and a female of every taxon was chosen for description from specimens showing the most common pattern of the species in the range of its variability. Regarding the new species the holotype was described in detail. The structure

of the descriptions were made based on a model devised at the end of the study in order to make the terminology used for the characters under consideration as uniform as possible, removing those characters that were invariable within the genus. For character states that were impossible to transform into a mathematical ratio, and which were therefore subjective (e.g. curvature of rostrum and elytra, convexity of pronotum, etc.), only a few particular adjectives and adverbs — i.e. weak(ly), moderate(ly), distinct(ly) — were used, considering the extreme of variability for each character in the genus as a whole.

For characters represented by a ratio the following adjective and adverbs were used, according to the range of variability: Rostrum length vs. pronotum length: short,  $RI/PI < 0.60$ ; somewhat short,  $RI/PI 0.60-0.80$ ; moderately long,  $RI/PI 0.81-1.00$ ; long,  $RI/PI 1.01-1.20$ ; very long,  $RI/PI > 1.20$ .

Pronotum width vs. pronotum length: weakly transverse,  $Pw/Pl < 1.30$ ; moderately transverse,  $Pw/Pl 1.30-1.45$ ; distinctly transverse,  $Pw/Pl > 1.45$ .

Elytra length vs. elytra width: short,  $El/Ew < 1.20$ ; somewhat short,  $El/Ew 1.20-1.35$ ; moderately long,  $El/Ew 1.36-1.50$ ; long,  $El/Ew 1.51-1.70$ ; very long,  $El/Ew > 1.70$ .

Width of elytra vs. width of pronotum: weakly wider,  $Ew/Pw < 1.25$ ; moderately wider,  $Ew/Pw 1.25-1.45$ ; distinctly wider,  $Ew/Pw > 1.45$ .

Scales length: short,  $l/w < 3$ ; moderately long,  $l/w 3-6$ ; long,  $l/w 7-10$ ; very long,  $l/w > 10$ .

Regarding these ratios, the range of variability was given only when the low or the high value exceeds the reported average more than 5%.

*Bionomics.* We followed Olmstead *et al.* (2001), Albach *et al.* (2005) and Stevens (2012) regarding the systematics of the host plants.

*Distribution.* A detailed list of the localities of collection (from west to east) of the examined specimens was reported for almost all species except for a few which are very common in the whole Palaearctic Region. Concerning these species, only significant data are reported. I follow the geographical criteria adopted in Fauna Europea (2012) and in the Catalogue of the Palaearctic Coleoptera (Löbl & Smetana 2013) for the Extra-European countries.

## Depositories

The collections housing material studied in this revision are abbreviated as follows (with their curators in parentheses):

APCB collection Attila Podlussány, Budapest, Hungary

ARCK collection Alexander Riedel, Karlsruhe, Germany

AZCM collection Miguel A. Alonso-Zarazaga, Madrid, Spain

BMNH Department of Entomology, The Natural History Museum, London, U.K. (M. Barclay, C. Lyal)

CBCB collection Christopher Bayer, Berlin, Germany

CBCM collection Cosimo Baviera, Messina, Italy

CGCT collection Christoph Germann, Thun, Switzerland

CPCM collection Carlo Pesarini, Milano, Italy

DBAM Dipartimento di Biologia Animale ed Ecologia Marina dell'Università di Messina, Italy (C. Baviera)

DEIM Deutsches Entomologisches Institut, Müncheberg, Germany (L. Behne)

DMCM collection David Mifsud, Msida, Malta

ECCR collection Enzo Colonnelli, Roma, Italy

FACF collection Fernando Angelini, Francavilla Fontana, Italy  
GACN collection Gabriel Alziar, Nice, France  
GOCA collection Giuseppe Osella, L'Aquila (presently Verona), Italy  
HNHM Hungarian Natural History Museum, Budapest, Hungary (O. Merkl)  
HWCB collection Herbert Winkelmann, Berlin, Germany  
JMCS collection Jochen Messutat, Schorndorf, Germany  
JPCM collection Jean Pelletier, Monnaie, France  
JSCP collection Jaromír Strejček, Praha, Czech Republic  
LDCC collection Luciano Diotti, Cinisello Balsamo, Italy  
LGCE collection Levent Gültekin, Erzurum, Turkey  
LMCP collection Luigi Magnano, Poggibonsi, Italy  
MCNM Museum de Ciencias Naturales, Madrid, Spain (M.A. Alonso-Zarazaga)  
MKUA Mustafa Kemal University, Department of Plant Protection, Antakya, Hatay, Turkey (M. Doğanlar)  
MHNG Muséum d'Histoire Naturelle, Geneva, Switzerland (I. Löbl)  
MKCB collection Michael Košťál, Brno, Czech Republic  
MMCT collection Massimo Meregalli, Rivalta Torinese, Italy  
MNHN Muséum National d'Histoire Naturelle, Paris, France (H. Perrin)  
MSNF Museo di Storia Naturale dell'Università, Firenze, Italy (L. Bartolozzi)  
MSNG Museo civico di Storia Naturale, Genova, Italy (R. Poggi)  
MSNM Museo civico di Storia Naturale, Milano, Italy (C. Pesarini, F. Rigato)  
MSNV Museo civico di Storia Naturale, Verona, Italy (L. Latella)  
MTCM collection Michele Tedeschi, Milano, Italy  
NHMB Naturhistorisches Museum, Basel, Switzerland (E. Sprecher)  
NHRS Naturhistoriska Riksmuseet, Stockholm, Sweden (B. Viklund)  
OVCL collection Oldřich Voříšek, BMNH, London  
PACF collection Piero Abbazzi, Firenze, Italy  
PBCS collection Piotr Białooki, Sopot, Poland  
PCCP collection Paolo Cornacchia, Porto Mantovano, Italy  
PKCJ collection Petr Kresl, Janovice nad Úhlavou, Czech Republic  
PSCH collection Peter Sprick, Hannover, Germany  
PSCM collection Peter Stüben, Mönchengladbach, Germany  
PWCP collection Patrick Weill, Pau, France  
RBCS collection Roman Borovec, Smidary, Czech Republic  
RCCM collection Roberto Caldara, Milano, Italy  
RIFR Research Institute of Forests and Rangelands of Iran, Tehran, Iran (S. E. Sadeghi)  
SMNS Staatliches Museum für Naturkunde, Stuttgart, Germany (W. Schawaller)  
SMTD Museum für Tierkunde, Dresden, Germany (O. Jäger, K. Klass)  
TAUI Department of Zoology, The George S. Wise Faculty of Life Sciences, Tel-Aviv University, Tel Aviv, Israel (A.-L.-L. Friedman)  
ZFMK Zoologische Forschungsinstitut und Museum "Alexander Koenig", Bonn, Germany (D. Ahrens)  
ZISP Zoological Institute, Russian Academy of Sciences, St. Petersburg, Russia (B. A. Korotyaev)  
ZMHB Museum für Naturkunde der Humboldt-Universität, Berlin, Germany (J. Frisch, J. Willers)  
ZMUC Universitets Zoologiske Museum, Copenhagen, Denmark (A. Solodovnikov)

## Results

### Treatment of the species

#### *Rhinusa bipustulata* group

**Remarks and comparative notes:** All species which are included in this group are very similar each other in their overall aspect and in the shape of their genitalia.

According to Caldara *et al.* (2010), on the basis of morphological characters this seems the most basal group in *Rhinusa*, since it lacks synapomorphies from the sister genus *Gymnetron* except for those (width of mesosternal apophysis and pattern of elytral striae) which allow distinguishing these two genera from each other. The penis with a long body is very similar to that of *Gymnetron* and Cionini, which is considered the sister-group of the Mecinini (Caldara 2001). Moreover, the species of the *R. bipustulata* group usually share the colour of the elytral integument, which is more or less broadly reddish, with most species of *Gymnetron*. In *Rhinusa* this pattern is possessed only by some species of the *R. tetra* group, and by a rare variety of *R. melas*.

The species of the *R. bipustulata* group appear to be related with *R. tetra* group. The character support for this assemblage consists of two synapomorphic character states of the spermatheca (its small length if compared with the length of the body of the spiculum ventrale and the presence of an emargination at the passage point between nodus and body) (Caldara *et al.* 2010). The monophyly of this clade seems further supported by the fact that all species are associated with plants belonging to the Scrophulariaceae. The species of the *R. bipustulata* group are specialized to *Scrophularia* species and are fairly homogenous with regards to their morphology. They share only one morphological synapomorphy, i.e. the apex of the median lobe of the aedeagus is uniformly sclerotized. This character is furthermore homoplasious within the *R. herbarum* group. On the other hand, the species of the *R. tetra* group associated with *Verbascum* species and share five synapomorphies not typically observed in the Mecinini (see Remarks of this group).

#### *Rhinusa bipustulata* (Rossi, 1792)

*Curculio bipustulatus* Rossi, 1792: 39.

*Mecinus bipustulatus* (Rossi). Bedel, 1885: 146; 1887: 307. Sainte-Claire Deville, 1923: 69.

*Gymnetron bipustulatum* (Rossi). Desbrochers des Loges, 1893: 8, 33. Rey, 1894: 74. Reitter, 1907: 48; 1916: 230. Müller, 1921: 87. Hustache, 1931: 414, 429. Hoffmann, 1958: 1283, 1310. Smreczyński, 1976: 39. Lohse & Tischler, 1983: 268.

*Rhinusa bipustulata* (Rossi). Caldara, 2001: 185.

*Cleopus ellipticus* Dejean, 1802: 83 (nomen nudum).

*Cionus spilotus* Germar, 1821: 307.

*Gymnetron spilotum* (Germar). Gyllenhal, 1838: 768. Brisout de Barneville, 1862: 649. Faust, 1889: 228.

*Cleopus bimaculatus* Sturm, 1826: 119 (nomen nudum).

*Gymnetron melaphrum* Dejean, 1835: 326 (nomen nudum).

*Gymnetron fuliginosum* Rosenhauer, 1847: 56. Brisout de Barneville, 1862: 648. Faust, 1889: 228.

*Gymnetron bipustulatum* var. *fuliginosum* Rosenhauer. Desbrochers des Loges, 1893: 34. Reitter, 1907: 43. Hustache, 1931: 429. Hoffmann, 1958: 1310

*Gymnetron bipustulatum* var. *germari* Faust, 1889: 228.

*Gymnetron germari* Faust. Reitter, 1907: 29.

*Gymnetron aterrimum* Schilsky, 1891: 157.

*Gymnetron bipustulatum* var. *brevipile* Desbrochers des Loges, 1893: 34.

*Gymnetron brevipile* Desbrochers des Loges. Reitter, 1907: 42.

*Gymnetron bipustulatum* var. *sanguinipenne* Desbrochers des Loges, 1893: 34. Reitter, 1907: 43. Hustache, 1931: 429 (infrasubspecific name).

*Gymnetron bipustulatum* ab. *rubripes* Reitter, 1907: 34. Hustache, 1931: 429 (infrasubspecific name).

*Gymnetron municipale* Voss, 1960: 138 (**syn. nov.**).

**Type locality:** “Etruria” (central Italy).

**Type series:** This species was described based on specimens from “Etruria” (an area of the central Italy including Tuscany and part of Umbria and Latium). I was not able to find syntypes of *Curculio bipustulatus* Rossi at the Museum für Naturkunde der Humboldt-Universität of Berlin (ex coll. J.C.L. Hellwig), where a residual part of Rossi’s collection is housed (M. Uhlig pers. comm.). However, I examined many topotypical specimens which agree with the sense usually attributed to this taxon.

**Synonyms:** *Cleopus ellipticus* Dejean, *Cleopus bimaculatus* Sturm and *Gymnetron melaphrum* Dejean are nomina nuda, lacking a description. Therefore they are unavailable according to the Art. 12 of the ICZN (1999).

*Cionus spilotus* was described from specimens from Odenbaci (Bayern, Germany) by Germar, who doubted that it could be a synonym of *R. bipustulata* in the same original description. According to this description, only one of the four specimens (a pinned female without labels) under this name in Germar’s collection can be considered as belonging to the type series (lectotype here designated with the addition of the following red printed label: “LECTOTYPUS *Cionus spilotus* Germar, Caldara des. 2006”), although all of them are specimens of *R. bipustulata*.

*Gymnetron fuliginosum* Rosenhauer was described from specimens from Hungary. After the examination of a syntype in Heyden’s collection, Desbrochers des Loges (1893) concluded that it is a variety of *R. bipustulata* with black elytra. Subsequently all authors agreed with this opinion, with which I also agree.

Faust described the variety *germari* of *R. bipustulata* based on specimens from Ordubad (Nakhchivan, Azerbaijan), of which I examined one female (SMTD) labelled “Ordubad, Heyden / Germari Faust / Coll. Faust, Aukauf 1900 / Syntypus” (lectotype here designated with the addition of the following red printed label: “LECTOTYPUS *Gymnetron bipustulatum* var. *germari*, Caldara des. 2006”). This taxon was erected as a distinct species by Reitter (1907), but considered as synonymous with *R. bipustulata* by all other authors who treated this species (Desbrochers des Loges 1893, Hustache 1931, Hoffmann 1958). This specimen differs from the typical specimens of *R. bipustulata* by the red legs and the elytral vestiture which is formed by scales shorter and less raised and by the rostrum slightly shorter and less curved. I agree with the opinion of other authors and currently consider these phenotypic characters in the range of the variability of *R. bipustulata* (however see Remarks of the species).

The name *brevipile* was proposed by Desbrochers des Loges (1893) for a “doubtful” variety of *G. bipustulatum* (“var. ? [sic] *brevipilis*” in the original description) based on a single female collected at Derbent (Daghestan, southern Russia). This name must be considered as available, since Reitter (1907) erected this taxon as a distinct species (ICZN

1999, Art. 45.6.4.1). However subsequently this taxon always has been considered as synonymous with *R. bipustulata*. I have not found this type, but only a few specimens labelled with this name by Desbrochers des Loges and corresponding well to the original description. Apart for the black colour of the legs they are similar to the lectotype of *G. germari*. Therefore I place this taxon in synonymy with *R. bipustulata*.

*Gymnetron aterrimum* Schilsky was described based on a single specimen from Transylvania (Romania), which I did not find. After reading the original description I agree with Reitter (1907), who considered this taxon as another synonym of *R. bipustulata* with black elytra in the variety *fuliginea*.

The variety *sanguinipennis* of *R. bipustulata* was described by Desbrochers des Loges based on specimens with almost completely reddish elytra collected in “France méridionale, Sicilie etc.”. By the original description, it is clear that the author treated this entity as infrasubspecific as treated also by Reitter (1907). Therefore this name is not available according to the Art. 45.6 of the ICZN (1999).

Reitter described the taxon *rubripes* as an aberration of *G. bipustulatum* based on specimens with reddish legs from Dalmatia. By the original description the infrasubspecific rank of this entity is unequivocal (ICZN 1999, Art. 45.6.2) and therefore the name is unavailable according to the Art. 45.5 of ICZN (1999).

Voss (1960) described *Gymnetron municipale* from two specimens collected at the environs of Paghman (Afghanistan) comparing it with *G. zuberi* Desbrochers des Loges, 1869 (synonym of *G. hoferi*, Desbrochers des Loges, 1869) and *G. variabile* Rosenhauer, 1856 (presently *Mecinus variabilis*). I have examined the holotype preserved at ZFMK and labelled “Holotypus / J. Klapperich, Paghmangebirge, 2100 m, 14.6.53, Afghanistan / *Gymnetron municipale* sp. nov. E. Voss det, 1956”. It is a specimen of *R. bipustulata* with red legs and very similar to the lectotype of *R. germari*.

**Redescription:** *Female*. Length 2.5 mm. Body: moderately long, oval and stout. Rostrum: black with reddish apex, moderately long (Rl/Pl 1.19), subcylindrical; in lateral view moderately curved, only slightly narrowed from antennal insertion to apex (Fig. 9); in dorsal view sides slightly narrowed from base to antennal insertion, further slightly widened to apex, with moderately visible scrobe, striate-punctate at basal half, smooth and shining in apical half, in basal half with recumbent to subrecumbent, sparse, whitish, long (l/w 6-10), seta-like scales. Frons: as wide as rostrum at base, with distinct fovea. Eyes: almost flat. Antennae: brown, inserted just before middle of rostrum; scape 5.0x longer than wide, funicle as long as scape, with segment 1 2.0x longer than wide, slightly stouter and 1.5x longer than segment 2, latter 1.3x longer than wide, segments 3-5 gradually more transverse; club elongate oval, with segment 1 almost glabrous in basal half. Pronotum: black, with dense and regular punctures, intervals between punctures narrow, smooth and shining, clearly visible between recumbent to suberect, sparse, greyish, long to very long (l/w 7-12), seta-like scales; distinctly transverse (Pw/Pl 1.54), with moderately prominent apical constriction, with distinctly rounded sides, widest in basal third, moderately convex. Elytra: reddish with broad subtriangular periscutellar black spot from humeri to apex; moderately short (El/Ew 1.30), at base weakly concave, moderately wider than pronotum (Ew/Pw 1.39), with subparallel sides, moderately convex on disc; interstriae clearly visible between moderately dense, brownish grey, seta-like scales, which are 0.75-1.00x as long as width of interstria (l/w 7-12) and arranged in 3-4 irregular rows; striae clearly visible, two third narrower than interstriae, with row of scales shorter than those of interstriae. Legs: slender, with recumbent to suberect, sparse, whitish scales, which are slightly shorter than width of tibiae; femora black, clavate, with small tooth; tibiae blackish, slender; unci black, moderately stout; tarsi brown, with

tarsomere 1 1.7x longer than wide, tarsomere 2 as long as wide, tarsomere 3 bilobed and distinctly wider than tarsomere 2, onychium slightly shorter than tarsomeres 1-3 taken together, claws brown. Metasternum: black, with sparse, whitish, long, seta-like scales. Mesothoracic epimera and meso- and metathoracic episterna: with partly plumose, somewhat dense, white, long, seta-like scales. Abdomen: black, with dense and somewhat regular punctures, somewhat visible between recumbent to subrecumbent, moderately dense, whitish, long, seta-like scales; length ventrite 1-2/3-4 2.50. *Male*. As female except rostrum distinctly shorter (Rl/Pl 0.98), slightly less curved in lateral view and slightly angulate at antennal insertion along upper margin (Fig 8), distinctly striate-punctate at basal two third, smoother and more shining only to apex, antennae inserted just beyond middle of rostrum, unci slightly stouter. Penis: as in fig. 42.

**Variability:** Length 2.0-3.5 mm. The elytra vary somewhat in length and their integument varies from reddish, except a narrow periscutellar black spot, to completely black. The scales, which are variable in colour from whitish to brown sometimes with sericeous reflexion, may be very fine, hairlike, variable in length (0.5-1.25x as long as interstria), more or less erect. The rostrum in females varies moderately in length and curvature. Femora and tibiae vary from completely black to completely reddish (see also Müller 1921).

**Remarks and comparative notes:** *Rhinusa bipustulata* seems a variable species composed of numerous populations. However presently it is not possible to exclude that some of these varieties might actually be different species and this especially might concern the varieties with red legs and that with shorter scales of the dorsal vestiture, which were found in the Balkans and the Caucasus. This doubt is also raised by the recently published study on *R. antirrhini* (Paykull, 1800), which was previously considered another “variable” species and which on the contrary was demonstrated to be composed of several different species after a careful biological and molecular study (Hernández-Vera *et al.* 2010).

*Rhinusa bipustulata* is closely related to *R. scrophulariae* and *R. pelletieri*, It differs from the former by the rostra more sexually dimorphic and not concave at their base in lateral view, and by the less dense dorsal vestiture, whereas it differs from *R. pelletieri* by the rostrum of the female less strongly curved in lateral view and usually by the elytral scales longer and more numerous. These three species differ more distinctly from the other two species of the group, *R. algerica* and *R. emmrichi*, by the scales of the dorsal vestiture which are hairlike (and not wider, lanceolate), often transparent, arranged irregularly and usually denser, by the elytra which are slightly wider and narrowing gradually in apical third (and not only at apex proximity), by the femora with small tooth instead of indented.

**Biological notes:** Immatures were recently described in detail by Gosik (2010). Larvae feed on seeds of various species of *Scrophularia* (*S. aquatica* L., *S. canina* L., *S. nodosa* L., and *S. variegata* M. Bieb.), in which they pupate (Hoffmann 1958; Gosik 2010). In Turkey (Erzurum province) this species was collected on *S. olympica* Boiss. (L. Gültekin pers. comm.).

**Distribution:** Europe (from Portugal to southern Russia and the states of the Caucasus, and from Sweden to Sicily and Greece), Turkey, northern Lebanon (Bcharré, Kadicha, 1600 m; 1, GOCA), Israel, Iran (East Azerbaijan Kaleybar from seeds of *Scrophularia variegata*; 4, RIFR), central Asia (Turkmenistan, Uzbekistan, Afghanistan), Algeria.

**Non-type specimens examined:** About 800 specimens from the whole area of distribution.

***Rhinusa pelletieri* sp. nov.**

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**Type locality:** Rankous (Damascus, Syria).

**Type series:** Holotype, female [SYRIA]: “Syrie (Damas), Rankous, 1750 m, 13-VI-2003, P. Weill leg.” (MNHN). Paratypes: same data as holotype (3, PWCP); “Rankous, 13-VI-2003, Syrie, P. Weill” (4, PWCP); “Syrie (Damas), Monte Rosa, 1200 m, 33° 36' N 36° 03' E, 16-V-2003. P. Weill leg.” (9, PWCP; 6, RCCM); “Syrie (Damas), Maaloula, 1600 m, 13-VI-2003, P. Weill leg.” (1, PWCP); “Syrie (Alep), Qalat Nijem, 350 m, 36° 33' N 38° 13' E, 8-V-2003. P. Weill leg.” (5, PWCP); “Syr b. oc.; Aingara, Wald/Feld, 20 km NW Aleppo, 20.IV.96, leg. Behne” (10, DEIM; 4, RCCM); “Syrie (Hauran), Shahba, 30-IV-2004, J. Pelletier leg.” (2, JPCM); “Chahba (Sweida), 27-IV-2002 / Scrophularia #1200 m, J. Pelletier leg.” (7, JPCM); “Djebel Bilas, 17-V-2003, Syrie, P. Weill” (2, PWCP); “D. Marmoussa, 31-V-2003, Syrie, P. Weill” (3, PWCP); “Qalaat Nijem, 08-5-2003, Syrie, P. Weill” (1, PWCP); “Shahaba, 27-IV-02, Syrie, P. Weill” (4, PWCP); “Israel bor., Galilaea bor., M. Košťál leg. / Meron, 1000 m, 22.IV.1993” (2, MKCB); “Israel, N[ahal]. Boqer, 12.III.1981, leg. D. Furth” (2, TAUI); “Israel, W. Faria [currently Nahal Tirza], 21.III.1978, D. Furth” (1, TAUI); “Israel, Ha Tanur [Nahal 'Iyyon Nature Reserve, HaTanur Waterfall], 26.III.1974, D. Furth” (1, TAUI); “Israel, Har Horesha, 900-1000 m, 18.iv.1998, A. Freidberg” (10, TAUI); “178341. Israel: Nahal Nizzana, Rt. 171, 750 m, 2.iv.2014, L. Friedman, on *Scrophularia*” (2, TAUI); “Israel, Sede Boqer, 14.iv.1998, T. Pavliček” (1, TAUI); “Jordania bor. occ., Mafrag, Michael Košťál leg. / Nādira pr. Jarash, 750 m, N 32°17.9' E 36°00.5', 4.iv.2011” (1, MKCB); “Iran mer., Fars, Kuhhā-ye Zāgros Mts., Michael Košťál leg. / Khaneh Zenyan pr. Shiraz, 2000 m, N 29°36.7' E 52°16.3', 3.V.2008” (4, RCCM; 3, MKCB); “Iran mer., Fars, Kuhhā-ye Zāgros Mts., Michael Košťál leg. / Shiraz, 1850 m, N 29°40.9' E 52°25.9', 5.V.2008” (3, MKCB); “Iran bor. oc., Khorasan, Kuh-and Bīnalud Mts., Michael Košťál leg. / Torqābeh pr. Masshad, 1700 m, N 36°17.0' E 59°17.8', 9.V.2008” (7, MKCB); “Iran bor. occ., Qazvin, Michael Košťál leg. / Chenelcheshmeh pr. Tākestan, 1550 m, N35°46.4' E49°18.5', 17.v.2013 / *Scrophularia* sp.” (4, MKCB); “Iran occ., Hamadān, Michael Košťál leg. / Qorveh env., 1700 m, N35°10.3' E48°54.9', 17.v.2013 / *Scrophularia* sp.” (3, MKCB); “Iran occ., Markazi, Kuhhā-ye Zāgros Mts., Michael Košťál leg. / Arak, 1900 m, N 34°03.2' E 49°42.9', 1.V.2006 / *Scrophularia* sp.” (4, MKCB).

**Description:** *Female* (holotype). Length 2.2 mm. Body: short, oval, moderately stout (Fig. 1). Rostrum: black with reddish apex, moderately long (Rl/Pl 1.05); in lateral view strongly curved, slightly narrowed from base to antennal insertion further of same width to apex but slightly flattened (Fig. 10); in dorsal view with sides subparallel to apex, with slightly visible scrobe, almost smooth and shining from base to apex, in basal quarter with recumbent, sparse, whitish, moderately long (l/w 4-6), seta-like scales. Frons: as wide as rostrum at base, with deep fovea. Eyes: flat. Antennae: reddish brown with dark brown club, inserted between basal third and median third of rostrum; scape 5.0x longer than wide, funicle as long as scape, with segment 1 1.5x longer than wide, slightly stouter and 1.5x longer than segment 2, latter about as long as wide, segments 3-5 gradually more transverse; club elongate oval, with segment 1 almost glabrous in basal half. Pronotum: black, with dense and regular punctures, intervals between punctures narrow, smooth and shining, clearly visible between recumbent to subrecumbent, sparse, whitish grey, long (l/w 4-8), seta-like scales; distinctly transverse (Pw/Pl 1.48), with moderately prominent apical constriction, with distinctly rounded sides, widest in basal third, moderately convex. Elytra: reddish with subtriangular periscutellar

black spot from humeri to apex; moderately short (El/Ew 1.20), at base weakly concave, moderately wider than pronotum (Ew/Pw 1.40), with slightly rounded sides, widest at middle, moderately convex on disc; interstriae clearly visible between moderately dense, whitish grey scales, which are 0.50-0.75x as long as width of interstria (l/w 7-12), arranged in two irregular subrecumbent rows and in regular suberect median row; striae clearly visible, two thirds narrower than interstriae, with a row of scales shorter than those of interstriae. Legs: slender, with recumbent to suberect, sparse, whitish, seta-like scales, which are slightly shorter than width of tibiae; femora black, clavate, without tooth; tibiae blackish, slender; unci black, moderately stout; tarsi blackish, with tarsomere 1 1.7x longer than wide, tarsomere 2 as long as wide, tarsomere 3 bilobed and distinctly wider than tarsomere 2, onychium slightly shorter than tarsomere 1-3 taken together, claws brown. Metasternum: black, with sparse, whitish, long, seta-like scales. Mesothoracic epimera and meso- and metathoracic episterna: with somewhat dense, white, long, seta-like, partly plumose scales. Abdomen: black, with dense and somewhat regular punctures, somewhat visible between recumbent to subrecumbent, moderately dense, whitish, long, seta-like scales; length ventrites 1-2/3-4 2.45. *Male*. As female except rostrum shorter (Rl/Pl 0.94), slightly curved (as in *R. bipustulata*, fig. 8), rugulose and opaque in apical half, antennae inserted at middle of rostrum, unci slightly bigger. Penis: as in *R. bipustulata* (Fig. 42).

**Variability:** Length 1.5-2.6 mm. Concerning the colour of the integument, the elytral triangular black area varies somewhat in extension, however not exceeding the reddish part.

**Etymology:** This species is named in honour of my friend and colleague Jean Pelletier, who collected part of the specimens of the type series.

**Remarks and comparative notes:** This new species can be confused only with *R. bipustulata*, from which it differs mainly by the rostrum of female in lateral view being strongly curved especially in apical half, where it is slightly tapered instead of subcylindrical, and usually by the elytra shorter, almost subquadrate and not subrectangular, and the elytral scales short and with a median row of suberect scales arranged regularly.

**Biological notes:** This species was collected on *Scrophularia* sp. by J. Pelletier and M. Košťál.

**Distribution:** Iran, Syria, Jordan, Israel.

### ***Rhinusa scrophulariae* Caldara, 2009**

*Rhinusa scrophulariae* Caldara, 2009: 228.

**Type locality:** Wadi Safad (United Arab Emirates).

**Type series:** This species was described from seven specimens from the United Arab Emirates and 11 specimens from Syria (Caldara 2009).

**Redescription:** As *R. bipustulata* except rostrum in female slightly longer than in male and in lateral view concave at base (as in *R. algerica*, figs. 11-12), dorsal vestiture denser (for habitus see Caldara 2009).

**Variability:** Sometimes the triangular part of the elytra from the base to the middle of

interstria 1 is blackish brown.

**Remarks and comparative notes:** As above reported, *Rhinusa scrophulariae* is closely related to *R. bipustulata*, whereas differs from all the other species of the group by the denser dorsal vestiture.

**Distribution:** United Arab Emirates, Israel, Syria, Turkmenistan.

**Biological notes:** This species was collected on *Scrophularia deserti* Delile at the type locality. This is probably the host plant being largely distributed also in the Middle East and in central Asia.

**Non-type material examined:** ISRAEL: En Gedi, 22.III.1978, leg Furth (1, TAUD); Nahal Mishmar, 24.III.2011, leg. Furth (1, TAUI). TURKMENISTAN: Kopetdag Mts., Kara-Kala 5 km NW, 25.IV.1989, on *Scrophularia* sp., Košťál leg. (4, MKCB).

### ***Rhinusa algerica* (Brisout de Barneville, 1862)**

*Gymnetron variabile* Rosenhauer var. *algericum* Brisout de Barneville, 1862: 635.

*Gymnetron algericum* Brisout de Barneville. Brisout de Barneville, 1867: 64. Desbrochers des Loges, 1893: 11, 48. Reitter, 1907: 29. Peyerimhoff, 1911: 310. Normand, 1937: 270.

*Gymnetron algericum* var. *basalis* Hustache, 1946: 61 (infrasubspecific name).

*Gymnetron algericum* var. *concolor* Hustache, 1946: 61 (infrasubspecific name).

**Type locality:** Algeria.

**Type series:** This taxon was described as a variety of *Gymnetron variabile* from specimens collected from Algeria without more precise indications. Subsequently Brisout de Barneville (1867) stated that he misunderstood Rosenhauer's species, placing it in synonymy with *G. sanguinipes* Chevrolat, 1859, and that *G. algericum* is a distinct species. I was not able to find syntype of this taxon at MNHN where the collection Brisout de Barneville is deposited. However, in some historical collection of the same museum I have examined some specimens labelled as *G. algericum* by Brisout de Barneville.

**Synonyms:** The two chromatic varieties of *R. algerica* described by Hustache (1946), which I examined at MNHN, *R. algerica* var. *basalis* (elytra reddish with short basal black spot) and *R. algerica* var. *concolor* (integument almost completely black), were described respectively from Aïn-Sefra (Algeria) and from Aïn-Sefra and Azzaba (Morocco). Also strengthened by the fact that both of them were collected at the same locality, it is clear that they must be considered as infrasubspecific (ICZN 1999, Art. 45.6.1) and therefore these name are not available (ICZN 1999 Art 45.5).

**Redescription:** *Female.* Length 2.3 mm. Body: moderately long, cylindrical, moderately slender (Fig. 2). Rostrum: black with reddish apex, moderately long (RI/PI 0.98), cylindrical, moderately curved in lateral view and slightly impressed at base, weakly narrowed in apical third (Fig. 12); in dorsal view with subparallel sides, moderately striate-punctate at basal half, smooth and shining at apical half, in basal third with recumbent, sparse, white, moderately long (l/w 6-8), seta-like scales. Frons: as wide as rostrum at base, with distinct fovea. Eyes: weakly convex. Antennae: reddish brown with dark brown club, inserted just before middle of rostrum; scape 4.0x longer than wide, funicle slightly longer than scape, with segment 1

1.7x longer than wide, distinctly stouter and 2.2x longer than segment 2, latter about as long as wide, segments 3-5 transverse; club short oval, with segment 1 almost glabrous. Pronotum: black, with dense and regular punctures, intervals between punctures narrow, slightly convex and shining, clearly visible between recumbent, sparse, whitish, moderately long to long (l/w 6-10), seta-like scales; moderately transverse (Pw/Pl 1.36), with weakly rounded sides, with slightly prominent apical constriction, widest in basal third, weakly convex. Elytra: blackish brown except reddish sides; moderately long (El/Ew 1.43), subrectangular, at base weakly concave, with sides parallel to apical quarter further distinctly narrowed towards apex, moderately wider than pronotum (Ew/Pw 1.28), almost flat on disc; interstriae clearly visible between recumbent to subrecumbent, sparse, subelliptical, whitish scales, which are as long as 0.75x width of interstria (l/w 5-7) and arranged in one and partly two rows (Fig. 3); striae clearly visible, as wide as half of interstriae, with row of scales shorter and finer than those of interstriae. Legs: slender, covered with recumbent to suberect, sparse, whitish, seta-like scales, which are slightly shorter than width of tibia; femora blackish, subclavate, without tooth; tibiae reddish brown, slender; unci blackish brown, fine, that of metatibiae slightly smaller than others; tarsi dark brown, with tarsomere 1 1.5x longer than wide, tarsomere 2 about as long as wide, tarsomere 3 bilobed and distinctly wider than tarsomere 2, onychium as long as tarsomeres 1-3 taken together, claws blackish brown. Metasternum: black, with recumbent, sparse, whitish, long, seta-like scales. Mesothoracic epimera and meso- and metathoracic episterna: with sparse, broad, suboval scales, and more numerous, narrow, trifid scales. Abdomen: black, with distinct and somewhat regular punctures, clearly visible between subrecumbent to suberect, sparse, white, long, seta-like and hairlike scales; ventrites length 1-2/3-4 2.6. *Male*: As female except rostrum slightly shorter (Rl/Pl 0.91), subcylindrical; in lateral view weakly curved (Fig. 11), smooth and shining only to apex, antennae inserted at middle of rostrum, unci slightly bigger. Penis: as in *R. bipustulata* (Fig. 42).

**Variability:** Length 1.4-2.5 mm. Antennae, elytra and legs vary in colour from reddish to almost completely black. The sides of the pronotum vary slightly in their curvature, whereas the elytra are more or less convex.

**Remarks and comparative notes:** This species is very closely related to *R. emmrichi*, from which it differs exclusively by the scales of the elytral interstriae being mainly recumbent and not suberect, and slightly shorter (see figs. 3-4 and remarks of *R. emmrichi* for further details). These two species seem vicariant each other, since *R. algirica* is distributed in the western part and *R. emmrichi* in the central part of the Palearctic Region. They are easily distinguishable from all the other species of *Rhinusa* by the pattern of the vestiture of the elytral interstriae, being formed by a regular row of scales which are wider, subelliptical and not seta-like.

**Biological notes:** In Algeria this species was collected on *Scrophularia canina* L. (Peyerimhoff 1911; Normand 1937) and *S. saharae* Batt. (Peyerimhoff 1911).

**Distribution:** Portugal, Spain, Italy (Sicily), Morocco, Algeria, Tunisia, Libya.

**Non-type specimens examined:** PORTUGAL: Lisboa, Serra from Arrábida coast, 7.IV.1995, leg. Stüben, Bayer & Winkelmann (13, CBCB; 10, PSCM); Montargil, Terra Preta, 8.IV.1995, leg. Stüben (4, PSCM); Loule NE, Querenca, 12.V.1994, leg. Bayer & Winkelmann (15, CBCB). SPAIN: Andalusia, leg. Morel (4, MSNM); Cádiz, Prado del Rey, 15.V.1993, leg. Alonso-Zarazaga (2, MCNM); Huelva, Matalascanes, 12.IV.1988, leg.

Matern (1, RBCS). ITALY (SICILY): Messina (1, DBAM). MOROCCO: Middle Atlas, Azrou, V.1926 (3, MNHN); Middle Atlas, Khenifra, 11.V.2000, leg. Borovec (1, RBCS); Middle Atlas, Reraia, 29.V-15.VI.1926, leg Lindberg (1, ZMUC); High Atlas, Agouim, 13.IV.1990, leg. Bastazo & Vela (1, AZCM); High Atlas, Ras el Ma, leg. Thery (3, MNHN). ALGERIA: Algeri, leg. Desbrochers des Loges (2, MSNM); Aïn Sefra, V.1896, leg. Chobaut (4, MSNM); Aïn Sefra, V.1923, leg. Théron (1, JSCP); Aïn Sefra, 26.IV.1987, leg. Strejček (5, JSCP); Aures, Aïn Zaatout, 1.VI.1971, leg. Hoffer & Horák (1, OVCL); Annaba [= Bône] (1, MSNG); Blida, 10.V.1987, leg. Strejčková (1, JSCP); Blida, Chrea, 10.V.1987, leg. Kubáň (3, NHMB); Boufarik, leg. Thery (2, MNHN); Bouïra, 10.VI.1971, leg. Hoffer & Horák (1, OVCL); Bou Saâda, 4.V.1987, leg. Strejčková (5, JSCP); Petit Kabylie, Chabel El Akra, 23.V.1983 (4, GOCA); Constantine (3, MNHN); Djurdjura, 1000-2000 m, 15.VI.1971, leg. Hoffer & Horák (2, OVCL); El Goléa (1, NHMB); Gorges de la Chiffa, Ruisseau des Singes, 4.V.1988, leg. Besuchet & Löbl (6, MHNG); Margueritte, V.1893, leg. Abeille de Perrin (2, MNHN); Michelet, VI.1928 (4, MNHN); Teniet el Haad (3, MNHN); Tlemcen, 24.IV.1987, leg. Kubáň (2, NHMB); TUNISIA: Kasserine, Djebel Chambi, m 1050, 28.IV.1998, leg. Merregalli (7, OVCL; 3, RBCS); Jendouba, 5 km S of Ain Draham, 7.V.2006, leg Kresl (5, PKCJ). LIBYA: Cyrenaica, Cyrene, leg. Krüger (1, MSNG).

### ***Rhinusa emmrichi* (Bajtenov, 1979)**

*Gymnetron emmrichi* Bajtenov, 1979: 72.

**Type locality:** Arystantau (Kysylkum, Uzbekistan).

**Type series:** This species was described from 13 specimens (holotype in Bajtenov's collection, Almaty, Kazakhstan), of which I examined one male and two females (SMTD).

**Redescription:** As *R. algerica* (Fig. 2) except vestiture of elytral interstriae composed of suberect to erect, slightly finer scales (Fig. 4).

**Variability:** Length 1.4-2.5 mm. Antennae, elytra and legs vary from reddish to black. The sides of the pronotum are slightly variable in their curvature, whereas the elytra vary moderately in their convexity.

**Remarks and comparative notes:** The question whether *R. emmrichi* is really a different species from *R. algerica* presently remains unresolved and needs further study. I decided here to keep these two taxa separated on the basis of two main grounds: first, in the Mecinini the disposition of the scales of the dorsal vestiture is particularly important for the separation of several species, sometimes as a unique distinctive morphological difference; second, a preliminary examination of a short fragment of DNA in museum specimens showed a few differences between these two taxa (Hernandez-Vera *et al.* 2010). It is noteworthy that in perfectly preserved specimens of *R. algerica* and *R. emmrichi* this morphological character was shown to be unevenly variable in the whole area of their distribution apart for some specimens collected at Cyprus.

**Biological notes:** The specimens of the type series, as well as other specimens examined, were collected on *Scrophularia* sp. In Syria they were collected on *S. lucida* L. (det. P. Weill), whereas in Cyprus they were collected on *S. peyronii* Post. (det. P. Sprick).

**Distribution:** Cyprus, Turkey, Syria, Lebanon, Jordan, Turkmenistan, Uzbekistan.

**Non-type specimens examined:** CYPRUS: Paphos, Fasoulla: Diarizos-Fluss, 28.IV.1995, on *Scrophularia peyronii*, leg. Sprick (2, DEIM; 2. PSCM; 14, PSCH). TURKEY: [Bitlis], Adilcevaz, lake Van, 10.VI.2002, leg Bialooki (1, PBCS); Gaziantep, 10 km N Gaziantep, 13.VI.1986, leg. Bologna (2, GOCA); Hatay, Akbez, 5.VI.1992, leg. Kadlec (1, RBCS); Hatay, Akbez, 20.V.2001, leg. Colonnelli (2, ECCR); Mardin, 12.VI.1972, on *Scrophularia* sp., leg. Lodos (1, DEIM; 2. RCCM). SYRIA: Latakia, Nahr al Bared, 30.IV.2000, leg Kresl (4, PKCJ); Nahr el Bared 50 km NE Harna, 30.IV.2000 (1, RBCS); Rankous, 13.VI.2003, leg. Weill (2, PWCP); Saida (1, MNHN); Tartous, Safita, 23.III.2002, on *Scrophularia lucida*, leg. Weill (7, PWCP); Tartous, 30.IV.2002, leg. Pellettier (2, JPCM); Tartous, Mashrafeh, 28.V.2004, leg. Weill (4, PWCP); LEBANON: Beirut (4, MNHN); Bloudan, 22.IV.2002, leg. Weill (1, PWCP); Kbachin, 9.V.2003, leg. Weill (4, PWCP). JORDAN: Wadi Schaib, IV.1963, leg. Klapperich (1, DEIM). TURKMENISTAN: 20 km SW Aschhabad, Firjususchlucht, 5.V.1989, on *Scrophularia* sp., leg. Behne (5, DEIM); Kov Ata, Bacharden, 10.V.1991, leg. Kejval (9. PKCJ).

### ***Rhinusa tetra* group**

**Remarks and comparative notes:** This group is characterized by the presence of a premucro on protibiae and metatibiae, which is more pronounced in the female – where the stout uncus is as or slightly bigger than in the male, is placed farther from the tibial apex and has a different shape –, and the profemora which are very globose, the protibiae in the male which are distinctly arcuate in the apical quarter, the ventrites 3-5 in male along the midline with hairlike scales dense and ruffled.

### ***Rhinusa tetra* (Fabricius, 1792)**

*Curculio teter* Fabricius, 1792: 406. Caldara *et al.* 2012: 32.

*Rhynchaenus teter* (Fabricius). Fabricius, 1801: 448.

*Cionus teter* (Fabricius). Germar, 1821: 310.

*Gymnetron tetrum* (Fabricius). Gyllenhal, 1838: 755. Brisout de Barneville, 1862: 653. Desbrochers des Loges, 1893: 6, 24. Rey, 1894: 74. Reitter, 1907: 34; 1916: 229. Hustache, 1931: 416, 425. Zumpt, 1933: 9. Normand, 1937: 271. Hoffmann, 1958: 1284, 1299. Smreczyński, 1976: 35, 37. Lohse & Tischler, 1983: 269.

*Mecinus teter* (Fabricius). Bedel, 1885: 145; 1887: 507; Sainte-Claire Deville, 1923: 69.

*Rhinusa tetra* (Fabricius). Caldara, 2001: 185. Caldara *et al.* 2012: 36.

*Cionus amictus* Germar, 1821: 310. Caldara *et al.* 2012: 32.

*Gymnetron amictum* (Germar). Schoenherr, 1838: 764. Brisout de Barneville, 1862: 653. Reitter, 1907: 34. Zumpt, 1933: 9 (as subspecies of *tetrum*).

*Gymnetron hispidum* Brullé, 1832: 247. Caldara *et al.* 2008: 62. Caldara *et al.* 2012: 32.

*Cionus antirrhini* (Paykull) sensu Germar, 1821: 312. Caldara, 2008b: 129.

*Gymnetron eoum* Rosenschoeld, 1838: 755. Caldara *et al.* 2012: 32.

*Gymnetron plagiellum* Gyllenhal, 1838: 759. Brisout de Barneville, 1865: 621. Hoffmann, 1954: 1300. Caldara *et al.* 2012: 33.

*Gymnetron fuscescens* Rosenschoeld, 1838: 760. Brisout de Barneville, 1865: 621. Caldara *et al.* 2012: 33.

*Gymnetron trigonale* Gyllenhal, 1838: 767. Brisout de Barneville, 1862: 661; 1865: 621. Caldara *et al.* 2012: 33.

*Cleopus verbasci* Dufour, 1843: 86. Desbrochers des Loges, 1893: 64. Zumpt, 1933: 3. Péricart, 1973: 460. Caldara *et al.* 2012: 34.

*Cleopus uncinatus* Dufour, 1843: 86. Caldara *et al.* 2012: 34.

*Gymnetron haemorrhoum* Rosenhauer, 1847: 55. Brisout de Barneville, 1862: 662. Desbrochers des Loges, 1893: 64 (as variety of *G. bipustulatum*). Reitter, 1907: 42. Endrödi, 1970: 260. Caldara *et al.* 2012: 34.

*Gymnetron tetrum* var. *cognatum* Rey, 1894: 74 (infrasubspecific name).

*Gymnetron tetrum* var. *ovatum* Rey, 1894: 74 (infrasubspecific name).

*Gymnetron tetrum* var. *subrotundatum* Reitter, 1907: 35. Zumpt, 1933: 9 (subsp. of *tetrum*). Hustache, 1931: 426. Hoffmann, 1958: 1300. Smreczyński, 1976: 35. Caldara *et al.* 2012: 36.

*Gymnetron tetrum* var. *rufescens* Löden, 1910: 172. Caldara, 2013: 142.

**Type locality:** Italy.

**Type series:** The lectotype of this taxon was designated recently by Caldara *et al.* (2012) and is deposited at ZMUC.

**Synonyms:** All the synonyms, except for *R. tetra* var. *rufescens*, were discussed by Caldara *et al.* (2012).

The two varieties of *R. tetra* described by Rey (1894), *cognata* and *ovata*, of which the author did not quote the type localities, must be considered unequivocally as infrasubspecific names (Art. 45.6.1) and therefore not available (ICZN 1999 Art. 45.6.4.1).

Löden (1910) described the variety *rufescens* as southern “form” of *R. tetra* from specimens with almost completely reddish elytral integument from central Italy without more detailed indications. Therefore this name is available, since the author gave a subspecific rank to his taxon. It is noteworthy that surely Löden did not know that the type locality of *R. tetra* is just Italy. However *rufescens* is only a common aberration of *R. tetra*.

**Redescription:** *Female.* Length 4.0 mm. Body: short, oval, very stout. Rostrum: black, moderately long (Rl/P1 0.93), weakly conical; in lateral view straight, slightly and gradually narrowed from base to apex (Fig. 14); in dorsal view with sides slightly and gradually narrowed from base to apex (Fig. 29), flattened, with clearly visible scrobe, shining and scarcely punctured in apical half, in median third with broad, shining longitudinal median stria, in basal half with subrecumbent to suberect, somewhat dense, greyish white, long (l/w 6-8), seta-like scales. Frons: slightly narrower than rostrum at base, with distinct fovea. Eyes: weakly convex. Antennae: dark brown, inserted just before middle of rostrum; scape 4.5x longer than wide, funicle slightly longer than scape, with segment 1 2.5x longer than wide, slightly stouter and longer than segment 2, latter is 2.0x longer than wide, segments 3-4 about as long as wide, segment 5 moderately transverse; club short, oval, with segment 1 almost glabrous in basal half. Pronotum: black, with dense and somewhat regular punctures, intervals between punctures narrow, smooth and shining, clearly visible between subrecumbent to suberect, greyish white, long (l/w 6-10), seta-like scales; distinctly transverse (Pw/P1 1.59), with distinctly prominent apical constriction, with distinctly rounded sides, widest in basal third, weakly convex. Elytra: black; short (El/Ew 1.10), oval, at base transverse till interstria 5 further moderately directed forward, with moderately rounded sides, moderately wider than pronotum (Ew/Pw 1.40), widest at middle, weakly convex on disc; interstriae weakly visible between subrecumbent to suberect, dense, slightly sericeous greyish white, seta-like scales, which are about as long as width of interstria (l/w 8-12), ruffled and arranged irregularly, denser on interstria 1; striae weakly visible, two thirds narrower than interstriae, with row of scales distinctly shorter and finer than those of

interstriae. Legs (Fig. 41): stout, with recumbent to suberect, somewhat dense, greyish white, seta-like scales, which are moderately shorter than width of tibia; femora black, globose, femora with indistinct minute tooth; tibiae black, moderately slender, apical quarter of protibiae distinctly curved inward; unci black, very stout, lacking at metatibiae, protibiae and mesotibiae with big premucro; tarsi brown, with tarsomere 1 1.8x longer than wide, tarsomere 2 1.2x longer than wide, tarsomere 3 bilobed and distinctly wider than tarsomere 2, onychium slightly longer than tarsomeres 1-3 taken together, claws brown. Metasternum: black, with dense, whitish, long, seta-like scales, distinctly concave along midline. Mesothoracic epimera and meso- and metathoracic episterna with somewhat dense, whitish, long, seta-like scales. Abdomen: black, with dense and somewhat regular punctures, moderately visible between recumbent to subrecumbent, dense, whitish, long, seta-like scales; length ventrites 1-2/3-4 2.20. *Male*. As female except rostrum slightly shorter (RI/PI 0.86) especially from antennal insertion to apex, striate-punctate to apex (Figs. 13, 27-28), antennae inserted just beyond middle of rostrum, femora with big and stout tooth, protibiae and mesotibiae with small premucro (Fig. 40), metatibiae with unci truncate at apex and only slightly smaller and thinner than others. Penis: as in fig. 43.

**Variability:** Length 2.0-4.5 mm. The elytra are more or less largely reddish with specimens only with a short black basal part. The tibiae may be reddish too. In three mature females collected in Toscana (Arezzo, Verna; MSNM) antennae and tarsi very uncommonly are completely light reddish. The colour of the vestiture vary from greyish to golden yellow. The density and the length of scales, the width and the convexity of pronotum and elytra are somewhat variable (Pw/PI 1.46-1.60; El/Ew 1.07-1.15). The rostrum of the female varies somewhat in length, especially from antennal insertion to apex (RI/PI 0.90-1.05). The tooth of the femora in the male is more or less stout.

**Remarks and comparative notes:** This species, which is one of the commonest and most widespread in the genus *Rhinusa*, can be confused in the southern part of its area of distribution with *R. verbasci*, *R. moroderi* and *R. weilli*. It can be separated from these only by the shape of the female rostrum, most easily if observed in lateral view. Unfortunately the males of these three species differ only by average length of rostrum and of penis. It is well known that adults of *R. tetra* vary greatly in size (from 2.0 mm to 4.5 mm) even in specimens collected on the same plant. The same is probably true for the different lengths of the rostra of the female in various populations as it is known to occur in several species of herbivorous “long-nosed weevils” (see Discussion).

**Biological notes:** This species was quoted as being on several species of *Verbascum*. Caldara *et al.* (2012) could verify the following plant associations: *Verbascum blattaria* L., *V. boerhavia* L., *V. creticum* (L.) Cav., *V. lychnitis* L., *V. nigrum* L., *V. phlomoides* L., *V. phoeniceum* L., *V. pulverulentum* Vill., *V. speciosum* Schrader, *V. thapsiforme* Schrader, *V. thapsus* L. Adults were collected also on *Scrophularia auriculata* L., *S. canina* L., *S. laevigata* Vahl., and this might be a further demonstration of the close relationships between the *R. tetra* group and the *R. bipustulata* group and between the genera *Verbascum* and *Scrophularia*.

**Distribution:** Europe, Siberia, North Africa, Middle East, central Asia, Northern India. Introduced in North America (O'Brien & Wibmer 1982).

**Non-type specimens examined:** More than 1,000 specimens from the whole Europe. Here are reported in detail only some noteworthy localities of collection: TURKEY: Afyonkarahisar,

Başören, 1500 m, 21.VI.1999 (13, RBCN); Kahramanmaraş, Mehmetbey, 1600 m, 23.V.2001 (2, ECCR). SYRIA: Nahr el Bared 50 km NE Harna, 30.IV.2000 (2, RBCS). IRAN: Hamedan, Gazandar-Toyserkan, 10.VIII.2011, from seeds of *Verbascum speciosum* (4, RIFR); Qom, Emamzadeh Esmail, 7.VII.2011, from seeds of *Verbascum speciosum*, leg. Mohammadpour (3, RIFR) KAZAKHSTAN: Uralsk reg., Beket env., 2.VIII.2000, leg. Klimentev (3, OVCL). TAJIKISTAN: Dushanbe (3, DEIM). INDIA: Lahul, Keylong, 3500-4000 m, 25.VII.1989, leg. Riedel (10, ARCK); Uttar Pradesh, Mussoorie, 2100 m, leg. Riedel (1, ARCK); Himalaya, Shimla (1, ZMHB). MOROCCO: Tanger (1, MNHN); Middle Atlas, Ifrane, 1650 m, 16.VII.1993, leg. Stüben (1, PSCM); Middle Atlas, Ksiba, 1800 m, V.1953, leg. Antoine (5, MNHN); Middle Atlas, Oued R'bia, leg. Maile (4, MNHN); Middle Atlas, Sources de l'Oumer-Rbia, 1800 m, 17.VII.1993, leg. Stüben (2, PSCM); Middle Atlas, Timahdite, 2000 m, 18.VII.1993 (1, PSCM); High Atlas, Jb. Ayachi, 11.VII.1963 (1, BMNH); High Atlas, Imlil nr. Marrakesh, 1200 m, 1.V.1961 (1, BMNH); High Atlas, Tachdirt, VII.1923 (6, MNHN); High Atlas, Tassemt, 1900 m, VI.1942, leg. Antoine (2, MNHN). ALGERIA: Le Lac, VI.1905, on *Scrophularia laevigata* (4, MNHN); Le Lac, 26.V.1912, on *Scrophularia auriculata* (2, MNHN); Boghari, from *Verbascum creticum* ex larva (4, MNHN). TUNISIA: Nebeur, 25.V.1995, leg. Krajcik (1, RBCS). PAKISTAN: Swat, Utrot, 2200-2800, 12-14.VII.1982, leg. Erber & Heinz (2, SMNS); Swat, Ghabral, 2300-2600, 13.VII.1982, leg. Erber & Heinz (5, SMNS). CANADA: St. Annes, Quebec, VI.1921 (3, BMNH); Quebec, I. Perrot, VI.1923 (1, BMNH). U.S.A.: Indiana, Putnam Co. (1, BMNH); Indiana, Steuben Co. (6, BMNH); Indiana, Marion Co. (11, BMNH); Connecticut, Hartford, 1913 (3, BMNH); Florida, Dunedin (1, BMNH).

### ***Rhinusa verbasci* (Rosenschoeld, 1838)**

*Gymnetron verbasci* Rosenschoeld, 1838: 765. Brisout de Barneville, 1862: 660; 1865: 621. Caldara *et al.* 2012: 33, 36.

*Gymnetron crassirostre* Lucas, 1846: pl. 38. Brisout de Barneville, 1862: 653; 1865: 621. Caldara *et al.* 2012: 35.

**Type locality:** Tiflis (Georgia).

**Type series:** The lectotype of this taxon was designated recently by Caldara *et al.* (2012) and is preserved at NHRS.

**Redescription:** As *R. tetra* except rostrum distinctly longer especially in female (RI/PI male 0.92-1.02, female 1.05-1.20) (Figs. 15-16).

**Variability:** Length 2.4-4.1 mm. The tibiae and sometimes also the femora are often completely reddish as in the specimens collected at İnegöl (Turkey), where also antennae and rostrum are reddish brown. The colour of the vestiture varies from greyish to golden yellow. The thickness and the length of the scales, the width and the convexity of pronotum and elytra are somewhat variable (Pw/PI 1.60-1.70; El/Ew 1.12-1.22). In the females also the length of the rostrum is somewhat variable (RI/PI 1.05-1.20); in dorsal view the sides of the rostrum vary from moderately convergent to parallel from antennal insertion to apex, whereas in lateral view the upper margin has the concave and convex parts more or less distinct. In this connection it is noteworthy that in a large series of specimens collected at Cephalonia the rostrum of the female (Fig. 16) is somewhat different from that of the lectotype in its apical part (Fig. 15) if observed in lateral view. This interesting difference deserves further investigations.

**Remarks and comparative notes:** This species differs from *R. tetra* by the shape and the length of the rostrum, especially in the female, although it is well known that the rostra are somewhat variable in length. It is noteworthy that the two taxa are sympatric in the entire area of distribution of *R. verbasci*, but were never collected on the same plant. This circumstance supports the current decision to consider *R. tetra* and *R. verbasci* as different species, although it should be noted that the more southern populations of *R. tetra* has a rostrum on average slightly longer than the northern populations. This species differs from *R. ensifer* by the shape of the rostrum and the more robust shape of pronotum and elytra.

**Biological notes:** The lectotype was collected on *Verbascum formosum* Fisch. ex Schrank, an endemic specie from the Caucasus and Anatolia. In Sicily (C. Baviera pers. comm.) adults of this species were collected on several species of *Verbascum* (*V. blattaria*, *V. macrurum*, *V. pulverulentum*, *V. thapsus*) and together with *R. comosa* on *V. thapsus*.

**Distribution:** Southern Spain, Italy (Sicily), Macedonia, Greece, states of the Caucasus, Turkey, Morocco.

**Non-type specimens examined:** SPAIN: Granada, La Cortichuela, Sierra Nevada, 29.VI.1993, leg. Alonso-Zarazaga (7, AZCM); Málaga, Ronda, Sierra de la Nieves, 7.VII.1984, leg. de Ferrer (3, AZCM); Cordoba, Luque, 27.XII.1983, leg. Baena (2, AZCM). ITALY (SICILY): Catania, Etna nord, Rifugio Brunek, 1500 m, 20.VI.2006, leg. Baviera (1, CBCM); Catania, Etna Sud, Zafferana, 800m, 23.VI.2011, on *Verbascum macrurum*, leg. Baviera (3, CBCM); Catania, Monte S. Leo, Monte Etna, 5.VI.1958, leg. Gulli (1, CPCM; 1, MSNV); Catania, Randazzo, 14.VI.1961, leg. Magidstretti, (2, GOCA); Catania, Randazzo, 1000 m, 27.V.1981, leg. Bellò (4, GOCA); Nebrodi Floresta Sorgente San Giacomo 1000 m, 29.VI.2010, on *Verbascum blattaria*, leg. Baviera (4, CBCM); Messina, Nebrodi Longi Frazzanò Convento Fragalà, 700m, 19.VI.2011, on *Verbascum blattaria*, leg. Baviera (5, CBCM); Messina, Peloritani, Antillo, 28.V.2010, on *Verbascum thapsus*, leg. Baviera (3, CBCM); Messina, Peloritani, Bosco di Malabotta, 1300 m, 25.VII.2006, leg. Baviera (1, CBCM); Messina, Peloritani Casalvecchio, 28.V.2010, on *Verbascum thapsus*, leg. Baviera (2, CBCM); Messina, Peloritani, Castoreale Bafia, 5.VI.2011, on *Verbascum thapsus*, leg. Baviera (5, CBCM); Messina, Peloritani, Colle San Rizzo, VII.1959 (2, GOCA); Messina, Peloritani, Foce Niceto, 13.VI.2011, on *Verbascum macrurum*, leg. Baviera (6, CBCM); Messina, Peloritani, Portella Castanea, VI. 1959 (2, GOCA); Palermo, X.1922, leg. Falzoni (4, MSNM). MACEDONIA: Lake Dojran, 5-7.V.1964, leg. Pozzi (3, MSNM). GREECE: West Macedonia, Kelli W Florina, 22.VI.2004, leg. Voříšek (2, OVCL); West Macedonia, Florina, Vernion Mount, 4.VII.1984, legg. M. & G. Osella (2, GOCA); Ionian Islands, Lefkas, Agios Nikolaos Nira, 11.VI.1999, leg. Osella (93, GOCA); Ionian Islands, Lefkas, Sivota, 11.VII.1998, leg. Osella (2, GOCA); Ionian Islands, Cephalonia, Krane, 4.-17.V.29, leg. Beier (31, MSNM; 8, RCCM; 1, MSNV); Ionian Islands, Cephalonia, 1 km W Fiskardho, 4.V.1996, legg. Erhard & Schmallfuss (1, DEIM; 3, SMNS); Ionian Islands, Corfu, Pantokrator, 8.V.1989, 800 m, on *Verbascum*, leg. Suppantisch (1, DEIM); Peloponnesos, Achaea, Erimanthos, 2000-2300 m, 22.VII.1981, legg. M. & G. Osella (1, GOCA); Peloponnesos, Achaea, Erimanthos, Alepophori, 1900 m, 22.VI.1997, leg. Messutat (2, JMCS); Peloponnesos, Achaea, Kalavryta, 1600 m, leg. Osella (1, GOCA); Peloponnesos, Achaea, Kalavryta, Chelmos Mts., 1900 m, Xylokambos Ski centrum, 21.V.2004, leg. Voříšek (8, OVCL); Peloponnesos, Achaea, Kalavryta, Chelmos Mts., 1000 m, Kato Lousi, 22.V.2004, leg. Voříšek (7, OVCL); Peloponnesos, Achaea, str. Kalavryta-Chelmos Mount, 20.VI.1998 (30, FACF); Peloponnesos, Achaea, Kalogria, 7.V.1999, leg. Angelini (1,

FACF); Peloponnesos, Arcadia, Chrysovitz, Mount Menalo, 1200 m, 23.V.2004, leg. Voříšek (3, OVCL); Peloponnesos, Arcadia, Manthiréa, 30.VII.1979, leg. Agazzi (26, GOCA); Peloponnesos, Arcadia, Tripoli, 5.V.1999, leg. Angelini (3, FACF); Peloponnesos, Argolis, Nafplion, 19.V.1977 (5, GACN); Peloponnesos, Corinthia, Néméa, 11.V.1977 (11, GACN); Peloponnesos, Corinthia, Kaliani, 14.VI.1998, leg. Angelini (35, FACF); Peloponnesos, Corinthia, Bouzi, 6.V.1999, leg. Angelini (6, FACF); Peloponnesos, Laconia, Githeio, Skoutari, 18.IV.1987, leg. Riedel (1, ARCK); Peloponnesos, Laconia, Kosiarion, 16.V.1981, leg. Podlussány (4, APCB); Peloponnesos, Laconia, Sparti SW, Ilias Oros, 1500 m, 21.VI.1997, leg. Messutat (2, JMCS); Peloponnesos, Messenia, Agios Nikolaos, 17.V.1981, leg. Rozner (2, APCB); Peloponnesos, Messenia, 7 km SE Exochori, 25.VI.1979, leg. Mager (2, ARCK); Peloponnesos, Messenia, Kalamata, 12.VIII.1990, leg. Schmidt (1, PSCH); Peloponnesos, Messenia, Mount Taygetus, Poliana, 1000 m, 16.VII.1981, leg. Bellò (4, GOCA); Crete, Heraklion, Archanes, 31.V.1989, leg. Mehl (1, DEIM); Crete, Chania, Askyfou, 21.V.1990, leg. Mehl (1, ZMUC); Crete, Chania, Elos, 26.V.1990, leg. Mehl (1, ZMUC); Crete, Chania, Lakki, 13.V.1990, leg. Mehl (1, ZMUC); Crete, Lasiti, 19.IV.1975, leg. Köstlin (3, SMNS); GEORGIA: Tbilisi, 21.V.1973, leg. Pospisil (2, OVCL). ARMENIA: Caucasus, Elisabetpol, leg. Babadjanides (1, RCCM). TURKEY: İstanbul, Kadıköy, leg. Duchon (2, MNHN); Bursa, İnegöl, 8.VII.1975, leg. Colonnelli (3, ECCM); Bilecik, Osmaneli, 500 m, 14.VII.1972, leg. Osella (1, MSNV); İzmir, Bergama, 3.V.1984, leg. Rozner (1, APCB); Denizli, Pamukkale, Hierapolis, 5.V.1984, leg. Rozner (15, APCB); Tokat (7, MNHN); [Çanakkale], Eceabat, 30.V.1970, leg. Wittmer (3, NHMB); Eskişehir, Seyitgazi, 12.VI.1989, leg. Podlussany (1, APCB); Ankara, Golluk-Nallıhan, 28.VI.1982, leg. Metzler (3, RCCM); Afyonkarahisar, Acıgöl, 6.VI.1986, leg. Kadlec & Voříšek (2, OVCL); Konya, Sertavul, 1610 m, 12.VI.1986 (1, OVCL); Niğde, Ulukışla, 24.V.1988, leg. Riedel (7, ARCK); Mersin, Toros Dağları, Gülnar, 11.VI.1986, leg. Kadlec & Voříšek (7, OVCL); Rize, 20 km S of İkizdere, northern slope of Ovitdağı Pass, 1868 m, 12.VII.2010, leg. L. & N. Gültekin (5, LGCE). MOROCCO: 36 km road Boulemaine-El Hajeb, 1700 m, 6 km Ifrane, 1.IV.1988, leg. Bastazo & Vela (10, AZCM).

### ***Rhinusa ensifer* sp. nov.**

[urn:lsid:zoobank.org:act:D253C889-DC3F-4606-A8C1-4C591180F748](http://urn:lsid:zoobank.org:act:D253C889-DC3F-4606-A8C1-4C591180F748)

**Type locality:** Aydıncık (İçel [= Mersin] province, Turkey).

**Type series:** Holotype, female “Asia minor [Turkey], Kilikien, İçel prov., Aydıncık, 25.V.1977, Wellschmied lg. / Anatolia m., Prov. İçel / coll. Dieckmann, DEI Eberswalde” (DEIM). Paratypes: same data as the holotype (3, DEIM; 2, RCCM); “TR [Turkey]: Prov. Mersin, Anamur, 4.-17.6.1993, leg. R. Eichler / coll. Behne, DEI Eberswalde” (5, DEIM).

**Description:** *Female* (holotype). Length 3.0 mm. Body: moderately long, oval, moderately stout. Rostrum: black with reddish apex, very long (RI/PI 1.80), subconical; in lateral view almost straight, gradually narrowed from base to antennal insertion then almost of same width to apex (Fig. 18); in dorsal view with sides slightly and gradually narrowed from base to apex (Fig. 34), with clearly visible scrobe, flattened on dorsum, striate-punctate in basal half, smooth and shining in apical half, in median third with wider and shining longitudinal median stria and with subrecumbent to suberect, somewhat dense, greyish white, long (l/w 6-9), seta-like scales. Frons: slightly narrower than rostrum at base, with distinct fovea. Eyes: weakly convex. Antennae: dark brown with blackish club, inserted just before middle of rostrum; scape 5.5x longer than wide, funicle about as long as scape, with segment 1 2.5x

longer than wide, slightly stouter and slightly longer than segment 2, latter 2.0x longer than wide, segments 3-4 about as long as wide, segment 5 moderately transverse; club short oval, with segment 1 almost glabrous in basal half. Pronotum: black, with dense and somewhat regular punctures, intervals between punctures narrow, smooth and shining, clearly visible between subrecumbent to suberect, moderately dense, greyish white, long to very long (l/w 7-12), seta-like scales; moderately transverse (Pw/Pl 1.31), at apex with distinctly prominent apical constriction, with distinctly rounded sides, widest in basal third, weakly convex. Elytra: reddish brown except a subtriangular black area from base to middle; moderately long (El/Ew 1.20), oval, at base transverse till interstria 5 further distinctly directed forward, moderately wider than pronotum (Ew/Pw 1.31), with moderately rounded sides, widest at middle, weakly convex on disc; interstriae slightly visible between subrecumbent to suberect, somewhat dense, slightly sericeous greyish, seta-like scales, about as long as width of interstria (l/w 8-12), ruffled and arranged irregularly, denser on interstria 1; striae slightly visible, as wide as one third of interstriae, with row of scales distinctly shorter and finer than those of interstriae. Legs: moderately stout, with recumbent to suberect, moderately dense, greyish white, seta-like scales, which are slightly shorter than width of tibia; femora black, globose, with indistinct tooth; tibiae reddish brown, slender, protibiae and mesotibiae with big premucro; unci black, stout, lacking at metatibiae; tarsi brown, with tarsomere 1 2.3x longer than wide, tarsomere 2 1.4x longer than wide, tarsomere 3 bilobed and distinctly wider than tarsomere 2, onychium slightly longer than tarsomeres 1-3 taken together; claws brown. Metasternum: black, with moderately dense, whitish, long, seta-like scales, distinctly concave along midline. Mesothoracic epimera and meso- and metathoracic episterna: with somewhat dense, whitish, long, seta-like scales. Abdomen: black, with dense and somewhat regular punctures, slightly visible between recumbent to subrecumbent, dense, whitish, long, seta-like scales; length ventrites 1-2/3-4 1.87. *Male*. As female except rostrum distinctly shorter (Rl/Pl 1.05) especially from antennal insertion to apex (Fig. 17), smooth and shining only in apical third, antennae inserted just beyond middle of rostrum, femora with moderately stout tooth, protibiae and mesotibiae with smaller premucro, unci slightly stouter, that of metatibiae truncated at apex and slightly smaller and thinner than others. Penis: as in *R. tetra* (Fig. 43) but slightly longer.

**Variability:** Length 2.6-3.2 mm. In one specimen of the type series the tibiae are blackish. The elytral vestiture can be more or less dense.

**Remarks and comparative notes:** This species is clearly distinguishable by the shape and especially the length of the rostrum in the female. Moreover the body is more slender than in the other species with the penis similar in shape (*R. tetra*, *R. verbasci*, *R. moroderi*).

**Biological notes:** No data are available.

**Distribution:** Southern Turkey.

### ***Rhinusa moroderi* (Reitter, 1906)**

*Gymnetron moroderi* Reitter, 1906: 379; 1907: 42. Caldara *et al.* 2012: 35, 37.  
*Gymnetron otini* Hustache, 1946: 59. Caldara *et al.* 2012: 36.

**Type locality:** Valencia (Spain).

**Type series:** Lectotype and one paralectotype were designated by Caldara *et al.* (2012) and

preserved at HNHM.

**Synonyms:** The synonymy of *Gymnetron otini*, described from Morocco, with *R. moroderi* was recently proposed by Caldara *et al.* (2012).

**Redescription:** As *R. tetra* except rostrum of female in lateral and dorsal view cylindrical and not tapered from antennal insertion to apex, more elongate (RI/PI 1.10) (Figs 19, 35).

**Variability:** Range in length usually is between 1.6 mm and 2.7 mm, with a few specimens reaching 3 mm. Antennae, elytra and legs may be completely black. The colour of the vestiture varies from greyish to golden yellow. The thickness and the length of the scales, the width and the convexity of pronotum and elytra (Pw/PI 1.56-1.66; El/Ew 1.10-1.18), as well as the shape and the length of the rostra (see Remarks on this species), are somewhat variable.

**Remarks and comparative notes:** This southern Palaearctic species is closely related to *R. tetra*, with which it is sympatric in the entire area of its distribution. It differs from this species only, but constantly, by the shape of the female rostrum which is cylindrical and not tapered from the antennal insertion to the apex both in lateral and dorsal views. Moreover it is noteworthy that the body length in specimens of *R. moroderi* is less than 3 mm, whereas in *R. tetra* and *R. verbasci* specimens longer than 3 mm are common and therefore male with length exceeding 3 mm almost surely are not attributable to this species. The shape of the rostrum of the female is also the clearest difference between *R. moroderi* (Fig. 19) and *R. weilli* (Fig. 20), with which it shares the small size.

**Biological notes:** In Sicily, Spain and Cyprus adults of this species were collected on *Verbascum sinuatum* L. Also in Israel (Rosh ha'Ayin Zafon) *R. moroderi* was collected on *V. sinuatum* L. apparently together with *R. weilli* (L. Friedman pers. comm.), whereas at Crete (Chania) it was collected on *V. spinosum* L. (C. Germann pers. obs.)

**Distribution:** Portugal, southern Spain, southern Italy and main isles (Sardinia, Sicily), Malta, Albania, continental Greece and isles (Cephalonia, Zakynthos), Romania, Bulgaria, Cyprus, Turkey, Iran, Lebanon, Israel, Morocco, Algeria.

**Non-type specimens examined:** PORTUGAL: Lisbon, Parque Florestal de Monsanto, 23.VII.1972, leg. Abraham & Horacek (1, OVCL); Barragem do Arade, 12.V.1994, leg. Bayer & Winkelmann (5, CBCB). SPAIN: Andalusia, Cádiz, Sanlúcar de Barrameda, Algaida nr. Bonanza, 17.IV.1963 (3, BMNH); Andalusia, Cádiz, San Roque, 30.VI.1987, leg. de Ferrer (4, AZCM); Andalusia, Cádiz, San Roque, Pinar del Rey, 16.VI.1972, leg. de Ferrer (1, AZCM); Andalusia, Malaga, La Cancelada, Benahavís, 11.VI.1988, on *Verbascum sinuatum*, leg. Alonso-Zarazaga (1, AZCM); Andalusia, Malaga, Nerja, 8.V.1992, leg. Bellò (8, GOCA); Valencia, leg. Clermont (1, MSNG); Valencia, Torrente, leg. Moroder (1, JSCP); Catalonia, Blanes, Rio Tordera valley, 22.VII.1990, on *Verbascum* sp., leg. Strejcek (1, JSCP); Catalonia, Girona, Salt, 25.VI.1952, leg. Ferrer Andreu (2, MCNM); Catalonia, Pineda de Mar, 14.VII.1998, leg. Svec (2, JSCP). ITALY (SARDINIA): Sassari, Ittiri, 15.V.1978, leg. Caldara (1, RCCM); Oristano, 7.VI.1974, on *Verbascum*, leg. Meloni (4, GOCA); Cagliari, 29.V.1910, leg. Solari (1, MSNM); Cagliari, Capoterra, Rio S. Lucia, 1.IV.1979, leg. Meloni (1, PACF); Cagliari, Domusnovas, 3.IV.1979, leg. Leo (7, GOCA); Cagliari, Elmas, 10.VII.1989, leg. Meloni (5, PACF); Cagliari, Esterzili, 20.V.2002, leg. Osella (3, GOCA); Cagliari, Isola S. Antioco, Fontana Canai, 13.V.1988, leg. Osella (1,

GOCA); Cagliari, Sarroch, 6.VI.1979, leg. Meloni (1, PACF); Cagliari, Mount Urpino, 11.VI.1971, on *Verbascum*, leg. Meloni (3, GOCA). ITALY (SICILY): Agrigento, Licata, 21.VI.1978, leg. Carapezza (4, GOCA); Enna, Aidone, 2.VII.1989, on *Verbascum* sp., leg. Caldara (15, RCCM); Messina, Colle San Rizzo, VII.1959 (1, GOCA); Palermo, river Pollina, mouth, 31.V.1996, leg. Angelini (15, FACF); Ragusa, Marina, 5.VI.1992, leg. Bologna (2, GOCA); Siracusa, Ferla Pantalica, 30.VII.1969, leg. Magnano (1, LMCP); Siracusa, Lentini, 10.V.2000 (1, CBCM); Siracusa, Sortino Anapo, 17.VII.1966, leg. Magnano (8, LMCP); Egadi Isles, Favignana, VI.1968, leg. Osella (80, MSNV); Egadi Isles, Favignana, 3.IV.1990, leg. Bologna (1, GOCA); Egadi Isles, Levanzo, VI.1968, leg. Osella (40, MSNV); Eolie Isles, Lipari, Valle di Pera, 20.VII.1968, on *Verbascum sinuatum*, leg. Magnano (4, LMCP); Eolie Isles, Lipari, Vallone Muria, 19.VI.1998, leg. Carletti (1, PACF); Pantelleria Isle, VII.1954, leg. Pippa (6, CPCM); Pantelleria Isle, Montagna Grande, 28.V.1994, leg. Lo Valvo (1, GOCA). MALTA: Virdid-Dis, 27.VI.1997, leg. Mifsud (13, DMCM); Buskett, 27.VII.1996, leg. Farrugia (1, DMCM); Tal-Munyar, 23.V.1997, leg. Mifsud (1, DMCM). CROATIA: Istria, Krk island, 15.VI.1996, leg. Strejcek (3, JSCP). ALBANIA: Tirana, Ravasini, leg. Lona (1, MSNM). MACEDONIA: Gadsko, 21.VI.1973, leg. Angelov (1, GOCA). GREECE: East Macedonia and Thracia, Nestos-Delta, 10 km E Neá Karia, 9.VII.2003, leg. Bahr, Bayer & Winkelmann (2, HWCB); Central Macedonia, Asprovalta, 23.VII.1983, leg. Osella (1, GOCA); Central Macedonia, Chalkidike, 14 km W Ierisós, Gomati, 16.VII.2003, leg. Bahr, Bayer & Winkelmann (3, HWCB); Central Macedonia, Chalkidike, 4,5 km NW Rendina, Volvi See, 18.VII.2003, leg. Bahr & Winkelmann (1, HWCB); Central Macedonia, Polikastro NW 8 km N Axioupoli, 28.VI.1997, leg. Messutat (1, JMCS); Central Macedonia, Thessaloniki (2, BMNH); Athos, Dafni, leg. Schatzmayr (1, DEIM; 1. MSNM); Epirus, Igoumenitza, 22. VII.1971, leg. Osella (2, GOCA); Epirus, Ioannina, leg. Apfelbeck (1, NHMB); Epirus, Konitza Timfli-Drakolimni, 2000 m, 8.VII.1983, leg. Osella (1, GOCA); Thessaly, Lithocoron, 21.VII.1971, leg. Osella (1, MSNV); Thessaly, Meteora monastir, 14.V.1994, leg. Strejcek (1, JSCP); Thessaly, Meteora, Grevena, 15.V.1987, leg. Angelov (1, MMCT); West Greece, Ilia, Kaláfa, 27.IV.1994, leg. Colonnelli (2, ECCR); Ionian Islands, Cephalonia, Argostoli, 1905, leg. Leonhard (1, DEIM); Ionian Islands, Corfu, 21.IV.1985, leg. Köstlin (4, SMNS); Ionian Islands, Zakynthos, 1909, leg. Hilf (3, DEIM); Ionian Islands, Zakynthos, Kalamaki, 1909, leg. Hilf (1, RBCS); Peloponnesos, Galatás, 28.VI.1976, leg. Köstlin (1, SMNS); South Aegean, Rhodes, Kolympia, Loutani valley, 9.V.1996, leg. Borovec (2, RBCS); Crete, Rethymnos, Askyfou, 22.V.1988, leg. Mehl (1, ZMUC); Crete, Chania, Omalos, 1550 m, 22-25.V.1990, leg. Mehl (3, ZMUC); Crete, Chania, E Chora Sfakion, on *Verbascum spinosum*, leg. Germann (2, CGCT); Crete, Patellati, 27.V.1992, leg. Mehl (1, ZMUC); South Aegean, Rhodes, Afántou, 10.V.1996, leg. Schön (2, RBCS);. ROMANIA: Babadag Dobrutscha, leg. Breit (1, MSNM). BULGARIA: Belaslza, 1000 m, 13.VI.1973, leg. Angelov (1, GOCA); Belosiza, 1000 m, 13.VI.1978, leg. Angelov (12, MMCT); Kamcija, 4.VIII.1981, leg. Voříšek (1, OVCL); Melnik, 23.V.1970, leg. Angelov (1, MMCT); Sandanski, V.1970, leg. Horak (1, OVCL); Sandanski, 15.VII.1993, leg. Kocian (1, JSCP); Sandanski, VII.1976, leg. Švihla (1, JSCP); Sandanski, Struma river, 25.V.1974, leg. Strejcek (1, JSCP). CYPRUS: Akaki, 25.VII.1977, leg. Alziar (8, GACN); Lapithos, 31.V.1974, leg. Alziar (2, GACN); Larnaca, 10.XI.1932, leg. Ball (4, BMNH); Larnaca, Ayla-Anna, 17.V.2008, on *Verbascum sinuatum*, leg. Alziar (3, GACN); Limassol, 24.IV.1977, leg. Köstlin (6, SMNS); Moni, 27.V.1952, leg. Mavromoustakis (4, BMNH); Pano Lefkara, 23.V.1999, leg. Kantner (10, RBCS); Salamis, V.1973, leg. Vesely (1, OVCL). TURKEY: Çanakkale, Eceabat, 30.V.1970, leg. Wittmer (5, NHMB); Manisa, Alaşehir, 10.VII.1975, on *Verbascum* sp. (1, MMCT); Manisa, Bakır, 11.VI.1976 (1, MMCT); İzmir, Bornovo, 19.VI.1974 (1, MMCT); İzmir, Pamucak, 14.VI.1977 (3, MMCT); Antalya, Alanya, 3.VIII.1965, leg. Pierotti & Perissinotto

(20, MSNM; 6, CPCM); Antalya, Bey Dağları, Termessos, 9.VI.1986, leg. Kadlec & Voříšek (17, OVCL); [İçel] Mersin, Çamalan, Pozantı, 1000 m, 9.VI.1986, leg. Bologna (1, GOCA); Adana, Gülek, 4.VI.1984, leg. Sama (1, GOCA); [İçel] Mersin, Çamlıyayla, 1000 m, 1.VIII.1998, leg. Winkelmann (4, HWCB); [İçel] Mersin, Toros Dağları, Gülnar, 11.VI.1986, leg. Kadlec & Voříšek (1, OVCL); Şırnak, Uludere, 15.VI.1973 (1, MMCT). IRAQ: Kurdistan, Penjwin, 1300 m, 11.V.1976, leg. Macek (2, NHMB). IRAN: Kurdistan, Sanandaj, 21.VI.1975, leg. Senglet (1, MHNG). SYRIA: Krak des Chevaliers, 25.VI.1971, leg. Osella (1, GOCA); Djebel Ansariya, Mardash, 25.IV.1989, leg. Macek (1, NHMB). ISRAEL: Har Hermon, 1500-1600 m, 8.VI.2002, leg. Friedman (2, TAUI); Rosh ha'ayin Zafon Railway Station, 7.VI.2012, L. Friedman, on *Verbascum sinuatum* (30, TAUI); Migdal Zedeq, 13.IV.1999, leg. Friedman (2, TAUI); Nahal Keziv, 1.VI.2001, leg. Finkel (3, TAUI). LEBANON: Kesrouane, Nahr el Kelb, 20.V.1972, leg. Brignoli (4, GOCA); Zghorta, Ehden, 1450 m, 4.VI.1972, leg. Brignoli (2, GOCA). MOROCCO: Tanger, 1901, leg. Buchet (1, MNHN); Middle Atlas, 5 km E Khenifra, 900 m, 11.V.2000, leg. Borovec (1, RBCS); Middle Atlas, Aquelmame Azigza lake, 25 km E Khenifra, 1100 m, 11.V.2000, leg. Borovec (1, RBCS); Casablanca, Sidi-el-Aidi, 28.IV.2000, leg. Borovec (12, RBCS); Meknés, 29.V.1965 (9, BMNH); 14 km SE Berrechid, 12.V.2000, leg. Borovec (1, RBCS). ALGERIA: Aures, Ain Zaatout, 1.-4.VI.1971, leg. Hoffer & Horak (4, OVCL); Boufarik, leg. Thery (1, MNHN); Djebel Chenoua nr. Cherchell, 400 m, 4.VII.1980, leg. Strejcek (2, JSCP); Guelma, Bou Mahra, Ahmet, 22.V.1970, leg. Doguet (5, GOCA); Lalla Marnia, leg. Martin (4, MNHN); Tipasa nr. Cherchell, 2.VII.1980, leg. Strejcek (3, JSCP); Tlemcen, leg. Martin (2, MNHN). TUNISIA: Cherchell, 15.VI.1955, leg. Liebmann (3, SMNS); Jendouba, 5 km S Ain Draham, 7.V.2006, leg. Kresl (20, PKCJ); Nebeur, 25.V.1995, leg. Krajcik (3, RBCS); Sousse, Port El Kantaoui, 6.VI.2001, leg. Messutat (17, JMCS); Sousse, Friguia, 30 km SSW of Hammamet, 13.V.2006, leg. Kresl (25, PKCJ).

### ***Rhinusa weilli* sp. nov.**

urn:lsid:zoobank.org:act: 074C8D78-81ED-40E6-9B86-5516C56AE75C

**Type locality:** Al Qadmos (Lattaquié, Syria).

**Type series:** Holotype, female [SYRIA]: “Syrie (Lattaquié), Qadmous, 31-V-2003, P. Weill leg.” (MNHN). Paratypes: same as holotype (3, PWCP; 3, RCCM); “Syrie (Lattaquié), Frulloq, 600 m, 15-VI-2002, P. Weill leg.” (1, PWCP); “Syrie, Tammazeh, 14-VI-2002, P. Weill leg.” (2, PWCP); “Syrie (Alep), Qalat Nijem, 350 m, 36° 33' N 38° 13' and, 8-V-2003. P. Weill leg.” (3, PWCP); “Syrie b. oc.: Umg. Midanki b. Afrin Bachufer, 29.IV.96, leg. Behne” (1, DEIM); “Sunfeh, 02-VI-2003, Syrie, Weill” (4, PWCP); “Syrie (Idlib), Ihsem, 30-IV-2004” (2, PWCP); “Syrie (Tartous), Amrit, < 50 m, 34° 50' N 35° 54' and, 10-IV-2004, P. Weill leg.” (7, PWCP); “Hosn, 23-III-2002, Syrie, Weill” (3, JPCM); “Syrie (Tartous), Marqab, 300 m, 31-III-2003, P. Weill leg.” (1, JPCM); “Syrie, Tartous, < 50 m, 34° 50' N 35° 54' and, 10-IV-2004, P. Weill leg.” (1, PWCP); “Syria, Homs distr., Crac des Chevaliers, 24.V.2002, Košťál & Voříšek leg.” (2, MKCB); “Syrie (Damas), Irneh (Mt Hermon), 2000 m, 7-V-2004, P. Weill leg.” (1, JPCM); “Syrie (Damas), Irneh, 2000 m, 7-V-2004, 35° 53' N 33° 27' E, P. Weill leg.” (3, PWCP; 4, RCCM); “Syrie (Deraa), Tal Sh'hab, 29-IV-2004, P. Weill leg.” (4, PWCP); “35124 TURKEY: Adana Province, Çukurova Delta, sand dune, v-vii.2003-2005, G. Aydin” (1, TAUI); “Turchia, v. Adana 19. 15 km S Tufanbeyli, m 1500, 10.6.1986, M. Bologna” (1, GOCA); “Turkey, Gülek, Rt. 750, 35 km N Tarsus, 700 m, 9.v.2000 / A. Freidberg, H. Ackerman, L. Friedman” (1, TAUI); “Turkey: Rt. 750, 20 km N Tarsus, 250 m, 9.v.2000 / A. Freidberg, H. Ackerman, L. Friedman” (2, TAUI). LEBANON:

“Libano - caza Kesrouane, Mayrouba, m 1200, 20/21-V-1972, P. Brignoli leg.” (4, GOCA); “Libano Zghorta Ehden, m 1450 / 4.VI.72, Brignoli” (2, GOCA); ISRAEL: “Israel, Berekhat Ya'ar, 14.v.2003, L. Friedman” (1, TAUI); “127365. Israel: Rosh ha'ayin Zafon Railway Station, 7.vi.2012, L. Friedman, on *Verbascum sinuatum*” (8, TAUI); “Israel, Shoham, 31.iii.2006, L. Friedman” (19, TAUI); “Israel, Shoham, N32°00 E34°57', 17.III.2006, E. Amsalem” (1, TAUI); “Israel, Shoham, 32°00N 34°57'E, 26.v.2008, M. Shraga” (1, TAUI); “Izrael, Ahihud, 1965.V.13, Dr. Erdős / Coll. Dr. Erdős” (2, HNHM); “Izrael, Ahihud, 1965.V.13, dr. Erdős” (1, HNHM); “Israel, H[ar]. Meron, 10.VI.1987, Y. Zvik” (4, TAUI); “Israel, Nazareth, 8.V.1979, D. Furth” (2, TAUI); “Israel, Nahal Oren, riverbed, 14.v.2003, L. Friedman” (2, TAUI); “Israel, Nahal Oren, 16.v.1999, I. Lopatin” (1, TAUI); “Israel, Rehovot, 17.v.2006, W. Kuslitzky” (2, TAUI); “Israel, N[ahal]. Poleg, 2.V.1980, D. Furth” (9, TAUI); “Israel, Shoham, 31.iii.2006, L. Friedman” (2, TAUI); “Israel, Bet Oved, 27.iv.2004, A. Freidberg” (1, TAUI); “Israele-Neghev Beer Sheva, 21/5/2006, Leg. Tedeschi (3, MTCM).

**Description:** *Female* (holotype). Length 2.6 mm. Body: short, oval, very stout. Rostrum: black with reddish apex, moderately long (Rl/Pl 0.92), subcylindrical; in lateral view weakly curved, of same width from antennal insertion to apex (Fig. 20); in dorsal view subparallel-sided, with scrobe moderately visible, moderately convex on dorsum, smooth and shining in apical half, in basal half with subrecumbent to suberect, moderately dense, greyish white, long (l/w 6-9), seta-like scales. Frons: slightly narrower than rostrum at base, with distinct fovea. Eyes: weakly convex. Antennae: reddish brown, except segments 3-5 of funicle and club blackish, inserted before middle of rostrum; scape 4.5x longer than wide, funicle slightly longer than scape, with segment 1 2.5x longer than wide, slightly stouter and longer than segment 2, latter 2.0x longer than wide, segments 3-4 about as long as wide, segment 5 moderately transverse; club short oval, with segment 1 almost glabrous in basal half. Pronotum: black, with dense and somewhat regular punctures, intervals between punctures narrow, smooth and shining, clearly visible between subrecumbent to suberect, moderately dense, greyish white, long to very long (l/w 7-12), seta-like scales; distinctly transverse (Pw/Pl 1.54), with distinctly prominent apical constriction, with distinctly rounded sides, widest in basal third, weakly convex. Elytra: reddish brown except a black subtriangular spot from base to middle; short (El/Ew 1.14), oval, at base transverse till interstria 5 further moderately directed forward, moderately wider than pronotum (Ew/Pw 1.28), with moderately rounded sides, widest at middle, weakly convex on disc; interstriae weakly visible between subrecumbent to suberect, dense, slightly sericeous greyish white, seta-like scales, which are about as long as width of interstria (l/w 7-12), ruffled and arranged irregularly, denser on interstria 1; striae weakly visible, two thirds narrower than interstriae, with row of scales distinctly shorter and finer than those of interstriae. Legs: stout, with recumbent to suberect, somewhat dense, greyish white, seta-like scales, which are slightly shorter than width of tibia; femora black with reddish brown apex, globose, with very small tooth, tibiae reddish brown, moderately slender, protibiae and mesotibiae with mucro, metatibiae without uncus; tarsi reddish brown, with segment 1 1.8x longer than wide, tarsomere 2 1.2x longer than wide, tarsomere 3 bilobed and distinctly wider than tarsomere 2, onychium slightly longer than tarsomeres 1-3 taken together; claws brown. Metasternum: black, with somewhat dense, whitish, long, seta-like scales, distinctly concave at midline. Mesothoracic epimera and meso- and metathoracic episterna: with somewhat dense, whitish, long, seta-like scales. Abdomen: black, with dense and somewhat regular punctures, weakly visible between recumbent to subrecumbent dense, whitish, long, seta-like scales; length ventrites 1-2/3-4 2.15. *Male*. As female except rostrum slightly shorter (Rl/Pl 0.89), in lateral and dorsal view slightly and gradually narrowed from base to apex, in dorsal view somewhat flattened, more

rugulose and opaque to apex (as in *R. tetra*, figs. 14, 27, 28), antennae inserted just beyond middle of rostrum, femora with distinct tooth, protibiae and mesotibiae with thinner premucro. Penis: as in *R. tetra* (Fig. 43).

**Variability:** As in the other species of its group the length is somewhat variable, with a range between 1.8 and 2.6 mm. The colour of the elytral integument varies from completely black to more or less broadly reddish at sides.

**Remarks and comparative notes:** This species differs distinctly from *R. moroderi*, with which it shares the small size, and the small specimens of *R. tetra* by the shape of the rostrum in the female (Fig. 20). It is noteworthy that *R. weilli* is sympatric with *R. tetra* in some localities of Syria (Fruulloq, Tammazeh), and with *R. moroderi* at least in one locality from Turkey (Cukurova Delta) and one locality from Israel (Rosh ha'Ayin Zafon).

**Biological notes:** The specimens from Rosh ha'Ayin Zafon (Israel) were collected on *Verbascum sinuatum* L. apparently together with *R. moroderi* (L. Friedman pers. comm.).

**Distribution.** Turkey, Syria, Lebanon, Israel.

### ***Rhinusa comosa* (Rosenschoeld, 1838)**

*Gymnetron comosum* Rosenschoeld, 1838: 756. Brisout de Barneville, 1862: 655; 1865: 621. Caldara *et al.* 2012: 32.

*Rhinusa comosa* (Rosenschoeld). Caldara *et al.* 2012: 37.

**Type locality:** Smyrne (Turkey).

**Type series:** Lectotype and one paralectotype were designated by Caldara *et al.* (2012) and preserved at NHRS.

**Redescription:** As *Rhinusa tetra* except female rostrum cylindrical in lateral view (Figs. 22, 32), smoother and more shining in apical half; male rostrum not conical in lateral view (Fig. 21), parallel-sided in dorsal view from antennal insertion to apex (Fig. 30), and almost completely lacking dorsal longitudinal median sulcus and more regularly punctured (Fig. 31); penis longer and parallel-sided (Fig. 44).

**Variability:** Length 2.1-3.9 mm. The elytra may be almost completely reddish except for a narrow periscutellar black area. Sometimes the tibiae are black at the basal two thirds. The colour of the scales varies from whitish grey to yellowish grey.

**Remarks and comparative notes:** *Rhinusa comosa* is closely related to *R. acifer*, with which it shares the shape of the penis but from which differs clearly by the different shape and length of the rostrum in the female. There are no difficulties in separating these two species from the others of the group if one considers shape of elytra, male rostrum and penis all together.

**Biological notes:** This species was collected on *Verbascum* spp., in Sicily, *V. macrurum* Ten. and *V. thapsus* L. (C. Baviera pers. obs.).

**Distribution:** Italy, Croatia, Montenegro, Macedonia, Greece, Bulgaria, Turkey, Uzbekistan.

**Non-type specimens examined:** ITALY: Liguria, Genova, Gattorna, 1.-10.VII.1979, leg. Caldara (3, RCCM); Marche, Macerata, Bolognola, 24.VI.1955, leg. Magistretti (1, PCCP); Lazio, Roma, Acquacetosa, 29.VI.1910, leg. Luigioni (1, GOCA); Lazio, Maccarese, 19.VI.1910, leg. Luigioni (1, GOCA); Lazio, Riofreddo, 23.-26.V.1943, leg. Cerruti (4, MSNM); Abruzzo, L'Aquila, Fucino, 19.VII.1990, leg. Osella (4, GOCA); Abruzzo, L'Aquila, Ofena, Colonia Frasca, 14.V.1998, leg. Osella (1, GOCA); Abruzzo, Gran Sasso, S. Stefano di Sessanio, 16.VII.1999, leg. Osella (2, GOCA); Abruzzo, L'Aquila, Gran Sasso, Barisciano, 28.V.1986, leg. Colonnelli (1, GOCA); Abruzzo, L'Aquila, Barisciano, 16.V.2000, leg. Colonnelli (1, ECCR); Abruzzo, L'Aquila, Assergi, 1600 m, 9.VII.1990, leg. Abbazzi (1, PACF); Chieti, San Salvo Marina, V.1975, leg. Caldara (3, RCCM); Pescara, 9.VI.1946, leg. Barbera (1, MSNG); Abruzzo, Majella, Vall'Orfento, guado S. Antonio, 1200 m, 29.VI.1987, leg. Altea & Osella (19, GOCA); Majella, Palumbaro, 24.VI.1992, leg. Domizio & Osella (4, GOCA); Molise, Campobasso, Campomarino Lido, 9.V.1994, leg. Colonnelli (1, ECCR); Molise, Isernia, Matese, Roccamandolfi, VI.1967, leg. Osella (1, GOCA); Campania, Benevento, Sassinoro, 12.VI.1962, leg. Magistretti (1, GOCA); Puglia, Brindisi, Francavilla Fontana, 5.XI.1995, leg. Montemurro (4, FAF); Puglia, Foggia, Manfredonia, 26.VI.1973, leg. Poldi (1, GOCA); Puglia, Foggia, Isola di Varano, Capoiola, 26.IV.2003, leg. Pavanello (1, CBCM; 4, LDCC); Puglia, Foggia, Gargano, Lago Varano, V.1967, leg. Castellini (16, MSNV); Puglia, Foggia, San Giovanni Rotondo, 6.VI.1995, leg. Osella (1, GOCA); Puglia, Lecce, Frigole, 17.IV.1977, leg. Angelini (1, PACF); Puglia, Taranto, Martina Franca, 21.V.1970, leg. Angelini (1, PCCP); Puglia, Taranto, Martina Franca, Bosco Orimini, 28.V.1995, leg. Magnano (3, LMCP); Puglia, Taranto, Martina Franca, Bosco Pianella, 17.V.1992, leg. Montemurro (1, FAF); Puglia, Taranto, Martina Franca, San Paolo, Bosco Orimini, 400 m, 29.V.1995, leg. Cornacchia (16, PCCP); Catanzaro, Capo Rizzuto, 2.VI.1996, leg. Magrini (1, PACF); Calabria, Catanzaro, Cardinale, 7.VI.1987, leg. Abbazzi (4, PACF); Calabria, Catanzaro, Cardinale, loc. San Nicola, 7.VII.1987, leg. Nisticò (3, MSNF); Calabria, Catanzaro, Lamezia Terme, Sant'Eufemia, 17.VI.1973, leg. De Martin (5, GOCA); Calabria, Catanzaro, Sant'Eufemia, 17.VI.1973, leg. Bucciarelli (2, CPCM); Calabria, Cosenza, Camigliatello, VII.1938, leg. Burlini (4, PCCP); Calabria, Cosenza, Saracena, fosso Serrapopolo, 11.VI.1989, leg. Colonnelli (5, ECCR); Calabria, Cosenza, Castiglione Cosentino, 14.VI.1994, leg. Angelini (2, FAF); Calabria, Cosenza, Collareto, Massiccio del Pollino, VI.1953, leg. Ruffo (1, GOCA; 2, PCCP; 4, LMCP); Calabria, Cosenza, Paola, Passo Crocetta, 800 m, 27.VI.1966, leg. Angelini (3, CPCM); Calabria, Cosenza, San Giovanni in Fiore, 17.VII.1976, leg. Montemurro & Angelini (1, LDCM; 3, CPCM); Calabria, Reggio Calabria, Santa Cristina d'Aspromonte, 12.VI.1989 (1, GOCA); Calabria, Reggio Calabria, Gambarie, Aspromonte, VII.1957 (1, LMCP); Calabria, Reggio Calabria, Piano della Limina, 15.VII.1990, leg. Mamoli (1, GOCA); Calabria, Reggio Calabria, Podargoni, Aspromonte, VI. 1958, leg. Magnano (4, PCCP; 2, LMCP); Calabria, Sila, 6.VII.1978, leg. Bellò (6, GOCA); Calabria, Sila, M. Paleparto, VIII.1962 (1, GOCA); Calabria, Sila Piccola, Taverna, Rif. Nat. Poverella, m 1000, 12.VII.2003, leg. Scaglioni-Ferro (1, PCCP); Basilicata, Matera, 15.VI.1971, leg. Angelini (1, MMCT); Basilicata, Matera, Policoro, 22.IV.1970, leg. Angelini (1, GOCA; 1, MMCT); Basilicata, Potenza, 22.VI.1969, leg. Angelini (1, GOCA); Basilicata, Potenza, Monte Vulture, 1300 m, 18.VI.1988, leg. Angelini (8, GOCA);. ITALY (SICILY): Catania, Etna north, Bosco di Malabotta, 1300 m, 23.VI.2003, leg. Baviera (1, CBCM); Catania, Francavilla, 21.V.1977, leg. Mourglia (8, MMCT); Catania, Randazzo, 1000 m, 27.V.1981, leg. Bellò (4, GOCA); Messina, leg. Vitale (1, DEIM); Messina, Cavaliere, 7.V.1904, leg. Vitale (6, MSNM); Messina, Peloritani Casalvecchio, 28.V.2010, on *Verbascum thapsus*, leg. Baviera (2, CBCM); Messina, Peloritani, Castoreale Bafia, 5.VI.2011, on *Verbascum*

*thapsus*, leg. Baviera (5, CBCM); Messina, Peloritani, Colle San Rizzo, VII.1959 (6, GOCA); Messina, Peloritani, Torrente Niceto, on *Verbascum macrurum*, leg. Baviera (6, CBCM); Messina, Peloritani, Pizzo Chiarino, 750m, 29.VI.2011, on *Verbascum thapsus*, leg. Baviera (6, CBCM); Siracusa, Cassaro, Anapo, 12.V.1983, leg. Magnano (3, LMCP); Messina, Peloritani, Mandanici, VI.1959 (1, GOCA); Messina, Peloritani, Punta Mandarazzi, 1000 m, 25.V.1981, leg. Bellò (1, GOCA); Palermo, Monti Iblei, Vizzini, 22.V.1981, leg. Bellò (1, GOCA); Monti Nebrodi, Portella Femminamorta, 18.VI.1979, leg. De Martin (1, GOCA). ITALY (SARDINIA): Nuoro, Siniscola, Monte Albo, P. Cupetti, 550-650 m, 4.V.1995, leg. Angelini (1, FACF). CROAZIA: Metkovic (1, SMNS). MONTENEGRO: Kotor, 29.IV.1975, leg. Strejcek (1, JSCP); Sutomore, 27.V.1984, leg. Strejcek (1, JSCP). MACEDONIA: Baba planina, 1650 m, 30.VII.1967, leg. Horvatovich (1, MMCT); Vardar valley, Demir Kapija, 14.VIII.1980, leg. Mühle (2, ZISP); Stip river Kriva Lakavica, 8.V.1971, leg. Horvatovich (1, GOCA); Vodno nr. Skopje, 11.VI.1969, leg. Necker & Haas (2, PSCH);. GREECE: East Macedonia and Thracia, Pangeon, Kloster Ikosifinisi, 1300 m, 4.V.1990, leg. Bense (3, SMNS); East Macedonia and Thracia, Xanthi, 13.VI.1988, leg. Hobauer (1, DEIM); Central Macedonia, 7.5 km NW Axioupolis, 14.VII.2003, leg. Bahr, Bayer & Winkelmann (4, HWCB); Ionian Islands, Cephalonia, Krane, 4.-17.V.29, leg. Beier (35, MSNM); Thessaly, Meteora monastery, 14.V.1994, leg. Strejcek (1, APCB); West Greece, Agrinion, 14.V.1987, leg. Angelov (1, GOCA); West Greece, Achaea, Erymanthos, Alepohori, 1900 m, 22.VI.1997, leg. Messutat & Winkelmann (1, JMCS; 1. HWCB); Peloponnesos, Arcadia, Tripoli, 10.V.1987, leg. Angelov (1, GOCA; 2. MMCT); Peloponnesos, Laconia, Areopoli, 10.V.1987, leg. Angelov (1, MMCT); Peloponnesos, Laconia, Gythion, Skoutari, 18.IV.1987, leg. Riedel (1, ARCK); Peloponnesos, Laconia, Kosiaron, 16.V.1981, leg. Podlussany (1, APCB); Peloponnesos, Laconia, Krokees, Mount Taigetos, 16.V.1981, leg. Podlussany (4, APCB); Peloponnesos, Laconia, Poliane, Mount Taigetos, 1000 m, 16.VII.1981, leg. Bellò (1, GOCA); Peloponnesos, Laconia, Sparta, Mistra, 28.III.1990, leg. Schmidt (2, PSCH); Peloponnesos, Messenia, Achladohori, 29.VI.1997, leg. Bayer & Messutat (4, CBCB; 4, JMCS); Peloponnesos, Messenia, 52 km NW Drama, Achladohori, 12.VII.2003, leg. Bahr, Bayer & Winkelmann (1, HWCB). BULGARIA: Cernomorec, 15.VII.1978, leg. Kolescova (1, RBCS); Charmanli, 11.V.1985, leg. Kadlec (1, RBCS); Gredna Gora, 17.VI.1963, leg. Kral (1, JSCP); Kresna defile, 22.V.1970, leg. Angelov (3, GOCA; 4, MMCT); Krupnik, 12.V.1967, leg. Angelov (1, GOCA); Markovo, 25.V.1977, leg. Angelov (2, GOCA); Sandanski, 29.V.1974, leg. Strejcek (2, JSCP); Sandanski, Polenica, 28.V.1974, leg. Strejcek (2, JSCP); Sandanski, valley of Lebnica river, leg. Hájek (2, JSCP); Sandanski, Strumatal, 17.V.1985, leg. Behne (1, HWCB); Semsinovo, V.1986, leg. Ernest (1, RBCS); Pirin, Banderiza, 1800 m, 16.VII.1975, leg. Angelov (1, GOCA; 2. MMCT); Strandza, Boljorovo, 20.VI.1978, leg. Angelov (1, GOCA). TURKEY: Kahramanmaraş, Kahramanmaraş, 8.V.2000, leg. Colonnelli (2, ECCR); Elmalı, 19.VI.1988, leg. Hobauer (1, DEIM); [Konya], Ereğli, İvriz, 1800 m, 18.VI.1966, on *Verbascum*, leg. Remaudiere (1, MNHN); İzmir (1, MSNM); Tokat (4, MNHN); [Adıyaman], Karadut, N Kahta, 17.V.2001, leg. Białooki (2, PBCS); [Afyonkarahisar], Sultandağı, 14.VI.1972, on *Verbascum* (1, GOCA); Manisa, Boz dag, 1500 m, VII.1973, leg. Osella (1, GOCA); Eskişehir, 29.V.1989, leg. Riedel (7, ARCK). UZBEKISTAN: Tashkent-Aktash, m 1500, 30.IV.1977, leg. Novotny (1, RBCS).

### ***Rhinusa acifer* sp. nov.**

[urn:lsid:zoobank.org:act:43ED1EF8-2D19-4E6A-B204-8FDE31FACBAE](http://urn:lsid:zoobank.org:act:43ED1EF8-2D19-4E6A-B204-8FDE31FACBAE)

**Type locality:** Elazığ (Elazığ province, Turkey).

**Type series:** Holotype female: “TR [Turkey] vill. Elazığ, Elazığ, 16.VI.1986, Kadlec + Voříšek leg.” (BMNH). Paratypes: as the holotype (1, BMNH); “TR vill. Antalya, Bey Dağları, Termessos, 9.6.1986, Kadlec + Voříšek leg.” (3, RCCM); “TR vill. Denizli, 1250 m, Kazıkbeli Geçidi, 8.6.1986, Kadlec + Voříšek leg.” (1, BMNH); “Turcia, 27.6.1993, [Adıyaman], Nemrut Dağı, Bitlis, Bilek lgt.” (2, JSCP); “Turchia, v. Gaziantep, 19.10 km and Gaziantep, m 800, 13.6.1986, M. Bologna” (2, GOCA); “Turchia, v. Adıyaman, 21, Gölbaşı dint., m 900, 14.6.1996, M. Bologna” (2, GOCA); “TR - Prov. Adıyaman, 7 km N Narince, 13.6.1988, leg. Barries & Cate” (1, DEIM); “Turchia, v. Kayseri, 29. Erciyes dağı, m 2000-2350, 19.6.1980, M. Bologna” (1, GOCA); SYRIA: “Syrie, Maaloula, 8.VI.2002, leg. Weill” (2, PWCP); “Syrie (Idlib) Ihsem, 30-V-2004, P. Weill leg.” (7, PWCP; 2, RCCM); “Syrie (Damas) Monte Rosa, 1200 m, Lac ZarZar, 31-V-2002. P. Weill leg.” (8, PWCP; 4, RCCM); “Monte Rosa, 31-V-02, Syrie, P. Weill” (2, PWCP); “Djebel Bilas, 17-V-2003, Syrie, P. Weill” (2, PWCP); “Syrie (Damas), Bloudan, 2000 m, 31-V-2002, P. Weill leg.” (2, PWCP); “D. Marmoussa, 31-V-2003, Syrie, P. Weill” (1, PWCP); “Rankous, 13-VI-2003, Syrie, P. Weill” (3, PWCP); “Maaloula, 08-VI-02, Syrie, P. Weill” (2, PWCP); “Syrie b. oc.: Umg. Midanki b. Afrin Bachufer, 29.IV.96, leg. Behne” (9, DEIM); “Syrien/Damaskus, Tkie, 18.5.1980, leg. H. Mühle” (1, DEIM; 6, ZISP); ISRAEL: “Israel/Tel Aviv, Ilanoth, 24.4.1982, leg. Mühle” (7, ZISP).

**Description:** *Female* (holotype). Length 3.9 mm. Body: short, oval, very stout (Fig. 6). Rostrum: black, very long (Rl/Pl 1.52), cylindrical especially from antennal insertion to apex, in lateral view moderately curved in apical third (Fig. 23), in dorsal view subparallel-sided from base to apex (Fig. 36), with clearly visible scrobe, smooth, shining and with sparse small punctures in apical half, in basal half with subrecumbent to suberect, moderately dense, greyish white, long (l/w 6-9), seta-like scales. Frons: slightly narrower than rostrum at base, with distinct fovea. Eyes: weakly convex. Antennae: reddish brown with dark brown club, inserted just before middle of rostrum; scape 4.5x longer than wide, funicle slightly longer than scape, with segment 1 2.5x longer than wide, slightly stouter and slightly longer than segment 2, latter 2.0x longer than wide, segments 3-4 about as long as wide, segment 5 moderately transverse; club short, oval, with segment 1 almost glabrous in basal half. Pronotum: black, with dense and somewhat regular punctures, intervals between punctures narrow, smooth and shining, clearly visible between subrecumbent to suberect, moderately dense, greyish white, long to very long (l/w 8-12), seta-like scales; distinctly transverse (Pw/Pl 1.47), with distinctly prominent apical constriction, with distinctly rounded sides, widest in basal third, weakly convex. Elytra: reddish brown except a subtriangular black spot from humeri to middle; short (El/Ew 1.13), oval, at base transverse till interstria 5 further directed moderately forward, moderately wider than pronotum (Ew/Pw 1.33), with moderately rounded sides, widest at middle, weakly convex on disc; interstriae weakly visible between subrecumbent to suberect, dense, slightly sericeous greyish white, seta-like scales, which are about as long as width of interstria (l/w 8-12), ruffled and arranged irregularly, denser on interstria 1; striae weakly visible, two thirds narrower than interstriae, with row of scales distinctly shorter and thinner than those of interstriae. Legs: stout, with recumbent to suberect, somewhat dense, greyish white, seta-like scales, which are slightly shorter than width of tibia; femora black, globose, with very small tooth, protibiae and mesotibiae with mucro, metatibiae without uncus; tarsi reddish brown, with tarsomere 1 1.8x longer than wide, tarsomere 2 1.2x longer than wide, tarsomere 3 bilobed and distinctly wider than tarsomere 2, onychium slightly longer than tarsomeres 1-3 taken together; claws brown. Metasternum: black, with somewhat dense, whitish, long, seta-like scales, distinctly concave along midline. Mesothoracic epimera and meso- and metathoracic episterna: with somewhat dense, whitish, long, seta-like scales. Abdomen: black, with dense and somewhat regular

punctures, weakly visible between recumbent to subrecumbent, dense, whitish, long, seta-like scales; length ventrites 1-2/3-4 2.28. *Male*. As female except rostrum distinctly shorter (RI/PI 1.04), weakly conical, in lateral view slightly and gradually narrowed from base to apex, in dorsal view striate-punctate to apex, with narrow and shallow striae (as in *R. comosa*, figs. 21, 30, 31), antennae inserted just beyond middle of rostrum, femora with big and stout tooth, tibiae black, moderately slender, unci stouter, that of metatibiae truncate at apex and slightly smaller and thinner than others, protibiae and mesotibiae with small premucro. Penis: as in *R. comosa* (Fig. 44).

**Variability:** Length mm 2.6-4.1. The elytral integument may be more or less broadly reddish at sides. Sometimes the tibiae are dark brown in their apical part or completely reddish brown. The colour of the scales varies from whitish grey to yellowish grey.

**Remarks and comparative notes:** This species is closely related to *Rhinusa comosa*, from which it differs, only but clearly, by the shape of the rostrum in the female. There are no difficulties in separating this species from the others of the group.

**Biological notes:** No data are reported.

**Distribution:** Turkey, Syria, Israel.

### ***Rhinusa asellus* (Gravenhorst, 1807)**

*Rhynchaenus asellus* Gravenhorst, 1807: 203.

*Cionus asellus* (Gravenhorst). Germar, 1821: 311.

*Gymnetron asellus* (Gravenhorst). Schoenherr, 1838: 765. Brisout de Barneville, 1862: 645. Desbrochers des Loges, 1893: 6, 23. Reitter, 1907: 31; 1916: 229. Hustache, 1931: 413, 425. Hoffmann, 1958: 1282, 1298. Smreczyński, 1976: 33. Lohse & Tischler, 1983: 268.

*Mecinus asellus* (Gravenhorst). Sainte-Claire Deville, 1923: 68.

*Rhinusa asellus* (Gravenhorst). Caldara, 2001: 185. Caldara *et al.* 2011: 13.

*Gymnetron nasutum* Rosenschoeld, 1838: 757.

*Gymnetron polonicum* Rosenschoeld, 1838: 757.

*Gymnetron plagiatum* Gyllenhal, 1838: 758. Brisout de Barneville, 1865: 620. Hustache, 1931: 425. Hoffmann, 1958: 1299. Smreczyński, 1976: 33.

*Gymnetron cylindrirostre* Gyllenhal, 1838: 766.

*Gymnetron asellus* f. *rufofusca* Hepp, 1832: 125 (infrasubspecific name).

**Type locality:** San Martino al Cimino (Latium, central Italy).

**Type series:** As well known, all the species described by Gravenhorst have no type locality (Alonso-Zarazaga *et al.* 2013) and his collection was destroyed during the Second World War (M. Uhlig pers. comm.). Therefore, because of the need to fix the taxonomic status of this species, according to Articles 75.2 and 75.3.6 of ICZN (1999) I decided to designate a neotype of *Rhynchaenus asellus* Gravenhorst, 1807. It is a well preserved male, 4.0 mm long, well corresponding to the original description. The neotype is labelled as follows: “Lazio, S[an]. Mart[ino]. Cimino, Stagnitta, VI.[19]46 / Neotype *Rhynchaenus asellus* Gravenhorst, 1807, R. Caldara des. 2013 / *Rhinusa asellus* (Gravenhorst, 1807) det. R. Caldara 2013”. It is deposited at the MSNM in the Solari collection.

**Synonyms:** *Gymnetron nasutum* was described by Rosenschoeld from specimens from

Smyrne (Turkey), of which I examined one female at NHRS labelled "Smyrne / Chevrol., Anatolia / Coll. Chevrol. / Typus" (lectotype here designated with the addition of the following red printed label: "LECTOTYPUS *Gymnetron nasutum* Rosensch., Caldara des. 2006"); it is a typical female of *R. asellus*.

Rosenschoeld described also *G. polonicum* from specimens from Poland (without more detailed indications), of which I examined a female at NHRS labelled "Typus / Polonia, Falderman" (lectotype here designated with the addition of the following red printed label: "LECTOTYPUS *Gymnetron polonicum* Rosch., Caldara des. 2006"); also this specimen is a typical female of *R. asellus*.

*Gymnetron plagiatum* was described by Gyllenhal from specimens collected at Krzmienc (Volhynia, Ukraine), of which I examined one male at NHRS labelled "♂ / Typus / Gymn: thapsus e Gremieniec, Besser" (lectotype here designated with the addition of the following red printed label: "LECTOTYPUS *Gymnetron plagiatum* Gyll., Caldara des. 2006"), whereas Gyllenhal again described *G. cylindrirostre* from specimens collected in Ukraine (Podolia, Volhynia, Tauria) and Germany, of which I examined two females at NHRS labelled respectively "♀ / Miarus e Podolia, Besser / Typus" (lectotype here designated with the addition of the following red printed label: "LECTOTYPUS *Gymnetron cylindrirostre* Gyll., Caldara des. 2006") and "♀ / Paratypus / Gymn: thapsus e Krmieniec, Besser" (paralectotype here designated with the addition of the following red printed label: "PARALECTOTYPUS *Gymnetron cylindrirostre* Gyll., Caldara des. 2006"). Both these taxa are synonymous with *R. asellus*.

The form *rufofusca* of *G. asellus*, which was described by Hepp from specimens from Germany, was unequivocally described as infrasubspecific (ICZN, 1999, Art. 45.6.1). Therefore this name is not available (ICZN, 1999 Art. 45.6.4.1).

**Redescription:** *Female*. Length 4.2 mm. Body: long, oval, stout. Rostrum: black with reddish apex, very long (RI/PI 1.74), subcylindrical; in lateral view slightly curved in apical third (Fig. 26); in dorsal view with sides slightly narrowing in basal third further cylindrical to apex (Fig. 38), with clearly visible scrobe, smooth, shining and with sparse small punctures from antennal insertion to apex, in basal third with subrecumbent to suberect, moderately dense, greyish white, long (l/w 6-9), seta-like scales, Frons: slightly narrower than rostrum at base, with distinct fovea. Eyes: weakly convex. Antennae: brown, inserted just before middle of rostrum; scape 4.5x longer than wide, funicle slightly longer than scape, with segment 1 2.0x longer than wide, slightly stouter and about as long as segment 2, which is 2.5x longer than wide, segments 3-4 1.2x longer than wide, segment 5 about as long as wide; club short oval, with segment 1 almost glabrous in basal half. Pronotum: black, with dense and somewhat regular punctures, intervals between punctures narrow, smooth and shining, slightly less dense along midline, clearly visible between subrecumbent to suberect, moderately dense, greyish, long to very long (l/w 7-12), seta-like scales; distinctly transverse (Pw/Pl 1.50), with distinctly prominent apical constriction, with distinctly rounded sides, widest in basal third, weakly convex. Elytra: black, moderately long (El/Ew 1.29), suboval, at base trasverse till interstria 5 further directed moderately forward, moderately wider than pronotum (Ew/Pw 1.31), with moderately rounded sides, widest at middle, weakly convex on disc; interstriae clearly visible between subrecumbent to suberect, moderately dense, slightly sericeous greyish, seta-like scales, which are long 0.75-1.00x width of interstria (l/w 9-14), ruffled and arranged irregularly, denser on interstria 1; striae somewhat visible, two thirds narrower than interstriae, with row of scales distinctly shorter and thinner than those of interstriae. Legs: stout, with recumbent to suberect, somewhat dense, greyish white, seta-like scales, which are slightly shorter than width of tibia; femora black, globose, with very small tooth; tibiae blackish, protibiae and mesotibiae with distinct premucro, unci black,;

moderately stout, lacking at metatibiae; tarsi reddish brown, with tarsomere 1 1.8x longer than wide, tarsomere 2 1.2x longer than wide, tarsomere 3 bilobed and distinctly wider than tarsomere 2, onychium slightly longer than tarsomeres 1-3 taken together, claws brown. Metasternum: black, with somewhat dense, whitish, long, seta-like scales, distinctly concave at midline. Mesothoracic epimera and meso- and metathoracic episterna: with somewhat dense, whitish, long, seta-like scales. Abdomen: black, with dense and somewhat regular punctures, weakly visible between recumbent to subrecumbent dense, whitish, long, seta-like scales; length ventrites 1-2/3-4 2.10. **Male.** As female except rostrum distinctly shorter (RI/PI 1.12), especially from antennal insertion to apex, in lateral view slightly and gradually narrowed from base to apex (Fig. 25), in dorsal view with subparallel sides from base to apex (Fig. 37), with clearly visible scrobe, striate-punctate to apex, with narrow and moderately shallow striae, antennae inserted just beyond middle of rostrum, femora with distinct bigger tooth, protibiae with smaller premucro, unci stouter, that of metatibiae truncate at apex and only slightly smaller and thinner than others. Penis: as in fig. 45.

**Variability:** Length 2.6-4.5 mm. Rarely, the elytra are almost completely brown except for a narrow black triangular periscutellar area. The colour of the scales varies from greyish white to yellowish brown. In general specimens from Turkey possess longer rostra than European ones.

**Remarks and comparative notes:** This species is very closely related to *Rhinusa tenuirostris*, from which it differs by the longer rostrum, especially in the female, and the less dense dorsal vestiture. The elongate shape of the elytra, together with that of the rostra and the male genitalia, allows one to distinguish these two species from all others of the group.

**Biological notes:** The larva feed on and pupate in the stem of several species of *Verbascum* (*V. nigrum* L., *V. phlomoides* L., *V. pulverulentum* Vill., *V. sinuatum* L., *V. thapsoides* Schw., *V. thapsus* L., *V. virgatum* With.), where it causes a small hypertrophy of this structure.

**Distribution:** Central and southern Europe, states of the Caucasus, western and central Turkey.

**Non-type specimens examined:** Specimens from the whole Europe. Here are reported in detail only some noteworthy localities of collection: TURKEY: Adıyaman, Nemrut Dağı, 2500 m, 17.VII.1996, leg. Tyrner & Voříšek (1, OVCL); İzmir, Selçuk, Ephesus, 27.IV.1997, leg. Szelles (3, JMCS); Çanakkale, Truva, 2.VI.1991, leg. Bednarik & Kovarik (1, HWCB); Ankara, Kiizilcahamam, 3.VII.1986, leg. Kadlec (2, RBCS); Konya, 25 km NE Beyşehir, 27.V.1998 (2, OVCL); Kahramanmaraş, Püren geçidi, 1550 m, 23.V.2001, leg. Colonnelli (3, ECCR); Kayseri, Barkırdağı, 7.V.2000, leg. Colonnelli (1, ECCR).

### ***Rhinusa tenuirostris* (Stierlin, 1888)**

*Gymnetron tenuirostre* Stierlin, 1888: 59. Caldara 2013: 52.

*Gymnetron bodenheimeri* Wagner, 1926: 254.

*Rhinusa bodenheimeri* (Wagner). Caldara *et al.* 2010: 13. Caldara 2013: 52

**Type locality:** Beirut (Lebanon).

**Type series:** This species was described from specimens collected at Beirut. I examined one male and one female preserved at DEIM and labelled “Appl Beirut 1878. / ♂ / coll. Stierlin /

Syntypus” (lectotype here designated with the addition of the following red printed label: “LECTOTYPE *Gymnetron tenuirostre* Strl., Caldara des. 2013”) and “Appl Beirut 1878. / coll. Stierlin / Syntypus” (female, paralectotype here designated with the addition of the following red printed label: “PARALECTOTYPE *Gymnetron tenuirostre* Strl., Caldara des. 2013”).

**Synonyms:** *Gymnetron bodenheimeri* was described by Wagner from one male and four females collected at Tel Aviv (Israel), without the designation of a holotype. I examined two of these specimens, one male and one female preserved at MHNH and labelled: “Palästina, Tel-Aviv / Typus male / *Gymnetron Bodenheimeri* m. Type! ♂, Wagner det.” (lectotype here designated with the addition of the following red printed label: “LECTOTYPE *Gymnetron bodenheimeri* Wagner, Caldara des. 2013”) and “Palästina, Tel-Aviv / Typus female / *Gymnetron Bodenheimeri* m. Type! ♀, Wagner det.” (paralectotype here designated with the addition of the following red printed label: “PARALECTOTYPE *Gymnetron bodenheimeri* Wagner, Caldara des. 2013”). This synonymy was proposed by Caldara (2013).

**Redescription:** As *Rhinusa asellus* except rostrum shorter in both sexes (RI/PI male 0.98; female 1.31) (female fig. 24), dorsal vestiture denser and formed by more raised hairlike scales (Fig. 7).

**Remarks and comparative notes:** This taxon is very closely related to *R. asellus*, differing from it only by the length of the rostra and the pattern of the dorsal vestiture. It seems exclusive to the Middle East where it is vicariant of *R. asellus*. A preliminar molecular study showed that the mtCOII gene frequency data revealed high genetic divergence (8%) between these two taxa (I. Toševski pers. comm.).

**Biological notes:** This species reared in March from galls collected in December, and kept in laboratory condition at about 20-25 C and 50-60% relative humidity at Hatay province (southern Turkey) on *Verbascum gaillardotii* Boiss. Adults were collected from its host plant when they were feeding on newly developed stems in the field (Doğanlar & Üremiş 2014). Also the specimens from Neve Ativ (Israel) were collected on the same plant, whereas at İçel province (Turkey) they were collected from galls on stems of *Verbascum* sp. (det. Winkelmann). In Syria adults were collected on *Verbascum* sp. (det. Pellettier). It is noteworthy that up to now no author reported the induction of galls by *R. asellus* (Hoffmann 1958; Toševski pers. comm.). Therefore also the different bionomic might be a further proof that *R. tenuirostris* and *R. asellus* are different at species level.

**Distribution:** Southern Turkey, Syria, Lebanon, Israel.

**Non-type specimens examined:** TURKEY: [İçel] Mersin, Çamlıyayla E, Kurtbucuk, 1000 m, 6.VIII.1998, from galls on stems of *Verbascum* sp., leg. Winkelmann (11, HWCB; 4, RCCM); Hatay, Hanyolu, Altınözü, III.2013, from galls on stem of *Verbascum gaillardotii*, leg. Doğanlar (2, MKUA). SYRIA: Aleppo (6, MSNV); Suweida, Qanawat, 27.IV.2002, on *Verbascum*, 1200 m, leg. Pellettier (3, JPCM); Hosn, 23.V.2002, leg. Weill (1, PWCP); Tartous, Amrit, 10.IV.2004, leg. Weill (3, PWCP); Kbachin, 9.V.2003, leg. Weill (1, PWCP); Irneh, 25.IV.2004, leg. Weill (3, PWCP); Hauran, Shahba, 30.IV.2004, leg. Pellettier (3, JPCM); Lattakié, Slunfeh, 3.V.2004, leg. Pellettier (2, JPCM). LEBANON: Zghorta, Ehden, 1450 m, 4.VI.1972 (1, MSNV); Beyrut (9, MSNV). ISRAEL: Biranit, 21.III.1967, leg. Gerling, ex stem gall of *Verbascum* sp. (5, TAUI); Jerusalem (1, MNHN); Jerusalem, 14.V.1958, leg. Ginsburg (1, BMNH; 3, TAUI); Mt. Hermon, 800 m, 29.IV.1973, leg. Furth

(2, TAUI); Mt. Hermon, 1750 m, 8.VII.1987, leg. Freidberg (1, TAUI); Ma'agar Yeroham, 7.III.2007, leg. Freidberg (1, TAUI); Mekora, 21.I.1984, leg. Shney-Dor (3, TAUI); Meron, 21.IV.1973, on *Verbascum*, leg. Furth (4, TAUI); Nahal 'Ammud, 7.IV.1978, leg. Furth (1, TAUI); Golan, Neve Ativ, 15.VIII.1990, leg. Halperin, on *Verbascum gaillardotii* (16, TAUI); Qidron, 31.III.1978, leg. Furth (1, TAUI); Nahal Poleg [Wadi Falik], 9.I.1962 (3, TAUI), 16.II.1962, leg. Kugler, ex galls on *Verbascum* sp., Nahal Poleg, iv.1996, leg. Friedman, ex stem galls of *Verbascum* sp. (2, TAUI); Daliyya, 6.II.1948, leg. Bytinski-Salz (9, TAUI); Haifa, 25.ii.1972, leg. Goldstein, ex gall on *Verbascum sinuatum* (1, TAUI); Oranim, 28.XII.1978, ex gall on *Verbascum* sp. (1, TAUI); Nes Ziyona, 10.I.1992, leg. Halperin, ex twig galls on *Verbascum* sp. (6, TAUI); Palaestina, Pardess Hanna, 5.II.1937, leg. Duvdevani (2, BMNH)

## Key to the species

1. Protibiae and metatibiae with premucro, which is more pronounced in female; protibiae in male distinctly arcuate in apical quarter, profemora distinctly globose, with distinct tooth in male (Figs. 40-41); ventrites 3-5 in male along midline with hairlike scales dense and ruffled . . . . . 2 (species of *R. tetra* group)
  - Protibiae and metatibiae without premucro; protibiae in male moderately arcuate in apical quarter, profemora moderately globose, at least with small tooth in male; ventrites 3-5 in male along midline without hairlike scales . . . . . 10 (other species of *Rhinusa*)
2. Rostrum of male in dorsal view of same width from antennal insertion to apex (Figs. 30, 37), striate-punctate without larger median sulcus (Fig. 31); rostrum of female in lateral and dorsal views parallel-sided (Figs. 22-24, 26; 32, 36, 38); body of penis very long, parallel-sided to near apex (Figs. 44-45) . . . . . 3
  - Rostrum of male in dorsal view gradually but distinctly tapering from base to apex (Fig. 27), at least at antennal insertion with large median sulcus deeper than lateral ones (Fig. 28); rostrum of female in lateral and dorsal views either gradually narrowing from base to apex or parallel-sided; body of penis shorter, sinuous at middle and then gradually narrowing to apex (Fig. 43) . . . . . 6
3. Elytra short (El/Ew 1.10-1.16) (Fig. 6) . . . . . 4
  - Elytra longer (El/Ew 1.24-1.32) (Fig. 7) . . . . . 5
4. Rostrum in female moderately long (RI/Pl 1.15-1.25) (Fig. 32), in lateral view almost straight (Fig. 22) . . . . . *R. comosa* (Rosenschold)
  - Rostrum in female distinctly long (RI/Pl 1.48-1.58) (Fig. 36), in lateral view distinctly curved (Fig. 23) . . . . . *R. acifer* sp. nov.
5. Rostrum longer, especially in female (RI/Pl male 1.08-1.16; female 1.64-1.78), in lateral view straight (Fig. 26); dorsal vestiture less dense and formed by suberect seta-like scales . . . . . *R. asellus* (Gravenhorst)
  - Rostrum shorter in both sexes (RI/Pl male 0.95-1.01; female 1.28-1.36), in female in lateral view slightly curved toward apex (Fig. 24); dorsal vestiture denser and formed by more raised hairlike scales (Fig. 7) . . . . . *R. tenuirostris* (Stierlin)
6. Rostrum of female in lateral and dorsal views of same width from antennal insertion to apex (Figs. 19-20, 35); body size 1.6-2.7 mm, average 2.3 mm . . . . . 7
  - Rostrum of female in lateral and dorsal views gradually but distinctly narrowing from antennal insertion to apex (Figs. 14-16, 18, 29, 33-34); body size 2.0-4.5 mm, average 3.3 mm . . . . . 8

7. Rostrum in female long (Rl/Pi 1.08-1.15), in lateral view almost straight (Figs. 19, 35) . . . . . *R. moroderi* (Reitter)
- Rostrum in female shorter (Rl/Pi 0.90-0.95), in lateral view moderately curved in apical half (Fig. 20) . . . . . *R. weilli* **sp. nov.**
8. Pronotum weakly transverse (Pw/Pi 1.30-1.37) and elytra moderately long (El/Ew 1.20-1.24) (Fig. 5). Tibiae and tarsi long, tarsomere 1 twice longer than wide, tarsomere 2 longer than wide. Rostrum in female very long (Rl/Pi 1.77-1.87) (Figs. 18, 34) . . . . . *R. ensifer* **sp. nov.**
- Pronotum distinctly transverse (Pw/Pi 1.55-1.68) and elytra short (El/Ew 1.05-1.15) (as in *R. acifer*, fig. 6), Tibiae and tarsi short, tarsomere 1 slightly longer than wide, tarsomere 2 transverse. Rostrum in female shorter (Rl/Pi < 1.30) (Figs. 14-16, 29, 33) . . . . . 9
9. Rostrum moderately long (length/width at base male 3.8-4.4, average 4.0; female 4.3-5.2, average 4.5. Rl/Pi male 0.84-0.97, average 0.90; female 0.95-1.07, average 1.01), female with scrobe distinctly visible in dorsal view (Figs. 14, 29) . . . . . *R. tetra* (Fabricius)
- Rostrum distinctly long especially in female (length/width at base male 3.9-5.0, average 4.6; female 5.0-6.1, average 5.6. Rl/Pi male 0.90-1.03, average 0.96; female 1.05-1.27, average 1.15), female with scrobe less visible in dorsal view (Figs. 15-16, 33) . . . . . *R. verbasci* (Rosenschoeld)
10. Elytral integument at least partly reddish (Figs. 1-2), rarely black (variety of *R. bipustulata*, in this case see shape of rostra, Figs. 8-9) . . . . . 11 species of *R. bipustulata* group
- Elytral integument black . . . . . other *Rhinusa*
11. Scales of dorsal vestiture hairlike, arranged in several irregular rows on each elytral interstria (Fig. 1). Femora with small tooth . . . . . 12
- Scales of dorsal vestiture broader, not hairlike, arranged in single regular row on each elytral interstria (Figs. 2-4). Femora indented . . . . . 14
12. Elytral integument and legs completely reddish. Scales covering elytra dense, hiding almost completely integument. Rostrum in female in lateral view distinctly concave at base (as in *R. algerica*, Fig. 12) . . . . . *R. scrophulariae* Caldara
- Elytral integument at least partly black; legs usually black. Scales covering elytra less dense; integument clearly visible (Fig. 1). Rostrum in female in lateral view at most slightly concave at base (Figs. 9-10) . . . . . 13
13. Rostrum in female in lateral view moderately curved and cylindrical in apical half (Fig. 9) . . . . . *R. bipustulata* (Rossi)
- Rostrum in female in lateral view strongly curved and slightly tapered in apical half (Fig. 10) . . . . . *R. pelletieri* **sp. nov.**
14. Scales covering elytral interstriae slightly broader, mostly recumbent, the subrecumbent ones directed backward (Fig. 3) . . . . . *R. algerica* (Brisout de Barneville)
- Scales covering elytral interstriae slightly finer, subrecumbent to suberect, directed outward (Fig. 4) . . . . . *R. emmrichi* (Bajtenov)

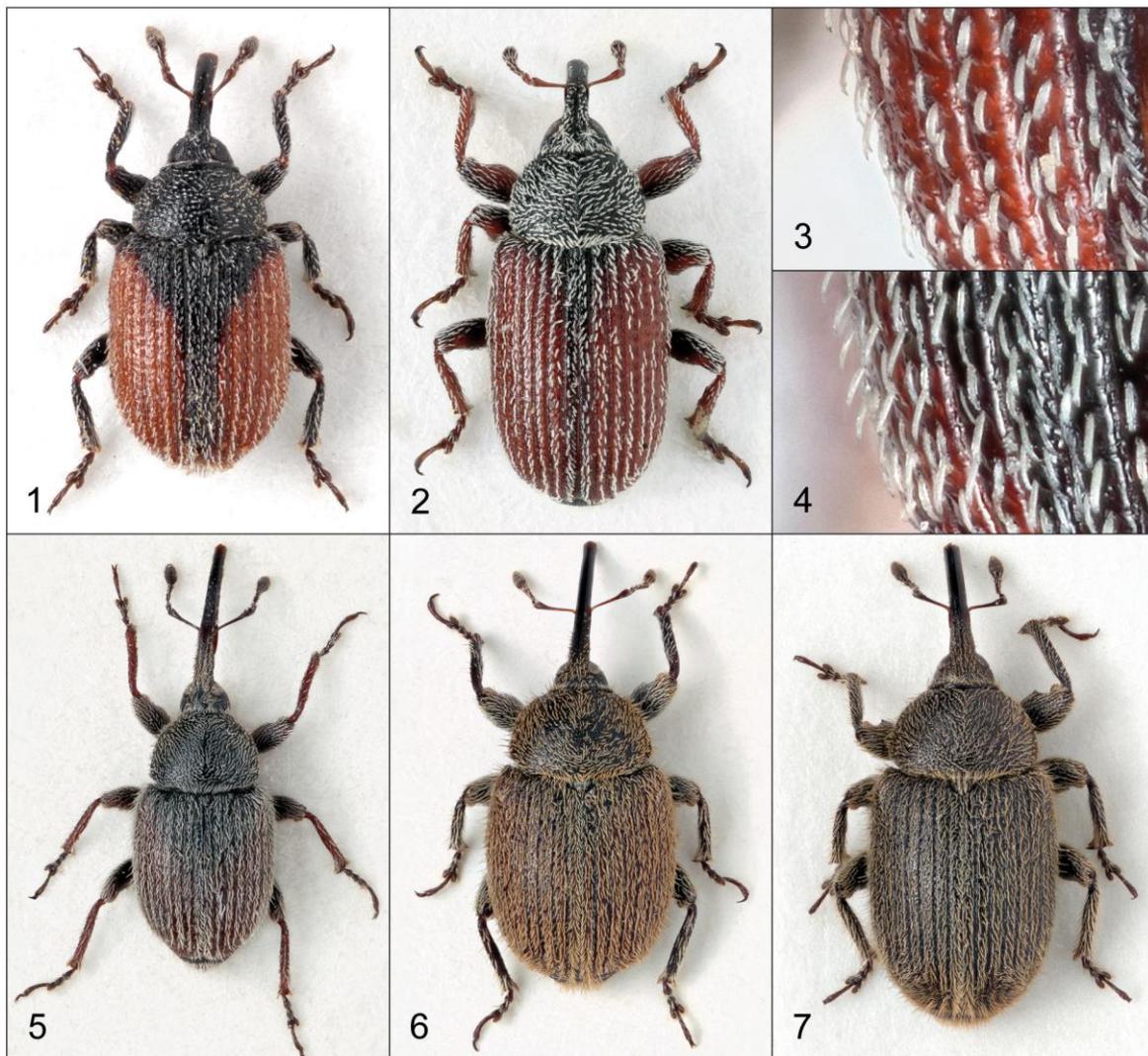
## Discussion

It is necessary to state beforehand that the monophyly of the taxon *Rhinusa*, considered either a subgenus of *Gymnetron* as previously (Reitter 1907, Hoffmann 1958, Smreczyński 1976) or a distinct genus as currently (Caldara 2001, Caldara *et al.* 2010), is still

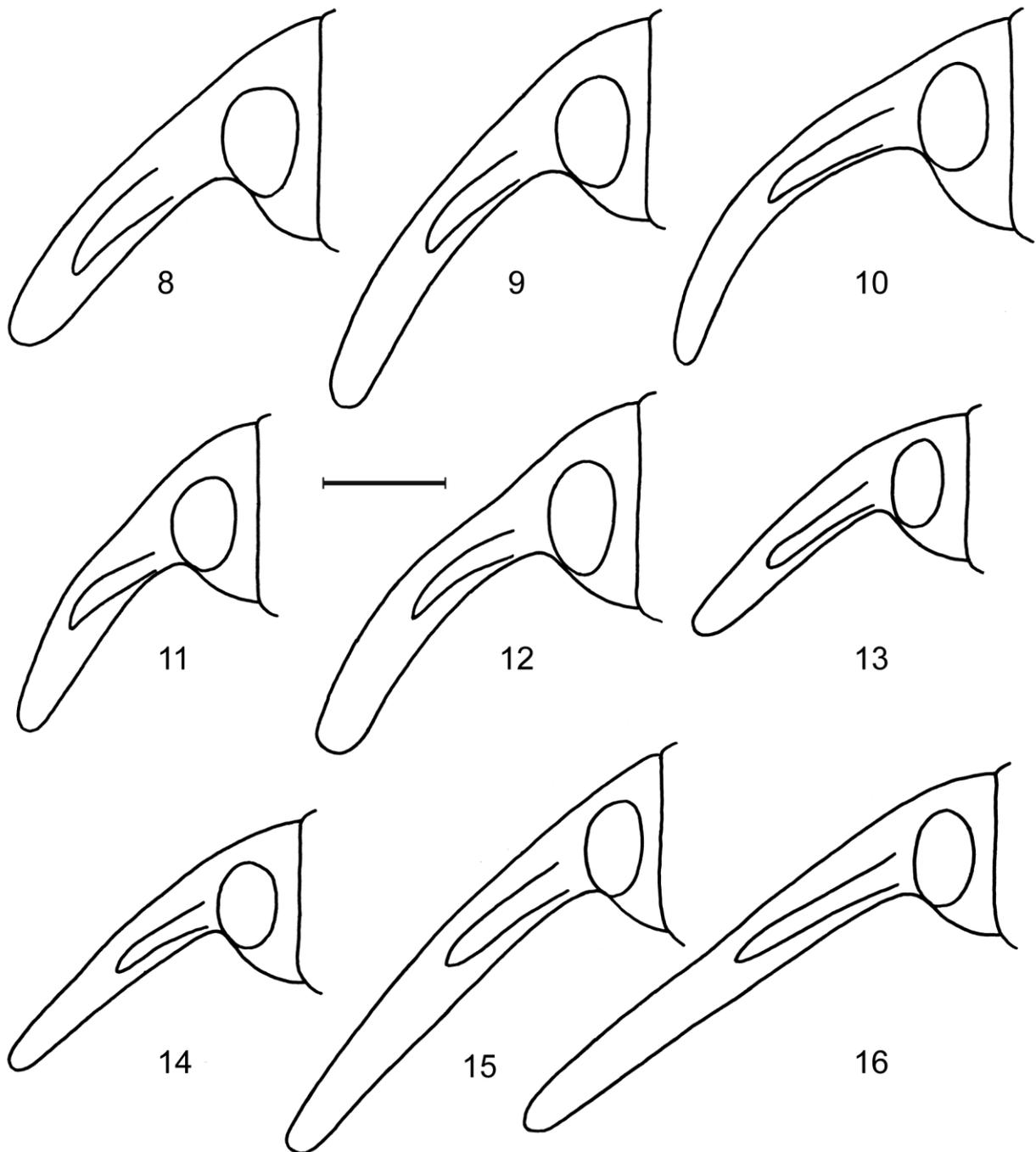
in need of discussion. In fact, on the basis of preliminary molecular studies, *Rhinusa* and *Gymnetron* seem not monophyletic with respect to each other, and could present multiple lineages that are disjunct between southern Africa and the Palaeartic. Moreover the *R. tetra* and the *R. bipustulata* groups seem very different in DNA from all other species of *Rhinusa* and might belong to another lineage (Hernández-Vera *et al.* 2013).

The *R. tetra* group and the *R. bipustulata* group are two groups easily distinguishable in the genus *Rhinusa*: apart for the genitalia, the first one by some characters of the legs which are unique in this genus, the second one by a characteristic overall habitus. Moreover the two species that give the name to the groups are so common that they are present in all weevil collections and well known by the students of the weevils, making the comparison with other groups easier.

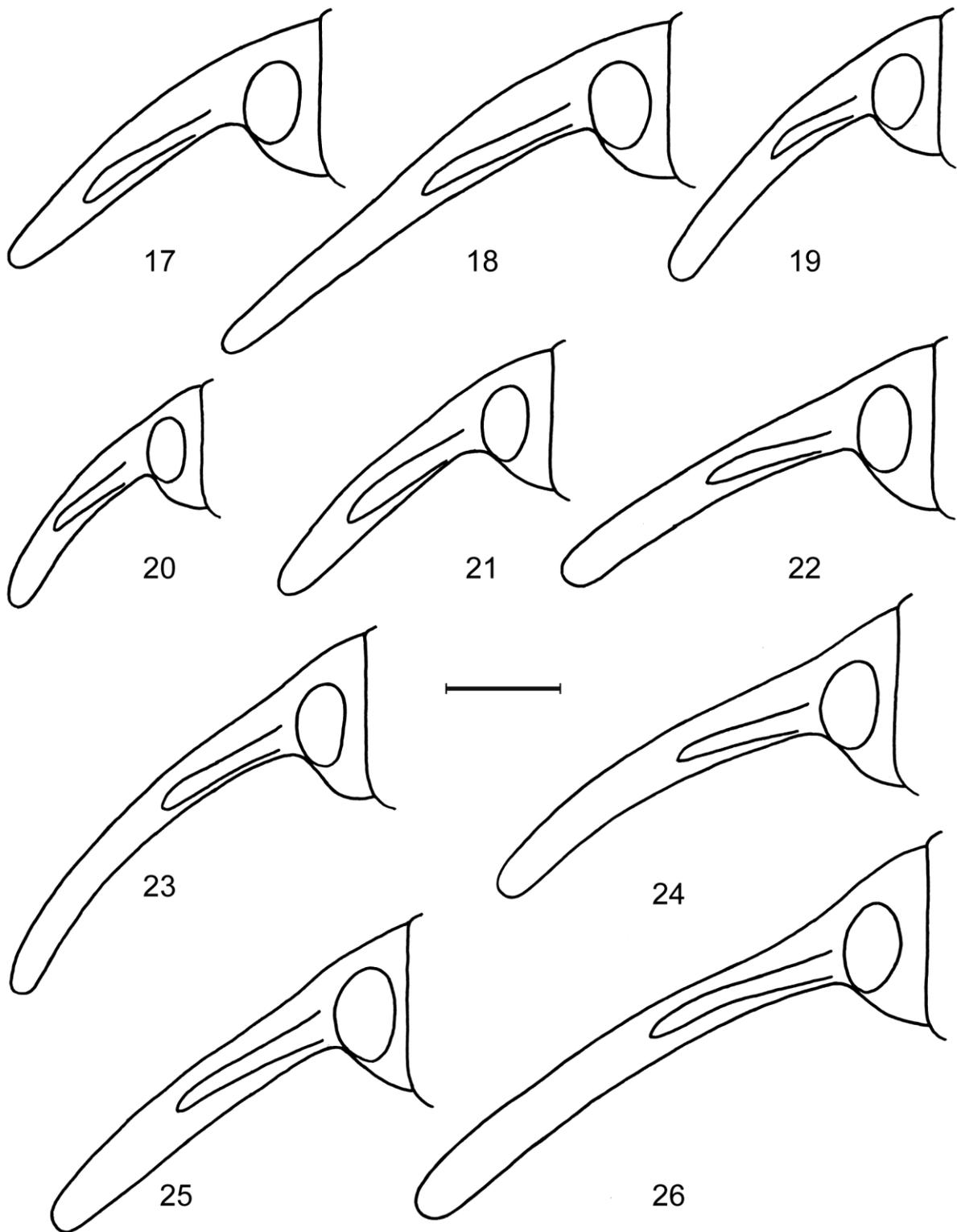
On the contrary the identification of the species within both groups is sometime difficult, since often only the females bear good morphological characters for identification. The characters for the separation of the species are few and generally limited to the shape and the length of the rostrum and the pattern of the elytral vestiture.



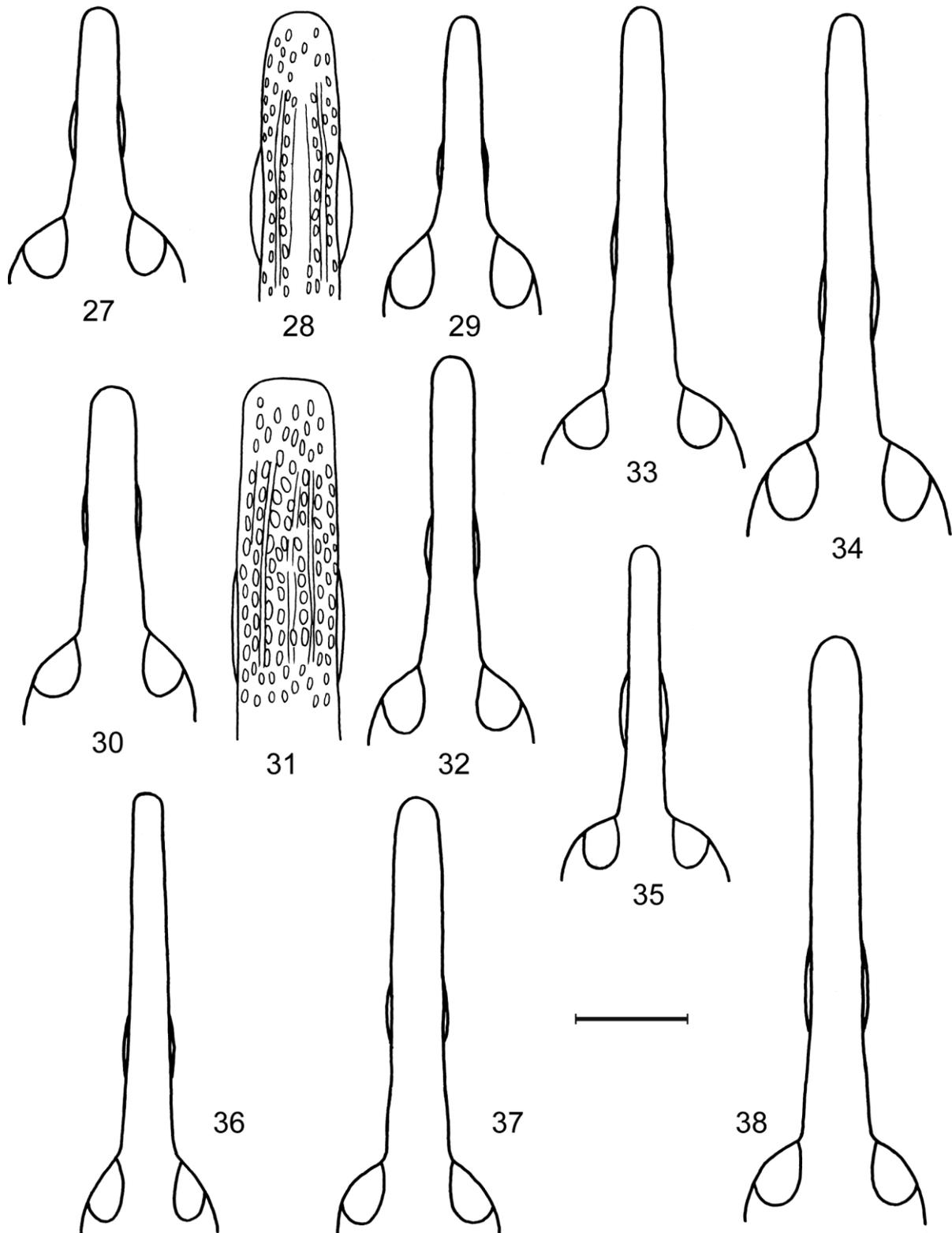
**Figures 1–7.** Habitus (female) of 1, *Rhinusa pelletieri*; 2, *R. algerica*; 3, *R. algerica* particular of elytral vestiture in oblique view; 4, *R. emmrichi*, idem; 5, *R. ensifer*; 6, *R. acifer*; 7, *R. tenuirostris*. Not at the same scale.



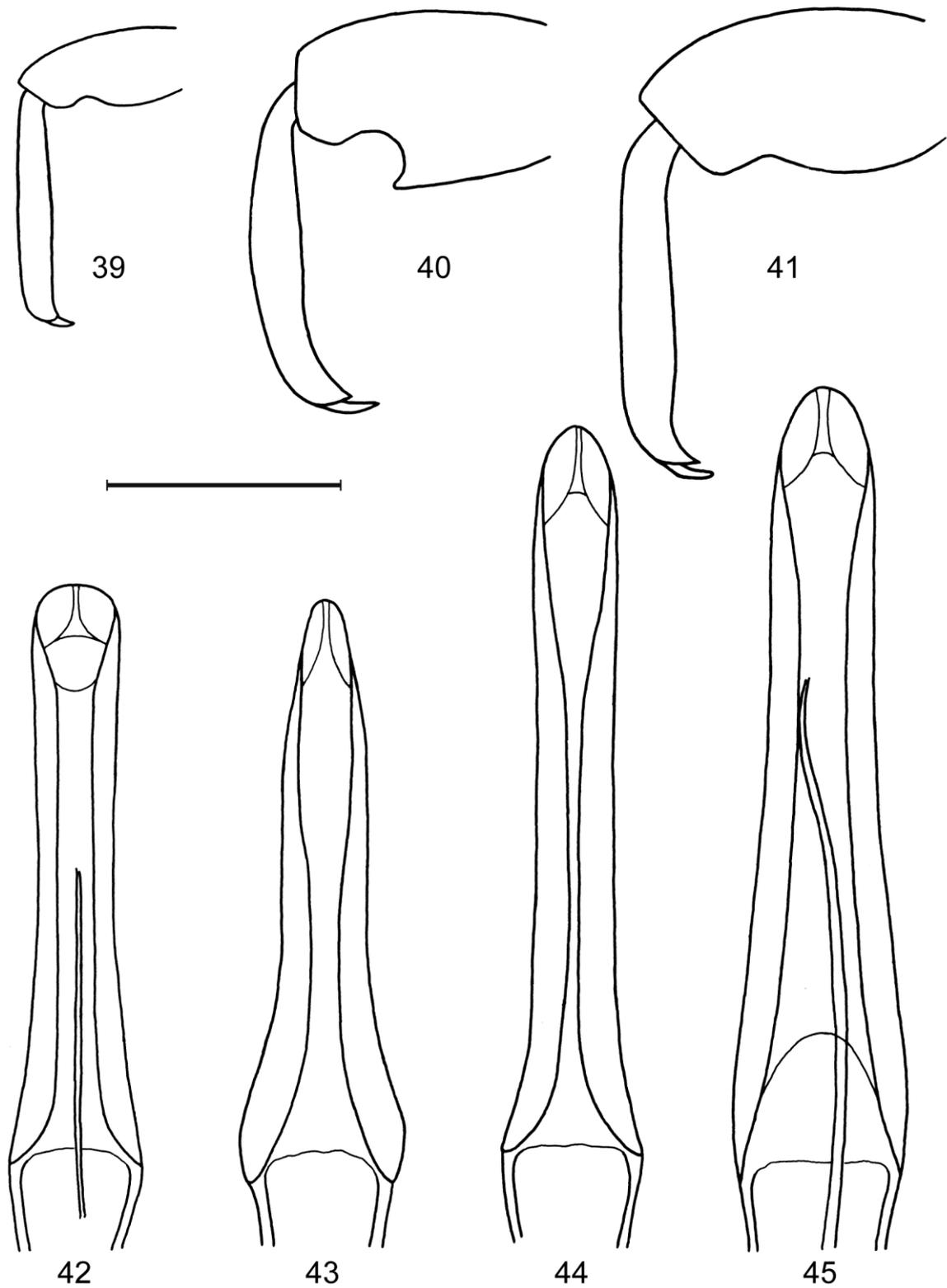
**Figures 8–16.** Rostrum in lateral view of: **8**, *Rhinusa bipustulata*, male; **9**, idem, female; **10**, *R. pelleitieri*, female; **11**, *R. algerica*, male; **12**, idem, female; **13**, *R. tetra*, male; **14**, idem, female; **15**, *R. verbasci*, female, lectotype; **16**, idem, female, Cephalonia. Scale bar = 0.50 mm (Figs. 8-12), 0.25 mm (Figs. 13-16).



**Figures 17–26.** Rostrum in lateral view of: **17**, *Rhinusa ensifer*, male; **18**, idem, female; **19**, *R. moroderi*, female; **20**, *R. weilli*, female; **21**, *R. comosa*, male; **22**, idem, female; **23**, *R. acifer*, female; **24**, *R. tenuirostris*, female; **25**, *R. asellus*, male; **26**, idem, female. Scale bar = 0.25 mm; 0.40 mm (Figs. 19-20).



**Figures 27–38.** Rostrum in dorsal view of: **27**, *Rhinusa tetra*, male; **28**, idem, particular of the sculpture; **29**, idem, female; **30**, *R. comosa*, male; **31**, idem, particular of the sculpture; **32**, idem, female; **33**, *R. verbasci*, female; **34**, *R. ensifer*, female; **35**, *R. moroderi*, female; **36**, *R. acifer*, female; **37**, *R. asellus*, male; **38**, idem, female. Scale bar = 0.25 mm; 0.40 mm (Fig. 35), 0.50 mm (Figs. 28, 31).



**Figures 39–45.** Profemur and protibia of: **39**, *Rhinusa bipustulata*; **40**, *R. tetra*, male; **41**, idem, female. Penis in dorsal view of: **42**, *R. bipustulata*; **43**, *R. tetra*; **44**, *R. comosa*; **45**, *R. asellus*. Scale bar = 0.50 mm (Figs. 39-41), 1.00 mm (Figs. 43-45); 1.50 mm (Fig. 42).

Within the Mecinini, it is a common occurrence that many species differ from each other only slightly, by a few characters just such as the shape of the rostrum and the disposition of the dorsal vestiture [e.g. *Rhinusa pilosa* (Gyllenhal, 1838) vs *R. brondelii* (Brisout de Barneville, 1862), *Rhinusa antirrhini* (Paykull, 1800) vs related species, *Gymnetron rostellum* (Herbst, 1795) vs *G. aper* (Desbrochers des Loges, 1892), *Mecinus variabilis* (Rosenhauer, 1856) vs *M. caucasicus* Reitter, 1907 and *M. ludyi* Reitter, 1907, *Mecinus janthinus* Germar, 1821 vs *M. janthiniformis* Toševski & Caldara, 2011, *Mecinus heydenii* Wencker, 1866 vs related species, etc.] (Caldara 2008a; Caldara *et al.* 2008; Caldara *et al.* 2010; Caldara & Fogato 2013; Toševski *et al.* 2011, Toševski *et al.* 2013) showing clear elements of cryptic speciation. Therefore, at least in the Mecinini, but probably in many other herbivorous weevil tribes, it seems that rostrum and dorsal vestiture are the first characters that change in recently diverged species more than genitalia. By morphological and biological studies, it was seen that a different curvature of the rostra corresponds often to different species (Caldara *et al.* 2008; Toševski *et al.* 2013), whereas sometimes it is not so concerning the difference in their length.

In the Curculionoidea, the existence of a more elongated rostrum in female of most species than in male is a well-known phenomenon. Moreover it is well known that in the females of many Curculionoidea the rostrum plays an important role in the preliminary phase of the oviposition. In fact the female drills the parenchymas of the host plants with its rostrum till the most favourable depth. Sometimes the thickness of the tissues is particularly pronounced and in these cases a long rostrum is surely evolutionarily advantageous. However one cannot underestimate the fact that also the part of the plant (flower, capsule, stem etc.) into which oviposition occurs may represent an important evolutionary step.

According to other studies on Curculionoidea three hypothesis on the reason of an increase of rostrum length in females of *Rhinusa* here treated can be postulated: 1) the length of the rostrum in seed feeding species is related and directly proportional to the thickness of the pericarps of their host plant which can vary in populations of the same plant; this is a co-evolutionary hypothesis; 2) a different length of the rostrum may be related to a different species of host plant; 3) a long rostrum might be a competitive advantage over other species (weevils or not) parasitizing the same plant possibly reaching areas with more nutritive substances and less exposed to the attack of parasites. It seems obvious that the length of the ovipositor must be directly proportional to the length of the rostrum maintaining the same ratio as demonstrated for *R. asellus* and also for the tychiine *Sibinia aureofulva* Desbrochers des Loges, 1875 (Caldara unpublished data).

With regard to the first hypothesis an interesting example is given by the careful studies of the weevil predator *Curculio camelliae* (Roelofs, 1875), which female adults possess a rostrum twice as long as that of the male (Toju 2008), and its host plant *Camellia japonica* L. (Toju & Sota 2006). In fact, the significance of the long rostrum was interpreted as an adaptive key trait in a coevolutionary arms race. The females bore channels through the thick pericarps using their rostra and deposit eggs with their ovipositor into the fruits of *C. japonica* and the developing larvae infest the seeds. The development of a thick pericarp in *C. japonica* is seen as a significant selective factor resulting from predation by *C. camelliae*. One outcome of the coevolutionary arms race is the evolution of the longest rostrum in the genus *Curculio* Linnaeus, 1758 (Toju & Sota 2009). This signifies that the same species of weevil may have rostra different in length for feeding on the same host plant. This might be true also for some *Rhinusa*, like *R. tetra* and *R. asellus* and it would be interesting to repeat the experience by Toju & Sota (2006) also in common species of *Verbascum*.

The second hypothesis might be sustained by examples regarding species here treated. *Rhinusa moroderi* seems to be monophagous on *Verbascum sinuatum* (only at Crete a few

specimens were collected on a different plant, *V. spinosum*). Its rostrum is always long and varies only a little in the populations from West (Iberic peninsula) to East (Turkey). On the contrary it is known that *R. tetra* is oligophagous on various species of *Verbascum* and the rostrum is distinctly more variable in length in various populations.

It is noteworthy that every species of the *R. tetra* group with large distribution (*R. tetra*, *R. comosa* and *R. asellus*) has “populations” with female rostrum variable in length. For all of these three species, however, this feature is restricted in the southern area of their distribution, namely in Turkey, although in *R. tetra* the differences are more gradual from north to south. With regard to the possible reason why these populations are almost exclusive for Greece and Turkey, it is noteworthy that in these countries the number of species of *Verbascum*, on which these species live, are extremely high. For instance in Turkey about 230 species of *Verbascum* occur, most of them being endemic (Huber-Morath 1978). Therefore the length of the rostra must be used with prudence in the separation of the species.

Concerning the third hypothesis an example might be that of the female rostrum in *Rhopalation longirostre* (Olivier, 1807) which is more than twice as long as the stout male rostrum as well as *Curculio camelliae*. However Wilhelm *et al.* (2011) proposed that in this case a coevolutionary arms race is not necessarily involved in the emergence of the elongated rostrum of *R. longirostre*. The long rostrum is presumably an advantage for this weevil because its larvae can feed on plant parts with high energy density into buds (i.e. pollen grains). Wilhelm *et al.* (2011) have argued that natural selection favours rostrum elongation, although the elongated rostrum of females also bears a high risk when metamorphosed weevils attempt to leave their site of pupal development, which is the dry seed chambers. Mortality during escaping may counteract selection for rostrum elongation, thus placing a limit on rostrum exaggeration. This does not seem the truth in some mecinines as *R. vestita* (Germar, 1821), *R. neta* (Germar, 1821), *M. sicardi* Hustache, 1920, *M. janthinus* Germar, 1821, *M. heydenii* Wencker, 1866 (Toševski *et al.* 2011, Toševski *et al.* 2013, Caldara & Fogato 2013, Caldara pers. obs.), where before pupation mature larvae produce a tunnel which ends just in proximity of the external cuticle of the stem or the ovary. Therefore, when leaving its cell, adults have only to bore a subtle layer although in the meantime the plant has become dry and hard (Caldara & Fogato 2013; Caldara pers. obs.).

As in other weevils also in the Mecinini the rostrum lengthen mainly from antennal insertion to apex. Moreover the female rostrum is usually smoother than in the male. This was interpreted by the fact that a smooth structure is more suitable for making a drill causing less friction with the plant tissues. Moreover the insertions of the antennae – which club sensibility is important in the accuracy of the site of oviposition (Oberprieler *et al.* 2007) – on the rostrum determine the depth to which the rostrum can be pushed into plant tissues. Both in orthocerous and in gonatocerous antennae have to be inserted far back on the rostrum for the latter to be able to reach deep-lying plant tissues. Oberprieler *et al.* (2007) quoted interesting examples like that of the cycad-associated brenthid *Antliarhinus zamiae* (Thunberg, 1784), the female of which requires a rostrum twice the length of her body to pierce the thick sporophylls and reach the deeply hidden ovules in which the larvae develop.

On the contrary it was seen that in other groups of Mecinini (the *R. pilosa* group and the *M. heydenii* group) and also in some species of the two groups here treated (*R. pericarti*, *R. weilli*) the evolutive trend seems that towards an increase of the curvature of the rostra instead of its length. The species of the Mecinini with very curved and less exaggerated sexually dimorphic rostra are mainly stem borers or gall producers. In this case probably the evolutive advantage might be to have more adherence of the body to a convex surface like that of a stem at the expense of the depth. However it is noteworthy that the females of the stem borer *R. asellus* and of the gall producer *R. tenuirostris* have long and almost straight

rostra. One might hypothesize that in this circumstance the drill of the tunnel is made using as support a leave more or less perpendicular to the steem. In this connection it would be very interesting to know whether *R. pericarti* and *R. weilli* – with a more curved female rostrum than in their sister species *R. bipustulata* and *R. moroderi* respectively – have a different biology from these last species.

Concerning the density of the vestiture it seems that most species of the mecinines with dense vestiture live in desertic or semi-desertic areas. This is true in *Rhinusa* for *R. mauritii* and in *Mecinus* for the *M. simus* group and a “variety” of *M. pyraster*. Usually in the species with denser vestiture the scales are also more raised. Apart for mimetic reasons these two possibly adaptive characters might be evolved in order to avoid the exposition to the rays of the sun. In the two groups here studied it might be true for *R. scrophulariae* and *R. tenuirostris*.

Concerning the host plants, biological and molecular studies on some groups of the Mecinini demonstrated that many species are strictly monophagous (the species of the *Mecinus janthinus*, *M. heydenii*, *Rhinusa antirrhini*, *R. pilosa* groups), only few of them feeding on different plants although of the same genus (the *R. neta* group), and that some species, which were supposed highly variable, were actually composed of different taxa. Preliminar molecular studies have shown that several species of the *R. tetra* group (*R. tetra*, *R. verbasci*, *R. moroderi*, *R. comosa*, *R. asellus* and *R. tenuirostris*) and of the *R. bipustulata* group (*R. bipustulata*, *R. scrophulariae*, *R. algerica*) actually differ significantly in their DNA (Hernández-Vera *et al.* 2013, Toševski unpublished data). It will be necessary a careful collection on *Verbascum* especially in Turkey, where this genus is particularly rich in species, in order to verify whether the change of a host plant corresponds to different species or not.

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