

Contribution to the knowledge of the family Nemonychidae (Coleoptera) with descriptions of new taxa

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Two new tribes, the Zimmiellini Legalov, trib. n. (type genus: *Zimmiellus* Kuschel, 2011), which differs from the tribe Rhinorhynchini by the mandible exodontous, maxillary palpi barely extending forward beyond the prementum and position of rostrum base, and the Argentinomacerini Legalov, trib. n. (type genus: *Argentinomacer* Legalov, gen. n.) that differs from the tribe Rhynchitomacerini by having the pronotum narrowed before the basal fourth, antennae inserted subbasally and club 4-articled. Also erected is a new subtribe Bunyaena Legalov, subtrib. n. (type genus: *Bunyaenus* Kuschel, 1994) that differs from the subtribe Mecomacerina by procoxae hemispherical, mesonotum with one coarsely ridged stridulatory file and forehead distinctly wider than apex of rostrum. Two new genera, *Nothofagomacer* Legalov, gen. n. (type species: *Rhynchitomacer apionoides* Kuschel, 1959) that differs from the genus *Rhynchitomacer* by the mandibular sockets not being visible in dorsal view, elytral striae regular, postmentum deeply emarginate and vaginal vestiture absent; and *Argentinomacer unicus* Legalov, gen. et sp. n. from Argentina, are described. A key to subfamilies, tribes, subtribes, genera and subgenera of Recent Nemonychidae with a list of species is provided. The distribution of some Palearctic species is specified.

Key words: Curculionoidea, trib. n., subtrib. n., gen. n., sp. n., check list, keys, distribution.

Introduction

The pine flower weevils of the family Nemonychidae are a small relict group of the most primitive Curculionoidea. The earliest records of the family are known from the Late-Upper Jurassic of Karatau ([Martynov, 1926](#); [Arnoldi, 1977](#); [Gratshev & Zherichin, 1995, 1996, 2003](#); [Legalov, 2010b, 2010c](#); [Gratshev & Legalov, 2014](#)). They were common in the Cretaceous ([Zherikhin, 1986, 1993](#); [Kuschel & Poinar, 1993](#); [Ren, 1995](#); [Gratshev et al., 1997](#); [Gratshev & Zherichin, 2000](#); [Liu et al., 2006](#); [Zherichin & Gratshev, 2003, 2004](#); [Legalov, 2012, 2014, 2015](#); [Davis et al., 2013](#); [Gratshev & Legalov, 2014](#); [Davis & Engel, 2014](#); [Peris et al., 2014](#); [Legalov et al., 2017](#)). Two extinct tribes were described from the Eocene Green River ([Legalov, 2013](#)) and Baltic amber ([Riedel, 2010](#)).

Recent fauna of Nemonychidae was well studied by G. Kuschel ([Kuschel, 1954, 1959, 1983, 1989, 1994, 2003](#); [Kuschel & May, 1997](#); [Kuschel & Leschen, 2011](#)). A. Legalov made important additions ([Legalov, 2009a, 2009b, 2010c, 2011, Gratshev & Legalov, 2014](#)) to the study of this family. New taxa and distribution also were given in different references ([Paykull, 1792](#); [Fabricius, 1787, 1801](#); [Olivier, 1807](#); [Dejean, 1821](#); [Schoenherr, 1833](#); [Labram & Imhoff, 1843](#); [Redtenbacher, 1845](#); [Agassiz, 1846](#); [Desbrochers des Loges, 1869](#); [LeConte & Horn, 1876](#); [Broun, 1880](#); [LeConte, 1880](#); [Solsky, 1880-1881](#); [Gozis, 1881, 1882](#); [Bedel, 1882-1888](#); [Sharp, 1882](#); [Stierlin, 1886](#); [Pic, 1898, 1905](#); [Semenov, 1900](#); [Abeille de Perrin, 1898, 1901](#); [Daniel & Daniel, 1903](#); [Schilsky, 1903](#); [Blatchley & Leng, 1916](#); [Pierce, 1916](#); [Reitter, 1916](#); [Voss, 1922, 1932, 1937, 1952, 1974](#); [Lea, 1926](#); [Martin, 1930](#); [Angelov, 1966](#); [Alonso-Zarazaga & Lyal, 1999](#); [Dalla Torre & Voss, 1937](#); [Hatch, 1971](#); [Dieckmann, 1974](#); [O'Brien & Wibmer, 1982](#); [Wibmer & O'Brien, 1986](#); [Morris, 1990](#); [May, 1993](#); [Hamilton, 1994](#); [Morrone, 1997](#); [Gonget, 2003](#); [Elgueta & Marvaldi, 2006](#), etc.). The distribution of Nemonychidae in the Palearctic was shown by Kuschel & Leschen ([2011](#)). Unfortunately, the distribution of the subfamily Cimberidinae is not accurate. I made maps (Figs. 87-89) with regions for Palearctic species.

Here I describe new taxa, compile a list of Recent species and their synonyms, and specify the distributions of this group.

Material and methods

The Nemonychidae species are deposited in the Institute of Systematics and Ecology of Animals (Russia: Novosibirsk) - ISEA; Zoological Museum, University of Copenhagen (Denmark: Copenhagen) - ZMUC; Zoological Museum of Moscow State University (Russia: Moscow) - ZMM; Zoological Institute of Russian Academy of Sciences (Russia: St. Petersburg) - ZIS; Collection of E.N. Akulov (Russia: Krasnoyarsk) - EAK; Collection of R. Dunda (Czech Republic: Prague) - RDP; Collection of R.V. Yakovlev (Russia: Barnaul) - RYB.

The location of species is shown on maps (Figs. 87-89) which given sensu references (Alekseev, 2005; Alekseev & Bukejs, 2010; Benedikt, 2014; Berlov & Tomilova, 1980; Dedyukhin, 2011, 2012; Dmitrieva, 2005; Dorofeev & Evsjunin, 2008, 2012; A. Egorov, 1996; L. Egorov, 1996, 2009, 2012, 2016; Egorov & Isaev, 2006; Egorov & Khisanova, 1999a, 1999b; Everts, 1922; Gonget, 2003; Gosik, 2006; Hansen, 1965; Heijerman, 2010; Isaev & Savitskii, 1999; Khisanova & Egorov, 2006; Kizub & Nazarenko, 2005; Knutelsky & Kubisz, 1993; Knutelsky & Lason, 1997; Knutelsky & Skalski, 1993; Knutelsky & Witkowski, 1995; Knutelsky et al., 1992; Korotyaev, 2010; Lindeman, 1871; Mazur, 2002, 2011; Medvedev & Shapiro, 1957; Miller & Zybovsky, 1917; Nazarenko, 2009, 2012; Nemkov, 2011; Ruchin, 2008; Šablevičius, 2003; Semenov, 2009; Stachowiak, 2001; Süda, 2016; Tamutis, 2003; Telnov et al., 2006, 2016; Ter-Minassian, 1984; Tsinkevich et al., 2005; Tsurikov, 2009; Wanat, 2001; etc.), original data from collections and in the following websites (<http://baza.biomap.pl>; <http://beta.biodiversity.no>; <http://kharkov.naturalist.su>; <http://koivu.luomus.fi>; <http://macroid.ru>; <http://www.colkat.de>; <http://www1.biomus.lu.se>; <https://www.zin.ru>, etc.).

Observations and photographs were made with a Zeiss Stemi-2000 stereoscopic microscope.

Photographs of *Brarus mystes* were obtained in "Taxonline - Rede Paranaense de Coleções Biológicas, Entomological Collection Padre Jesus Santisgo Moure, Departament of Zoology, Federal University of Paraná, Curitiba (DZUP)" with *Leica MZ16* stereomicroscope, *Leica DFC 500* photographic camera and *Leica LAS 3D* viewer module and *LAS* montage version 4.7.

Systematic entomology

Key to supraspecific taxa of Recent Nemonychidae

1. Mesocoxal cavities open laterally to pleurites. Mandible with longitudinal groove at top. Ventrite 1 not rimmed at coxal cavities (Fig. 6). Ventrite 5 with setiferous fovea on either sides in female (Fig. 6). Claws with teeth (Fig. 4). West and Central Palaearctic. (Nemonychinae)..... *Nemonyx*
- Mesocoxal cavities closed. Mandible without longitudinal groove at top. Ventrite 1 rimmed at coxal cavities (Fig. 72). Ventrite 5 without setiferous fovea in female (Fig. 72). Claws without teeth, if with teeth than elytra striate.....2
2. Elytra without striae (Fig. 66). Claws simple, without teeth. Holarctic. (Cimberidinae).....3
- Elytra with distinct striae (Fig. 17). Claws with teeth.....8
3. Mandibles directed obliquely downward (Fig. 83). Epipleuron broad. Antennae inserted in middle or basal third of rostrum (Figs. 74-76). West Palaearctic, West of USA. (Doydirhynchini).....4
- Mandibles horizontal (Fig. 68). Epipleuron narrow. Antennae inserted subapically (Fig. 71) or in middle of rostrum (Fig. 69). Holarctic. (Cimberidini).....5
4. Maxillary palpi 3-articled. Labrum very small, strongly transverse. Ventrites without sex patches on females. West Palaearctic..... *Doydirhynchus*
- Maxillary palpi 4-articled. Labrum large, subquadrate. Ventrites 3 and 4 with sex patches on females (Fig. 80). West of USA..... *Lecontellus*
5. Mandibles evenly curved, with strong tooth on inner edge. Holarctic. (*Cimberis*).....6
- Mandibles angulate, unarmed on inner edge.....7
6. Antennae inserted near apex of rostrum in males and females. Labrum almost rectangular Holarctic..... *Cimberis* s. str
- Antennae inserted closer to apex of rostrum in males than in females. Labrum almost trapezoidal. North America. *Amerocimberis*
7. Labrum trapezoidal or broadly rounded at apex. Ventrites usually with sex patches on females. North America.... *Pityomacer*
- Labrum triangular, pointed at apex. Ventrites without sex patches on females. North America..... *Acromacer*
8. Clypeolabral suture reduced. Antennae inserted basally. New Caledonia. (Idiomacerinae)..... *Idiomacer*
- Clypeolabral suture distinct. Antennae inserted subapically, if basally than antennal club 4-articled and forehead flat. America, NE Australia, New Zealand, New Guinea, New Caledonia. (Rhinorhynchinae).....9
9. Eyes elongate (Fig. 23), if round (Fig. 27) then rostrum reduced (*Brarus*) (Fig. 28). Procoxa hemispherical (Fig. 30) or subconical. Labrum with four or more pairs of setae. Maxillary palpi with terminal article about as long as antennomere...1
- South America, NE Australia, New Guinea, New Caledonia (Mecomacerini).....10
- Eyes round (Fig. 39). Procoxa subconical (Fig. 40). Labrum with at most three pairs of setae. Maxillary palpi with terminal article considerably shorter than antennomere 1.....18
10. Mesonotum punctate, without stridulatory files. Rostrum on basal half strongly constricted (*Rhynchitomacerinus*) (Fig. 24), or not constricted, but distinctly longer than pronotum (*Rhynchitoplesius*). South America. (Rhynchitoplesiina).....11
- Mesonotum with stridulatory files. Rostrum on basal half not constricted and shorter than pronotum or equal in length to pronotum.....12
11. Rostrum at basal half strongly constricted, shorter than pronotum (Fig. 24). Metatibiae with one apical spur. Andes meridional..... *Rhynchitomacerinus*
- Rostrum at basal half not constricted, distinctly longer than pronotum. Metatibiae with two apical spurs. South Brazil..... *Rhynchitoplesius*
12. Eyes oval (Fig. 22). Rostrum distinct, short (Fig. 17) or quite long (Fig. 16). Tibiae not widened (Fig. 19).....13
- Eyes round (Fig. 27). Rostrum reduced (Fig. 28). Tibiae broad (Fig. 27). South Brazil. (Brarina)..... *Brarus*
13. Procoxa hemispherical (Fig. 17). Mesonotum with one coarsely ridged stridulatory file. Forehead distinctly wider than apex of rostrum (Fig. 17). NE Australia. Bunyaeina).....14
- Procoxa subconical (Fig. 17). Mesonotum with finely ridged stridulatory files. Forehead about as wide as apex of rostrum (Fig. 16). Andes meridional, NE Australia, New Guinea, New Caledonia. (Mecomacerina).....15
14. Mesotibiae without mucro of male. Rostrum in lateral view continuous with forehead, without depression or sinus

at base.....	<i>Bunyaeus</i>
- Mesotibiae with mucro of male. Rostrum in lateral view discontinuous with forehead, with distinct depression or sinus at base.....	<i>Eutactobius</i>
15. Metatibiae with one apical spur. Andes meridional.....	<i>Araucomacer</i>
- Metatibiae with two apical spurs.....	16
16. Head deeply constricted behind eyes (Fig. 10). Andes meridional.....	<i>Mecomacer</i>
- Head slightly constricted behind eyes (Fig. 14).....	17
17. Prothorax distinctly longer than broad, partially smooth in midline (Fig. 16). Endophallus of aedeagus without baculiform sclerites. NE Australia, New Caledonia.....	<i>Notomacer</i>
- Prothorax almost transverse, not partially smooth in midline. Endophallus of aedeagus with baculiform sclerites. NE Australia, Papua New Guinea.....	<i>Aragomacer</i>
18. Pronotum narrowed before basal fourth (Fig. 59). Antennae inserted subbasally (Fig. 61). Club 4-articled (Fig. 61). Andes meridional. (Argentinomacerini).....	<i>Argentinomacer</i>
- Pronotum narrowed to apex and base (Fig. 58). Antennae inserted subapically (Fig. 56) or behind middle of rostrum (Fig. 50). Club 3-articled (Fig. 49).....	19
19. Mandible exodontous. Maxillary palpi hardly extending forward beyond prementum. Position of rostrum at base of head. (Zimmiellini). North-East Australia.....	<i>Zimmiellus</i>
-Mandible not exodontous. Maxillary palpi long. Position of rostrum at middle of head.....	20
20. Mesonotum with stridulatory files. Rostrum weakly widened at apex (Fig. 35); distinctly longer than pronotum (Fig. 42) (excluding <i>Nannomacer</i>) (Fig. 36). SW of USA, Central America, South America, NE Australia, New Zealand, New Guinea. (Rhinorhynchini).....	21
- Mesonotum without stridulatory files. Rostrum distinctly widened at apex (Fig. 58); usually shorter than pronotum (Fig. 54) (excluding <i>Stenomacer</i>) (Fig. 65). Andes meridional. (Rhynchitomacerini).....	26
21. Metatibiae with two apical spurs. New Zealand.....	<i>Rhinorhynchus</i>
- Metatibiae with one apical spur.....	22
22. Rostrum distinctly shorter than pronotum. Andes meridional.....	<i>Nannomacer</i>
- Rostrum as long as or longer than pronotum.....	23
23. Mesonotum with two symmetrical stridulatory files.....	24
- Mesonotum with one stridulatory file, or with two strongly asymmetrical files.....	25
24. Prosternal process of male simple. Pubescence on dorsal surface of rostrum directed forward. Mandibles simple at apex. NE Australia.....	<i>Basiliorhinus</i>
- Prosternal process of male extended downwards (Fig. 43). Pubescence on dorsal surface of rostrum directed backwards. Mandibles usually bidentate at apex. SW of USA, Central America, N of South America.....	<i>Atopomacer</i>
25. Rostrum deeply saddled at base. Pubescence on dorsal surface of rostrum directed forward. NE Australia, Papua New Guinea.....	<i>Basiliogeus</i>
- Rostrum shallowly saddled at base. Pubescence on dorsal surface of rostrum directed backwards. NE Australia.....	<i>Pagomacer</i>
26. Mandibles dorsal, with sockets entirely visible in dorsal view. Rostrum longer than prothorax.....	<i>Stenomacer</i>
- Mandibles lateral, with sockets partly or entirely invisible in dorsal view. Rostrum as long as or shorter than prothorax.....	27
27. Mandible partially visible in dorsal view. Elytral striae partially irregular (Fig. 51). Postmentum shallowly emarginate. Vaginal vestiture present.....	<i>Rhynchitomacer</i>
- Mandibular sockets not visible in dorsal view. Elytral striae regular (Fig. 56). Postmentum deeply emarginate. Vaginal vestiture absent.....	<i>Nothofagomacer</i>

Systematic list of Recent species of the family Nemonychidae

Subfamily Nemonychinae Bedel, 1882

Tribe Nemonychini Bedel, 1882

Figs. 1-9, 11.

Genus *Nemonyx* Redtenbacher, 1845

= *Nematonyx* Agassiz, 1846

Nemonyx lepturoides - group

N. lepturoides (Fabricius, 1801) - Western Palaearctic.

= *grisescens* Reitter, 1899

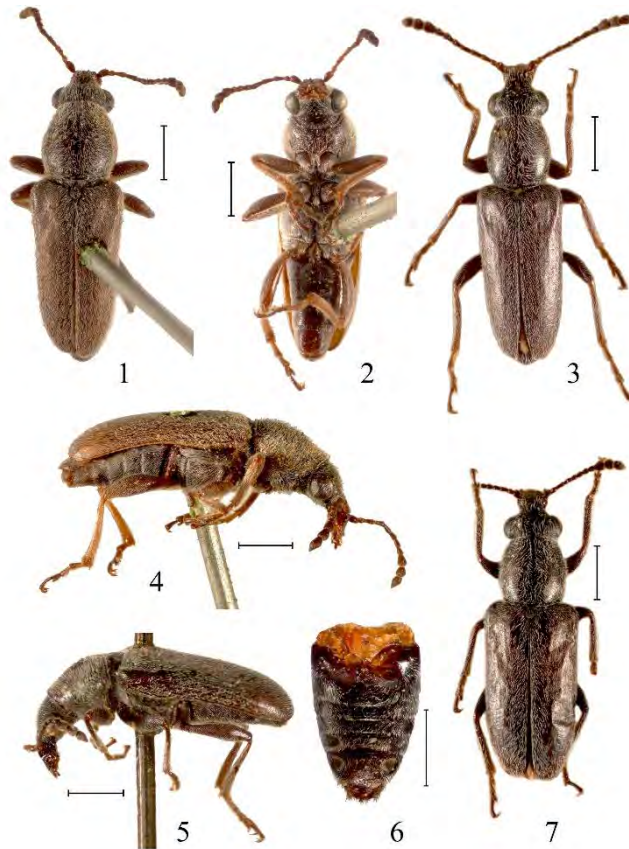
N. scutellatus Abeille de Perrin, 1901 - Tunisia.

Nemonyx canescens - group

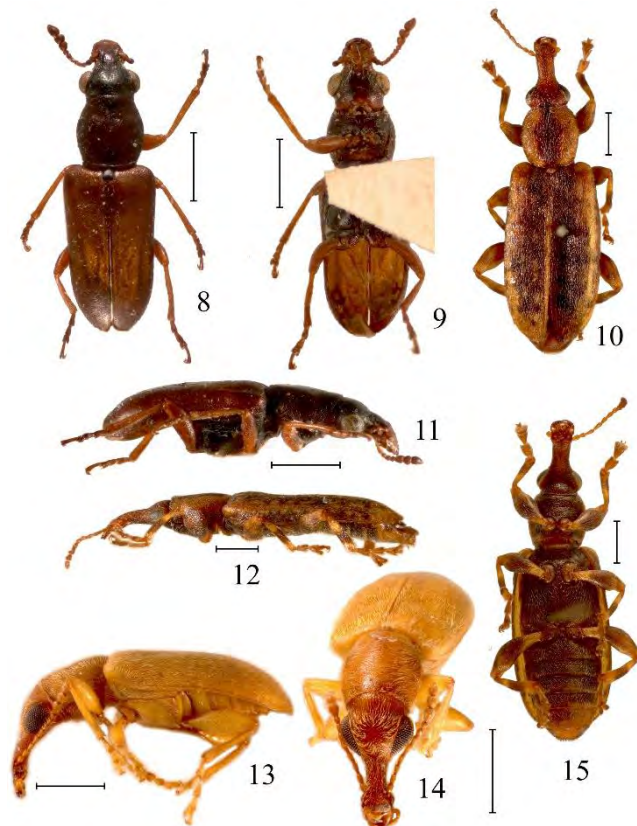
N. canescens Solsky, 1881 (Figs. 1-7) - Central Asia

N. semirufus Pic, 1898 (Figs. 8-9, 11) - Algeria.

= *variicolor* Abeille de Perrin, 1898



Figures 1–7. *Nemonyx canescens*. 1 – male, lectotype, dorsal view; 2 – male, lectotype, ventral view; 3 – male, SE Kazakhstan; 4 – male, lectotype, lateral view; 5 – male, paralectotype, lateral view; 6 – abdomen, female, Turkmenistan; 7 – female, SE Kazakhstan. Scale bar 1.0 mm.



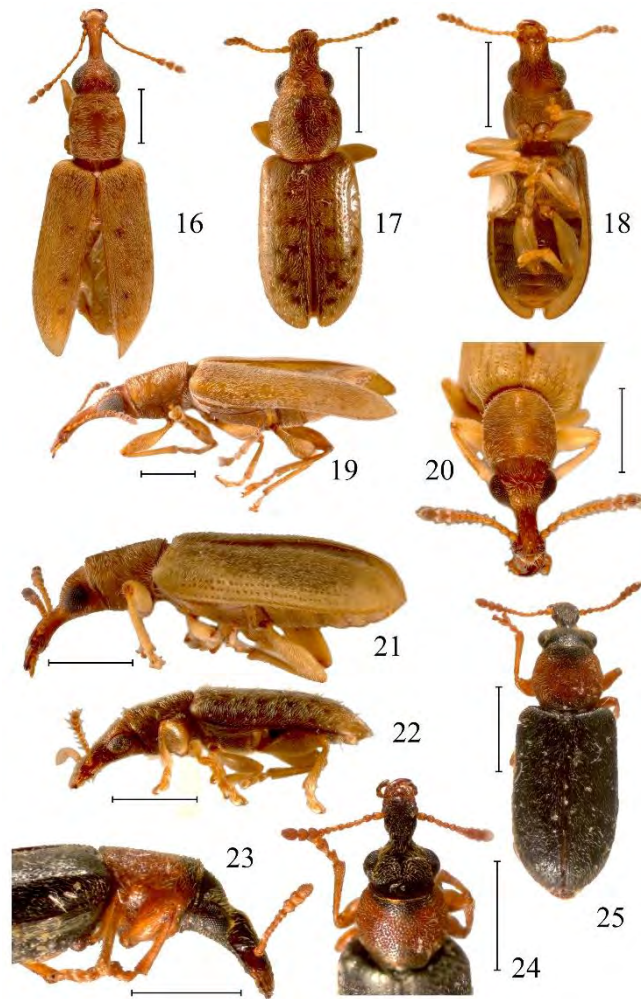
Figures 8–15. Nemonychidae spp. 8 – *Nemonyx semirufus*, female, dorsal view, Algeria; 9 – *N. semirufus*, female, ventral view, Algeria; 10 – *Mecomacer scambus*, male, dorsal view, Argentina; 11 – *N. semirufus*, female, lateral view, Algeria; 12 – *Mecomacer scambus*, male, lateral view, Argentina; 13 – *Notomacer caledonicus*, female, paratype, lateral view; 14 – *N. caledonicus*, female, paratype, frontal view; 15 – *Mecomacer scambus*, male, ventral view, Argentina. Scale bar 1.0 mm.

Subfamily Rhinorhynchinae Voss, 1922

Tribe Mecomacerini Kuschel, 1994

Subtribe Mecomacerina Kuschel, 1994

Figs. 10, 12-16, 19-21.



Figures 16–25. Mecomacerini spp. 16 – *Notomacer araucariae*, female, paratype, dorsal view; 17 – *Bunyaeus monteithi*, male, dorsal view, Australia; 18 – *B. monteithi*, male, ventral view, Australia; 19 – *Notomacer araucariae*, female, paratype, lateral view; 20 – *N. hirtulus*, female, paratype, frontal view; 21 – *N. hirtulus*, female, paratype, lateral view; 22 – *Bunyaeus monteithi*, male, lateral view, Australia; 23 – *Rhynchitomacerinus kuscheli*, female, lateral view, Chile; 24 – *Rh. kuscheli*, female, frontal view, Chile; 25 – *Rh. kuscheli*, female, dorsal view, Chile. Scale bar 1.0 mm.

Genus *Mecomacer* Kuschel, 1954*M. collaris* (Voss, 1952) - Argentina, Chile.*M. scambus* Kuschel, 1954 (Figs. 10, 12, 15) - Argentina, Chile.Genus *Araucomacer* Kuschel, 2011*A. hirticeps* Kuschel, 1954 - Argentina, Chile.*A. ruficornis* Kuschel, 1954 - Chile.Genus *Notomacer* Kuschel, 1994*N. eximius* Kuschel, 1994 - North-East Australia.*N. hirtulus* Kuschel, 1994 (Figs. 20-21) - New Caledonia.*N. araucariae* Kuschel, 1994 (Figs. 16, 19) - New Caledonia.*N. caledonicus* Kuschel, 1994 (Figs. 13-14) - New Caledonia.*N. zimmermani* Kuschel, 1994 - North-East Australia.*N. brittoni* Kuschel, 1994 - North-East Australia.*N. australiae* (Lea, 1926) - North-East Australia.*N. reginae* Kuschel, 1994 - North-East Australia.Genus *Aragomacer* Kuschel, 1994*A. uniformis* Kuschel, 1994 - North-East Australia.*A. leai* Kuschel, 1994 - North-East Australia.*A. munus* Kuschel, 1994 - Papua New Guinea.

A. grayi Kuschel, 1994 - Papua New Guinea.

A. papuae Kuschel, 1994 - Papua New Guinea.

Bunyaena Legalov, subtrib. n.

Figs. 17-18, 22.

Type genus. *Bunyaenus* Kuschel, 1994

Diagnosis. Head weakly constricted behind eyes. Labrum free, plurisetose. Rostrum almost straight, flattened, distinctly shorter than pronotum; in lateral view continuous or discontinuous with forehead, with or without depression or sinus at base. Eyes convex, oval. Forehead distinctly wider than apex of rostrum. Mandible simple. Fourth article of maxillary palpi as long as scape. Antennae inserted subapically. Elytra quite elongate and flattened, with scutellar striole. Elytral striae distinct. Procoxal portion of prosternum elongated. Procoxal cavities contiguous. Mesocoxal cavities closed. Mesonotum with one coarsely ridged stridulatory file. Abdomen weakly convex. First ventrite longer than ventrite 2. Procoxae hemispherical, not large. Tibiae with two apical spurs. Tibiae almost straight, widened to apex, with two apical spurs. Metatibiae with or without mucro in male. Tarsi long and quite wide. Fourth tarsomere small. Claws free, strongly divergent, dentate.

Comparison. The new subtribe differs from the subtribe Mecomacerina by the procoxae hemispherical, mesonotum with one coarsely ridged stridulatory file and forehead distinctly wider than apex of rostrum.

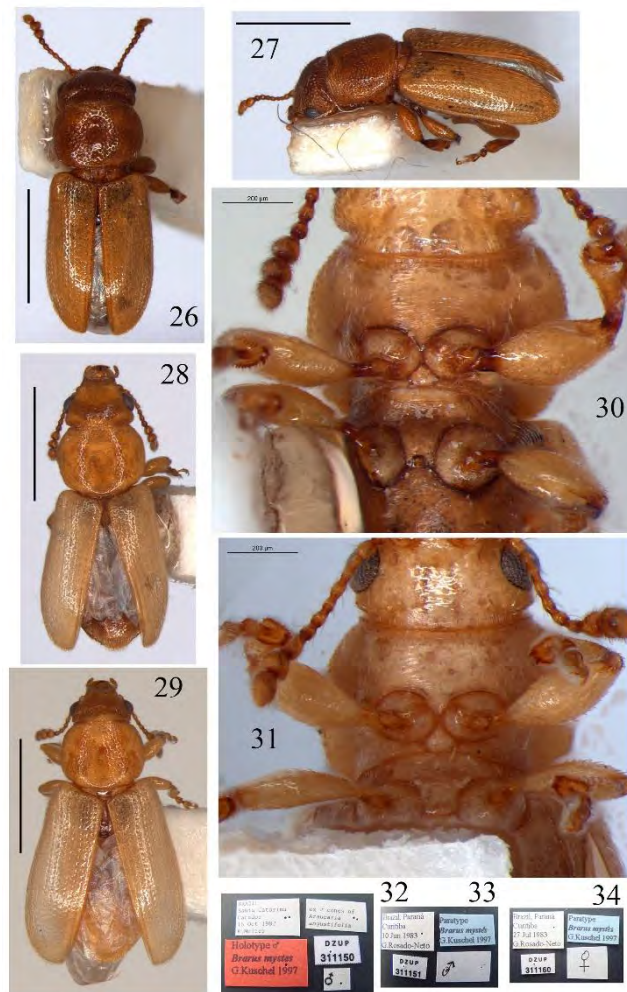
Genus *Bunyaenus* Kuschel, 1994

B. eutactae Kuschel, 1994 - North-East Australia.

B. monteithi Kuschel, 1994 (Figs. 17-18, 22) - North-East Australia.

Genus *Eutactobius* Kuschel, 1994

E. puellus Kuschel, 1994 - North-East Australia.



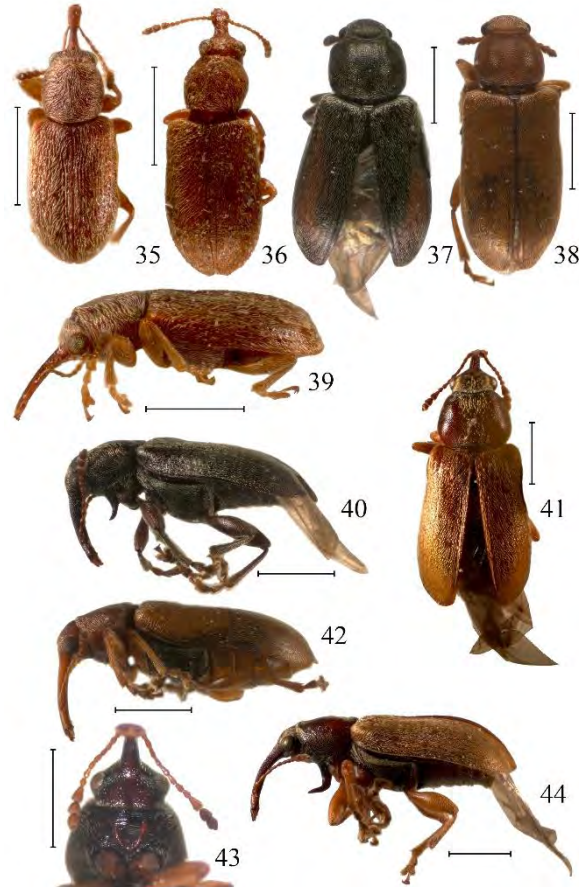
Figures 26–34. *Brarus mystes*. 26 – male, holotype, dorsal view; 27 – male, holotype, lateral view; 28 – male, paratype, dorsal view; 29 – female, paratype, dorsal view; 30 – prothorax, male, paratype, ventral view; 31 – prothorax, female, paratype, ventral view; 32 – labels, holotype; 33 – labels, male, paratype; 34 – labels, female, paratype. Scale bar 1.0 mm for Figs. 26-29.

Subtribe Rhynchitoplesiina Legalov, 2011

Figs. 23-25.

Genus *Rhynchitoplesius* Voss, 1952*Rh. eximius* (Voss, 1937) - South Brazil.Genus *Rhynchitomacerinus* Kuschel, 1954*Rh. kuscheli* (Voss, 1952) (Figs. 23-25) - Argentina, Chile.**Subtribe Brarina Legalov, 2009**

Figs. 26-31.

Genus *Brarus* Kuschel, 1997*B. mystes* Kuschel, 1997 (Figs. 26-34) - South Brazil.

Figures 35–44. Rhinorhynchini spp. 35 – *Rhinorhynchus rufulus*, female, dorsal view, New Zealand; 36 – *Nannomacer germani*, female, dorsal view, Chile; 37 – *Atopomacer orites*, male, paratype, dorsal view; 38 – *A. orites*, female, paratype, dorsal view; 39 – *Rhinorhynchus rufulus*, female, lateral view, New Zealand; 40 – *Atopomacer orites*, male, paratype, lateral view; 41 – *A. hoplites*, male, paratype, dorsal view; 42 – *A. orites*, female, paratype, lateral view; 43 – *A. hoplites*, head and prothorax, male, paratype, ventral view; 44 – *A. hoplites*, male, paratype, lateral view. Scale bar 1.0 mm.

Tribe Rhinorhynchini Voss, 1922

Figs. 35-44.

Genus *Rhinorhynchus* Sharp, 1882= *Rhinorrhynchus* Kirby, 1884= *Rhinomacer* subgen. *Listrorhinus* Voss, 1922*Rh. halli* Kuschel, 2003 - New Zealand.*Rh. halocarp* Kuschel, 2003 - New Zealand.*Rh. phyllocladi* Kuschel, 2003 - New Zealand.*Rh. rufulus* (Broun, 1880) (Figs. 35, 39) - New Zealand.= *zealandicus* Sharp, 1882Genus *Nannomacer* Kuschel, 1954*N. germani* (Voss, 1952) (Fig. 36) - Chile.*N. wittmeri* Kuschel, 1954 - Argentina, Chile.Genus *Atopomacer* Kuschel, 1989*A. ites* Kuschel, 1989 - SW of USA.

- A. pini* Kuschel, 2011 - Mexico
A. obrieni Kuschel, 2011 - Mexico
A. orites Kuschel, 1989 (Figs. 37-38, 40, 42) - Mexico.
A. hoplites Kuschel, 1989 (Figs. 41, 43, 44) - Mexico.
A. panamensis Kuschel, 2011 - Panama
A. hondurasensis Legalov, 2009 (Figs. 45-47) - Honduras.
A. grandifurca Kuschel, 2011 - Costa Rica, Panama.
A. podocarpus Kuschel, 2011 - Venezuela.

Genus *Basiliorhinus* Kuschel, 1994

- B. araucariae* Kuschel, 1994 (Fig. 48) - North-East Australia.

Genus *Basilogeus* Kuschel, 1994

- B. dacrycarpi* Kuschel et Riedel, 2011 - Indonesia (New Guinea), Papua New Guinea.
B. inops Kuschel, 2011 - North-East Australia
B. prasinus Kuschel, 1994 (Figs. 49-50) - North-East Australia.
B. striatopunctatus (Lea, 1926) - North-East Australia

Genus *Pagomacer* Kuschel, 1994

- P. deceptus* Kuschel, 1994 - North-East Australia.

Zimmiellini Legalov, trib. n.

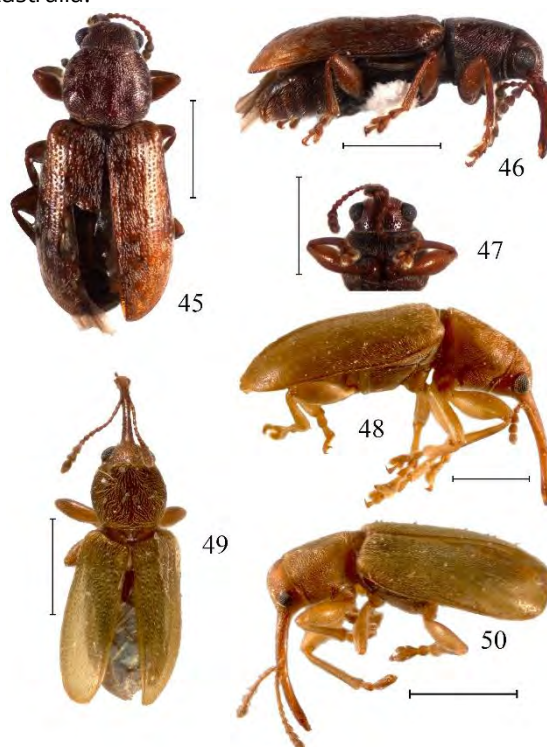
Type genus. *Zimmiellus* Kuschel, 2011

Diagnosis. Head not constricted behind eyes. Labrum free, paucisetose. Rostrum curved, longer than head and pronotum together. Position of rostrum bottom. The eyes round, convex. Mandible exodontous. Maxillary palpi hardly extending forward beyond prementum. Scrobes foveiform. Antennae inserted before base of rostrum. Sides of pronotum rounded from apex to base. Elytra quite elongate, with scutellar striole. Elytral striae distinct. Striae 8 and 9 irregular. Precoxal portion of prosternum elongated. Procoxal cavities contiguous. Mesocoxal cavities closed. Mesonotum with stridulatory files. Abdomen weakly convex. Procoxae large, conical. Protibiae slightly incurved, with two apical spurs. Mesotibiae almost straight, with two apical spurs. Metatibiae with one apical spur. Tarsi long and wide. Fourth tarsomere small. Claws free, strongly divergent, laminate.

Comparison. The new tribe is similar to the tribe Rhinorhynchini but differs by having the mandible exodontous, maxillary palpi barely extending forward beyond prementum and position of rostrum bottom (base surface).

Genus *Zimmiellus* Kuschel, 2011

- Z. fronto* Kuschel, 2011 - North-East Australia.



Figures 45-50. Rhinorhynchini spp. 45 – *Atopomacer hondurasensis*, male, holotype, dorsal view; 46 – *A. hondurasensis*, male, holotype, lateral view; 47 – *A. hondurasensis*, head and prothorax, male, holotype, ventral view; 48 – *Basiliorhinus araucariae*, female, paratype, lateral view; 49 – *Basilogeus prasinus*, male, dorsal view, Australia; 50 – *B. prasinus*, female, lateral view, Australia. Scale bar 1.0 mm.

Tribe Rhynchitomacerini May, 1993

Figs. 51-58, 65.

Genus *Rhynchitomacer* Voss, 1937

Rh. flavus Voss, 1937 (Figs. 51, 54, 55) - Argentina, Chile.

= *viridulus* Kuschel, 1954

= *frustatus* Voss, 1974

Rh. nitidus Kuschel, 1959 - Chile.

Rh. luridus Kuschel, 1954 - Argentina.

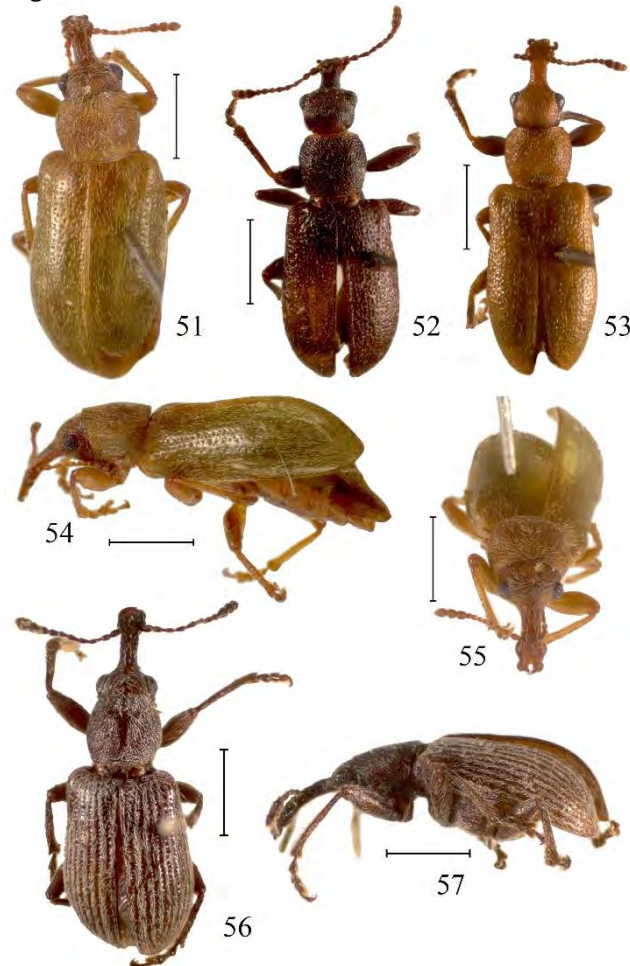
Rh. nigritus Kuschel, 1954 (Figs. 52-53) - Argentina, Chile.

= *rufus* Kuschel, 1954

Rh. errans Kuschel, 1959 - Chile.

Rh. puberulus Kuschel, 1959 - Argentina, Chile.

Rh. rostralis Kuschel, 1959 - Chile, Argentina.



Figures 51–57. Rhynchitomacerini spp. 51 – *Rhynchitomacer flavus*, female, dorsal view, Argentina; 52 – *Rh. nigritus*, male, dorsal view, Argentina; 53 – *Rh. nigritus* (*rufus*), male, dorsal view, Argentina; 54 – *Rh. flavus*, female, lateral view, Argentina; 55 – *Rh. flavus*, female, frontal view, Argentina; 56 – *Nothofagomacer apionoides*, female, dorsal view, Argentina; 57 – *N. apionoides*, female, lateral view, Argentina. Scale bar 1.0 mm.

***Nothofagomacer* Legalov, gen. n.**

Figs. 56-57.

Type species. *Rhynchitomacer apionoides* Kuschel, 1959

Etymology. Generic name from the name "*Nothofagus*" and nemonychid suffix "macer".

Diagnosis. Body brown or black-brown with decumbent light setae. Head weakly constricted behind eyes. Labrum free, paucisetose. Rostrum short, weakly curved. Eyes round, strongly convex. Mandibles lateral. Mandibular sockets not visible in dorsal view. Postmentum deeply emarginate. Maxillary palpi long, with terminal article shorter than 1st antennomere. Antennae long, inserted at apical third of rostrum. Funicle consists of 2nd to 8th antennomeres. Club forms from 9th to 11th antennomeres. Sides of pronotum rounded from apex to base. Elytra wide. Scutellar striole distinct. Elytral striae regular. Precoxal portion of prosternum elongated. Procoxal cavities contiguous. Metanepisternum quite narrow. Mesocoxal cavities closed. Mesonotum without stridulatory files. Abdomen weakly convex. First- third ventries subequal in length. Fifth ventrite without setiferous sex patch on either side in females. Procoxae large, conical. Tibiae almost straight, with two apical spurs. Tarsi long. First tarsomere conical. Second tarsomere truncate-emarginate. Third tarsomere bilobed. Fourth tarsomere very small. Claws free, strongly divergent, dentate.

Comparison. The new genus is similar to the genus *Rhynchitomacer* but differs by the mandibular sockets not visible in dorsal view, elytral striae regular, postmentum deeply emarginate and vaginal vestiture absent. From the genus *Stenomacer* it is distinguished by the mandibles lateral, with sockets entirely invisible in dorsal view and rostrum shorter than prothorax.

Remarks. Kuschel and Leschen (2011) identified two species as belonging to the *Rhynchitomacer apionoides*-group. I consider these species in a separate new genus.

N. apionoides (Kuschel, 1959), **comb. n.** (Figs. 56-57) - Argentina, Chile.

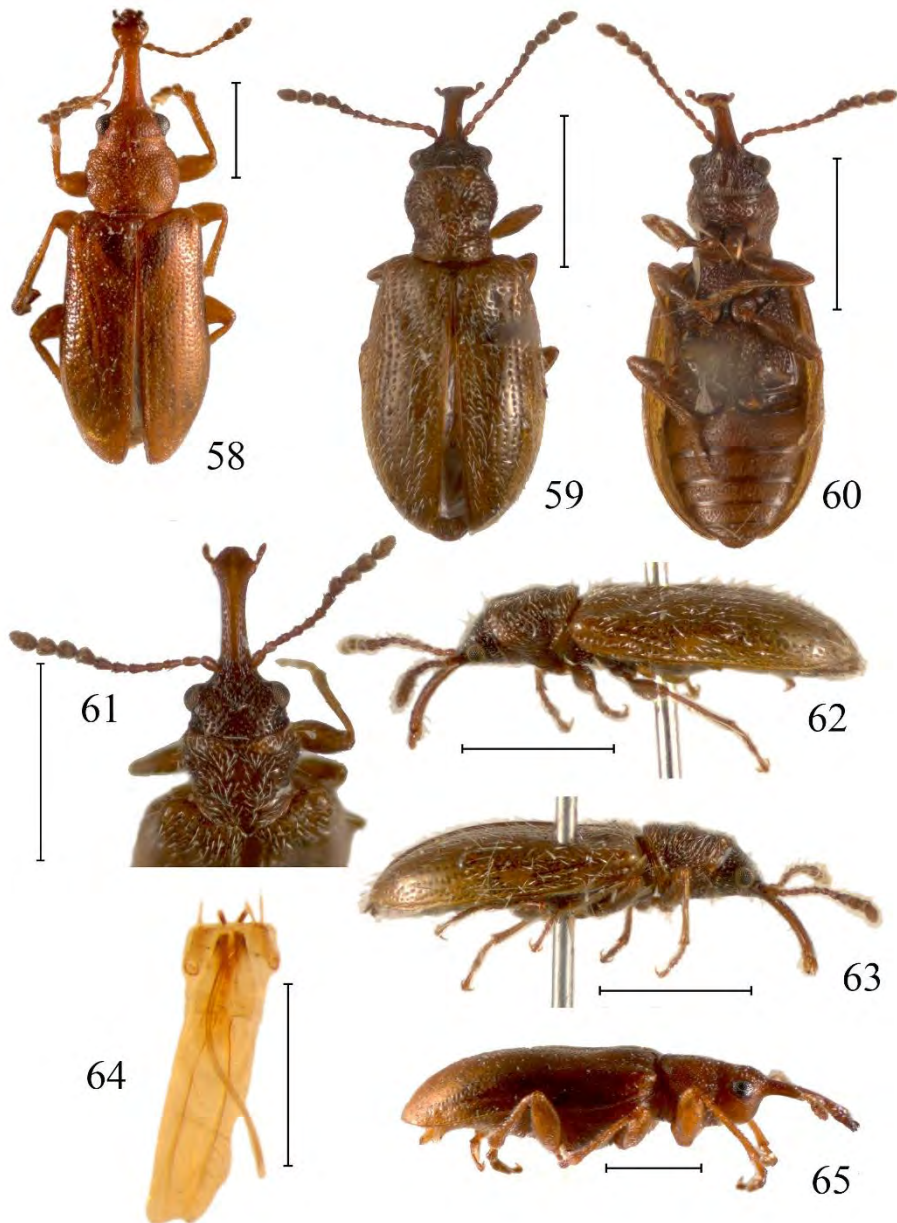
N. cortesi (Kuschel, 1959), **comb. n.** - Chile.

Genus *Stenomacer* Kuschel, 1954

S. brevicollis (Voss, 1965) - Argentina, Chile.

S. vernus Kuschel, 1954 (Figs. 58-65) - Argentina, Chile.

= *fuscus* Kuschel, 1954



Figures 58–65. Rhynchitomacerini and Argentinomacerini spp. 58 – *Stenomacer vernus*, female, dorsal view, Chile; 59 – *Argentinomacer unicus*, female, holotype, dorsal view, Argentina; 60 – *A. unicus*, female, holotype, ventral view; 61 – *A. unicus*, female, holotype, frontal view; 62 – *A. unicus*, female, holotype, lateral view (left); 63 – *A. unicus*, female, holotype, lateral view (right); 64 – *A. unicus*, genitalia, female, holotype, dorsal view; 65 – *Stenomacer vernus*, female, dorsal view, Chile. Scale bar 1.0 mm for Figs. 59-63, 65 and 0.5 mm for Fig. 64.

Argentinomacerini Legalov, trib. n.

Figs. 59-64.

Type genus. *Argentinomacer* Legalov, gen. n.

Diagnosis. Labrum free, paucisetose. Rostrum long, curved. Eyes strongly convex. Maxillary palpi long, with terminal article shorter than 1st antennomere. Antennae long, inserted before base of rostrum. Funicle consists of 2nd to 7th antennomeres. Club forms from 8th to 11th antennomeres. Sides of pronotum rounded from apex to basal fourth, extended in basal fourth somewhat. Elytra wide, with scutellar striole. Elytral striae distinct. Precoxal portion of prosternum elongated. Procoxal cavities contiguous. Metanepisternum quite wide. Mesocoxal cavities closed. Mesonotum without stridulatory files. Abdomen weak convex. First ventrite distinctly longer than 2nd ventrite. Fifth ventrite without setiferous sex patch on either side in females. Procoxae not large, conical. Tibiae almost straight, with two apical spurs. Tarsi long and narrow. Second and third tarsomere truncate-emarginate. Fourth tarsomere distinct. Claws free, strongly divergent, appendiculate.

Comparison. The new tribe is similar to the tribe Rhynchitomacerini but differs by having the pronotum narrowed before basal fourth, antennae inserted subbasally and club 4-articled.

***Argentinomacer* Legalov, gen. n.**

Type species. *Argentinomacer unicus* Legalov, sp. n.

Etymology. Generic name from the name of Argentinean and nemonymid suffix "macer".

Diagnosis. As for tribe.

***Argentinomacer unicus* Legalov, sp. n.**

Figs. 59-64.

Etymology. The specific epithet is from the Latin unica (unique).

Description.

Female. Body length (without rostrum) 2.6 mm. Rostrum length 0.7 mm. Body brown with fairly thick curved pale hairs. Head and bottom darker. Head weakly narrowed behind eye. Labrum free, paucisetose, with three pairs of dorsal setae. Rostrum long, strongly curved, widened near apex, 1.2 times as long as length of pronotum, 3.1 times as long as wide at apex, 5.8 times as long as wide in middle, 3.0 times as long as wide at base, almost bare in middle, densely punctate on sides. Eyes strongly convex and rounded. Forehead flat and wide, 1.6 times as wide as rostrum at base. Temples quite short, 0.6 times as long as length of eye, punctate. Vertex convex and quite large, punctate. Gular suture double. Maxillary palpi long, 4-articled. Terminal article considerably shorter than 1st antennomere. Antennae long, inserted before base of rostrum, protruding beyond humeri. Scape not reaching eye, 2.6 times longer than wide. Funicle with 2nd to 7th antennomeres elongate-conical. Second antennomere 2.1 times longer than wide, 0.7 times as long as and 0.9 times as narrow as 1st antennomere. Third antennomere 3.1 times longer than wide, 1.2 times as long as and 0.8 times as narrow as 2nd antennomere. Third and fourth antennomeres subequal in width. Fourth antennomere 2.7 times longer than wide, 0.9 times as long as 3rd antennomere. Fifth antennomere 2.5 times longer than wide, 1.1 times as long as and 1.1 times as wide as 4th antennomere. Sixth antennomere 2.0 times longer than wide, 0.9 times as long as and 1.1 times as wide as 5th antennomere. Seventh antennomere 1.9 times longer than wide, 1.1 times as long as and 1.1 times as wide as 6th antennomere. Club not compact, 0.8 times as long as funicle, formed from 8th to 11th antennomeres. First antennomere of club (8th antennomere) 1.4 times longer than wide, 1.2 times as long as and 1.6 times as wide as 7th antennomere. First antennomere of club 2.5 times longer than wide, 2.5 times as long as and 1.6 times as wide as 8th antennomere. Second antennomere of club subequal to 1st antennomere of club. Third antennomere of club 1.2 times longer than wide, equal in length and 1.1 times as wide as 2nd antennomere of club. Fourth antennomere of club 1.9 times longer than wide, 1.5 times as long as and 0.9 times as narrow as 3rd antennomere of club. Pronotum almost bell-shaped, 1.3 times longer than wide at apex, 1.0 times longer than wide in middle and 1.2 longer than wide at base, without lateral carina. Sides rounded from apex to basal fourth, extended in basal fourth almost. Disk weakly convex, densely and finely punctate. Scutellum almost triangular. Elytra 1.6 times longer than wide at base, 1.5 times longer than wide in middle, 2.3 times longer than wide at apical fourth, 2.8 times as long as pronotum, with slightly flattened humeri. Scutellar striole distinct. Elytral striae distinct with quite small points. Elytral intervals flattened, quite narrow, 1.3-2.0 times as wide as striae. Epipleura distinct. Apex of elytra rounded when together. Precoxal portion of prosternum elongated, 1.6 times as long as procoxal cavities, 5.3 times as long as postcoxal portion; postcoxal portion 0.3 times as long as procoxal cavities. Procoxal cavities contiguous. Metanepisternum densely punctate, 4.6 times longer than wide in middle. Mesocoxal cavities narrowly separated, closed. Mesoventrite flattened, coarsely punctate, 2.1 times as long as length of mesocoxal cavity. Metaventrite weakly convex, quite coarsely punctate, 2.5 times as long as length of mesocoxal cavity. Mesonotum punctate, without stridulatory files. Abdomen weakly convex. Ventrites free. First ventrite 1.8 times as long as length of metacoxal cavity. Second ventrite 0.8 times as long as length of 1st ventrite. Third ventrite 0.7 times as long as length of 2nd ventrite. Fourth ventrite 0.8 times as long as length of 3rd ventrite. Fifth ventrite 0.9 times as long as length of 4th ventrite, without a setiferous sex patch on either side. Procoxae large, conical. Metacoxae transverse. Trochanters small, not separating femora from coxae. Femora thickened, lacking teeth. Profemora 3.2 times longer than wide. Mesofemora 2.8 times longer than wide. Metafemora 3.6 times longer than wide. Tibiae almost straight, with two apical spurs, without mucro. Protibiae 9.1 times longer than wide in middle, 1.8 times as long as length of protarsi. Mesotibiae 10.3 times longer than wide in middle, 1.4 times as long as length of mesotarsi. Metatibiae 11.0 times longer than wide in middle, 1.3 times as long as length of metatarsi. Tarsi long, quite narrow. First tarsomere conical. Second and third tarsomere truncate-emarginate. Fourth tarsomere distinct, equal in length and width. Fifth tarsomere elongated. Claws free, strongly divergent, appendiculate. Protarsi: First tarsomere 2.0 times longer than wide at base. Second tarsomere 1.4 times longer than wide at base, 0.8 times as long as and 1.1 times as wide as 1st tarsomere. Third tarsomere 1.5 times longer than wide, 1.1 times as long as and 1.1 times as wide as 2nd tarsomere. Fourth tarsomere

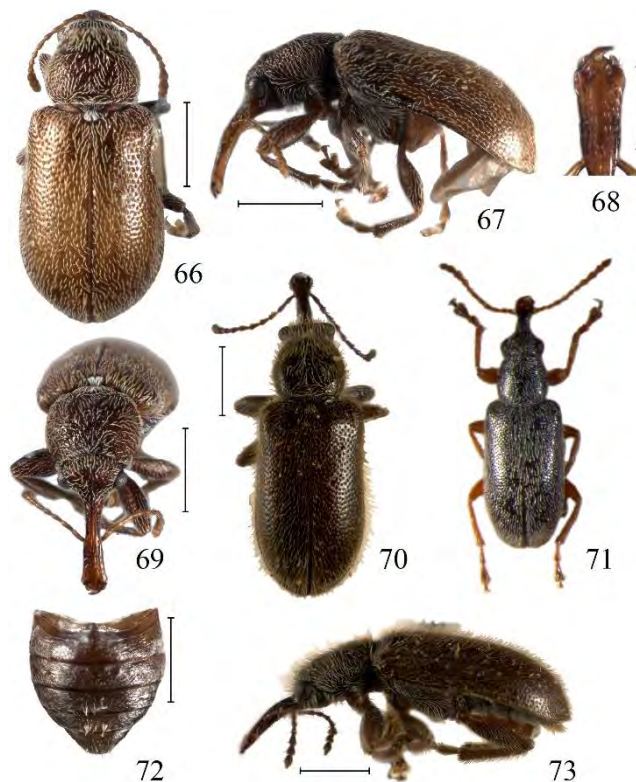
0.6 times as long as and 0.8 times as narrow as 3rd tarsomere. Fifth tarsomere 3.0 times longer than wide at base, 3.3 times as long as and 1.1 times as wide as 4th tarsomere. Mesotarsi: First tarsomere 1.7 times longer than wide at base. Second tarsomere 1.6 times longer than wide at base, 1.1 times as long as and 1.1 times as wide as 1st tarsomere. Third tarsomere 2.0 times longer than wide, 1.5 times as long as and 1.3 times as wide as 2nd tarsomere. Fourth tarsomere 0.4 times as long as and 0.8 times as narrow as 3rd tarsomere. Fifth tarsomere 3.7 times longer than wide at base, 4.3 times as long as and 1.1 times as wide as 4th tarsomere. Metatarsi: First tarsomere 3.4 times longer than wide at base. Second tarsomere 1.7 times longer than wide at base, 0.6 times as long as and 1.3 times as wide as 1st tarsomere. Third tarsomere 2.1 times longer than wide, 1.5 times as long as and 1.2 times as wide as 2nd tarsomere. Fourth tarsomere 0.3 times as long as and 0.7 times as narrow as 3rd tarsomere. Fifth tarsomere 3.6 times longer than wide at base, 4.5 times as long as and 1.3 times as wide as 4th tarsomere.

Material examined. Holotype, adult female, ZMUC, "ARGENTINA, Rio Nergo 9: S.C. de Bariloche, Colonia Suiza, 800 m, 21.X.1981, Nielsen & Karsholt".

Subfamily Idiomacerinae Legalov, 2011

Genus *Idiomacer* Kuschel, 2011

I. basicornis Kuschel, 2011 - New Caledonia.



Figures 66–73. Cimberindini spp. 66 – *Pityomacer nugax*, female, paratype, dorsal view; 67 – *P. nugax*, female, paratype, lateral view; 68 – *P. nugax*, apex of rostrum, female, paratype, dorsal view; 69 – *P. nugax*, female, paratype, frontal view; 70 – *Acromacer bombifrons*, male, dorsal view, USA; 71 – *Cimberis attelaboides*, male, dorsal view, N Korea; 72 – *Pityomacer nugax*, male, dorsal view, USA; 73 – *Acromacer bombifrons*, male, dorsal view, USA. Scale bar 1.0 mm for Figs. 67, 69-70, 72-73 and 0.5 mm for Fig. 68.

Subfamily Cimberindinae des Gozis, 1882

Tribe Cimberindini des Gozis, 1882

Figs. 66-73, 79.

Genus *Cimberis* des Gozis, 1881

= *Rhinomacer* Olivier, 1807 nec Geoffroy, 1762

= *Neocimberis* O'Brien & Wibmer, 1982

Subgenus *Cimberis* s. str.

C. (C.) attelaboides (Fabricius, 1787) (Fig. 71) - Palaearctic.

= *Curculio rhinomacer* Paykull, 1792

= v. *canescens* Semenov, 1900

C. (C.) elongata (LeConte, 1876) - North America.

C. (C.) decipiens Kuschel, 1989 - North America.

C. (C.) pallidipennis (Blatchley & Leng, 1916) - North America.

Subgenus *Amerocimberis* Legalov, 2009

C. (A.) pilosa (LeConte, 1876) - North America.

C. (A.) compta (LeConte, 1876) - North America.

= *parvulus* Hatch, 1971

C. (A.) bihirsuta (Hatch, 1971) (Fig. 79) - North America.

C. (A.) turbans Kuschel, 1989 - USA.

Genus *Pityomacer* Kuschel, 1989

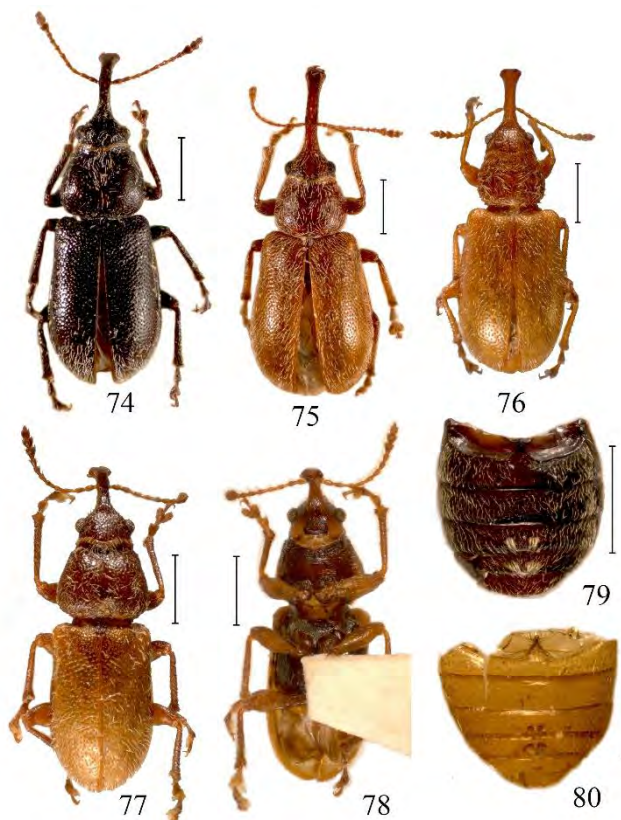
P. nugax Kuschel, 1989 (Figs. 66-69, 72) - USA (California).

P. carmelites Kuschel, 1989 - USA (California).

P. pix Kuschel, 1989 - North America.

Genus *Acromacer* Kuschel, 1989

A. bombifrons (LeConte, 1876) (Figs. 70, 73) - North America.



Figures 74-80. Cimberindinae spp. 74 - *Doydirhynchus austriacus*, male, dorsal view, France; 75 - *D. austriacus*, female, dorsal view, France; 76 - *D. bicolor*, female, dorsal view, Algeria; 77 - *D. bicolor*, male, dorsal view, Algeria; 78 - *D. bicolor*, male, ventral view, Algeria; 79 - *Cimberis bihirsuta*, abdomen, female, dorsal view, USA; 80 - *Lecontellus pinicola*, abdomen, female, paratype, dorsal view, USA. Scale bar 1.0 mm.

Tribe Doydirhynchini Pierce, 1916

Figs. 74-78, 80-86.

Genus *Doydirhynchus* Dejean, 1821

= *Diodyrhynchus* Schoenherr, 1833

= *Doedycorhynchus* Labram & Imhoff, 1843

= *Doedycorrhynchus* Bedel, 1883

D. austriacus (Olivier, 1807) (Figs. 74-75) - Western Palearctic.

= v. *castaneus* Germar, 1833

= *karamani* Stierlin, 1886

= *cilicicus* Daniel & Daniel, 1903

= v. *lutescens* Schilsky, 1903

= v. *pallidicolor* Pic, 1905

= v. *fulvipennis* Reitter, 1916

= f. *testacea* Voss, 1932

D. bicolor Pic, 1905 (Figs. 76-78) - Northern Africa.

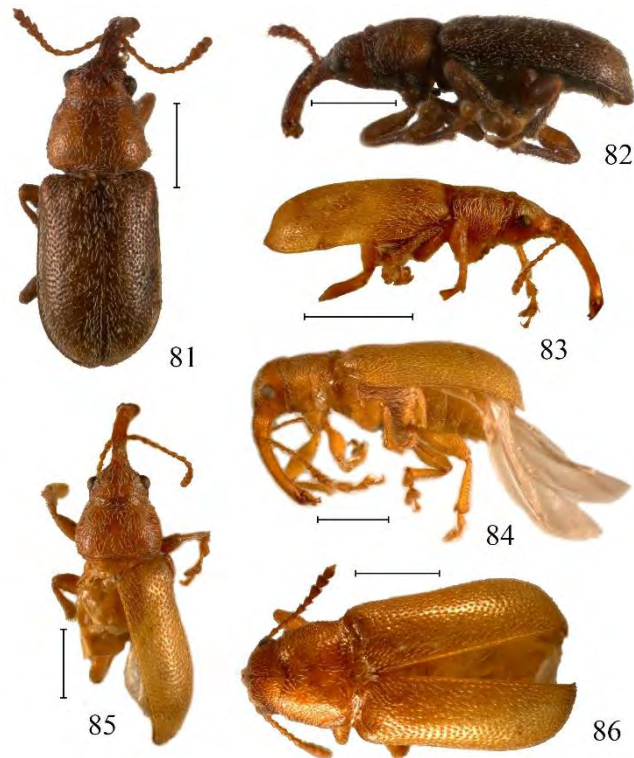
= v. *testaceus* Pic, 1905

Genus *Lecontellus* Kuschel, 1989

L. byturoides (LeConte, 1880) (Figs. 81-82) - USA.

L. pinicola Kuschel, 1989 (Figs. 80, 83, 85) - USA (California).

L. sleveni (Martin, 1930) (Figs. 84, 86) - USA (California).



Figures 81–86. *Lecontellus* spp. 81 – *L. byturoides*, male, dorsal view, USA; 82 – *L. byturoides*, male, lateral view, USA; 83 – *L. pinicola*, female, paratype, lateral view, USA; 84 – *L. sleveni*, female, lateral view, USA; 85 – *L. pinicola*, female, paratype, dorsal view, USA; 86 – *L. sleveni*, female, dorsal view, USA. Scale bar 1.0 mm.

Distribution of some Palearctic Rhynchitidae

Nemonyx lepturoides

Fig. 87.

Desbrochers des Loges, 1869: 419-420; Lebedev, 1906: 421; Miller & Zybovsky, 1917: 143; Voss, 1931: 165-167; Dalla Torre & Voss, 1937: 5; Hoffmann, 1945: 169-170; Medvedev & Shapiro, 1957: 202; Endrodi, 1958: 8-9; Dieckmann, 1974: 23; Cmoluch, 1979: 10; Podlussany, 1984: 60; Ter-Minassian, 1984: 190; Abbazzi, Osella, 1992: 274; Kuschel, 1993: 29-31; L. Egorov, 1996: 56; 2016: 103; Poiras, 1998:12; Isaev & Savitskii, 1999: 97; Majzlan et al., 1999: 145; Davidian, 2001: 145; Di Giovanleonardo, Osella, 2001: 68-69; Stachowiak, 2001: 190; Mazur, 2002: 218; Gonget, 2003: 28-29; Dedyukhin et al., 2005: 311; Dmitrieva, 2005; Egorov & Isaev, 2006: 12; Gosik, 2006: 26; Khrisanova & Egorov, 2006: 650; Ruchin, 2008: 164; Nazarenko, 2009: 37; Tsurikov, 2009: 247; Benedikt et al., 2010: 62; Germann, 2010: 105; Korotyayev, 2010: 287-288; Rheinheimer & Hassler, 2010: 163-164; Alonso-Zarazaga, 2011: 90; Dedyukhin, 2011: 91, 2012: 56; Dorofeev & Evsjunin, 2012: 77; Fayzulin et al., 2012: 140; Benedikt, 2014: 72.

Material. 1 ex. (ZIS), MOLDOVA, Bender, 3.VIII.1907, Talitsky; 32 ex. (ZIS), UKRAINE, **Kherson Prov.**, Askania-Nova Res., 20.VI.1932, S.I. Medvedev; 1 ex. (ZIS), "Ascania-Nova, Tesua Ross. mr.", 29.VI.1926, S. Medvedev; 1 ex. (ZIS), **Khmelnyskiy Prov.**, Kamianets-Podilskyi, 24.VI.1908, V. and I. Yakubovsky; 5 ex. (ZIS), **Sumy Prov.**, Sumy, 1891, Benua; 1 ex. (ZIS), **Poltva Prov.**, env. Plotava, 24.VI.1922; 2 ex. (ZIS), idem, 6.VII.1911, V. Nikolaev; 1 ex. (ZIS), **Kharkiv Prov.**, Kharkiv, Koppe; 1 ex. (ZIS), **Cherkasy Prov.**, Mehedovka, 1909, V. Kizetitsky; 4 ex. (ZMM), **Luhansk Prov.**, Bilovodsky Distr., Derkul riv., 29.VI.-4.VIII.1950, K. Arnoldi; 2 ex. (ZMM), idem, 30.VI.1952, K. Arnoldi; 1 ex. (ZMM), idem, 3.VII.1956, K. Arnoldi; 1 ex. (ZIS), **Donetsk Prov.**, Novoselovka, Donets riv., VII.1936, Arnoldi; 1 ex. (ZMM), Crimea, Saky, 21-22.VI.1948, K. Arnoldi; 2 ex. (ZIS), Yevpatoria, 25.V.1901, V.E. Yakovlev; 2 ex. (ZIS), idem, 8-9.VI.1902, V.E. Yakovlev; 1 ex. (ZIS), Simferopol, 13.VI.1911, Pavlovsky; 1 ex. (ZIS), Alma riv., Rybakov; 1 ex. (ZIS), "Tauria", 1890; RUSSIA: 1 ex. (ZMM), **Moscow Prov.**, Lkhovitsky Distr., env. Chetnaya, 15-20.VI.2011, N. Nikitsky; 1 ex. (ZMM), env. Alpat'evo, 17.VI-28.VII.2011, N. Nikitsky; 1 ex. (ZMM), env. Beloomut, 29.VI.2012, N. Nikitsky; 1 ex. (ZMM), env. Lovtsy, 24.VI.2007, Khryapin; 1 ex. (ZIS), **Bryansk Prov.**, Pogosshenskoe forestry, 10.VI.1926, V. Stark; 2 ex. (ZMM), **Kursk Prov.**, Central Black Earth Res., "Streletzkaya" steppe, 15.VII.1958, K. Arnoldi; 1 ex. (ZIS), **Belgorod Prov.**, Borisovka, 18.VI.1907, S. Malyshev; 2 ex. (ZIS), env. Borisovka, Les na Vorskle Res., 6-17.VI.1989, G.E. Davidian; 2 ex. (ZMM), **Rostrov Prov.**, Kamensky Distr., Mihailovka, VII.1950, K. Arnoldi; 2 ex. (ZMM), Kamensk-Shakhtinsky, 27.VI.1952, K. Arnoldi; 1 ex. (ZIS), Rostov-on-Don, 4.VIII.1924, F. Lukjanovich; 7 ex. (ZIS), env. Novocherkassk, 15.V.-1.VIII.1912, Kizeritsky; 1 ex. (ZMM), **Krasnodar Krai**, Anapa, 3.VIII.1961, V. Messheryakov; 1 ex. (ZIS), Temryuksky Distr., Taman, 19.VI.1998, B. Korotyayev; 6 ex. (ZIS), **Republic of**

Adygea, Teuchezhsky Distr., Ponezhukay, 7-9.VII.1977, B. Korotyaev; 1 ex. (ZMM), **Republic of Kalmykia**, Sarpinsky District, Arshan'-Zel'men', 6.VI.1952, K. Arnoldi; 1 ex. (ZIS), **Republic of Dagestan**, Derbent, V.1872, Christoph; 1 ex. (ZIS), **Saratov Prov.**, Khvalynsk, Christoph; 8 ex. (ZIS), Dukhovnitsky Dist., Roslyakovo, 16.VI.1899, E. Klementz; 2 ex. (ZIS), **Samara Prov.**, Samara; 1 ex. (ZIS), idem, coll. Kippa; 1 ex. (ZIS), Sarepta, Becker; 1 ex. (ZIS), ARMENIA, **Kotayk Prov.**, Jrvezh, 8.VI.1984, Kazaryan; 1 ex. (ZMM), idem, 30.VI.1985, M. Kalashyan; 1 ex. (ZIS), Yerevan, 6.VII.1962, V. Rikhter; 3 ex. (ZIS), AZERBAIJAN, **Nakhchivan Autonomous Republic**, env. Ordubad, 26.IV.1974, M. Volkovich; 1 ex. (ZIS), 17 km E of Julfa, Arax riv., 11.V.1982, Kasparyan; 6 ex. (ZIS), "Caucasus, Araxesthal., Leder, Reitter"; 2 ex. (ZIS), TURKEY, **Mardin Prov.**, Mardin Daglari, Hop, Gecidi, 14.9 km NE of Mardin, 1024 m, 10.VI.2006, B.A. Korotyaev.

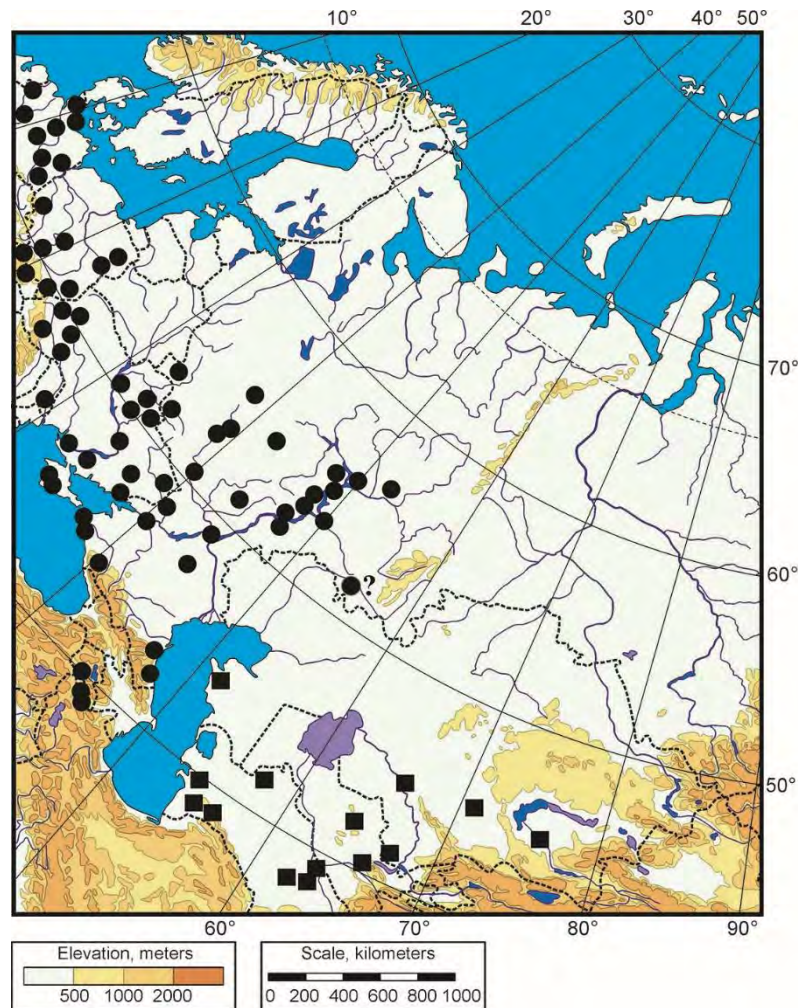


Figure 87. Distribution of *Nemonyx*. Circle – *N. lepturoides* and square – *N. canescens*.

Nemonyx canescens

Fig. 87.

Voss, 1931: 167; Dalla Torre & Voss, 1937: 5; Ter-Minassian, 1984: 190; Kuschel, 1993: 33-34; Alonso-Zarazaga, 2011: 90. Material. 1 ex. (ZIS), TURKMENISTAN: Daşoguz Prov., south of Ustyurt Plateau, Burili-Burun, desert, Delphinium, 3.VI.1997, L. Mitroshina; 1 ex. (ZMM), **Balkan Prov.**, SW of Kopet Dag Mtr., Garrygala (Kara-Kala), Parhai, 20.IV.1994, Ya. Metlyausky; 1 ex. (ZIS), 16 km SE of Madau, desert, 13.V.1984, M. Volkovich; 1 ex. (ZIS), 20 km W of Jebel, sandy desert, 9.V.1997, Andreeva; **Lebap Prov.**, Repetek, *Delphinium camptacarpum*, 7.V.1980, Kaplin; 9 ex. (ZIS), Farap (Farab), 13-24.V., G. Sumakov; 1 ex. (ZIS), near Chardzhou, railway station Karaul-Kuyu, 7.V.1911, N. Androsov; 1 ex. (ZIS), between Turkmenabat (Chardzhou) and Mary (Merv), V.1884, Regel; 1 ex. (ZIS), "Transcasp., Dortkuju, 4.1900, Coll. Hauser"; 4 ex. (ZIS), Kyzylkum Desert, "Urme-Kuduk", 17.V.1912, N.A. Zarudny; 1 ex. (ZMM), UZBEKISTAN: **Navoiy Prov.**, Kyzylkum Desert, 60 km SE of Uchquduq, 5.IV.1966, G. Medvedev; 1 ex. (ZIS), 40 km E Dzhingildy, Ajakguzhumdy, 18.V.1969, Falkovich; 2 ex. (ZMM), **Bukhara Prov.**, 25 km SE of Kogon, 18.V.-1.VI.1991, V. Gorbатовsky; 1 ex. (ZIS), KAZAKHSTAN, **Mangystau Prov.**, Munaily Distr., 15 km WNW of Ushtagan, Baskuduk, 17.VI.1973, V. Zaitsev; 4 ex. (ZIS), **Jambyl Prov.**, Moiynkum Distr., 20 km E of Ulanbel, Chu riv., sandy desert, 31.V.1983, Smirnova; 1 ex. (ZMM), **Almaty Prov.**, Bakanas, Ili riv., 27.V.1952, B. Kuzin; 1 ex. (ZMM), **Kyzylorda Prov.**, Kyzylorda (Perovsk), V.1915; 1 ex. (ZIS), **South Kazakhstan Prov.**, Kyzylkum Desert, 106 km W Dyusebai well, 13.V.1871, A.P. Fedchenko; 1 ex. (ZIS), env. "Korzhun", 9.V.1871, A.P. Fedchenko.

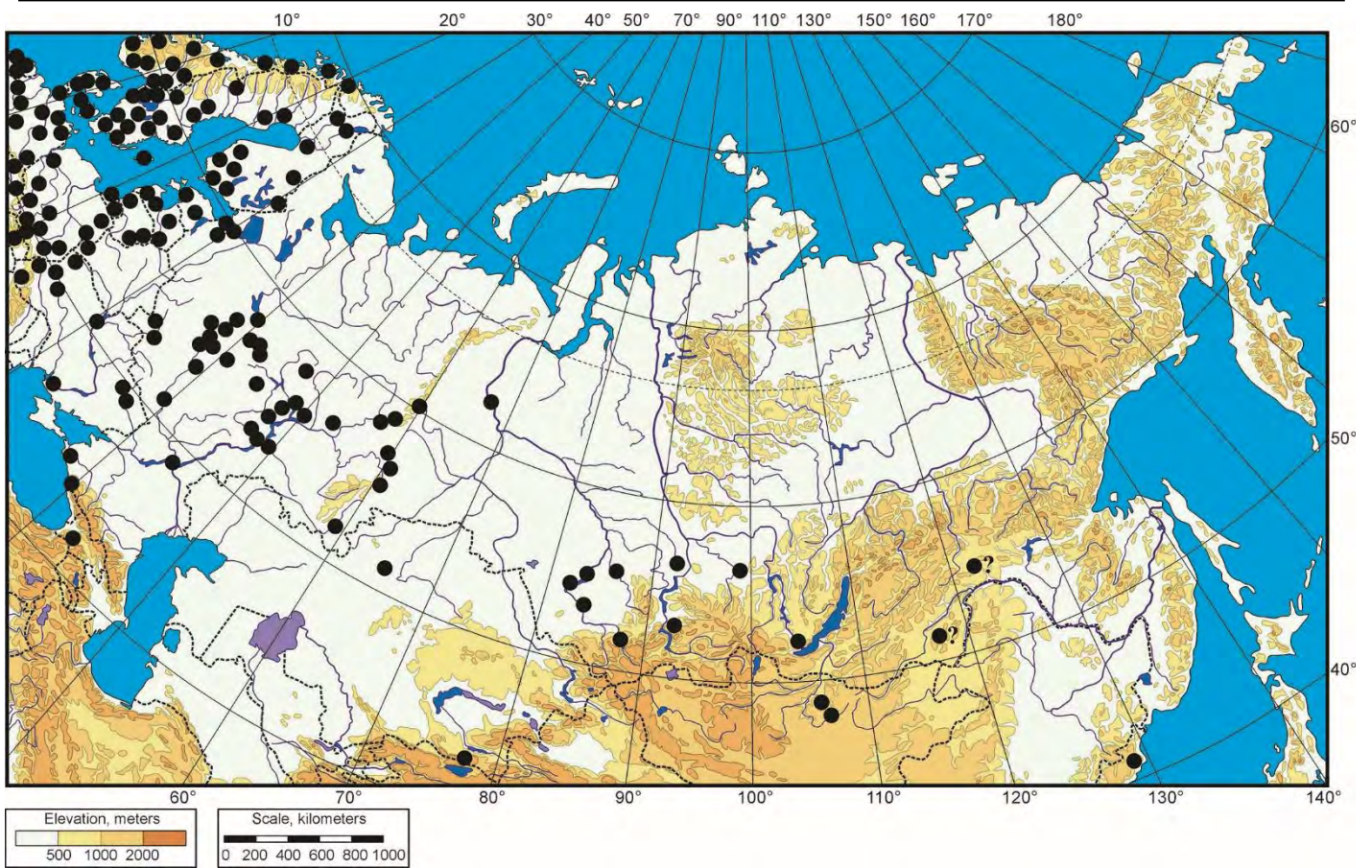


Figure 88. Distribution of *Cimberis attelaboides*.

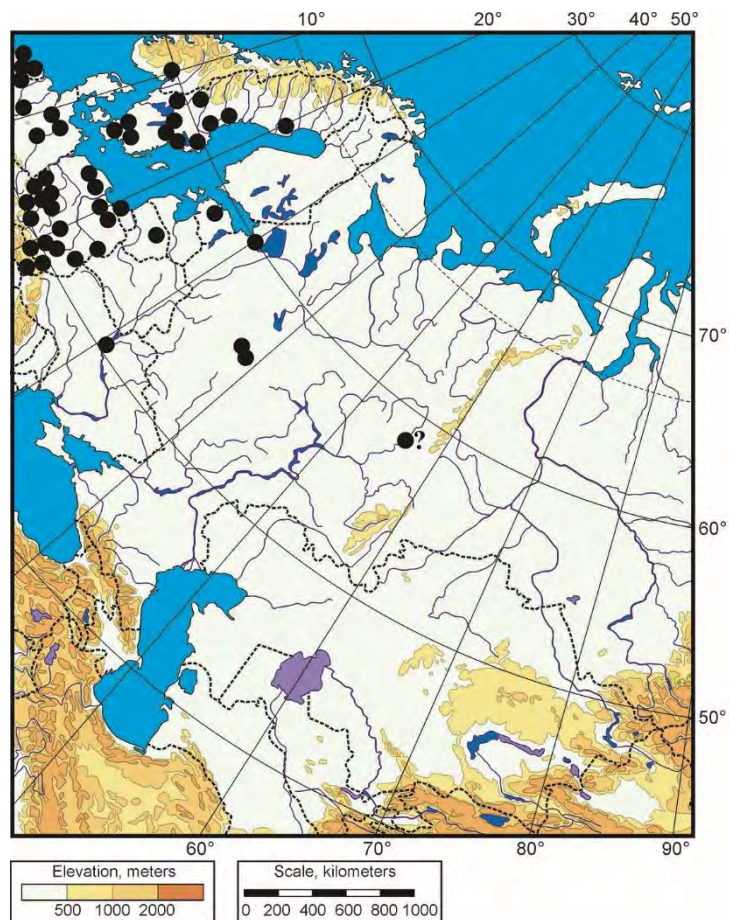


Figure 89. Distribution of *Doydirhynchus austriacus*.

Cimberis attelaboides

Fig. 88.

Desbrochers des Loges, 1869: 416-417; Lindeman, 1871: 198; Lebedev, 1906: 421; Everts, 1922: 502; Voss, 1932: 14-17; Dalla Torre & Voss, 1937: 6-8; Hoffmann, 1945: 170-172; Endrodi, 1958: 8-9; Cherepanov, Opanassenko, 1963: 14; Hansen, 1965: 455-456; Angelov, 1966: 7, 1981: 51-52; Roginskaya, 1966: 45; Tveritina, 1966: 49; Strand, 1970: 143; Dieckmann, 1974: 23-24; Opanassenko, 1976: 225; Petryszak, 1976: 88; Cmoluch, 1979: 11; Berlov & Tomilova, 1980: 74; Podlussany, 1984: 60; Ter-Minassian, 1984: 110; Korotyayev, 1990: 216; Morris, 1990: 22; Abbazzi, Osella, 1992: 274; Knutelsky et al., 1992: 112; Heijerman, 1993: 35, 2010: 159; Knutelsky & Skalski, 1993: 185; Kuschel, 1993: 36-37; Knutelsky & Witkowski, 1995: 65; Alexandrovitch et al., 1996: 53; A. Egorov, 1996: 164; L. Egorov, 1996: 56, 2009: 26, 2012: 133; Nikiitsky et al., 1996; Knutelsky & Lason, 1997: 227; Krasnobaev et al., 1998: 147; Legalov, 1998: 216, 2009b: 205, 2010: 94; Egorov, Khrisanova, 1999a: 41, 1999b: 120; Isaev & Savitskii, 1999: 97; Majzlan et al., 1999: 145; Legalov & Opanassenko, 2000: 283; Legalov & Sitnikov, 2000: 38; Prikloonsky et al., 2001: 49; Stachowiak, 2001: 190; Wanat, 2001: 197; Ermakov, 2002: 230; Mazur, 2002: 218, 2011: 329; Gonget, 2003: 29-30; Šablevičius, 2003: 21; Legalov & Telnov, 2004: 98; Silfverberg, 2004: 85, 2010: 99; Alekseev, 2005: 60; Dedyukhin et al., 2005: 311; Tsinkevich et al., 2005: 155; Egorov & Isaev, 2006: 12; Gosik, 2006: 26; Khrisanova & Egorov, 2006: 650; Telnov et al., 2006: 121, 2016: 118; Braunert, 2009: 129; Křivan & Stejskal, 2009: 31; Semenov, 2009: 142; Alekseev & Bukejs, 2010: 172; Benedikt et al., 2010: 62; Germann, 2010: 105; Rheinheimer & Hassler, 2010: 162; Alonso-Zarazaga, 2011: 90; Nemkov, 2011: 236; Tamutis et al., 2011: 364; Dedyukhin, 2012: 55; Cunev, 2013: 1; Nazarenko, 2012: 50.

Material. ESTONIA: 1 ex. (ZIS), Tartu (Yur'ev), 1899, G. Sumakov; 2 ex. (ZMM), Puhtu, 1.VI.1966, V. Kovalev; LITHUANIA: 2 ex. (ZMM), near Vilnius, P. Ponarishki; UKRAINE: 1 ex. (ZIS), **Zakarpattia Prov.**, Yasinia, 2.VI.1950, Zaslavsky; 1 ex. (ZMM), **Rovno Prov.**, Sarny, 3.V.1989, A. Shiras; 1 ex. (ZMM), **Kherson Prov.**, Golopristanskii Distr., Rybalche, 7-9.V.1994, I. Mrl'nik; GEORGIA:

1 ex. (ZIS), **Samtskhe-Javakheti**, Akhaltsikhe, Hagi, 1780 m, 26.VI.1978, V.A. Richter; RUSSIA: 2 ex. (ZIS), **Leningradskaya Prov.**, Lomonosovsky Distr., Lebyazhye, 29.V.-11.VI.1899, Bianki; 3 ex. (ZIS), Luzhskii Distr., Yasshera, 9.V.2002, D.N. Prasolov; 1 ex. (ZIS), Sankt-Petersburg; 1 ex. (ZIS), idem, Pavlovsk, 10.VII.1927, V. Kusnezov; 1 ex. (ZIS), idem, Beloostrov, 31.V.1996; 2 ex. (ZIS), Kirov Prov., Svechinsky Distr., Svecha, 7.V.-27.VI.1990, G. Yuferev; 1 ex. (ISEA), Nizhny Novgorod Prov., Arzamas, 10.V.1952, B.S. Pavlov-Verevkin; 1 ex. (ZMM), **Moscow Prov.**, Serpukhov, Luzhki, *Pinus*, V.1964, A. Rasnitsyn; 1 ex. (ZMM), Serpukhovskiy Distr., Prioksko-Terrasny res., 16-23.V.1995, N. Nikitsky; 1 ex. (ZMM), env. Nikiforovo, 4.V.-7.VI.2011, N. Nikitsky; 1 ex. (ZIS), Pavlovskiy Posadskiy Distr., Pavlovskiy Posad, 14.VI.22; 1 ex. (ZMM), Taldomskiy Distr., env. Mel'dino, 6.V.-18.VI.2005, N. Nikitsky; 1 ex. (ZMM), Mozhayskiy Distr., env. Oblyanisshevo, 5.V.-5.VI.2007, N. Nikitsky; 1 ex. (ZMM), Ruzskiy Distr., env. Tovarkovo, 21.VI.-VII.2003, N. Nikitsky; 1 ex. (ZMM), Yegoryevskiy Distr., 3 km SE of Nikitinkovo, 29.V.2014, N. Nikitsky; 1 ex. (ZMM), Lukhovitskiy Distr., env. Alpat'evo, 30.IV.-5.VI.2012, N. Nikitsky; 1 ex. (ZMM), env. Beloomut, 27.IV.-3.VI.2011, N. Nikitsky; 1 ex. (ZMM), env. Chetnaya, 8.V.-14.VI.2012, N. Nikitsky; 1 ex. (ZMM), Serebryano-Prudskiy Distr., env. Lishnyagi, 07.V.-08.VI.2004, N. Nikitsky; 1 ex. (ZIS), Moscow, V.1924, Arnoldi; 1 ex. (ZMM), idem, 5.V.1933; 1 ex. (ZMM), idem, 24.V.1936, S. Nikulin; 1 ex. (ZMM), idem, 6.VI.1940, S. Nikulin; 1 ex. (ZMM), idem, Malinovskoe lesnichestvo, 15.VI.1973, N. Nikitsky; 1 ex. (ZMM), idem, Losinyi ostrov, 9.V.1982, A. Rasnitsyn; 1 ex. (ZMM), idem, 15.V.1988, A. Rasnitsyn; 1 ex. (ZMM), idem, Morozki, 1.V.1973, S.I. Khvylya; 1 ex. (ZMM), idem, Solntsevo, 28.V.1989, V. Gratshev; 1 ex. (ZMM), idem, Malyy Sokol, 8.V.1982, V. Gratshev; 1 ex. (ZMM), idem, Zelenogradskaya, 1.V.1959, V. Zherikhin; 1 ex. (ZMM), near Zhukovskii, Otdykh, 2.VI.1960, N. Nikitsky; 1 ex. (ZMM), idem, 22.IV.-26.V.2012, N. Nikitsky; 1 ex. (ZMM), idem, 7.V.2013, Ya. Kovalenko; 1 ex. (ZIS), **Vladimir Prov.**, Vladimir; 2 ex. (ZIS), Muromskiy Distr., Ol'gino, V.1898, T. Chicherin; 1 ex. (ZIS), **Yaroslavl Prov.**, Yaroslavl; 1 ex. (ZMM), **Bryansk Prov.**, Bryansk (Bezhitsa), 18.VI.1915, G. Sostylev; 1 ex. (ZIS), **Oryol Prov.**, Dmitrovskiy Distr., Vasil'evskii, 22.V.1924; 1 ex. (ZMM), **Voronezh Prov.**, Voronezh res., "Usmanskiy bor.", 17.VI.1964, K. Arnoldi; 1 ex. (ZIS), **Rostov Prov.**, 25 km W of Oblivskaya, 1934, Cherezova; 1 ex. (ZMM), **Krasnodar krai**, Severskiy Distr., Ubinskaya, 31.V.1976, N. Nikitsky; 1 ex. (ZIS), 18 km of Ubinskaya, Papai Mt., 2.VI.1986, I.A. Ushakov; 1 ex. (RDP), [Sochi, Mt. Akhun], "Caucasus occ., Soci-ok, Achun", 2.VI.1967, J. Strejcek; 1 ex. (ZMM), **Penza Prov.**, Kuznetsk, N.F. Ikonnikov; 1 ex. (ZMM), **Samara Prov.**, Zhiguli res., Volga riv., 19.VI.1984; 1 ex. (ZMM), **Udmurt Rep.**, Malopurginskiy Distr., Malaya Purga, VIII.1995, S.V. Dedjukhin; 1 ex. (ZMM), **Permskiy krai**, env. Perm, Sofrony, 25.VI.1964, V. Zherikhin; 2 ex. (ZMM), Basegi rez., 15-25.VI.1990, Eshunin; 2 ex. (ZMM), S of Lys'va, 27.V.-3.VI.1963, V. Zherikhin; 5 ex. (ZMM), idem, 25.V.-19.VI.1964, V. Zherikhin; 1 ex. (ISEA), **Sverdlovsk Prov.**, North Ural Mts., Denezhkin kamen res., Sharpinskaya hill, 6.VI.2001, A. Ermakov; 1 ex. (ISEA), idem, Ryabel' pass, snowfield, 12.VI.2001, A. Ermakov; 1 ex. (ISEA), Ekaterinburg, 27.VII.1990, O. Popova; 2 ex. (ISEA), Visim res., 15-18.VII.1990, N.L. Uchova; 1 ex. (ZMM), **Chelyabinsk Prov.**, Il'menskii res., 17.VI.1992; 1 ex. (ZMM), **Tyumen Prov.**, Yuganskiy rez., env. Gornospinkovo, 3-12.VI.2004, Rysvik; 1 ex. (ISEA), **Khanty-Mansi Autonomous Okrug**, Oktyabrskiy Distr., Oktyabrskoe, 24.VI.1964, Malinovskaya; 1 ex. (ISEA), **Novosibirsk Prov.**, Novosibirskii Distr., Mochisshe, 28.VI.1974, F. Opanassenko; 2 ex. (ISEA), Ordynskii Distr., Novyi Sharap, 1-16.VI.1959, F. Opanassenko; 1 ex. (ISEA), idem, Chingisy, 13.VI.1960, F. Opanassenko; 1 ex. (RYB), **Altai krai**, Barnaul, VI.1989, R. Yakovlev; 1 ex. (ZMM), **Altai Rep.**, Artybash, 1.V.1982, Eshunin; 1 ex. (ISEA), idem, 5.VII.1987, A. Barkalov; 1 ex. (ZIS), **Kemerovo Prov.**, Kemerovo, 3.VI.1928, A. Karpov; 1 ex. (ISEA), **Krasnoyarsk krai**, Ermakovskii Distr., 5 km W of Tanzybei, N 52°55'44.2", E 93°14'34.6", pine forest edge, on *Pinus silvestris*, 12.VI.2010, H. Borisova; 1 ex. (EAK), Emel'yanovskii Distr., Pogorelka, N 53°02'26.3", E 93°09'08.9", pine forest, beetle is found in bark beetle pheromone trap for *Ips sexdentatus*, 24.V.2009, E. Akulov; 1 ex. (ZIS), **Irkutsk Prov.**, Tayshetskiy Distr., Yurty, 26.V.1912, Mishin; KAZAKHSTAN: 2 ex. (ZMM), **Kostanay Prov.**, Naurzumi res., Naurzumskii bor, 19.V.-9.VI.1940, V. Zabelina; 1 ex. (ISEA), **Almaty Prov.**, Zailiyskiy (Trans-Ili) Alatau Mtr., Ile-Alatau National Park, Butakovka canyon, *Pinus silvestris*, 25.VI.2014, I.I. Temreshev; MONGOLIA: 1 ex. (ZIS), **Selenge aimag**, Suzukteh Mt., Noin-Ula, 10.VI.1924, Kozlov; 1 ex. (ZIS), **Tov aimag**, ~55 km E of Ar-Asgat, 48°22'N, 106°18' E, 1100 m, 18-23.VI.1997, Yu. Marusik; NORTH KOREA: 1 ex. (ZIS), **South Hamgyong Prov.**, Toxong-Omdonri hill, 1800 m, 27.V.1990, S.V. Murzin.

Doydirhynchus austriacus

Fig. 89.

Desbrochers des Loges, 1869: 413-414; Lindeman, 1871: 197; Everts, 1922: 502-503; Voss, 1932: 69-72; Dalla Torre & Voss, 1937: 9-10; Hoffmann, 1945: 172; Endrodi, 1958: 9-10; Dieckmann, 1974: 24-25; Cmoluch, 1979: 12; Podlussany, 1984: 60; Ter-Minassian, 1984: 110; Abbazzi, Osella, 1992: 274; Heijerman, 1993: 35, 2010: 159; Kuschel, 1993: 39-41; Knutelsky & Kubisz, 1993: 62; Knutelsky & Witkowski, 1995: 65; Nikitsky et al., 1998: 39; Stachowiak, 2001: 190; Wanat, 2001: 197; Gonget, 2003: 30-31; Tamutis, 2003: 59; Silfverberg, 2004: 85, 2010: 99; Alekseev, 2005: 61; Kizub & Nazarenko, 2005: 76; Braunert, 2009: 129; Benedikt et al., 2010: 62; Germann, 2010: 105; Rheinheimer & Hassler, 2010: 162-163; Alonso-Zarazaga, 2011: 90; Tamutis et al., 2011: 364; Cunev, 2013: 1; Süda, 2016: 63.

Material. 1 ex. (ZMM), RUSSIA: **Moscow Prov.**, Serpukhov, Luzhki, *Pinus*, 1.V.1963, A. Rasnitsyn; 1 ex. (ZMM), idem, 17.VI.1965, V. Zherikhin; 1 ex. (ZMM), Zvenigorod Distr., Nikolina Mt.; 1 ex. (ZIS), Moscow (Kosino), 28.IV.1902.

Discussion

Seventy-five described species from 26 genera in the family Nemonychidae are known in the modern fauna. The greatest number of species occur in confined areas in the Andes meridional (19), NE Australia (16), and North America (15). Nine species are recorded in the Neotropical region (Central America - 7, South Brazil - 2, Northwest Venezuela -1). Seven species occur in the Palaearctic. New Guinea, New Caledonia and New Zealand have 4 species each.

Rhinorhynchinae is distributed in the South of North America, Central America and one species is found in the Northwest of South America, where they live on Pinaceae and Podocarpaceae. The subfamily also occurs in the areas of *Araucaria* in South America (Brazil, Chile and Argentina), as well as on *Nothofagus* in Andes meridional and in North-East Australia on *Araucaria*, New Guinea on *Araucaria* and Podocarpaceae, New Zealand on Podocarpaceae and New Caledonia on *Araucaria* (Kuschel & Leschen, 2011). The species of subfamily Cimberidinae are distributed in North America, Eurasia from Spain to North Korea (Fig. 88) and North Africa (within the area of species of *Pinus* s. str.). Nemonychinae occur in the West and Central portions of the Palaearctic usually in arid areas on species of *Consolida* and *Delphinium* (Ranunculaceae). Nemonychidae is not recorded from many far Eastern countries, but it is likely they are distributed in North China on *Pinus silvestris* and in Iran and Pakistan on *Consolida camptocarpa* because their host plants are present in these countries. New taxa from New Caledonia and Australia (Kuschel & Leschen, 2011), a new tribe from Israel (Friedman, 2009) and the new tribe described in this paper from Argentina were found during the past decades. This suggests that new species will be found in the future.

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References

- Abbazzi, P., Osella, G. (1992). Elenco sistematico-faunistico degli Anthribidae, Rhinomaceridae, Attelabidae, Apionidae, Brentidae, Curculionidae (Insecta, Coleoptera, Curculionoidea) Italiani. *Redia*, 75(2), 267-414.
- Abeille de Perrin, E. (1898). Descriptions de Coléoptères du nord de l'Afrique. *Bulletin de la Société entomologique de France*, 1898, 254-258.
- Abeille de Perrin, E. (1901). Descriptions de deux Coléoptères nouveaux du Nord de l'Afrique. *Bulletin de la Société entomologique de France*, 1901, 234.
- Agassiz, L. (1846). *Nomenclatoris zoologici index universalis, continens nomina systematica classium, ordinum, familiarum et generum animalium omnium, tam viventium quam fossilium, secundum ordinem alphabeticum unicum disposita, adjectis homonymiis plantarum, nec non variis abnotationibus et emendationibus*, 12. Soloduri: Jent et Gassmann, VIII + 393 pp.
- Alekseev, V.I. (2005). A list of bark beetles (Scolytidae), leaf-rolling beetles (Attelabidae), anthribid (Anthribidae) and nemonychid (Nemonychidae) beetles found in Kaliningrad. *Proceedings on taxonomy and faunistics of beetles (Coleoptera) dedicated to the 100th birthday of the Latvian entomologist M. Stiprais. Daugavpils*, 53-62.
- Alekseev, V.I., Bukejs, A. (2010). Contributions to the knowledge of beetles (Insecta: Coleoptera) in the Kaliningrad region. 1. *Baltic Journal of Coleopterology*, 10(2), 157-176.
- Alexandrovitch, O.R., Lopatin, I.K., Pisanenko, A.D., Tsinkevitch, V.A., Snitko, S.M. (1996). *Catalogue of Coleoptera (Insecta) of Belarus*. Minsk: FFR RB.
- Alonso-Zarazaga, M.A. (2011). Family Nemonychidae. *Caralogue of Palaearctic Coleoptera*, 7, Stenstrup: Apollo Books, 90.

- Alonso-Zarazaga, M.A., Lyal, C.H.C. (1999). A world catalogue of families and genera Curculionoidea (Insecta: Coleoptera) (excepting Scolytidae and Platypodidae). Barcelona: Entomopraxis.
- Angelov, P. (1966). Die Bulgarischen Arten der Familien Anthribidae, Rhinomaceridae und Brentidae. Koleopterologische Rundschau, 43-44, 5-8.
- Angelov, P.A. (1981). Coleoptera, Rhynchophora (Urodonidae, Anthribidae, Brentidae, Rhinomaceridae, Attelabidae). Fauna Bulgarica, 2. Sofia.
- Arnoldi, L.V. (1977). Rhynchophora. In: Arnoldi, L.V., Zherichin, V.V., Nikritin, L.M., Ponomarenko, A.G. Mesozoic Coleoptera. Trudy Paleontologicheskogo Instituta, 161, 142-176 (in Russian).
- Bedel, L. (1882-1888). Faune des Coléoptères du Bassin de la Seine. Rhynchophora. Annales de la Société entomologique de France, 6. Publication Hors Série, 1-442.
- Benedikt, S. (2014). Contribution to the knowledge of beetles (Coleoptera) from the Jelšavský kras (karst) (Slovakia). Západočeské entomologické listy, 5, 32-90 (in Slovak).
- Benedikt, S., Borovec, R., Fremuth, J., Krátky, J., Schönn, K., Skuhrovec, J., Trýzna, M. (2010). Komentovaný zoznam nosatcovitých brouků (Coleoptera: Curculionoidea bez Scolytidae a Platypodidae) České republiky a Slovenska. Klapalekiana, 46, 1-363.
- Berlov, E.Ja., Tomilova, V.N. (1980). Coleoptera environs of Irkutsk. Arthropods of Siberia and Far East. Irkutsk, 67-79 (in Russian).
- Blatchley, W.S., Leng, C.W. (1916). Rhynchophora or weevils of North Eastern America. Indianapolis: The Nature Publishing Company, 1-682. <https://doi.org/10.5962/bhl.title.122480>
- Braunert, C. (2009). Verzeichnis der Rüsselkäfer Luxemburgs (Coleoptera, Curculionoidea) mit Ausnahme der Borkenkäfer (Scolytidae) und Kernkäfer (Platypodidae). Bulletin de la Société des naturalistes luxembourgeois, 110, 125-142.
- Broun, T. (1880). Manual of the New Zealand Coleoptera. Government Printer. Wellington, 1, 1-651. <https://doi.org/10.5962/bhl.title.32505>
- Cherepanov, A.I., Opanassenko, F.I. (1963). The weevil fauna of the riverside zone of Novosibirsk reservoir. Trudy Biologicheskogo Instituta, 10. Novosibirsk, 7-23 (in Russian).
- Cmoluch, Z. (1979). Kucze do oznaczania owadów Polski. Rhinomaceridae, Attelabidae, 19. Chrzaszca - Coleoptera. Warszawa - Wrocław.
- Cunev, J. (2013). New and interesting records of beetles (Coleoptera) from superfamily Curculionoidea on the territory of Slovakia. Entomofauna Carpathica, 25(2), 1-14.
- Dalla Torre, K.W., Voss, E. (1937). Curculionidae: Mesoptiliinae, Rhynchitinae I. Coleopterorum Catalogus auspiciis et auxilio W. Junk, 158, 1-56.
- Daniel, K., Daniel, L. (1903). Nova, von Hauptmann v: Bodemeyer in Kleinasien gesammelt. Münchener Koleopterologische Zeitschrift, 1, 319-333.
- Davidian, G.E. (2001). Faunistic list of beetle families Anthribidae, Rhinomaceridae, Attelabidae, Curculionidae (Insecta, Coleoptera) from reserve "Belogorye". Trudy assotsyatsii osobo okhranyaemykh prirodnykh territorii Tsentral'nogo Chernozem'ya Rossii, 2, 144-151 (in Russian).
- Davis, S.R., Engel, M.S. (2014). A new genus of nemomychid weevil from Burmese amber (Coleoptera, Curculionoidea). ZooKeys, 405, 127-138. <https://doi.org/10.3897/zookeys.405.6475>
- Davis, S.R., Engel, M.S., Legalov, A.A., Ren, D. (2013). Weevils of the Yixian Formation, China (Coleoptera: Curculionoidea): Phylogenetic considerations and comparison with other Mesozoic faunas. Journal of Systematic Palaeontology, 11(4), 399-429. <https://doi.org/10.1080/14772019.2012.691906>
- Dedyukhin, S.V. (2011). Materials on the interesting findings of weevils (Coleoptera, Curculionoidea) in the east of the Russian plain, Vestnik Udmurtskogo Universiteta, 2, 90-104 (in Russian).
- Dedyukhin, S.V. (2012). Beetles weevils (Coleoptera, Curculionoidea) of the Vyatka-Kama interfluvium: fauna, distribution, ecology. Izhevsk: Udmurt University, 340 p. (in Russian).
- Dedyukhin, S.V., Nikitsky, N.B., Semenov V.B. (2005). Checklist of beetles (Insecta, Coleoptera) of Udmurtia. Evraziatskii Entomologicheskii Zhurnal, 4(4), 293-315 (in Russian).
- Dejean, P.F.M.A. (1821). Catalogue de la collection de Coléoptères de M. le Baron Dejean. Paris, Crevot.
- Desbrochers des Loges, J. (1869). Monographie des Rhinomacérides d'Europe et des pays limitrophes, comprenant les genres Rhynchites, Auletus, Auletobius (N. G.), Diodyrhynchus, Rhinomacer & Nemonyx. L'Abeille, 5, 317-428.
- Di Giovanleonardo, A., Osella, G. (2001). Faunistica ed ecologia del popolamento ad Urodontidae, Anthribidae, Nemonychidae, Attelabidae ed Apionidae (Coleoptera, Curculionoidea) del Gran Sasso. Monitoraggio Biologico del Gran Sasso, 2, 56-105.
- Dieckmann, L. (1974). Beiträge zur Insektenfauna der DDR: Coleoptera - Curculionidae (Rhinomacerinae, Rhynchitidae, Attelabidae, Apoderinae). Beiträge zur Entomologie, 24(1-4), 5-54.
- Dmitrieva, I.N. (2005). A fauna and features of ecology of Curculionid beetles (Coleoptera, Curculionoidea) from the north of forest-steppe of Privolzhskaja height. Cheboksary.
- Dorofeev, Yu.V., Evsjunin, A.A. (2008). The new and interesting finds of beetles (Hexapoda: Coleoptera) in Tula. Issledovaniya prirody Tul'skoi oblasti, 1. Tula, 57-67 (in Russian).
- Dorofeev, Yu.V., Evsjunin, A.A. (2012). The new finds of weevils (Coleoptera: Curculionoidea) in Tula area. Ekologiya, evolyutsiya i sistematika zhivotnykh. Ryazan: "Golos gubernii", 77-78.
- Egorov, A.B. (1996). Fam. Nemonychidae (Rhinomaceridae). A key to Insects of the Russian Far East, 3(3). Vladivostok, 162-164 (in Russian).
- Egorov, L.V. (1996). Interesnye nakhodki zheskokrylykh (Insecta: Coleoptera) v Chuvashii. Ekologicheskii vestnik Chuvashii, 15, 49-56 (in Russian).
- Egorov, L.V. (2009). Zhestkokrylye (Insecta, Coleoptera) gosudarstvennogo prirodnogo zapovednika "Prisurskii" i ego okrannoi zony: sovremennoe sostoyanie izuchennosti. Nauchnye trudy gosudarstvennogo zapovednika "Prisurskii", 22, 12-23 (in Russian).
- Egorov, L.V. (2012). Novye dannye po faune zhestkokrylykh (Insecta, Coleoptera) natsyonalnogo parka "Chavash Varmane" (Chuvashskaya respublika). Soobschenie 5. Nauchnye trudy natsyonal'nogo parka "Chavash varmane", 4, 103-142 (in Russian).

- Egorov, L.V. (2016). Some data concerning the Coleoptera fauna of the nature reserve «Prisursky». Report 5. Nauchnye trudy gosudarstvennogo zapovednika "Prisurskii", 31, 69-114 (in Russian).
- Egorov, L.V., Isaev, A.Yu. (2006). Faunas of some families of Curculionoidea (Coleoptera: Curculionoidea: Nemonychidae, Apionidae, Nanophytidae, Dryophthoridae, Erihthidae, Curculionidae) of Chuvashia, Nauchnye trudy GPZ Prisursky. Cheboksary: KLIO, 13, 10-50 (in Russian).
- Egorov, L.V., Khrisanova, M.A. (1999a). Contribution to the fauna of Curculionoidea (Insecta, Coleoptera) of Oka State Biosphere Reserve. Sbornik nauchnykh trudov studentov, aspirantov i doktorantov, 5, 40-43 (in Russian).
- Egorov, L.V., Khrisanova, M.A. (1999b). Materials to beetle fauna (Insecta, Coleoptera) of Oka State Biosphere Reserve. Vestnik Chuvashskogo gosudastvennogo pedagogicheskogo universiteta, 7(12), 119-131 (in Russian).
- Elgueta, R., Marvaldi, A.E. (2006). Lista sistemática de las especies de Curculionoidea (Insecta: Coleoptera) presentes en Chile, con su sinonimia. Boletín del Museo Nacional de Historia Natural, Chile, 55: 113-153.
- Endrodi, S. (1958). Eszelények Attelabidae. Coleoptera V. Strepsiptera. Fauna Hungariae, 38. Budapest.
- Ermakov, A.I. (2002). A review of the fauna and ecology of the weevils (Coleoptera, Curculionoidea) of Denezhkin Kamen' mountain massif (North-Urals). Evraziatskii Entomologicheskii Zhurnal (Euroasian Entomological Journal), 1(2), 229-234 (in Russian).
- Everts, E. (1922). Coleoptera Neerlandica, 3. Nijhoff, v-xviii, 1-668.
- Fabricius, J.C. (1787). Mantissa insectorum sistens eorum species nuper detectas adiectis characteribus generis, differentiis specificis, emendationibus, observationibus, 1. Proft, Hafinae. <https://doi.org/10.5962/bhl.title.36471>
- Fabricius, J.C. (1801) Systema Eleutheratorum secundum ordines, genera, species adiectis synonymis, locis, observationibus, descriptionibus, 2. Kiliae.
- Fayzulin, A.I., Kuzovenko, A.E., Chihlaev, I.V., Isaeva, I.A. (2012). The analysis of food spectrum of a pool frog (*Rana lessonae*) in the urbanization territory of the middle Volga region. Izvestiya Samarskogo nauchnogo tsentra RAN, 14 (1), 139-143 (in Russian).
- Friedman, A.-L.-L. (2009). Review of the biodiversity and zoogeographical patterns of the weevils (Coleoptera, Curculionoidea) in Israel. ZooKeys, 31, 133-148. <https://doi.org/10.3897/zookeys.31.123>
- Germann, Ch. (2010). Die Rüsselkäfer (Coleoptera, Curculionoidea) der Schweiz - Checkliste mit Verbreitungsangaben nach biogeografischen Regionen. Bulletin de la Société Entomologique Suisse, 83, 41-118.
- Gonget, H. (2003). The Nemonychidae, Anthribidae and Attelabidae (Coleoptera) of Northern Europe. Fauna Entomologica Scandinavica, 38, 1-132.
- Gosik, R. (2006). Weevils (Curculionoidea) of the middle part of the Bug River Valley. Annales Universitatis Mariae Curie - Skłodowska Lublin - Polonia, 61(1), 7-69.
- Gozis, M. des. (1881). Quelques rectifications synonymiques touchant différents genres et espèces de Coléoptères français (1re partie). Annales de la Société entomologique de France, 6(1)(3), CXII-CXIII.
- Gozis, M. des. (1882). Synopsis du genre *Tropideres* Schoenherr et description d'une espèce nouvelle. Feuille des Jeunes Naturalistes, 12, 58-59.
- Gratshev, V.G., Legalov, A.A. (2014). The Mesozoic stage of evolution of the family Nemonychidae (Coleoptera, Curculionoidea). Paleontological Journal, 48(8), 851-944. <https://doi.org/10.1134/S0031030114080012>
- Gratshev, V.G., Zherichin, V.V. (1995). Revision of the Late Jurassic Nemonychid weevil genera *Distenorrhinus* and *Procurculio* (Insecta, Coleoptera: Nemonychidae). Paleontological Journal, 2, 83-94 (in Russian).
- Gratshev, V.G., Zherichin, V.V. (2000). New Early Cretaceous weevil taxa from Spain (Coleoptera, Curculionoidea). Acta Geologica Hispanica, 35, 37-46.
- Gratshev, V.G., Zherikhin, V.V. (1996). A revision of the Nemonychid weevil subfamily *Brenthorrhiniinae* (Insecta, Coleoptera: Nemonychidae). Paleontological Journal, 29, 112-127.
- Gratshev, V.G., Zherikhin, V.V. (2003). The fossil record of weevils and related beetle families (Coleoptera, Curculionoidea). Acta Zoologica Cracoviensia, 46, 129-138.
- Gratshev, V.G., Zherikhin, V.V., Jarzembowski, E.A. (1997). A new genus and species of weevil from the Lower Cretaceous of Southern England (Insecta: Coleoptera: Curculionoidea). Cretaceous Research, 19, 323-327. <https://doi.org/10.1006/cres.1998.0111>
- Hamilton, R.W. (1994). Family: Nemonychidae. A catalog of the Coleoptera of America north of Mexico, 134, 1-8.
- Hansen, V. (1965). Biller. 21. Snudebiller. Denmarks Fauna, 69, 1-524.
- Hatch, M.M. (1971). The beetles of the Pacific Northwest. University of Washington Publications in Biology.
- Heijerman, Th. (1993). Naamlijst van de snuitkevers van Nederland en het omliggende gebied (Curculionoidea: Curculionidae, Apionidae, Attelabidae, Urodontidae, Anthribidae en Nemonychidae). Nederlandse Faunistische Mededelingen, 5, 19-46.
- Heijerman, Th. (2010). Nemonychidae - bastaardsnuitkevers. In O. Vorst (ed.) Catalogus van de Nederlandse kevers (Coleoptera). Monografieën van de Nederlandse Entomologische Vereniging, 11, 159.
- Hoffmann, A. (1945). Coléoptères Bruchides et Anthribides. Faune de France, 44. Paris.
- Isaev, A.Yu., Savitskii, M.Yu. (1999). Contributions to the knowledge of seed beetles (Coleoptera: Chrysomeloidea, Bruchidae) and weevil-like beetles (Curculionoidea: Urodontidae (Bruchellidae), Nemonychidae, Anthribidae, Attelabidae) of Ulyanovsk Province. Natural historic investigations in Simbirsk-Ulyanovsk Region in the End of the Century. Ulyanovsk, 95-100 (in Russian).
- Khrisanova, M.A., Egorov, L.V. (2006). A review of the Rhynchophorous beetles (Coleoptera, Curculionoidea) of the Meshchera lowland. Entomological Review, 86(6), 649-661. <https://doi.org/10.1134/S0013873806060054>
- Kizub, I., Nazarenko, V.Yu. 2005. The first find of *Doydirhynchus austriacus* (Coleoptera, Nemonychidae) in Ukraine. Vestnik Zoologii, 39(6), 76 (in Russian).
- Knutelsky, S., Kubisz, D. (1993). New localities of some rare species of weevils (Coleoptera: Rhinomaceridae, Attelabidae, Apionidae, Curculionidae) in Poland. Zeszyty Naukowe Uniwersytetu Jagiellońskiego, 1044 (38), 61-72 (in Polish).
- Knutelsky, S., Lason, A. (1997). Materials for the studies of the weevil's fauna (Coleoptera: Curculionoidea) of the Podlasie Region. Annales Universitatis Mariae Curie-Skłodowska Lublin - Polonia, 50(13), 225-242 (in Polish).
- Knutelsky, S., Skalska, E., Skalski, T. (1992). The weevils (Coleoptera: Curculionoidea) of the Pieniny Spiskie Mts. Ochrona Przyrody, 50 (2), 109-123 (in Polish).

- Knutelsky, S., Skalski, T. (1993). The fauna of the weevils (Coleoptera: Curculionoidea) of the Polish part of Magura Spiska Mts. *Zeszyty Naukowe Uniwersytetu Jagiellońskiego*, 1044(38), 181-208 (in Polish).
- Knutelsky, S., Witkowski, Z. (1995). Weevils (Coleoptera: Curculionoidea) of the area of the future water reservoirs Czorstyn-Niedzica and Sromowce Wyzne and adjacent Carpathian mountain range. *Pieniny - Przyroda i Człowiek*, 4, 59-76 (in Polish).
- Korotyaev, B.A. (1990). Material on the fauna of beetles of the superfamily Curculionoidea (Coleoptera) of Mongolia and adjacent countries. *Insects of Mongolia*. Leningrad: Nauka, 11, 216-234 (in Russian).
- Korotyaev, B.A. (2010). Family Nemomychidae. Coleopterous insects (Insecta, Coleoptera) of Republic of Adygheya (annotated catalogue of species) (Fauna conspecta of Adygheya. 1) Maykop: Adyghei State University Publishers, 287-288.
- Krasnobaev, Yu.P., Isaev, A.Yu., Lyubvina, I.V., Magdeev, D.V., Polyakova, G.M. (1998). Fauna of Invertebrata of Zhiguli. IV. Polyphaga (Insecta, Coleoptera): Cidae-Attelabidae. *Samarskaya Luka*, 5, 116-152 (in Russian).
- Křivan, V., Stejskal, R. (2009). Interesting Records of Beetles (Coleoptera) from the Bohemian-Moravian Highlands - 1. *Acta rerum naturalium*, 6, 29-34 (in Czech).
- Kuschel, G. (1954). La familia Nemomychidae en la Region Neotropical (Aporte 15 de Coleoptera, Curculionoidea). *Revista Chilena de Historia Natural*, 54 (9), 97-126.
- Kuschel, G. (1959). Nemomychidae, Belidae y Oxycorynydae de la Fauna chilena, con algunas consideraciones biogeográficas. *Investigaciones Zoológicas Chilenas*, 5, 229-271.
- Kuschel, G. (1983). Past and present of the relict family Nemomychidae (Coleoptera, Curculionoidea). *GeoJournal*, 7 (6), 499-504.
- Kuschel, G. (1989). The Nearctic Nemomychidae (Coleoptera, Curculionoidea). *Entomologica Scandinavica*, 20, 121-171. <https://doi.org/10.1163/187631289X00276>
- Kuschel, G. (1993). The Palaearctic Nemomychidae (Coleoptera: Curculionoidea). *Annales de la Société entomologique de France*, 29(1), 23-46.
- Kuschel, G. (1994). Nemomychidae of Australia, New Guinea and New Caledonia. In: Zimmermann E.C. *Australian weevils (Coleoptera: Curculionoidea)*. Vol. 1. Melbourne: CSIRO Australia, 563-637.
- Kuschel, G. (2003). Nemomychidae, Belidae, Brentidae (Insecta: Coleoptera: Curculionoidea). *Fauna of New Zealand*, 45, 1-100.
- Kuschel, G., Leschen, R.A.B. (2011). Phylogeny and taxonomy of the Rhynchitinae (Coleoptera: Nemomychidae). *Invertebrate Systematics*, 24, 573-615. <https://doi.org/10.1071/IS09027>
- Kuschel, G., May, B.M. (1997). A new genus and species of Nemomychidae (Coleoptera) associated with *Araucaria angustifolia* in Brazil. *New Zealand Entomologist*, 20, 15-22. <https://doi.org/10.1080/00779962.1997.9722664>
- Kuschel, G., Poinar, G.O. (1993). *Libanorhinus succinus* gen. et sp. n. (Coleoptera: Nemomychidae). *Entomologica Scandinavica*, 24, 143-146. <https://doi.org/10.1163/187631293X00253>
- Labram, D., Imhoff, L. (1843). Singulorum generum Curculionidum unam alteramve speciem additis iconibus. *Die Gattungen der Rüsselkäfer erläutert durch bildliche Darstellung einzelner Arten*, 2(11), 3.
- Lea, A.M. (1926). On some Australian Curculionidae. *Proceedings of the Linnean Society of New South-Wales*, 51, 327-362.
- Lebedev, A.G. (1906). Materialy dlya faune zhukov (Coleoptera) Kazanskoi gubernii. *Trudy Russkogo entomologicheskogo obshchestva*, 37(3-4), 352-438 (in Russian).
- LeConte, J.L. (1880). Short studies of North American Coleoptera. *Transactions of the American Entomological Society*, 8, 163-218. <https://doi.org/10.2307/25076392>
- LeConte, J.L., Horn, G.H. (1876). The Rhynchophora of America, north of Mexico. *Proceedings of the American Philosophical Society*, 15, i-xvi + 1-455.
- Legalov, A., Telnov, D. (2004). Fam. Nemomychidae, Rhynchitidae, Attelabidae, 98-100. In: Telnov, D. *Check-List of Latvian beetles (Insecta: Coleoptera)*. Second Edition. Compendium of Latvian Coleoptera, 1. Riga: "Petrovskis & Ko".
- Legalov, A.A. (1998). The fauna of Curculionoidea beetles of families Nemomychidae, Urodonidae, Anthribidae, Attelabidae, Apionidae and Dryophthoridae of West Siberia. *The invertebrates of animals of the South Transural region and the neighbouring territories*. Kurgan. P. 216-221 (in Russian).
- Legalov, A.A. (2009a). New species of the genus *Atopomacer* Kuschel, 1989 (Coleoptera, Nemomychidae) from Honduras, *Baltic Journal of Coleopterology*, 9(1), 51-54.
- Legalov, A.A. (2009b). Annotated checklist of fossil and recent species of the family Nemomychidae (Coleoptera) from the world fauna. *Amurskii Zoologicheskii Zhurnal*, 1(3), 200-213, col. pl. I.
- Legalov, A.A. (2010a). Annotated checklist of species of superfamily Curculionoidea (Coleoptera) from Asian part of the Russia. *Amurskii Zoologicheskii Zhurnal*, 2(2), 93-132.
- Legalov, A.A. (2010b). Review of Curculionoid beetles of the genus *Arnoldibelus* Leg. from the Jurassic of Kazakhstan (Coleoptera: Nemomychidae). *Paleontological Journal*, 44(6), 654-656. <https://doi.org/10.1134/S0031030110060079>
- Legalov, A.A. (2010c). Phylogeny of the family Nemomychidae (Coleoptera) with descriptions of new taxa. *Evrasiatskii Entomologicheskii Zhurnal*, 9(3), 457-473.
- Legalov, A.A. (2011). Contribution to the knowledge of the families Nemomychidae and Rhynchitidae (Coleoptera). *Amurskii Zoologicheskii Zhurnal*, 3(2), 163-167.
- Legalov, A.A. (2012). Fossil history of Mesozoic weevils (Coleoptera: Curculionoidea). *Insect Science*, 19(6), 683-698. <https://doi.org/10.1111/j.1744-7917.2012.01508.x>
- Legalov, A.A. (2013). A new tribe of the subfamily Cretonemomychinae (Coleoptera, Nemomychidae) from the Middle Eocene of the Green River. *Paleontological Journal*, 47(4), 410-413. <https://doi.org/10.1134/S0031030113040084>
- Legalov, A.A. (2014). New Nemomychidae, Brentidae and Curculionidae (Coleoptera: Curculionoidea) from the Turonian of Kzyl-Dzhar (Kazakhstan). *Historical Biology*, 26(5), 675-689. <https://doi.org/10.1080/08912963.2013.829826>
- Legalov, A.A. (2015). Fossil Mesozoic and Cenozoic weevils (Coleoptera, Obrieniodea, Curculionoidea). *Paleontological Journal*, 49(13), 1442-1513. <https://doi.org/10.1134/S0031030115130067>
- Legalov, A.A., Azar, D., Kirejtshuk, A.G. (2017). A new weevil (Coleoptera; Nemomychidae; Oropsini trib. nov.) from Lower Cretaceous Lebanese amber. *Cretaceous Research*, 70, 111-116. <https://doi.org/10.1016/j.cretres.2016.10.006>

- Legalov, A.A., Opanassenko, F.I. (2000). A review of the fauna of the superfamily Curculionoidea (Coleoptera) of Novosibirsk Province. *Entomological Review*, 80(3), 282-303.
- Legalov, A.A., Sitnikov, P.S. (2000). Materials on the fauna weevils-beetles (Coleoptera, Curculionoidea) of Tyumen Area. *Vestnik ekologii, lesovedeniya i landshaftovedeniya*, 1. Tyumen, 37-47 (In Russian).
- Lindeman, K. (1871). Review the geographical distribution of beetles in the Russian Empire. Part. 1. *Trudy Russkogo Entomologicheskogo Obsschestva*, 6, 41-366 (in Russian).
- Liu, M., Ren, D., Tan, J. (2006). New fossil weevils (Coleoptera: Curculionoidea: Nemonychidae) from the Jehol biota of western Liaoning, China. *Annales Zoologici*, 56(4), 605-612.
- Majzlan, O., Rychlik, I., Deván, P. (1999). A select group of Insects (Coleoptera, Hymenoptera-Specidae, Pompilidae and Vespidae) in study site National nature reserve Čenkovská step in south Slovakia. *Folia faunistica Slovaca*, 4, 129-150 (in Slovak).
- Martin, J.O. (1930). Notes on the genus *Diodyrhynchus* Sch. with a description of a new species (Coleoptera). *The Pan-Pacific Entomologist*, 6, 129-130.
- Martynov, A.V. (1926). To the knowledge of fossil insects from the Jurassic beds in Turkistan. 5. On some interesting Coleoptera. *Annales de la Societe Paleontologie de Russie*, 5, 1-38 (in Russian).
- May, B. (1993). Larvae of Curculionoidea (Insecta: Coleoptera): a systematic overview. *Fauna of New Zealand*, 28, 1-221.
- Mazur, M. (2002). The distribution and ecology of weevils (Coleoptera: Nemonychidae, Attelabidae, Apionidae, Curculionidae) in western Ukraine. *Acta zoologica cracoviensia*, 45(3), 213-244.
- Mazur, M.A. (2011). Weevils (Coleoptera: Curculionoidea) of the Stobrowski Landscape Park. *Polskie pismo entomologiczne*, 80, 321-342. <https://doi.org/10.2478/v10200-011-0023-2>
- Medvedev, S.I., Shapiro, D.S. (1957). Contribution to the knowledge of beetle fauna (Coleoptera) of Moldavian SSR and adjacent regions of Ukraine. *Trudy Nauchno-Issledovatel'skogo Instituta Biologii i Biologicheskogo Fakel'teta Khar'kovskogo Gosudarstvennogo Universiteta*, 30, 173-206 (in Russian).
- Miller, E., Zybovsky, N. (1917). Materialy po entomofaune Bessabarii. *Trudy Bessarabskogo obsschestva estestvoispytatelei i lyubitelei estestvoznaniya*, 6, 119-150 (in Russian).
- Morris, M.G. (1990). Orthocerous weevils Coleoptera Curculionoidea (Nemonychidae, Anthribidae, Urodontidae, Attelabidae and Apionidae). *Handbooks for the Identification of British Insects*, 5(16), 3-108.
- Morrone, J.J. (1997). Weevils (Coleoptera: Curculionoidea) that feed on *Araucaria araucana* (Araucariaceae) in Southern Chile and Argentina, with an annotated checklist. *Folia Entomologica Mexicana*, 100, 1-14.
- Nazarenko, V.Yu. (2009). Weevils of the branch of the Ukrainian steppe natural reserve "Mykhajlivska Tsilyna" and adjacent territories. *Vestnik Zoologii*, 22, 36-50 (in Ukrainian).
- Nazarenko, V.Yu. (2012). Weevils of the superfamily Curculionoidea (Coleoptera) of Dnieper Islands in Kiev. *Trudy Khar'kovskogo entomologicheskogo Obsschesta*, 20(2), 49-55 (in Ukrainian).
- Nemkov, V.A. (2011). Entomofauna stepnogo Priural'ya (istoriya formirovaniya i izucheniya, sistav, izmeneniya, okhrana). M.: Izdatel'skii dom "Universitetskaya kniga". 316 p. (in Russian).
- Nikitsky, N.B., Semenov, V.B., Dolgin, M.M. (1998). Zhestkokrylye xylobionty, mycetobionty i plastinchatousye Prioksko-Terrasnogo biosfernogo zapovednika (s obzorom fauny etikh grupp Moskovskoi oblasti). *Dopolnenie 1. (s zametchanyami po nomenclature i sistematike nekotorykh zhukov Melandryidae mirovoi fauny)*. *Sbornik trudov Zoologicheskogo muzeya MGU. Dopolnenie 1. M.: MGU* (in Russian).
- Nikitsky, N.B., Osipov, I.N., Chemeris, M.V., Semenov, V.B., Gusakov, A.A. (1996). Zhestkokrylye-xylobionty, mycetobionty i plastinchatousye Prioksko-Terrasnogo biosfernogo zapovednika. *Sbornik trudov Zoologicheskogo muzeya MGU. Moscow: Moscow State University* (in Russian).
- O'Brien, C.W., Wibmer, G.J. (1982). Annotated checklist of the weevils (Curculionidae sensu lato) of North America, Central America, and the West Indies (Coleoptera: Curculionoidea) // *Memoirs of the American Entomological Institute*, 34, i-ix, 1-382.
- Olivier, A.G. (1807). *Entomologie, ou histoire naturelle des Insectes, avec leurs caractères généraux et spécifiques, leur description, leur synonymie, et leur Figure enluminée. Coléoptères*, 5. Paris: Desray. 612 pp.
- Opanassenko, F.I. (1976). Weevils (Coleoptera, Curculionidae et Rhinomaceridae) of the conifers of Siberia. *Fauna helminthes and arthropods of Siberia. Novosibirsk: Nauka*, 223-238 (in Russian).
- Paykull, G. (1792). *Monographia Curculionidum Sueciae. Upsaliae*.
- Peris, D., Davis, S.R., Engel, M.S., Delclos, X. (2014). An evolutionary history embedded in amber: reflection of the Mesozoic shift in weevil dominated (Coleoptera: Curculionoidea) faunas. *Zoological Journal of the Linnean Society*, 171, 534-553. <https://doi.org/10.1111/zoj.12149>
- Petryszak, B. (1976). Materials to the knowledge of Nemonychidae (=Rhinomaceridae) and Attelabidae (Coleoptera) in Pieniny. *Zeszyty Naukowe Uniwersytetu Jagiellonskiego*, 3333 (22), 87-93 (in Polish).
- Pic, M. (1898). Notes descriptives sur plusieurs Coléoptères et sur un Ichneumon (Hyménoptère). *Miscelanea Entomologica*, 73-75.
- Pic, M. (1905). Sur le genre "Diodyrhynchus" Germar in Schoenherr. *Échange*, 189-190.
- Pierce, W.D. (1916). Studies of weevils (Rhynchophora) with descriptions of new genera and species. *Proceedings of the United States National Museum*, 51, 461-473. <https://doi.org/10.5479/si.00963801.51-2159.461>
- Podlussany, A. (1984). Rhinomaceridae and Attelabidae fauna of Bakony Mt. *Folia Musei Historico-Naturalis Bakonyiensis*, 3, 57-70 (in Hungarian).
- Poiras, A.A. (1998). Catalogue of the weevils (Coleoptera, Curculionoidea) and their host plants in the Republic of Moldova. Sofia-Moscow: Pensoft Publishers.
- Priklonsky, S.G., Egorov, L.V., Semin, A.V., Butenko, O.M., Khrisanova, M.A. (2001). Zhestkokrylye Okskogo zapovednika: annotirovannyi spisok vidov. *Flora i fauna zapovednikov*, 95. Moscow (in Russian).
- Redtenbacher, L. (1845). Die Gattungen der deutschen Käferfauna nach der analytischen Methode bearbeitet, nebst einem kurzgefassten Leitfaden, zum Studium dieses Zweiges der Entomologie. Wien, 177 pp.

- Reitter, E. (1899). Beitrag zur Coleopteren-Fauna des russischen Reiches und der angrenzenden Länder. Deutsche Entomologische Zeitschrift, 1899, 193-209. <https://doi.org/10.1002/mmnd.48018990147>
- Reitter, E. (1916). Fauna Germanica. Die Käfer des Deutschen Reiches, 5. Stuttgart, 343 pp.
- Ren, D. (1995). Systematic palaeontology. Insecta. In: Ren, D., Lu, L., Guo, Z., Ji, S. Fauna and stratigraphy of Jurassic-Cretaceous in Beijing and the adjacent areas. Beijing. Seismic Publ. House, 47-121, 181-197.
- Rheinheimer, J., Hassler, M. (2010). Die Rüsselkäfer. Baden-Württembergs. Engelhardt & Bauer, Karlsruhe: 944 pp.
- Riedel, A. (2010). A new tribe, genus and species of Nemonychidae from Baltic amber (Coleoptera: Curculionoidea: Nemonychidae: Cimberidinae). Insect Systematic & Evolution, 41, 29-38. <https://doi.org/10.1163/139956009X12550095535792>
- Roginskaya, E.Ya. (1966). Materials on food specialization of dendrophilous leaf-rolling and short-proboscis weevils (Coleoptera, Attelabidae, Curculionidae) in Moscow Province. Entomologicheskoe Obozrenie, 45(1-2), 36-50 (in Russian).
- Ruchin, A.B. (2008). Spisok vidov nasekomykh natsyonal'nogo parka "Smol'nyi". Nauchnye trudy natsyonal'nogo parka "Smol'nyi", 1, 15--180 (in Russian).
- Šablevičius, B. (2003). New and rare for Lithuania beetle (Coleoptera) species. New and rare for Lithuania Insect Species. Records and Description, 15, 11-24.
- Schilsky, J. (1903). Die Käfer Europa's. Nach der Natur beschrieben von Dr. H.C. Küster und Dr. G. Kraatz, 40.
- Schoenherr, C.J. (1833). Genera et species curculionidum, cum synonymia hujus familiae, species novae aut hactenus minus cognitae, descriptionibus a Dom. Leonardo Gyllenhal, C. H. Boheman et entomologis aliis illustratae, 1. Paris.
- Semenov, A. (1900). Notes on beetles (Coleoptera) from European Russia and Caucasus. Bulletin de la Société Impériale des Naturalistes de Moscou, 13, 101-141.
- Semenov, V.B. (2009). Annotirovannyi spisok zhestkokrylykh nasekomykh (Insecta, Coleoptera) Tsentral'noi Messhery. M. 167 p. (in Russian).
- Sharp, D. (1882). On some New Zealand Coleoptera. Transactions of the Entomological Society of London, 1882, 73-99. <https://doi.org/10.1111/j.1365-2311.1882.tb01570.x>
- Silfverberg, H. (2004). Enumeratio nova Coleopterorum Fennoscandiae, Daniae et Baltiae. Sahlbergia, 9, 1-111.
- Silfverberg, H. (2010). Enumeratio renovata Coleopterorum Fennoscandiae, Daniae et Baltiae. Sahlbergia, 16(2), 1-144.
- Solsky, S.M. (1880-1881). Novye i maloizvestnye zhestkokrylye okrain Rossiiskoi imperii i priliegajushikh k nei stran. Trudy Russkogo entomologicheskogo obshchestva, 12, 230-265 (in Russian).
- Strand, A. (1970). Additions and corrections to the Norwegian part of Catalogus Coleopterorum Fennoscandiae et Daniae. Norsk Entomologisk Tidsskrift, 17, 125-145.
- Stachowiak, P. (2001). New localities of Rhinomaceridae (=Nemonychidae) (Coleoptera) in Poland. Wiadomosci Entomologiczne, 19(3-4), 190 (in Polish).
- Stierlin, G. (1886). Beschreibung neuer Rüsselkäfer-Arten. Mittheilungen der Schweizerischen Entomologischen Gesellschaft, 7, 226-230.
- Süda, I. (2016). New woodland beetle species (Coleoptera) in Estonian fauna. 2. Forestry Studies Metsanduslikud Uurimused, 64, 51-69. <https://doi.org/10.1515/fsmu-2016-0004>
- Tamutis, V. (2003). Eighty-two new for Lithuania beetle (Coleoptera) species. New and rare for Lithuania Insect species. Records and Description, 15, 54-62.
- Telnov, D., Bukejs, A., Gailis, J., Kalniņš, M., Kirejtshuk, AG., Piterāns, U., Savich, F. (2016). Contributions to the knowledge of Latvian Coleoptera. 10. Latvijas Entomologs, 53, 89-121.
- Telnov, D., Fägerström, Ch., Gailis, J., Kalniņš, M., Napolov, A., Piterāns, U., Vilks, K. (2006). Contributions to the knowledge of Latvian Coleoptera. 5. Latvijas entomologs, 43, 78-125.
- Ter-Minassian, M.E. (1984). A review of the weevil family Nemonychidae (Coleoptera, Rhynchophora) of the fauna of the USSR. Revue d'Entomologie, 63(1), 105-110 (in Russian).
- Tsinkevich, V.A., Aleksandrowicz, O.R., Lukashenya, M.A. (2005). Addition to the checklist of beetles (Coleoptera) for the Belarusian part of the Bialowieza Primeval Forest. Baltic Journal of Coleopterology, 5(2), 147-160.
- Tsurikov, M.N. (2009). The beetles of Lipetsk oblast. Voronezh. 332 p. (in Russian).
- Tveritina, T.A. (1966). Ecologo-faunistic essay of leaf-rolling weevils (Coleoptera, Attelabidae) of Transcarpathia. Komakhi Ukrainiskikh Karpat i Zakarpat'ya. Kiev, 49-54 (in Ukrainian).
- Voss, E. (1922). Monographische Bearbeitung der Unterfamilie Rhynchitinae (Curc.). I. Teil: Nemonychini-Auletini (5. Beitrag zur Kenntnis der Curculioniden). Archiv für Naturgeschichte, Ab A(88) (8), 1-113.
- Voss, E. (1932). Monographie der Rhynchitinen-Tribus Rhinomacerini und Rhinorhynchini. II. Teil der Monographie der Rhynchitinae-Pterocolinae (36. Beitrag zur Kenntnis der Curculioniden). Entomologische Blätter, 28, 11-18, 69-74, 100-108.
- Voss, E. (1937). Über Arten und Gattungen der Unterfamilie Belidae, Rhynchitinae und Attelabinae (Curc., Col.) (69. Beitrag zur Kenntnis der Curculioniden). Stettiner Entomologische Zeitung, 98(2), 199-209.
- Voss, E. (1952). Ueber einige Rhynchitinen der chilenischen Fauna (Coleoptera: Curculionidae) (116. Beitrag zur Kenntnis der Curculioniden). Revista Chilena de Entomologia, 1, 175-185.
- Voss, E. (1965). The zoological Results of Gy. Topal's collections in South Argentina. 17. Attelabidae (Coleoptera) (188. Beitrag zur Kenntnis der Curculioniden). Annales Historico-Naturales Musei National Hungarici, 57, 329-332.
- Voss, E. (1974). Über einige weitere Attelabinen (Coleoptera, Curculionidae) (211. Beitrag zur Kenntnis der Curculioniden). Reichenbachia, 15, 43-48.
- Wanat, M. (2001). Curculionoidea bez (without Scolytidae i (and) Platypodidae). Catalogue of the fauna of Bialowieza Primeval Forest. Warszawa, 197-203 (in Polish).
- Wibmer, G.J., O'Brien, C.W. (1986). Annotated checklist of the weevils (Curculionidae sensu lato) of South America (Coleoptera: Curculionoidea). Memoirs of the American Entomological Institute, 39, i-xvi, 1-563.
- Zherichin, V.V., Gratshev, V.G. (2003). A new weevil-beetle (Insecta, Coleoptera, Nemonychidae) from the Lower Cretaceous of Spain. Paleontological Journal, 37(4), 307-308.

Zherichin, V.V., Gratshev, V.G. (2004). Fossil Curculionid beetles (Coleoptera, Curculionoidea) from the Lower Cretaceous of Northeastern Brazil. *Paleontological Journal*, 38(5), 528–537.

Zherikhin, V.V. (1986). Weevils, Scarabaeida, Curculionoidea. *Transactions of the Joint Soviet-Mongolian Palaeontological Expedition*, 28, 105-108 (in Russian).

Zherikhin, V.V. (1993). Family Nemonychidae Bedel, 1882, family Ulyanidae Zherichin, fam. nov., family Anthribidae Billberg, 1829, family Attelabidae Billberg, 1820. In: Gromov, V.V., Dmitriev, V.Yu., Zherikhin, V.V., Lebedev, E.L., Ponomarenko, A.G., Rasnitsyn, A.P., Sukatsheva, I.D. *Cretaceous insect faunas of the Ulya River basin, West Okhotsk Region. Mesozoic insects and ostracods from Asia*. Moscow: Nauka Press, 20-33 (in Russian).

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