

# ***STENUS (NESTUS) PLUVIUS* SP. N., WITH NOTES ON SOME RELATED SPECIES (COLEOPTERA: STAPHYLINIDAE: STENINAE)**

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*Stenus (Nestus) pluvius* sp. n. is described from the Russian Far East. An annotated list of both Palaearctic and Nearctic species of the polyphyletic *cautus* group of the subgenus *Nestus* Rey, 1884, with taxonomic notes and new distributional data on them and *S. (N.) rigidus* Casey, 1884 sp. propria (= *S. (N.) ageus* Casey, 1884) is provided. *S. (N.) ryvkini* Puthz, 2001 is placed in the synonymy of *S. (N.) immodicus* Ryvkin, 2000; *S. (N.) brumalis* Casey, 1884 (= *pauperculus* Casey, 1884) is revalidated as a species propria. *S. (N.) submarginatus* Stephens, 1833 nomen oblitum is a synonym of *S. (N.) europaeus* Puthz, 1966 nomen protectum, not of *S. (N.) cautus* Erichson, 1839.

Key words: fauna, taxonomy, Palaearctic, Nearctic.

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## **INTRODUCTION**

The problem of delimitation of species groups in the subgenus *Nestus* Rey, 1884 is not a subject of the present paper inasmuch as it would require a thorough special study of the evolutionary trends in morphology and ecology of all the known species within the subgenus. Unfortunately, such an analysis has not also been provided by Puthz in his interesting works which concern, in addition to everything else, the matter of species group definition (e.g. Puthz 2008, 2013a–b, etc). Anyhow, for the time being, I suppose many of the formerly defined *Stenus (Nestus)* species groups may prove to be polyphyletic, including the *cautus* group sensu

lato (sensu Puthz 1966, 1971b, with additions of Puthz 1971c and Ryvkin 1995, 2000, 2011). One can believe that all the American species of the named complex belong to a separate group (or groups), relations of which with Palaearctic representatives seem obscure and not well grounded. Nevertheless, I treat the species of this mixed complex as members of the *cautus* group until a reasonable system of species groups is constructed for the subgenus.

In the Systematic results below, I give an annotated list of some species of the *cautus* and *atratus* groups from both the Palaearctic and the Nearctic, with taxonomic notes as well as new distributional data. Moreover, a new

species similar to *Stenus (Nestus) rigidus* Casey, 1884 (*atratus* group), *S. (N.) pluvius* sp. n., has been also described from the Russian Far East. In the text, the labels of type specimens of the new species as well as of unique and historic specimens are cited in single quotes completely (the type and historic labels with vertical strokes to separate different lines of a label); square brackets are used to complete label data; if necessary, the labels are supplied with remarks in angled brackets; in all cases, when the material identified before by other authors is used, the full text of their determinative labels is given in square brackets. Catalogue references besides those for original descriptions are given under the species name titles either for the sources treating essential aspects of taxonomy and distribution, which are discussed here in Remarks sections, or for the papers published after 2001; for other references see Herman (2001). The catalogues and regional checklists where sources of individual records have been concealed are not cited below, except the cases when those references are provided for taxonomic purposes.

The measured proportions of body parts of *S. (N.) pluvius* sp. n. are given in points of an eyepiece linear micrometer in a binocular microscope at 56x magnification.

## ABBREVIATIONS

HT: holotype;

PT, PTT: paratype, paratypes;

AR: Collection of A.B.Ryvkin, Moscow, Russia;

AYuS: Collection of A.Yu.Solodovnikov, Copenhagen, Denmark;

DUBC: Daugavpils University, Beetle Collection, Latvia (A.V.Shavrin);

FMNH: Field Museum of Natural History, Chicago, USA (M.Thayer, A.Newton);

IRSN: Institut Royal des Sciences Naturelles de Belgique, Bruxelles (Y.Gérard);

MHNG: Museum d'histoire naturelle, Geneve (G. Cuccodoro);

OB: Collection of O. Betz, Tübingen, Germany;

ONK: Collection of O.N.Kabakov (in ZIN: see below), S.-Petersburg;

OSU: Ohio State University, Museum of Biological Diversity, Columbus, USA (P.W. Kovarik);

SDEI: Senckenberg Deutsches Entomologisches Institut, Müncheberg, Germany (L. Zerche);

UAM: University of Alaska, Museum of the North, Fairbanks, USA (D.S. Sikes);

VIM: Collection of V.I.Motschulsky (in ZMMU: see below);

ZIN: Zoological Institute of the Russian Academy of Sciences, St.-Petersburg, Russia (†G.S. Medvedev);

ZMMU: Zoological Museum of Moscow University, Russia (A.A. Gusakov).

## SYSTEMATIC RESULTS

### I. A new species description

#### *Stenus (Nestus) pluvius* sp. n.

(Figs. 1–3, 7)

**Material examined.** 1 male-HT (ZMMU): ‘Amur Area, Selemdzhinskiy | District, Norskiy Nature Reserve, | Selemdzha River basin near | Burundushka River mouth, clayish | and sandy-clayish river | banks [with *Carex* spp., Poaceae, *Salix* spp., *Equisetum* spp., etc]. 03.08.2004. A.B.Ryvkin leg. #3’ <in Russian>; ‘HOLOTYPUS’ <my standard printed red label>; ‘*Stenus* HT | *pluvius* sp. n. | A.B. Ryvkin det. 2004’ <my standard determinative label>.—1 male-PT (AR), 1 male-PT (IRSN): ‘Amur Area, Selemdzhinskiy | District, near border of Norskiy | Reserve, island on | Selemdzha River near Dvadsatikha | cordon, leaf litter, moss and drift in the heart of the island [|: among *Salix* spp., *Populus* sp., *Picea ajanensis*, *Abies nephrolepis*, *Alnus* sp., *Larix gmelinii* with Poaceae, *Carex* sp., etc]. 06.08.2004. A.B.Ryvkin leg. #11’ <in Russian>.—3 males-PTT, 7 females-PTT (AR), 1 male-PT, 1 female-PT (MHNG): ‘Amur Area, Selemdzhinskiy | District, Norskiy Nature Reserve [(buffer zone)], | Burunda River, 1 km below Burunda | cordon, mosses [*Plagiomnium*

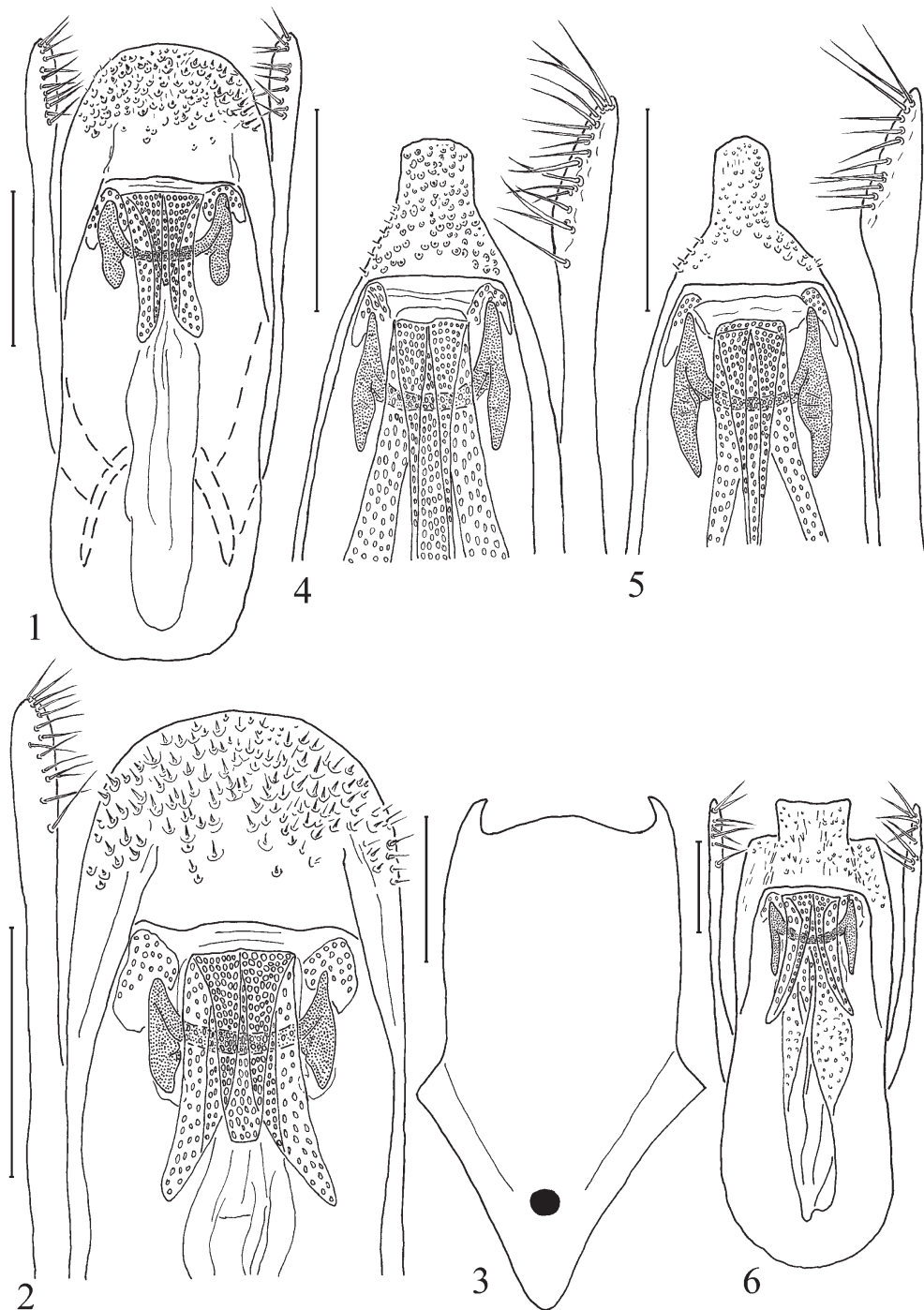


Fig. 1–6. — Male copulative structures of *Stenus (Nestus)* spp. 1, 6: Aedeagus, ventral view. 2, 4–5: Apical part of aedeagus, ventral view. 3: Abdominal sternite 9. 1–3: *S. (N.) pluvius* sp.n. (HT). 4: *S. (N.) incautus* Ryvkin, 2000 (Samara Area). 5. *S. (N.) lohsei* Puthz, 1965 (Isonzo). 6. *S. (N.) immodicus* Ryvkin, 2000 (Bol'shekhekhysyrskiy Nature Reserve). Scale = 0.1 mm.

sp. etc.)] and leaf litter under | *Salix* sp. with sparse Poaceae, | *Carex* sp., [*Filipendula palmata*, *Pyrola* sp.,] etc. along base | of shingle-sandy spit. | 25.09.2004. A.B.Ryvkin leg. ' <in Russian>. <in Russian>. —1 female (AR): Amur Area, Selemzhinskiy District, Norskiy Nature Reserve, Burunda River near Ozyornyi Rill mouth, mosses and leaf litter under *Salix* sp. and *Alnus* sp. with separate tussocks of *Carex* sp., *Plagiomnium* sp., etc. on flood-plain (near old channel). 30.09.2004. A.B.Ryvkin leg.

The paratypes listed above are also provided with both 'PARATYPUS' printed red label and my standard determinative label ('*Stenus* | *pluvius* sp. n. | A.B. Ryvkin det., 2004') for each lot.

**Description.** Pitchy black, moderately fatty shining, moderately densely punctured, with not long but fairly dense yellowish-silvery pubescence. Antennae brown, with basal segment brownish-black, segments of club dark brown; palpi brown with 1<sup>st</sup> segment and the very base of the 2<sup>nd</sup> yellow; legs brown to reddish-brown, knees slightly infusate; labrum pitchy-black to pitchy-brown, moderately pubescent with yellowish-silvery hairs.

Length: 2.7–2.9 mm (the last value with extended abdomen).

Head by nearly 1/4<sup>th</sup> broader than pronotum (41:33, all measurements are from the holotype), a scarcely broader than elytra between humeri (41:40) and somewhat narrower than in their broadest part (41:45). Front with two shallow but evident longitudinal impressions; medial elevation broad and prominent, posteriorly more than twice as broad as lateral portions (13:5). Punctuation moderately coarse and dense, irregular, partly confluent but not rugose; the greatest punctures are nearly as large as the broadest section of 3rd antennal segment; median elevation of the front with longitudinal strip impunctate distinctly broader than average diameter of punctures. Length proportions of antennal segments 2–9 as 5:6:5:4.5:4:4:3:3; segments 9–10 good as broad as long each;

segment 11 twice as long as broad. Antennae scarcely reaching posterior quarter of pronotum.

Pronotum moderately convex, a bit longer than broad (34:33), broadest near middle, narrowed feebly convexly towards anterior margin and concavely towards posterior one, without distinct furrows and impressions. Punctuation of the disk somewhat greater and more regular than that of the head, partly nonrugosely confluent.

Elytra good as broad as long (45:45), somewhat dilated posteriorly behind evident humeri (40:45), much longer than pronotum (45:34), at suture distinctly longer than the latter (38:34); sutural impression very feeble, humeral impressions short and vague. Punctuation fairly dense and regular, slightly nonrugosely confluent only at sutural and humeral impressions, punctures evidently larger than that of pronotum, about as large as the cross-section of the 2nd antennal segment; interstices between punctures smaller than 1/2 average diameter of punctures.

Wings well developed.

Legs of moderate length; metatibia by more than 2/5 longer than metatarsus (36:25); segment 1 of metatarsi good as long as segment 5 (7:7).

Abdomen subcylindrical, distinctly narrowed posteriorly; with paratergites moderately developed at segments 3 to 4 and gradually narrowed to segment 7; anterior tergites with four short but developed longitudinal keels at their basal parts. Posterior margin of tergite 7 with fine light fringe. Punctuation of anterior visible tergites somewhat smaller and distinctly shallower than that of head, most dense at lateral parts, medially more distant.

Very fine and dense mesh-like ground sculpture well developed throughout but less evident on head and interstices between punctures along midline of anterior visible abdominal tergites.

Male. Meso- and metatibiae without any teeth; abdominal sternites 7–8 with neither

emarginations nor impressions; posterior margin of 8<sup>th</sup> abdominal sternite broad convexly rounded; 9<sup>th</sup> abdominal sternite as in Fig.3; aedeagus as in Fig. 1–2.

Female. Abdominal sternite 8 with broad convexly rounded posterior margin. Spermatheca as in Fig.7.

**Etymology.** The name of the species is the Latin adjective “*pluvius*” (rainy).

**Diagnosis.** The species is externally very similar to *S. rigidus* Casey, 1884 and can be distinguished from all the known *Stenus* species by plain differences in the shape of the aedeagus and spermatheca (compare Figs.7–8) as well as by the absence of emarginations and impressions at both 7<sup>th</sup> and 8<sup>th</sup> male abdominal sternites. It differs from all the Far Eastern species of the *cautus* group by more developed ground sculpture of the forebody; from *S. rigidus* by the body somewhat more slender, and by the colour of legs on average lighter.

**Remarks.** As being closely related to *S. rigidus* Casey, 1884, the new species must be included in the *atratus* group which was mentioned formerly in some publications (e.g. Puthz 1971b) but was not properly diagnosed. This complex is now being inserted either in the *argus* group (Ryvkin 1990) or in the *crassus* group (Puthz

2013a); though I suppose it to be a well defined independent group.

## II. Notes on taxonomy and distribution

***Stenus (Nestus) rigidus* Casey, 1884 sp. propria**

*rigidus* Casey, 1884: 119

*rigidus*; Casey, 1892: 711

*ageus* Casey, 1884: 116

*ageus*; Herman, 2001: 2047

*ageus*; Smetana, 2004: 553

*ageus*; Shavrin & Puthz, 2007: 109

*ageus*; Puthz, 2012: 292, 296

*ageus*; Puthz, 2013a: 862

*dissociatus* Eppelsheim, 1893: 54

*parvulus* L.Benick, 1914: 150

*gerhardti* L.Benick, 1915a: 233

**New material examined. USA:** 1 female (OSU): Camden, N.J. 23.II.; H.W.Wenzel Collector; H.W.Wenzel Collection.—1 female (OSU): Huachu. Mts, Ariz. VII.26.; Miller Can. HA.Wenzel [leg.]; H.W.Wenzel Collection.—1 female (AR): Alaska 76–76, Cirkl Hot Springs. 24.08.1976. E.Matis leg.—5 males, 1 female (UAM): ALASKA: Sheenjek River, wet meadow. 1–30.06.2000. A.Johnson leg.—1 male, 1 female (UAM): ALASKA: Sheenjek River, open spruce. 1–30.06.2000. A.Johnson leg.—2 females (UAM): ALASKA: [Arctic Nat. Wild. Ref. (ANWR)] Sheenjek R, wet meadow. Trans 5, trap 5. 18.06.2000. A.Johnson leg.—**RUSSIA: SVERDLOVSK AREA:** 1 female (ZIN): Perm Government, near Ekaterinburg, Uktus. 09.06.1910. G.G.Jakobson leg. [‘*argus* Gr. L.Benick det.’]—**YAMALO-NENETS AUTONOMOUS REGION:** 1 male (AR): South of the Yamal Peninsula, Priuralskiy District, Tarcheda-Yakha River near mouth. 23.07.1980. E.M.Veselova leg.—1 female (AR): South of the Yamal Peninsula, Priuralskiy District, near Shchuchye trading station. He4a: *Calamagrostis lapponica*. 29.07.1980. E.M.Veselova leg.—1



Fig. 7–8. — Spermatheca of *Stenus (Nestus)* spp. 7. *S. (N.) pluvius* sp.n. (PT). 8. *S. (N.) ageus* Casey, 1884 (Khabarovsk Territory). Scale = 0.1 mm.

male (AR): South of the Yamal Peninsula, Priuralskiy District, near Shchuchye trading station. 11.08.1980. E.M.Veselova leg.—

**KHANTY-MANSI AUTONOMOUS REGION:** 1 male, 1 female (AR): near Shapsha, 61.085°N 69.458°E, 42 m a.s.l. 01–04.08.2010. K. Tomkovich leg.—1 male (AR): Surgutskiy District, Surgutskiy Nature Refuge, Ob' River basin, right side of Materikovyi Pasi Channel, lake shore: *Carex* spp., *Comarum palustre*, Lamiaceae gen. sp., *Climacium* sp., *Plagiomnium* sp. etc. 10.08.2000. A.B.Ryvkin leg.—1 male (AR): Khanty-Mansi Autonomous Region, Surgutskiy District, Yuganskiy Nature Reserve, Vuya-Yany River near Ay-Vuya-Yany River mouth, clay river banks near mouth of small left confluent (500 m below field research station): *Carex* spp., Poaceae, *Mentha* sp., ? *Trollius* sp. etc. 25.08.2000. A.B.Ryvkin leg.—

**TYUMEN AREA:** 1 male (AR): Uvatskiy District, 11 km S of Gornoslinkino, clayish right side of Irtysh River (narrow fold at rill mouth) up-stream of Tobolsk Field Research Station of Severtsov Institute, leaf litter under *Salix* sp. with small true mosses, *Marchantia* sp., *Equisetum* sp., *Carex* sp., *Calamagrostis* sp. etc. 04.06.2004. A.B.Ryvkin leg.—1 male (AR): same locality and collector, plant debris and leaf litter at margin of inundated flood-plain of Varpak River: *Carex* sp., Poaceae, *Lythrum* sp., *Salix* sp. on gentle slope, aspen trees on steep slope, depression in the ground with aspen leaf drift. 07.06.2004.—

**TAYMYR AUTONOMOUS REGION:** 4 males, 2 females (AR): Putorana Highland, nr. Ayan Lake, Kapchug River, riverside tundra, bog with mosses and *Eriophorum* sp. 11.06.1983. K.Yu.Eskov leg.—1 male (AR): Putorana Highland, Ayan Lake near Ayan River source, mossy coastal osier-bed. 07.07.1983. K.Yu.Eskov leg.—2 males (AR): Putorana Highland, Ayan Lake near Ayan River source, lakeside tundra, under willow & alder bushes. 31.07.1983. K.Yu.Eskov leg.—1 male (AR): Putorana Highland, Ayan Lake near source of Ayan River, larch forest with *Equisetum* sp. at debris cone. 21.08.1983. K.Yu.Eskov leg.—

**KRASNOYARSK TERRITORY:** 1 female (AR): 'Stolby' Nature Reserve, near Kandalak cordon, Mana River bank, sweeping on grass near water. 24.08.1994. I.A.Ushakov leg.—2 females (AR): Turukhanskiy District, Yelogyu River 7–10 km below Tyna River mouth, 70 m a.s.l., *Carex* spp., Poaceae gen. spp., *Comarum palustre*, etc. on lakeside (tussocks). 22.07.1989. A.B.Ryvkin leg.—1 male, 1 female (AR): Turukhanskiy District, Yelogyu Refuge, Yelogyu River 6 km below Tyna River mouth, in litter on swamped shore of forest lake with *Filipendula ulmaria*, *Ribes nigrum*, *Alnus* sp., *Betula* sp. 27.07.1992. V.B.Semenov leg.—1 female (AR): Turukhanskiy District, Yelogyu Refuge, Tyna River 12 km up-stream of river mouth, under mosses on stony bank of river. 12.08.1992. V.B.Semenov leg.—2 males (AR): Turukhanskiy District, Bakhta River basin, near Keteollo Lake, Noya River source, 323 m a.s.l., mosses and litter among *Carex* spp., *Filipendula ulmaria*, Poaceae on tussocks and between those at open river bank. 06.08.1992. A.B.Ryvkin leg.—1 male, 1 female (AR): Turukhanskiy District, Bakhta River basin: near Keteollo Lake, 325 m a.s.l., among *Carex* spp., Poaceae gen. spp. etc. on swampy SW lakeside near old hut. 21.08.1992. A.B.Ryvkin leg.—

**EVENKIA:** 1 male, 2 females (AR): same locality and collector, under *Salix* sp. 19.07.1982.—1 male (AR): near Tura, Kochechum River bank, alder bushes. 29.08.1982. K.Yu.Eskov leg.—1 female (AR): Baykitskiy District, Bakhta River head, 1.5 km up-stream of Gutkengne River mouth, 470 m a.s.l., swampy bank of old channel with tussocks: in mosses and litter among *Carex* spp., Poaceae gen. sp., *Filipendula ulmaria*, *Geranium* sp., *Trollius* etc. 14.08.1991. A.B.Ryvkin leg.—1 female (AR): Baykitskiy District, Central Siberian Biosphere Reserve, Stolbovaya River basin: Birapchana River, 3–5 km below confluence of the Levaya Birapchana and Pravaya Birapchana Rivers, 460–480 m a.s.l., swamps at rill mouth: *Carex* sp. with *Trollius asiaticus*, *Geranium* sp., *Filipendula palmata*, etc. on tussocks. 03.07.1988. A.B.Ryvkin leg.—2 males, 4 females (AR): same locality and collector, 480 m a.s.l., small eutrophic swamp at river bank (*Carex* spp., mosses etc.). 05.07.1988.—1 male (AR): Baykitskiy District, Central Siberian Biosphere Reserve, Stolbovaya River basin: Dulkuma

River (I), 12–15 km up-stream of Topkaya River mouth, 210 m a.s.l., litter, drift and mosses under *Alnus*, *Salix*, *Betula* at river bank. 27.06.1990. A.B.Ryvkin leg.—1 male, 1 female (AR): Baykitskiy District, Central Siberian Biosphere Reserve, Stolbovaya River basin, Dulkuma River 4–5 km up-stream of river mouth, 105 m a.s.l., river bank: shingles, stones, *Carex* spp., Poaceae, mosses. 06.07.1990. A.B.Ryvkin leg.—**TUVA**: 4 females (AR): Todja District, Todja Basin, Malyi Azas Lake, near Toora-Khem River source, 940 m a.s.l., swamp with tussocks at lake shore: *Carex* spp., Poaceae, *Trollius asiaticus*, *Plagiomnium* sp. etc. 16.06.1991. A.B.Ryvkin leg.—3 males, 5 females (AR): Todjenskiy District, Bol'shoi Yenisey (Biy-Khem) River basin, 2 km S of the Great Waterfall, lake on left confluent of Biy-Khem River, 1070 m a.s.l., mosses and litter on swamp and in lakeside swamped sparse forest (from water to foot of slope): *Larix sibirica*, *Picea obovata*, *Betula* spp., *Vaccinium uliginosum*, *V. vitis-idaea*, *Oxycoccus* sp., *Ledum palustre*, *Carex* spp., *Salix* sp., *Linnaea borealis*, *Sphagnum* spp., *Pleurozium schreberi*, *Hylocomium splendens*, etc. 15.06.1992. A.B.Ryvkin leg.—**IRKUTSK AREA**: 1 male, 1 female (ZIN): Irkutsk. V.Ye.Yakovlev leg.; 115. ['*argus* Gr. L.Benick det.'].—1 male (ZIN): same locality and collector; 238. ['*argus* Gr. L.Benick det.']; '52'].—1 female (ZIN): same locality and collector; 273. ['*argus* Gr. L.Benick det.'].—1 male (ZIN): same locality and collector; 276. ['*argus* Gr. L.Benick det.'].—1 female (AR): Kazachinsko-Lenskiy District, 9 km SO Magistralnyi, Kirenga River, river bank: *Carex* sp., *Filipendula ulmaria* (He). 16.07.1984. A.B.Ryvkin leg.—**BURYATIA**: 2 males (DUBC): E Siberia, Bauntovskiy district, left side of Talaya river, N54°50'826" E113°32'731". 23.08.2010. I.V.Enushchenko leg.—**TCHITA AREA**: 1 male (AR): Uletovskiy District, Sokhondinskiy Nature Reserve, valley of stream without name (right confluent of Ingoda River), 2 km NE of Ashagley winter hut. N 54°36.7' E 111°07.952', h=1350 m a.s.l. 20.07.2009. A.V.Shavrin, I.V.Enushchenko leg.—**YAKUTIA**: 1 female (ZIN): 5 verst off Yakutsk, suburban settlement. 18.06.1925. Bianki leg. [;] Yakutian

research expedition of Acad. of Sci. ['*argus* Gr. L.Benick det.']; '46']—1 male (ZIN): Ytykhaya 40 verst off Yakutsk. 26.06.1901. Herz leg. ['*argus* Gr. L.Benick det.'].—1 female (ZIN): Amginskaya Sloboda, Yakutsk Region. 09.08.1925. Bianki leg. [;] Yakutian research expedition of Acad. of Sci. [;] Grass swamp [;] Lakeside. ['*morio* Gr. L.Benick det.'].—1 female (ZIN): Amginskaya Sloboda. 12.08.1925. Bianki leg. [;] Yakutian research expedition of Acad. of Sci. [;] Grass swamp [;] Lakeside. ['*argus* Gr. L.Benick det.'].—1 female (ZIN): 17 verst off III camp, Amginsk–Yakutsk road. 15.08.1925. Bianki leg. [;] Yakutian research expedition of Acad. of Sci. ['*argus* Gr. L.Benick det.']; '19']—1 female (ZIN): same locality and collector, XIV-1 dry meadow of S slope. 01.08.1958.—4 females (AR): Ordjonikidzevskiy District, Lyutenge River basin, near Noochuga, leaf litter on small swamp with *Larix gmelinii*, *Salix* sp., *Ledum palustre*, *Carex* spp., *Iris* sp, Poaceae etc. 28.07.1984. A.B.Ryvkin leg.—1 male (AR): Tomponskiy District, Aldan River basin, 3 km NE of Khandyga, swamp with *Carex* spp., *Iris* sp., *Betula* sp., *Larix gmelinii*. 31.07.1984. A.B.Ryvkin leg.—1 male (AR): 25 km S of Yakutsk, left side of Lena River. 11.07.2001. S.A.Kurbatov leg.—**AMUR AREA**: 1 female (AR): upper reaches of Bolshoy Ol'doy River. 24.09.1958. O.N.Kabakov leg.—1 female (ZIN): Klimoutsy, 40 km W of Svobodnyi, *Iris-Carex* meadow, XIg–1. 14.06.1958. Zinoviyev leg.—1 female (ZIN): same locality and collector, XIV-1 dry meadow of S slope. 01.08.1958.—1 male, 1 female (AR): Selemdzhinskiy District, Norskiy Nature Reserve, Nora River basin near Maltsevskiy cordon, mosses and plant debris on swampy flood-plain lakeside: *Carex* spp., *Calamagrostis* sp., *Filipendula palmata*, *Geranium* sp., *Comarum palustre*, *Spiraea* sp., *Salix* sp., *Sphagnum* ? *girsensohnii*, *Sph. squarrosom*, *Polytrichum commune*, *P. sp.*, *Climacium* sp., *Iris* sp., etc. 28.08.2004. A.B.Ryvkin leg.—1 male, 2 females (AR): Selemdzhinskiy District, Norskiy Nature Reserve, Selemdzha River basin near Burundushka River mouth, clayish and sandy-clayish river banks with *Carex* spp.,

- Poaceae, *Salix* spp., *Equisetum* spp., etc. 03.08.2004. A.B.Ryvkin leg.—2 males, 3 females (AR): Selemdzhinskiy District, Norskiy Nature Reserve, Selemdzha River basin near Dvadsatikhha cordon, open swamp: *Carex* sp., *Spiraea* spp., *Geranium* sp., *Vicia* sp., Poaceae, *Salix* spp., *Filipendula palmata*, sparse *Plagiomnium* sp., *Sphagnum* sp., *Polytrichum* sp., etc. 04.08.2004. A.B.Ryvkin leg.—1 male (AR): same locality and collector, plant debris and sweeping on open swamp: *Carex* sp., *Spiraea* spp., *Geranium* sp., *Vicia* sp., Poaceae, *Salix* spp., *Filipendula palmata*, sparse *Plagiomnium* sp., *Sphagnum* sp., *Polytrichum* sp., etc. 08.08.2004.—2 males (AR): Selemdzhinskiy District, Norskiy Nature Reserve, rill (left confluent of Nora River) upstream of Gryashchinskaya Mt., true mosses and plant debris among *Carex* spp., Poaceae, *Alnus* sp., *Padus asiatica*, *Salix* sp., etc. 26.08.2004. A.B.Ryvkin leg.—1 male, 7 females (AR): Selemdzhinskiy District, Norskiy Nature Reserve, Nora River basin near Meun River mouth, small swamp with *Carex* spp., Poaceae & *Sphagnum squarrosum*. 19.08.2004. A.B.Ryvkin leg.—2 males, 9 females (AR): same locality, biotope & collector. 20.08.2004.—10 males, 9 females (AR): Selemdzhinskiy District, Norskiy Nature Reserve (buffer zone), Burunda River basin near Burunda cordon, plant debris and mosses (+sweeping) on swampy sides of flood-plain lake: *Carex* spp., Poaceae, *Spiraea* sp., sparse *Climacium* sp., *Hypnum* sp., *Sphagnum* sp., *Polytrichum* sp., etc. 09.09.2004. A.B.Ryvkin leg.—1 male (AR): Selemdzhinskiy District, Norskiy Nature Reserve (buffer zone), Burunda River basin, 0.5 km NW of Burunda cordon, moss and plant debris at edge of swamp: tussocks of Poaceae with *Carex* sp., young growth of *Betula* sp., *Salix* sp., *Spiraea* sp., and small true mosses. 07.10.2004. A.B.Ryvkin leg.—1 female (AR): Selemdzhinskiy District, Norskiy Nature Reserve (buffer zone), Burunda River basin, 1 km SE of Burunda cordon, mosses and plant debris among sedge tussocks on wide *Carex-Eriophorum*-gramineous swamp with small true mosses, *Sphagnum squarrosum*, *Sph.* sp., *Ledum palustre*, *Vaccinium uliginosum*, sparse *Salix* sp., young growth of *Betula* sp., etc. 21.09.2004. A.B.Ryvkin leg.—2 males, 1 female (AR): Selemdzhinskiy District, Norskiy Nature Reserve, Burunda River near Ozyornyi Rill mouth, mosses and plant debris among sedge-gramineous tussocks on very gentle slope near intermittent channel: *Carex* spp., *Calamagrostis* sp., *Polytrichum* sp. and other true mosses, *Spiraea* sp., etc. 27.09.2004. A.B.Ryvkin leg.—11 males, 11 females (AR): same locality, biotope & collector. 28.09.2004.—1 female (AR): same locality and collector, mosses and leaf litter under *Salix* sp. and *Alnus* sp. with separate tussocks of *Carex* sp., *Plagiomnium* sp., etc. on flood-plain (near old channel). 30.09.2004.—1 female (AR): same locality and collector, Plant debris and mosses among tussocks of *Carex* spp. and Poaceae with *Spiraea* sp., *Vicia* sp., *Plagiomnium* sp., etc. on open flood-plain depression with tracks of *Capreolus capreolus*. 01.10.2004.—1 male (AR): Selemdzhinskiy District, Norskiy Nature Reserve, lower reaches of Chervinka River, mosses, ferns, leaf litter, plant debris on banks of river and intermittent rill with tussocks of *Carex* spp., Poaceae, *Spiraea* spp., *Salix* spp., *Betula ? divaricata*, undergrowth of *Betula platyphylla*, etc. 30.06.2005. E.M.Veselova & A.B.Ryvkin leg.—1 female (AR): Selemdzhinskiy District, Selemdzha River basin, flood-plain of Aldikon River near Norsk, mosses and leaf litter under *Salix* sp. and along the edge of open sedge-gramineous tussock swamp. 05.09.2004. A.B.Ryvkin leg.—1 male (AR): Selemdzhinskiy District, Selemdzha River basin, 2 km up-stream of Norsk, mosses and plant debris among *Carex* spp., Poaceae, *Filipendula palmata*, *Spiraea* sp., *Salix* sp., *Padus* sp., etc. on swampy side of small drainage lake (dammed rill). 06.09.2004. A.B.Ryvkin leg.—3 males, 4 females (AR): Selemdzhinskiy District, 3 km SW of Norsk, Aldikon River near mouth, 200 m a.s.l., plant debris and sparse mosses among sedges and Poaceae gen. spp. on gentle bank of river. 21.08.2006. A.B.Ryvkin leg.—2 males, 1 female (AR): Selemdzhinskiy District, near Fevral'sk, 268th km of Belogorsk–Fevral'sk road, Tikhii rill, 275 m a.s.l., mosses and plant debris between sedge & gramineous tussocks among *Alnus* sp., *Salix* sp., *Spiraea* sp.



with *Sphagnum squarrosum*, *Sph.* spp., etc. 08.10.2008. A.B.Ryvkin leg.—1 male (AR): same locality, collector & biotope. 14.10.2008.—1 female (AR): Selemdzhinskiy District, Selemdzha River basin, 5 km up-stream of Ekimchan, up-stream of Unerikan River mouth, 500 m, mosses and litter on spacious swamp near lakeside: *Vaccinium uliginosum*, *Ledum palustre*, *Chamaedaphne calyculata*, *Betula divaricata*, undergrowth of *Betula* sp. and *Larix gmelinii*, *Carex* spp., Poaceae gen. spp., *Comarum palustre*, *Salix* spp., *Sphagnum* spp., *Polytrichum* spp., etc. 31.08.2005. A.B.Ryvkin leg.—2 males, 3 females (AR): Selemdzhinskiy District, Norskiy Nature Reserve, Burunda River bank 3 km up-stream of mouth, 215 m a.s.l., mosses and plant debris among sedges etc. and on shingle bed. 03.08.2006. E.M.Veselova & A.B.Ryvkin leg.—**KHABAROVSK TERRITORY**: 1 female (AR): Okhotskiy District, Khetana River (confluent of Amka River, Ulya River basin), 7 km up-stream of river mouth. 12.07.1985. V.Zherikhin, A.Rasnitsyn, D. Shcherbakov leg.—3 males, 2 females (AR): Verkhnebureinskiy District, 4th km of Chegdomyn–Urgal road, mosses and plant debris on swampy sides of wayside lake with tussocks of *Carex* spp. and Poaceae gen. sp., *Scirpus* sp., *Comarum palustre*, *Ledum palustre*, *Chamaedaphne calyculata*, *Vaccinium uliginosum*, *V. vitis-idaea*, *Betula divaricata*, *Larix gmelinii*, *Sphagnum* spp., *Aulacomnium* sp., *Polytrichum* sp. 05.10.2006. A.B.Ryvkin leg.—1 male (OB): Verkhnebureinskiy District, Bureinskiy Nature Reserve, right side of Levaya Bureya River up-stream of Malyi Sigda-Makit River mouth, 640 m a.s.l., plant debris among *Carex* spp. with Poaceae gen. spp. and *Alnus* sp. on swampy bank of old channel. 07.07.2011. A.B.Ryvkin leg.—2 females (AR): Verkhnebureinskiy District, Dublikanskiy Nature Refuge, right side of Dublikan River valley, 1 km N of cordon, leaf litter and plant debris on small open dried flood-plain swamp with tussocks of *Carex* spp., *Filipendula palmata*, *Spiraea* spp., *Sorbaria sorbifolia*, *Matteuccia struthiopteris*, etc. 31.08.2008. A.B.Ryvkin leg.—**MAGADAN AREA**: 1 female (AR): Upper reaches of Kolyma River, 78-11, 3

km W of Sibit-Tyhellakh. 23.06.1978. E.G.Matis leg.—1 male (AR): Atargan, 10 km E of Ola. 13.06.1979. E.G.Matis leg.—1 female (AR): Ten'kinskiy District, near Sibit-Tyhellakh, pitfall trap. 04–14.06.1983. D.I.Berman leg.—**KAMCHATKA TERRITORY**: 1 female (ZIN): Ust'-Kamchatskaya Koshka. 07.04.1908. A. Derzhavin leg. ['*argus* Gr. L.Benick det.']—1 female (ZIN): same locality and collector. 11.06.1909. ['*argus* Gr. L.Benick det. '; '154']—1 female (AR): Kozyrevsk. 22.06.1975. B.A.Korotyayev leg.

**Remarks.** Both *S. rigidus* and *S. ageus* were described in Casey's Revision (1884) from the USA (Cambridge, Massachusetts). In the Coleopterological notices IV (1892), acting as First Reviser, Casey himself put *S. ageus* in the synonymy of *S. rigidus*. But after Bernhauer & Schubert (1911), based on erroneous earlier concept (Hamilton 1889 etc), had mistakenly synonymized both names with *S. argus* Gravenhorst, 1806, the confusion was fixed in the taxonomy of the species. And even when L.Benick (1925), and then Puthz (1971a, 1973), restored the species, these authors regarded *S. ageus* as a valid name. Though the senior synonym has not been used as a valid name after 1899 (Article 23.9.1 of ICZN), I can not find 'at least 25 works, published by at least 10 authors in the immediately preceding 50 years' where 'the junior synonym or homonym has been used for a particular taxon, as its presumed valid name' (Article 23.9.2 of ICZN); I have found only five such references after 2000, that, with thirteen references listed by Herman (2001), amounts only eighteen works. Therefore, under Articles 24.2.1 and 24.2.2 of ICZN, the valid name for the species is *Stenus rigidus* Casey, 1884.

*Stenus rigidus* is extremely variable species in both external characters and the shape of the aedeagus, but it seems impossible at present time to divide it into separate taxa. It is widely distributed in North America and Northern Asia (see the New material section above); its distribution in Northern and Central Europe requires a further careful study.

***Stenus (Nestus) brumalis* Casey, 1884, sp. propria***brumalis* Casey, 1884: 131*brumalis*; Casey, 1892: 711*pauperculus* Casey, 1884: 124*pauperculus*; Herman, 2001b: 2328

**New material examined. USA:** 1 male (FMNH): Wisconsin. Kenosha Co.; Shiwaukee Prairie. 4:V:1968. Leg. W.Suter. [;]FM(HD)#68-134. Ber.: Mosses at Marsh. WS#68-38c.—1 male, 1 female (FMNH): Ind., Lake Co., 1 mi S Schneider, La Salle Fish & Game Area, FMHD #78-109, stranded debris on exposed flats of Kankakee R. 24.07.1978. H.S.Dybas leg.

**Remarks.** Originally described from the USA: ‘Detroit, Michigan, 2; Ann Arbor, Michigan, 1. <the digits mean number of specimens in the original type series>’; the holotype of *S. pauperculus* was captured from uncertain locality, probably in Michigan. Then it was also recorded (under the name of *S. pauperculus*) for Massachusetts and Wisconsin (Puthz 1971b), as well as for three provinces of Canada (Puthz 1975, Campbell & Davies 1991). Acting as First Reviser, Casey (1892) himself synonymized *S. pauperculus* with *S. brumalis*. But Bernhauer & Schubert (1911) cited *S. brumalis* erroneously as a junior synonym of *S. pauperculus*, and this misapprehension was kept by all the subsequent authors. Thus, under Articles 24.2.1 and 24.2.2 of ICZN, the valid name for the species under consideration is *Stenus brumalis* Casey, 1884.

New for Indiana.

***Stenus (Nestus) cautus* Erichson, 1839***cautus* Erichson, 1839: 553*cautus*; Herman, 2001a: 33*cautus*; Herman, 2001b: 2115*cautus*; Telnov, 2004: 46*cautus*; Semenov, 2004: 12*cautus*; Shavrin, 2007: 141*cautus*; Shavrin & Puthz, 2007: 115*cautus*; Assing, 2010: 79*cautus*; Puthz, 2010: 60*cautus*; Kashcheev & Puthz, 2011: 441*cautus*; Puthz, 2012: 303, 304*vafellus* Erichson, 1839: 554

**New material examined. GERMANY:** 2 males, 2 females (ZIN): ‘Germ. bor. 4132’ [‘*Stenus submarginatus* Steph.’]-1.—**CZECHIA:** 2 females (ZIN): ‘Prag’; ‘König Collection.’[‘*cautus* Er.’; ‘*Stenus cautus* Prag’].—1 female (ZIN): ‘Bohemia. Reitter.’[‘*Stenus cautus* Er.’; ‘C[ollection]. of A.Jakovlev’].—**POLAND:** 1 female (VIM): ‘Polonia’, ‘*Stenus | cautus* Er. | A.B.Ryvkin det. 2010’ <my common determinative label>.—**UKRAINE: DONETSK AREA:** 1 female (ZIN): Velikiy Anadol’, drift. 12.03.1906.—1 male (ZIN): same locality. 24.03.1908.—**KHERSON AREA:** 1 male (AR): Kherson. 19.06.1958. I.Maltsev leg.—**RUSSIA: MURMANSK AREA:** 1 male (ZIN): White Sea, Ryazhkov Island, tidal zone. 22.07.1978. M.Lyubimov leg.—1 female (AR): Poyakonda, Biological Field Research Station of Moscow University, ejected *Fucus*. 18.06.1979. E.M.Veselova leg.—**VOLOGDA AREA:** 1 male (AR): Darvinskiy Nature Reserve, steep shore. 11.08.1981. E.Kozodoy leg.—**TATARIA:** 1 male (AR): Volzhsko-Kamskiy Nature Reserve, Atabayevovo ca. 50 km S Kazan, Saraly Forestry. *Quercus*, *Tilia*, *Acer*, *Ulmus*. 09–10.06.1991. S.Golovatch, A.Vasilev & P.Durmanov leg.—**LENINGRAD AREA:** 3 males, 7 females (ZIN): Moravitz Collection.[‘*morio*’].—1 male (ZIN): Petropol. [Petropolis].—9 males, 7 females (ZIN): St.-Petersburg, Mitrofanyevskoye cemetery. 07.04.[19]02. V.V.Barovskiy leg.—8 males, 17 females (ZIN): same locality and collector. 08.04.[19]02.—2 ex (ONK): Mozhaysk. 28.05.1959. O.N.Kabakov leg.—5 males, 2 females (ZIN): Smolenskoye cemetery. St.-Petersburg. 18.08.1890. G.G.Jakobson leg.—3 females (VIM): ‘Petropol [=St.-Petersburg]’, ‘*Stenus | minutus* mihi | Petropol Russia’ <under the 1st specimen only>, ‘*Stenus | cautus* Er. | A.B.Ryvkin det. 2010’ <my common determinative label>.—**ULYANOVSK AREA:** 1 female (VIM): ‘Simbirsk’, ‘*minutus*’, ‘*Stenus |*

*cautus* Er. | A.B.Ryvkin det. 2010' <my common determinative label>.—**SAMARA AREA:** 1 male (ZIN): Samara. 4132 [*Stenus submarginatus* Steph.'].—**KRASNODAR TERRITORY:** 1 male (AYuS): 3 km S of Kholm'skiy, Khabl' River, near water. 07.05.1996. A.Yu.Solodovnikov leg. [*Stenus (Nestus)* sp. pr. *melanarius* Stephens A.Solodovnikov det. 1996'].—**OMSK AREA:** 1 male, 1 female (ZIN): '*Stenus buphtalmus* Gr. Tara.' [had been placed on a common pin with a specimen of *S. carbonarius* Gyllenhal transferred by me to a separate pin with a copy of the original label].—**IRKUTSK AREA:** 1 male, 2 females (AR): Irkutsk, left side of Angara River. 12.09.2012. I.V.Enushchenko leg.

**Remarks.** The range of the species was summarized by me formerly (Ryvkin 1990). Its easternmost limit appears to reach Southern Transbaikalia, however I do not know any records in Siberia besides those located in the very South. Though I had doubted the East Siberian records of the species in my previous papers (Ryvkin 1990, 2000), both new material above and literature data (Shavrin & Puthz 2007) confirm those records.

Until recently, *S. submarginatus* Stephens, 1833 was treated as a synonym of *S. cautus* and regarded as a nomen oblitum. But since it is ascertained (Allen, 1978, Puthz, 2010) that *S. cautus* has not been represented in Britain where *S. submarginatus* was described from, the respective taxonomic changes are necessary (see below).

***Stenus (Nestus) europaeus* Puthz, 1966 nomen protectum**

*europaeus* Puthz, 1966: 113  
*europaeus*; Monsyavitchus, 1986: 38  
*europaeus*; Ádám & Hegyessy, 2001: 123  
*europaeus*; Herman, 2001b: 2170  
*europaeus*; Bordoni, 2004: 121  
*europaeus*; Semenov, 2004: 12  
*europaeus*; Smetana, 2004: 556  
*europaeus*; Gontarenko, 2011: 23  
*europaeus*; Bukhkalov & al., 2012: 349  
*europaeus*; Puthz, 2012: 304

*submarginatus* Stephens, 1833: 295 **nomen oblitum**  
*submarginatus*; Stephens, 1839: 414  
*submarginatus*; Waterhouse, 1855: 149  
*submarginatus*; Waterhouse, 1858: 28  
*submarginatus*; Rye, 1864: 63

**New material examined. FRANCE:** 1 male (ZIN): 'Paris. 4132' [*Stenus submarginatus* Steph.'].—**RUSSIA: TVER AREA:** 2 males, 6 females (AR): Konakovskiy District, Donkhovka. 29.05.1983. V.B.Semenov leg.—2 males (AR): same locality and collector. 15.06.1984.—1 male, 1 female (AR): same locality and collector. 24.06.1984.—**LENINGRAD AREA:** 1 male (ZIN): St.-Petersburg Government, Luzhskiy Uyezd [District], Preobrazhenskaya. 02.05.1905. D.Glazunov leg.—1 female (ZIN): Petrograd, Smolenskoye cemetery. 11.04.1920. A.A.Stackelberg leg. [*vafellus* Er. L.Benick det.'].—1 male (ZIN): same locality and collector. 05.05.1905.—2 males, 1 female (AR): W of Lebyazhye, 68th km. 19.05.1985. I.A.Ushakov leg.—**KHANTY-MANSI AUTONOMOUS REGION:** 1 male (AR): Surgutskiy District, Surgutskiy Nature Refuge, Ob' River basin, Materikovyi Pasi Channel. Bank of rill flowing into channel: near water (clay), *Carex* sp., Poaceae gen. sp., *Veronica* ? *longifolia*, Asteraceae gen. sp., small mosses. 08.08.2000. A.B.Ryvkin leg.—1 male, 3 females (AR): Surgutskiy District, Yuganskiy Nature Reserve, Malyy Yugan River, 1 km up-stream of Vuya-Yany River mouth. Moss and litter at hummocks on flood-plain swamp with *Carex* spp., *Comarum palustre*, *Betula*, *Filipendula ulmaria*, Poaceae gen. sp., *Plagiomnium* sp. etc. 13.08.1998. A.B.Ryvkin leg.—1 male (AR): Surgutskiy District, near Ugut, Kinyaminskoye Lake, moss and litter among *Carex* spp. and Poaceae at lakeside. 06.08.2002. A.B.Ryvkin leg.—**TYUMEN AREA:** 4 males, 2 females (AR): Uvatskiy District, 11 km S of Gornoslinskino, near Tobolsk Field Research Station of Severtsov Institute, flood-plain of Missiinka River near mouth, in litter under *Salix* sp. 18.09.2003. A.B.Ryvkin leg.—1 male, 1 female (AR): same locality and collector, sweeping on *Carex* spp., *Comarum palustre*, *Mentha* sp., *Lythrum* sp.,

*Stachys* sp. etc. 18.09.2003.—1 female (AR): Uvatskiy District, 10 km S of Gornoslinskino, near Tobolsk Field Research Station of Severtsov Institute, in litter under *Salix* sp. with Poaceae, *Carex* sp., *Filipendula ulmaria*, Lamiaceae gen. sp. etc. 26.09.2003. A.B.Ryvkin leg.—1 male (AR): same locality and collector, among *Carex* spp. and Poaceae gen. sp. at border of flood-plain of Varpak River. 26.09.2003.—4 males (AR): same locality and collector, plant debris and leaf litter at margin of inundated flood-plain of Varpak River: *Carex* sp., Poaceae, *Lythrum* sp., *Salix* sp. on gentle slope, aspen trees on steep slope, depression in the ground with aspen leaf drift. 07.06.2004.—5 males, 3 females (AR): same locality and collector, willow leaf litter at margin of inundated flood-plain of Varpak River. 05.06.2004.

**Remarks.** There have been countless misinterpretations, misidentifications and a great deal of mere confusion in taxonomic history of the names of *Stenus cautus*, *S. vafellus*, and *S. submarginatus*, that we can see from the literature (Puthz 1966, Allen 1978, Herman 2001a, etc) and from the respective New material examined sections above. After Puthz synonymized real *S. vafellus* with real *S. cautus* and named *S. europaeus* for the species which had been mistakenly treated as *cautus* by L.Benick (1915b, 1917) and a part of the subsequent continental authors, the name *S. submarginatus*, having been treated as a synonym of *S. vafellus* (in spite of violating the Principle of priority), was groundlessly ignored for a long time until Herman (2001a, 2001b) formally synonymized it as a nomen oblitum with *S. cautus*. But the last decision seems unsatisfactory for the following reasons. *Stenus submarginatus* was originally described from England (London, Bristol, New Forest); but it has been shown that *Stenus cautus* is not represented in Great Britain (Allen 1978, Puthz 2010). It is quite evident that the British authors, when having synonymized *S. submarginatus* with *S. vafellus* (or rather *S. vafellus* with *S. submarginatus*), have meant under the latter name the species which is known at present as *S. europaeus* Puthz, the only species belonging to this complex and

really distributed in Britain, not true *S. vafellus* which is a synonym of *S. cautus*. Thus, *S. europaeus* Puthz, 1966 is a junior synonym of *S. submarginatus* Stephens, 1833. The name *S. submarginatus* Stephens has not been used as a valid name after 1899 (Article 23.9.1 of ICZN). The name *S. europaeus* Puthz 'has been used for a particular taxon, as its presumed valid name, in at least 25 works, published by at least 10 authors in the immediately preceding 50 years and encompassing a span of not less than 10 years' (Article 23.9.2 of ICZN). I have found 27 such works by 20 authors: 10 references above and 17 references in Herman (2001b): p.2170. Therefore *Stenus submarginatus* Stephens, 1833 is a nomen oblitum and *Stenus europaeus* Puthz, 1966 is a nomen protectum.

This Euro-Siberian species is known to me eastwards up to the Middle Siberia: the Yenisey River basin (Ryvkin 2000).

***Stenus (Nestus) immodicus* Ryvkin, 2000**  
(Fig. 6)

*immodicus* Ryvkin, 2000: 348

*ryvkini* Puthz, 2001: 58, **syn. nov.**

**Material examined. RUSSIA: KHABAROVSK TERRITORY:** 1 male-HT (ZMMU): USSR, Khabarovsk Province, Bolshe-Khekhtsyrskiy Reserve. 6–10.VI.1990. 400–450 m, *Abies/Pinus/Betula* forest. S.Golovatch & W.Schawaller leg.—4 males, 6 females (AR), 1 male, 1 female (MHNG): Bol'shekhekhtsyrskiy Nature Reserve, Sosninskiy cordon. 25.05.2004. A.V.Tanasevitch leg.—1 female (AR): same locality & collector, *Abies* forest. 27.05.2004.—1 female (AR): Slavyanka, 20 km N Troitskoye, right Amur bank, *Quercus/Betula* forest. 14–19.06.1990. S.I.Golovatch & W.Schawaller leg.—**MARITIME PROVINCE:** 1 female (AR): Kavalerovskiy District, Priiskovaya Pad'. 31.07.1977. L.D.Filatova leg.—1 female [HT of *S. ryvkini* Puthz] (SDEI): Primorskiy Kray [=Maritime Province]: 5 km SE Samarka, 70 km N Chuguyevka. Gordeyevskaya Mtn. 44°46'N, 134°13'E, 300 m, 29.V.1993, L.Zerche.

**Remarks.** The original description of *S. immodicus* is based on the only male holotype which has been collected SW of Khabarovsk. The species is closely related to the *cautus* group members which have subcylindrical abdomen and fairly narrow paratergites 4 to 7 (*S. lohsei* Puthz, 1965, *S. incautus* Ryvkin, 2000, *S. semiputatus* Ryvkin, 1995). Puthz (2001), when describing *S. ryvkini* from the only female, placed it in the *crassus* group and ignored presence of small but developed paratergites in this species. A comparison of both holotypes shows that those are conspecific in the external characters; the female characters of topotypical specimens of *S. immodicus* are quite identical to those of the holotype of *S. ryvkini*; therefore *S. ryvkini* is to be placed in the synonymy of *S. immodicus*. Basing on the cited material, we can suppose that *S. immodicus* is widely distributed in both the Khabarovsk Territory and the Maritime Province.

Since the holotype of *S. immodicus* had the aedeagus with evaginated endophallus, the new topotypical material enables me to provide a new illustration for this structure (Fig. 6).

#### ***Stenus (Nestus) incautus* Ryvkin, 2000**

(Fig. 4)

*incautus* Ryvkin, 2000: 349  
*melanarius* [pars]; Goreslavets & al., 2002: 348 (misidentification)

**Material examined. RUSSIA: KRASNOYARSK TERRITORY:** 1 male-HT, 1 female-PT(AR): Krasnoyarsk Territory, Severo-Yeniseyskiy District, Podkamennaya Tunguska River basin, Velmo River, 185 km upstream of river mouth, near trading post Velmo-I. River bank: *Carex*, Gramineae, shingles etc. 07/08/90. A.B.Ryvkin.—**VOLGOGRAD AREA:** 1 female (AR): S of Krasnoslobodsk. 07.06.1995. K.A.Grebennikov leg.—1 male (AR): near Volgograd, S of Krasnoslobodsk. 10.04.1999. K.A.Grebennikov leg.—**SAMARA AREA:** 1 male (AR): Kinel'skiy District, Krasnosamarskoye Forestry, flood-plain of Samara River, sand bank. 30.06.1993. I.N.Goreslavets leg. ['*Stenus*

sp-10 det. Goreslavetz I.N.'].—1 female (AR): Samara, Kryazh, flood-plain of Samara River, in drift. 02.05.1992. I.N.Goreslavets leg. ['*St. melanarius* Steph.'].]

**Remarks.** Until recently, the species has been known only from its Siberian type locality. But through the kindness of my colleagues Konstantin Grebennikov and Igor Goreslavets I have got an opportunity to study the material which confirms the presence of *S. incautus* in European Russia. Since Puthz (2010) recorded recently from Kiev, Ukraine a male of Central-European *S. lohsei* Puthz, 1965 closely related to *S. incautus*, both species are likely strict vicariants. *S. incautus* can be easily distinguished from *S. lohsei* by the body more flattened, by the puncturation smaller and more regular, and by the apical part of median lobe of the aedeagus evidently broader, with the constriction less sharp (see Figs. 4–5).

#### ***Stenus (Nestus) lohsei* Puthz, 1965**

(Fig. 5)

*lohsei* Puthz, 1965: 37  
*lohsei*; Puthz, 2010: 61

**New material examined. ITALY:** 1 male (AR): Isonzo. Sagrado. 1.2.88. Springer. ['coll. Puthz'; '*Stenus lohsei* Puthz det. V.Puthz 2002'].]

**Remarks.** The specimen has been kindly donated me by Dr. Puthz, that enables me to compare the species directly with *S. incautus* (see above).

#### ***Stenus (Nestus) mendosus* Puthz, 1971**

*mendosus* Puthz, 1971c: 20

**New material examined. USA:** 1 male (FMNH): Massachusetts: Middlesex Co.; Bedford Sta, 11:IV:1977. leg: W.Suter. WS#77-3: a,b,c. [;] FM(HD)#77-5. WS#77-3b. mosses on red maple buttresses.—1 female (FMNH): Mass.: Middlesex Co.; Bedford Field Station. 22:VI:1977. leg: W.Suter. WS#77-19: a,b,c,d,e,f. [;] FM(HD)#77-57. WS#77-

19C. sphagnum hummock edges.—1 male (FMNH): Mass.: Middlesex Co.; Bedford Field Station. 22:VI:1977. leg. W.Suter. WS#77-19: a,b,c,d,e,f. [;] FM(HD)#77-58. WS#77-19d. Conc. peat-root mat.

**Remarks.** The species with phylogenetic relations not evident. Originally described from Connecticut, USA; known also from Quebec, Canada (Campbell & Davies 1991). New to Massachusetts.

***Stenus (Nestus) pudicus* Casey, 1884**

*pudicus* Casey, 1884: 117

*minor* Casey, 1884: 118

*juvencus* Casey, 1884: 123

*enodis* Casey, 1884: 126

*sibyllinus* L.Benick, 1921: 117

**New material examined. USA:** 1 male, 1 female (FMNH): Vermont: Addison Co., Addison (5 mi W) Dead Ck. Wildlife Mngt. Area. 19:VIII:1974. Leg. W.Suter.[;] FM(HD)#74-233. Ber. # WS 74-71D Mixed mosses under fern.[‘FM(HD)#74-233 Ber. # WS 74-71D Mixed mosses under fern.’].—7 females (FMNH): Ohio, Hocking Co., 2 mi S. Gibisanville. 8-vii-1978. ex leaf lit. & moss nr. marsh. Watrous leg.—1 male (FMNH): Ohio: Morrow Co.; Mt. Giliad (5 mi SE). leg. W.Suter. 2:XI:1979. [;] WS#79-42c. moss on log. swamp.—1 male (FMNH): Union Co., Ohio. 28.VII.1975 [;] QDWheeler [;] river drift.—1 female (FMNH): Ohio, Holmes Co., Stillwell, 30-V-1977, [;] FMHD #77-3054, litter along stream. L.E.Watrous leg.—1 female (FMNH): Ohio, Adams Co., 2 mi. SE Blue Crk. 8-viii-1976 [;] ber. forest litter. L.E.Watrous leg. [‘*Stenus*’].—1 male (FMNH): Ohio: Ash Co., Trumbull. 5-VI-1976.[;] berlese debris along stream. D.S.Chandler leg.—1 male, 1 female (FMNH): Ohio: Franklin Co., Columbus. 5-VI-1976.[;] berlese forest litter.[.] L.E.Watrous leg.—1 male, 1 female (FMNH): Scioto Trail St. Pk., Ross Co. X-5-1974 Ohio. D.S.Chandler leg.—1 male (FMNH): Ohio, Ross Co., Scioto Trails St. Pk., 4-xi-1978[;] ex leaf litter[.] L.E.Watrous leg.—1 female (FMNH): Ind.:

Parke Co.; 4mi. W Rockville(“Hajji Hollow”) IX:4:71 leg. H.S.Dybas[;] sifting flood debris along stream.—1 male, 1 female (FMNH): Tippecanoe Co., Ind. IV-12-1971. N.M.Downie leg.[;] N.M.Downie Colln. 1992 Acc. Z-18,343 FIELD MUSEUM.—1 female (FMNH): Tippecanoe Co., Ind. V-6-1971. N.M.Downie leg.[;] N.M.Downie Colln. 1992 Acc. Z-18,343 FIELD MUSEUM.—1 male (FMNH): Ill.: DuPage Co.; Argonne Natl. Lab. 24-VII-1967. [;] old field. leg. J.Wagner and W.Suter leg.—1 male (FMNH): Il: Vermilion Co., Forest Glen Preserve, Tent Campground area, 185 m. 40°00.9’N, 87°34.2’W, 26.vi.2004,[;] eastern deciduous forest in wet stream debris, A.Newton FIELD MUS. NAT. HIST.[‘*Stenus* M.K.Thayer det.2002’].—1 male, 1 female (FMNH): Il: Pope Co., Dixon Springs State Park, Ghost Dance Canyon Trail, ca. 125 m. 37°23’N, 88°40.3’W, 22.VI.2002, mixed hardwood forest in ravine[;] near stream, FMHD 2002-3, berl., leaf & log litter incl. between large rocks, A.Newton & M.Thayer 1043 FIELD MUS. NAT. HIST.[‘*Stenus* det. Newton 2002’].—1 male (FMNH): Il: Cook Co., Spears Woods, W of Hickory Hills, 220 m, 41°43.5’N, 87°51.5’W, [;] 14.ix.1996, *Quercus* & mixed hardwood woodland[;] FMHD #96-11, berl. forest leaf & log litter, A.Newton & M.Thayer.FIELD MUS. NAT. HIST.[‘*Stenus* det. Newton 1996’].—1 male (FMNH): Il: Cook Co., Cherry Hill Woods (W of), NW of Palos Park; south site, [;] 220 m. 41°40.4’N, 87°52.5’W, 2.x.1996, oak woodland, shrubby understory; [;] FMHD #96-168, berl. leaf & log litter, M Thayer, A Varsek, J Louderman 971. FIELD MUS. NAT. HIST.[‘*Stenus* 1A A.Varsek det. 1996’; ‘*Stenus* species 3 M.K.Thayer det. 1998’].—1 female (FMNH): Il.: Cook Co., Cherry Hill Woods (W of), NW of Palos Park; north site, 232 m, [;] 41°40.6’N, 87°52.5’W, 5.vii.2000, oak woodland, shrubby understory, FMHD #00-25,[;] berl. leaf & log litter, J.Louderman, R.Vlach 970. FIELD MUS. NAT. HIST.[‘*Stenus* 1A J.Louderman det. 2000’; ‘*Stenus* species 3 M.K.Thayer det. 2001’].—1 male (FMNH): Il.: Cook Co., Swallow Cliff Woods, NW of Palos Park, north site. 215 m, [;] 41°40.6’N, 87°51.9’W, 22.vi.2000, oak woodland, incl.

*Q. macrocarpa*, shrubby understory, [;] FMHD #00-07, berl. leaf & log litter, Bio-diversity et al. 1969. FIELD MUS. NAT. HIST. ['*Stenus* 1A J.Louderman det. 2000'; '*Stenus* species 3 M.K.Thayer det. 2001'].—1 female (FMNH): Ill.: Cook Co., Swallow Cliff Woods, NW of Palos Park, north site. 215 m, 41°40.6'N, 87°51.9'W, [;] 19.vii.2000, oak woodland, incl. *Q. macrocarpa*, shrubby understory, FMHD #00-42, [;] berl. leaf & log litter, M.Banks, R.Vlach, 1969. FIELD MUS. NAT. HIST. ['*Stenus* 1A J.Louderman det. 2000'; '*Stenus* species 17 M.K.Thayer det. 2001'].—1 female (FMNH): Wi: Kenosha Co., E. of Woodworth, Benedict Prairie, 31 May 1998 [;] Mossy litter, leg. W.Suter. ['*Stenus* M.K.Thayer det. 1998'].—1 female (FMNH): N.J.: Burlington Co., Chatsworth. 17-VI-1976[;] berlese sphagnum moss. L.E.Watrous leg.—1 female (FMNH): Ark.: Sharp Co.; Cherokee Village. 27 June 1972 [;] Litter at log. leg. W.Suter.

**Remarks.** The species has been recorded for Canada (Ontario) and USA (Illinois, Michigan, Massachusetts, New York, New Jersey, Kentucky, District of Columbia, Tennessee, Virginia, Colorado, California, Georgia, Indiana) (Puthz 1971b). New to Vermont, Ohio, Wisconsin, Arkansas.

### *Stenus (Nestus) pusillimus* Puthz, 1971

*pusillimus* Puthz, 1971b: 250

**New material examined.** CANADA: 1 male, 1 female (FMNH): Quebec, Levis Co., 5 mi S St. Etienne, 26-V-1979, [;] FMHD#79-3044, mixed mosses on royal fern, W.S.Suter leg.—USA: 1 female (FMNH): Massachusetts: Middlesex Co.; Bedford Sta, 11:IV:1977. leg: W.Suter. WS#77-3: a,b,c. [;] FM(HD)#77-5. WS#77-3b. mosses on red maple buttresses.—1 female (FMNH): Illinois. Lake Co.; Volo. Sayer Bog. 7.IV.1959. Leg: W.Suter. [;] Berlese: sphagnum.—(FMNH): Ill. Lake Co. Volo, marsh S of Sayer Bog. 24-X-80. Watrous grassy l.—2 males (FMNH): Massachusetts: Middlesex Co.; Bedford Sta. 11:IV:1977. leg: W.Suter. WS#77-3: a,b,c. [;] FM(HD)#77-4.

WS#77-3a. sphagnum-mixed mosses - swamp area - / red maple.—1 female (FMNH): Massachusetts: Middlesex Co.; Bedford Field Station. 22:VI:1977. leg: W.Suter. WS#77-19: a,b,c,d,e,f. [;] FM(HD)#77-55. WS#77-19A. grassy peat between mossy hummocks.—4 males, 1 female (FMNH): Wis., Racine Co., Kneeland, 4 mi W Bog, 23-IV-1966, [;] FMHD #66-3003, hammocks [?hummocks], W.Suter leg.—1 female (FMNH): Wisconsin: Door Co.; Bailey's Harbor (N) Cedar Rd. Swamp. leg: W.Suter. 6:VIII:1977. [;] FM(HD)#77-77. WS#77-27. mixed mosses.—1 female (FMNH): Wis.: Kenosha Co.; Chiwaukee Prairie. 13:IV:1978. leg: W.Suter. WS#78-29 a,c.[;] FM(HD)#78-36. WS#78-29c. litter u. bush[;] marsh area. ['*Stenus* det. Newton 1993'].—1 female (FMNH): Wisc.: Kenosha Co.; Salem (W) Silver L. Van Halter Bog. 15 Aug. 1972. [;] *Sphagnum* Moss. W.Suter leg.[;] 72-87 WS#. ['*Stenus*'].—1 female (FMNH): Wi: Kenosha Co., Carol Beach, Chiwaukee Prairie, South. 26 May 1999[;] u. fern. leg: W.Suter.

**Remarks.** Has been formerly known from USA: Michigan and Massachusetts (Puthz 1971b); Canada: Manitoba, Ontario, Quebec, New Brunswick, Nova Scotia (Campbell & Davies 1991). The new data above widen the range to include Wisconsin.

### *Stenus (Nestus) setiger* Puthz, 1971

*setiger* Puthz, 1971b: 245

**New material examined.** USA: 1 male, 5 females (FMNH): Virginia. James City Co., Jamestown Is. (Jamestown). 27:III:1975. Leg. W.Suter. [;] FM(HD)#75-166. Ber. #WS 75-41C. mosses on logs.—2 males, 1 female (FMNH): Maryland: Anne Arundel Co.; Sandy Pt. St. Pk. 25-I-1967. leg: W.Suter. WS#67-3. a,b,c.[;] WS#67-3a. floor under dung, grass bush ecotone (500 cc).—2 females (FMNH): Maryland: Anne Arundel Co.; Sandy Pt. St. Pk. 25-I-1967. leg: W.Suter. WS#67-3. a,b,c.[;] FMHD#67-13. litter at log in high *Spartina* area, W.Suter.—1 female (FMNH): Scott Co. MS 3.5 mi SW Forest.[;] 28 Feb 1988 Paul K. Lago[;]

Duplicate ex series at UMIC. ['*Stenus* det. Newton 1998'].—2 males, 1 female (FMNH): Mississippi: Grenada Co.; Tie Plant, rest stop. 12:XI.1976. leg. W.Suter. WS#76-81: a,b. [;] FM(HD)#76-197. WS#76-81b. subcortical stump of old hardwood.—1 male (FMNH): Fl, Leon Co. Tallahassee. 11.III.1977. [;] mixed hardwood litter, G.B.Marshall leg.—1 female (FMNH): Fla.: Tallahassee LeonCo. 6.XII.1976. [;] berlese hardwood litter, G.B.Marshall leg.—2 males, 1 female (FMNH): Fla.: Gadsden Co. Ochlockonee R. & Hwy 157 29-vii-77. [;] berlese mixed hardwood litter[;] Justice & Healy leg.—1 male (FMNH): Fla. Gladsen Co. Hwy. 159 3 mi N Havana 25-viii-77. [;] berlese hardwood litter[;] E.D.Healy leg.—1 male, 1 female (FMNH): Fla., Columbia Co., Ichetucknee St. Pk., 3-V-1981, [;] FMHD#81-180, ex litter at bottom of nearly dry sink hole, L.Watrous leg.

**Remarks.** Has been recorded from New Jersey and District of Columbia. New to Virginia, Maryland, Mississippi, Florida.

### *Stenus (Nestus) tuberculatus* Casey, 1884

*tuberculatus* Casey, 1884: 129  
*tuberculatus*; Puthz, 1971b: 245

**New material examined. USA:** 1 male (FMNH): Mississippi: Jackson Co.: Ocean Springs (5 mi. S). FM(HD)#76-68. WS#76-40c. under bushes, salt marsh. 30:5:1976. leg. W.Suter.

**Remarks.** Until now has been known from Florida (USA) only. New to Mississippi.

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## REFERENCES

Ádám L., Hegyessy G. 2001. Adatok a Zempléni-

hegység, a Hernád-völgy, a Bodroγκöz, a Rétköz és a Taktaköz holyvafaunájához (Coleoptera). *Sátoraljaújhely*. Pp. 1–249.

Allen A.A. 1978. Notes on some British Staphylinidae. 4. *Stenus butrintensis* Smet. new to Britain with brief remarks on a few others of the genus. *The Entomologist's Monthly Magazine*, 113: 63–69.

Assing V. 2010. On the Staphylinidae of Turkey. VII. Five new species and additional records (Coleoptera: Staphylinidae). *Koleopterologische Rundschau*, 80: 71–102.

Benick L. 1914. Neue asiatische Steninen. *Entomologische Mitteilungen*, 3(5): 150–152.

Benick L. 1915a. Ueber *Stenus morio* Grav. und *melanarius* Steph., nebst Beschreibung einer neuen deutschen Art (Col.). *Entomologische Mitteilungen*, 4: 226–234.

Benick L. 1915b. Einige neue europäische *Stenus*-Arten und -Varietäten (Coleopt., Staphyl.). *Entomologische Blätter*, 11(10–12): 225–231.

Benick L. 1917. *Stenus cautus* Er., *vafellus* Er. und *macrocephalus* Aube (*corsicus* Benick), eine bibliographische und Typen-Studie. (Col., Staphyl.). *Entomologische Mitteilungen*, 6(10/12): 332–341.

Benick L. 1925. Ueber die Steninen der Münchener Staatssammlung (Col., Staph.). Mit 6 Abbildungen. *Mitteilungen der Münchener Entomologischen Gesellschaft*, 15: 72–85.

Bernhauer M., Schubert K. 1911. Staphylinidae. II. In: Schenkling S. (Editor): *Coleopterorum Catalogus. Pars 29*. W.Junk, Berlin. Pp. 87–190.

Bukhkalov S., Sergejeva E.V., Semenov V.B. 2012. Rove-beetle fauna (Coleoptera,



- Staphylinidae) of the central part of the southern taiga in West Siberia, Russia. *Euroasian Entomological Journal*, 11(4): 343–353.
- Campbell J.M., Davies A. 1991. Family Staphylinidae. Rove beetles. Checklist of beetles of Canada and Alaska. Publication 1861/E. Ottawa: Agriculture Canada. Pp. 86–124.
- Casey Th.L. 1884. Revision of the Stenini of America north of Mexico. Insects of the family Staphylinidae, order Coleoptera. Philadelphia. Pp. 206.
- Casey Th.L. 1892. Coleopterological notices. IV. *Annals of the New York Academy of Sciences*, 6: 359–712.
- Eppelsheim, E. 1893. Beitrag zur Staphylinen-Fauna des südwestlichen Baikal-Gebietes. *Deutsche Entomologische Zeitschrift*, 1893 (1): 17–67.
- Erichson W.F. 1839. Die Käfer der Mark Brandenburg. Erster Band. Zweite Abteilung. F.H. Morin, Berlin. Pp. 385–740.
- Gontarenko A.V., 2011. Contribution to the fauna of rove beetles of subfamily Steninae (Coleoptera: Staphylinidae) of Ukraine. *The Kharkov Entomological Society Gazette*, 19(1): 19–29.
- Goreslavets I.N., Solodovnikov A.Yu., Gildenkov M.Yu. & Grebennikov K.A. 2002. Staphylinids (Coleoptera, Staphylinidae) of Samara Province: subfamilies Omaliinae, Proteininae, Tachyporinae, Habrocerinae, Oxytelinae, Oxyporinae, Steninae, Euaesthetinae, Paederinae and Staphylininae. *Revue d'Entomologie de la Russie*, 81(2): 343–355. [In Russian].
- Hamilton J. 1889. Catalogue of the Coleoptera common to North America, Northern Asia and Europe, with the distribution and bibliography. *Transactions of the American Entomological Society and Proceedings of the Entomological Section of the Academy of Natural Sciences*, 16(2): 88–162.
- Herman L.H. 2001a. Nomenclatural changes in the Staphylinidae (Insecta: Coleoptera). *Bulletin of the American Museum of Natural History*, 264: 1–83.
- Herman L.H. 2001b. Catalog of the Staphylinidae (Insecta: Coleoptera). 1758 to the End of the Second Millenium. IV. Staphylinine Group (Part 1). *Bulletin of the American Museum of Natural History*, 265: 1807–2440.
- Kashcheev V.A., Puthz V. 2011. Contribution to the knowledge of the fauna of Steninae (Coleoptera, Staphylinidae) of the Kazakhstan. *Entomofauna. Zeitschrift für Entomologie*, 32(33): 437–460.
- Lohse G.A., Lucht W., 1989. Die Käfer Mitteleuropas. I. Supplementband. Goecke & Evers, Krefeld. Pp. 346.
- Monsyavitchus V.S. 1986. Effect of draining upon staphylinid beetles fauna in pine forest bug. *Lietuvos TSR Mosklų Akademijos darbai. C serija*, 3(95): 34–42.
- Puthz V. 1965. Ein neuer *Stenus* aus dem südlichen Mitteleuropa: *Stenus (Nestus) lohsei* n. sp. *Entomologische Nachrichten*, 12: 37–41.
- Puthz V., 1966. *Stenus cautus* Er., *europaeus* nov. spec. und *macrocephalus* Aube (Coleoptera, Staphylinidae). 13. Beitrag zur Kenntnis der Steninen. *Entomologische Blätter Biol. Syst. Käfer: Krefeld*, 62(2): 111–120.
- Puthz V. 1971a. Kritische Faunistik der bisher aus Mitteleuropa bekannten *Stenus*-Arten nebst systematischen Bemerkungen und Neubeschreibungen (Coleoptera,

- Staphylinidae). 80. Beitrag zur Kenntnis der Steninen. *Entomologische Blätter für Biologie und Systematik der Käfer*, 67(2): 74–121.
- Puthz V. 1971b. Über die Gruppe des *Stenus cautus* Erichson (Coleoptera, Staphylinidae). 103. Beitrag zur Kenntnis der Steninen. *Entomologisk Tidskrift*, 92(3/4): 242–254.
- Puthz V. 1971c. 104. Beitrag zur Kenntnis der Steninen. *Mitteilungen der Deutschen Entomologischen Gesellschaft*, 30(2): 20–21.
- Puthz V. 1973. Zur Synonymie und Stellung einiger *Stenus*-Arten. VI. (Coleoptera, Staphylinidae). 136. Beitrag zur Kenntnis der Steninen. *Entomologisk Tidskrift*, 94(1/2): 48–55.
- Puthz V., 1975. *Stenus* von der Anticosti-Insel, Quebec, Canada. *Entomologische Blätter für Biologie und Systematik der Käfer. Krefeld*, 71: 124–125.
- Puthz V. 1992. Zwei neue montane *Stenus*-Arten aus den italienischen Alpen (Coleoptera, Staphylinidae). 231. Beitrag zur Kenntnis der Steninen. *Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen*, 44(3/4): 109–112.
- Puthz V. 2001. Beiträge zur Kenntnis der Steninen CCLXX. Neue und alte paläarktische Arten der Gattung *Stenus* Latreille (Staphylinidae, Coleoptera). *Philippia*. 10(1): 53–64.
- Puthz V. 2008. *Stenus* LATREILLE und die seggenreiche Himmelstochter (Coleoptera, Staphylinidae). *Linzer biologische Beiträge*. 40(1): 137–230.
- Puthz V., 2010. Neuer Beitrag über paläarktische Steninen (Coleoptera, Staphylinidae). 314. Beitrag zur Kenntnis der Steninen. *Zeitschrift der Arbeitsgemeinschaft Österreichischer Entomologen*, 62: 59–74.
- Puthz V. 2012. Unterfamilie Steninae. In: Freude–Harde–Lohse–Klausnitzer – Die Käfer Mitteleuropas. Band 4. Staphylinidae I. Zweite neubearbeitete Auflage. Heidelberg, Spektrum Akademischer Verlag. Pp. 286–312.
- Puthz V. 2013a. Revision der *Stenus*-Arten Chinas (3) (Coleoptera, Staphylinidae). *Linzer Biologische Beiträge*, 45(1): 851–883.
- Puthz V. 2013b. Übersicht über die orientalischen Arten der Gattung *Stenus* LATREILLE 1797 (Coleoptera, Staphylinidae) 330. Beitrag zur Kenntnis der Steninen. *Linzer biologische Beiträge*, 45(2): 1279–1470.
- Ryabukhin A.S. 1999. A catalogue of rove beetles (Coleoptera: Staphylinidae exclusive of Aleocharinae) of the northeast of Asia. Pensoft, Sofia. Pp. 140.
- Ryvkin A.B. 1990. The road-beetle [sic!] subfamily Steninae (Coleoptera, Staphylinidae) in the Caucasus and adjacent areas. In: Striganova B.R. (ed.) *Fauna of terrestrial invertebrates of the Caucasus*. Nauka, Moscow. Pp. 137–234. [In Russian].
- Ryvkin A.B. 1995. Two new *Stenus* species from the Sayan Mountains in southern Siberia (Insecta: Coleoptera: Staphylinidae: Steninae). *Reichenbachia. Zeitschrift für taxonomische Entomologie des Staatlichen Museums für Tierkunde, Dresden*, 31(9): 41–44.
- Ryvkin A.B. 2000. New species and records of *Stenus* (*Nestus*) of the *cautus*-group (Insecta: Coleoptera: Staphylinidae: Steninae). *Reichenbachia. Zeitschrift für taxonomische Entomologie des Staatlichen Museums für Tierkunde. Dresden*, 33(43): 347–353.
- Rye E.C. 1864. Descriptions of the British species of *Stenus*. [3]. *The Entomologist's*

- Monthly Magazine*, 1: 59-65.
- Semenov V.B. 2004. Materials on the Fauna of the Road-Beetles [sic!] Subfamily Steninae (Coleoptera, Staphylinidae) of the Moscow Area. *Bulletin de la Société des Naturalistes de Moscou*, 109(4): 8–16. [In Russian].
- Shavrin A.V., 2007. The rove beetles (Coleoptera, Staphylinidae) of Pribaikalsky National Park. *Trudy Pribaikal'skogo natsional'nogo parka*, 2: 132–148. [In Russian].
- Shavrin A.V., Puthz V., 2007. Contribution to the Knowledge of the Fauna of *Stenus* LATREILLE, 1797 (Coleoptera, Staphylinidae, Steninae) of the Baikal Region. *Entomologische Blätter. Keltern*, 102(1–3): 107–136.
- Smetana A. 2004. Staphylinidae, subfamilies Omaliinae–Dasycterinae, Phloeocharinae–Apateticinae, Piestinae–Staphylininae. In: Löbl I. & Smetana A. (eds) *Catalogue of Palaearctic Coleoptera. Vol. 2. Hydrophiloidea – Histeroidea – Staphylinidae*. Apollo Books, Stenstrup. Pp. 237–272, 329–495, 505–698.
- Stephens J.F. 1833. *Illustrations of British Entomology; or a synopsis of indigenous insects: containing their generic and specific distinctions; with an account of their metamorphoses, times of appearance, localities, food, and economy, as far as practicable. Mandibulata. Vol. V.* Baldwin and Cradock, London. Pp. 241–304.
- Stephens J.F. 1839. *A manual of British Coleoptera, or beetles; containing a brief description of all the species of beetles hitherto ascertained to inhabit Great Britain and Ireland; together with a notice of their chief localities, times and places of appearances, etc.* Longman, Orme Brown, Green, and Longmans, London. xii+443 pp.
- Telnov D., 2004. Check-List of Latvian Beetles (Insecta: Coleoptera). Second edition. Entomological Society of Latvia, Riga. *Compendium of Latvian Coleoptera*. 1: 1–113.

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