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CHECK-LIST OF THE GROUND BEETLES (COLEOPTERA, CARABIDAE) OF KALININGRAD REGION

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A check-list of carabid beetles (*Coleoptera, Carabidae*) of Kaliningrad region (south-eastern Baltic Sea coast) with distribution of the species according to the division of the regions area on landscapes is provided. At present the list includes 283 species. 202 ground beetles species are found in our region in last 30 years (13 species new for the fauna), 81 species of the family are cited by the latest German work (Bercio, Folwaczny 1979) only. Data on 3 new for the Kaliningrad fauna *Carabidae* species (*Agonum duftschmidi* Schmidt, *Tachyta nana* (Gyll.) and *Badister meridionalis* Puel.) is presented for the first time. *Nebria rufescens* (Strom) and *Agonum munsteri* (Hell.) reported from Kaliningrad region (Alekseev 2002) are removed from check-list because erroneous identification. The occurrence of 5 species (*Calosoma investigator* (Ill.), *Callisthenes reticulatum* (F.), *Amara tricuspidata* Dej., *Dicheirotrichus gustavii* Cr., *Brachinus crepitans* (L)) in Kaliningrad region at present time is considered doubtful. The literature data for the fauna and distribution of ground beetles in Baltic States, Nord-Eastern Poland and West Byelorussia are analyzed.

Key words: Car*abidae*, check-list, Kaliningrad region, fauna, distribution.

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INTRODUCTION

The check-list of the family *Carabidae* of the North-East Poland includes 285 species (Aleksandrowicz, Gawronski, Browarski 2003), 239 species of this family are known from Bialowieża Primeval Forest (Aleksandrovich, Wojas 2001), 326 species - from whole Latvia (Barševskis 2003, Telnov 2004) and no less than 309 species of ground beetles lives in whole Belarus (Aleksandrowicz et al. 1996).

The last checklist of *Carabidae* for our region was published 27 years ago (Bercio, Folwaczny 1979) and summarized the before 1945 year collected material only. 275 species of ground beetles were known in the area of the contemporary Kaliningrad region (north part of East Prussia) according to this catalogue. Recent faunistical and ecological researches about ground beetles at the territory of Kaliningrad region are not numerous. Three shot reports with data about total number of ground beetles species only (135 species – Sakhnov, Dryomina, Alekseev 1998; 75 species – Dryomina 2001; 161 species – Dryomina 2002) were published. The specific information on the fauna, distribution and biology of *Carabidae* in Kaliningrad region

are completely absent in this theses. The cited data for present catalogue are scattered among six publications (Sharova, Grüntal 1973; Bercio, Folwaczny 1979; Främbs, Dormann, Mossakowski 2002; Alekseev 2002; Alekseev 2003; Alekseev 2005).

MATERIAL AND METHODS

Our material was collected in whole territory of Kaliningrad region, including the Curonian Spit in 1989-2008. The most part of the ground beetles was gathered in the Sambian peninsula (western part of Kaliningrad region) and in Chernyakhovsk district (central part of the region) in 1997-2008. The material was collected using standard entomological methods: stone turning, ground pitfall trapping, hand-searching, sampling in winter sheltering under bark of old logs and tree stumps as well as in moos on trees and collecting in places of occasional accumulation on the Baltic ńoast. The *Demetrias* and the smaller *Dromius* were swept from rough herbage. The beetles were identified with the help of the standard (Kryzhanovsky 1965; Freude, Harde, Lohse 1976) and the last (Freude, Harde, Lohse, Klausnitzer 2004) identification guides. The list of carabid species was prepared with use of the nomenclature by Silfverberg (2004) and by German authors (Freude, Harde, Lohse, Klausnitzer 2004). The material is deposited in the author's collection.

RESULTS

During the investigations the list of ground beetle species of Kaliningrad region was completed. The annotation to each species includes data divided into 3 sections:

a) In rubric "**Type of areal**" – by zoogeographical group. The system of zoogeographical subdivision to 5 groups is agreed with Aleksandrowicz (1991). The following abbreviations of the chorotypes (zoogeographical elements) are used: H – Holarctic, TP – Transpalearctic, WCP - West-Central Palearctic, WP - West Palearctic (European, Euro-Caucasian, Central European and other), AA - Amphiatlantic.

b) In section "**Distribution in Baltic region**" – by the occurence of the species in Baltic States. The information about distribution of the carabid beetles in northern Europe and Baltic region (cited by Silfverberg, 2004), West Byelorussia (Aleksandrowicz et al. 1996), West and Central parts of Lithuania (Barševskis 2001; Monsevičus, Tamutis, unpubl. - regions Nu 1, 2, 4; Ferenca et al. 2002; Ferenca 2003; Tamutis 2003; Ferenca et al. 2006; Ferenca et al., 2007) and Nord-Eastern Poland (Aleksandrowicz, Gawronski, Browarski 2003; Leśniak 2005) is given in the checklist. The countries or regions are indicated with the letters: F - Finland, K - Russian part of Fennoscandia, S - Sweden, N - Norway, D - Denmark, E - Estonia, A - Latvia and I - Lithuania (for the cited data from "Enumeratio nova Coleopterorum..."), Lit. – West and central parts of Lithuania, N-E Pol. - Nord-Eastern Poland.

c) In rubric "**Kaliningrad region**" – by locality (from literature and own collections) in the Kaliningrad region. Localities and occurense in the north part of East Prussia are given according the latest German work (Bercio, Folwaczny 1979). All German names of settlements of East Prussia are interchanged by contemporary Russian names (for example all notes "Königsberg" are cited as "Kaliningrad" etc.). Recent information is in the list after the prewar distribution and is separated with the semicolon ";". For the purposes of compactness the main source of literature data (Bercio, Folwaczny 1979) is referred to as (B., F.).

The distribution of the beetles is listed respectively to the division of our region area on landscapes (Geographical atlas of Kaliningrad Region, 2002). The abbreviations of the landscapes in the list symbolize: **1**. - the Curonian (Courish) Spit; **2**. - lowland of the Neman river; **3**. - seaside hilly-moraine ridges of the Sambian peninsula block; **4**. - Polessk lake-glacial lowland;

5. - hilly-moraine ridges of Instruch river; **6**. - lake-glacial plain of Sheshupe-Instruch rivers; **7**. - the Baltic Spit and the western shores of Sambian peninsula; **8**. - coastal inclined sandy plains near of the Kaliningrad gulf; **9**. - lake-glacial lowland of Lava-Pregolya rivers; **10**. - lake-glacial plain of Pissa-Tumannaya rivers; **11**. - Varmiya moraine hills; **12**. - Vishtynets moraine hills. The exposition of the landscapes is shown in Figure 1. More precise data about finding places are given for the remarkable (rare and new for the Kaliningrad fauna) species.

The list of *Carabidae* includes, along with taxa mentioned earlier, species that are know to inhabit the region from the data contained in literature (Bercio, Folwaczny, 1979), and species that inhabit the adjacent territories (West and Central parts of Lithuania, Nord-Eastern Poland). The ordinal numbers of the beetle species that were not found after World War II are in oval brackets. Species indicated without the round brackets were registered during the last 30 years. The occurrence (Bercio, Folwaczny, 1979) of 5 species in Kaliningrad region at present time is considered doubtful (may be extinct), the habitation of this species in Kaliningrad region should be confirmed and the species are marked with "?" in the list. These are: *Calosoma investigator* (Ill.), *Callisthenes reticulatum* (F.), *Amara tricuspidata* Dej., *Dicheirotrichus gustavii* Cr. and *Brachinus crepitans* (L). It is possibly, that recent occurrence in the region migth be called in question else for seven species: *Calosoma sycophanta* (L.), *C. auropunctatum* (Herbst), *Amara strenua* Zimm., *Amara concinna* Zimm., *Dromius angustus* Brull., *Demetrias atricapillus* (L.) and *Lebia cyanocephala* (L.) too, but this species were remained in the basic check-list. All these species have not been taken or recorded in our region during 100-200 years and are now possibly extinct. The 39 species, distributed in adjancent territories, but till present not found in Kaliningrad region are also marked with "?" and added in the list as "possible fauna". New species for the Kaliningrad region fauna (absent in the earlier published reports and presented in this list for the first time) are marked with two asterisks (**), the species absent in last German catalogue (Bercio, Folwaczny, 1979) and noted in last 30 years from the regions territory are marked with an asterisk (*).

Totally 283 species of the inhabited Kaliningrad region *Carabidae* and more 44 carabid species of "possible fauna" are listed below. The number

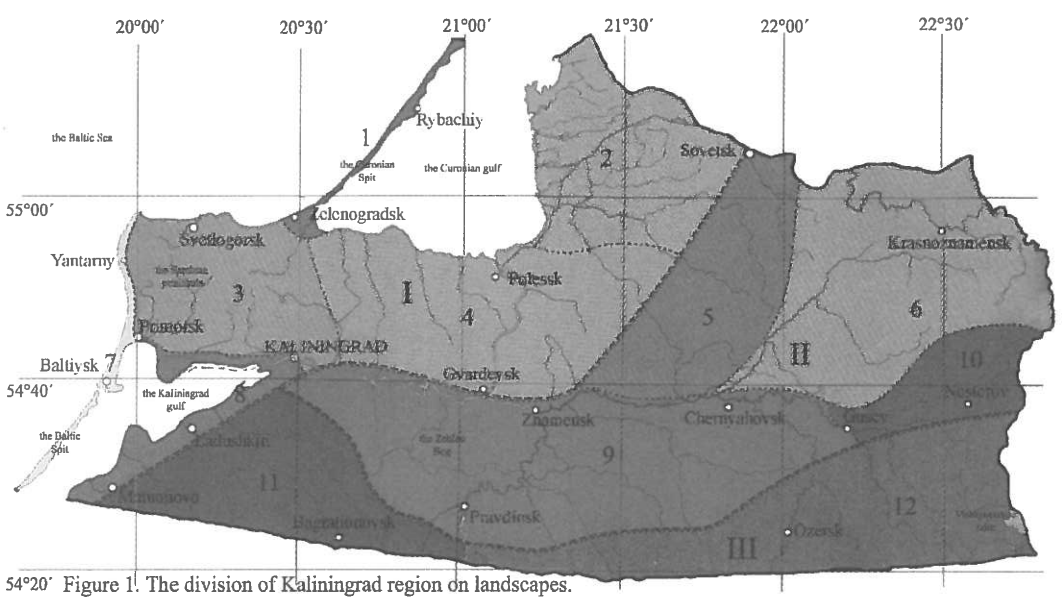

Figure 1. The division of Kaliningrad region on landscapes.

of the registered species per subfamily is as follows: Omophroninae – 1, Carabinae - 26, Cicindelinae - 6, Loricerinae – 1, Elaphrinae - 5, Scaritinae - 11, Trechinae - 51, Harpalinae - 182, Brachininae – 0. The general scheme of coleopterogeographic division of the Baltic States could be added with the use of the presented check-list and different comparative analysises of the peculiarities of distribution and carabid species' ranges in the whole Baltic region can be made. This list can be used also for the nature protections programms in Kaliningrad region.

Family *Carabidae* Latreille, 1802

Subfamily Omophroninae Bonelli, 1810

Genus *Omophron* Latreille, 1802

1. ***O. limbatum* (Fabricius, 1777)**
Type of areal: WCP.
Distribution in Baltic region: —S-DEAI; WB; Lit.; N-E Pol.
Kaliningrad region: everywhere, but not often (B., F.); **1** (Alekseev 2005), **3**, **9**.

Subfamily Carabinae Latreille, 1802

Tribus Nebriini Laporte de Castelnau, 1834

Genus *Leistus* Frölich, 1799

2. ***L.* (*Pogonophorus*) *rufomarginatus* (Duftschmid, 1812)**
Type of areal: WP.
Distribution in Baltic region: —S-D-AI; Lit. (Barševskis 2001, Ferenca et al. 2002).
Kaliningrad region: **3**, **7**: Svetlogorsk, Mechnikov (B., F.); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); **3**: N suburb of Kaliningrad (30.09.2007, 1 spec.; 24.07-3.08.2008, 3 spec.); environs of the settlement Otradnoe near Svetlogorsk, mixed forest (6.07.2005, 3 spec.; 1.07.2008, 1 spec.; 8.08.2008, 4 spec.). The species was registered on Curonian Spit near Juodkrantė (Barševskis 2001) and the occurrence of the species at the Russian part of the peninsula is very possible.

3. ***L.* (s.str.) *terminatus* (Panzer, 1793) [=*rufescens* (Fabricius, 1775) nec (Strom, 1768)]**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann and Mossakowski 2002); **3**, **6**, **8**.

4. ***L.* (s.str.) *ferrugineus* (Linnaeus, 1758)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: **3**: Sambian peninsula, Svetlogorsk, **7**: Yantarny, **8**: Ladushkin, Mamonovo, Kaliningrad, **9**: Chernyakhovsk (B., F.); **1**, **3**, **6**.

5. ***L.* (s.str.) *piceus* Frolich, 1799**
Type of areal: WP.
Distribution in Baltic region: ——EAI; WB; Lit.; N-E Pol.
Kaliningrad region: **3**: Svetlogorsk, Kaliningrad (B., F.); **6**: 6 km to the NO of Chernyakhovsk (26.04.1996).

Genus *Nebria* Latreille, 1802

6. ***N.* (*Paranebria*) *livida* (Linnaeus, 1758)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: **3**: Kaliningrad, Primorsk, Svetlogorsk, **1**: Lesnoe (B., F.); **1** (Alekseev 2003, 2005), **3**, **9**.

(?). ***N.* (*Boreonebria*) *rufescens* (Strom, 1768) [=*gyllenhali* (Schonherr, 1806)]**
Type of areal: H.
Distribution in Baltic region: FKSN-EAI; Lit.
Kaliningrad region: this species was noted as "Zel." (Alekseev 2002), but it must be removed from check-list of Kaliningrad *Carabidae* because erorneus identification. The localities in Kaliningrad region are possible but unknown at present.

7. ***N.* (s.str.) *brevicollis* (Fabricius, 1792)**
Type of areal: WP.
Distribution in Baltic region: F-SNDEAI; WB; Lit.

Kaliningrad region: everywhere not seldom (B., F.); omnipresent: **1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.**

Tribus Notiophilini Motschulsky, 1850
Genus *Notiophilus* Dumeril, 1806

8. ***N. aestuans* Dejean, 1826 [=*pusillus* Waterhouse, 1833 nec (Schreber, 1759)]**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; Lit.
Kaliningrad region: 7: Yantarny, Primorsk, Baltic Spit, **3**: Kaliningrad, **9**: Pravdinsk, Zehlau bog (B., F.); **7**: Yantarny (5.05.2008, 1 spec., 6.07.2008, 1 spec.). The species was registered on Curonian Spit near Juodkrantė (Barševskis 2001) and the occurrence of the species at the Russian part of the peninsula is very possible.

9. ***N. aquaticus* (Linnaeus, 1758)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere not seldom (B., F.); **1, 3, 8, 9.**

10. ***N. palustris* (Duftschmid, 1812)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); omnipresent in wetlands: **1, 3, 4, 6, 8, 9.**

(?). ***N. germinyi* Fauvel in Grenier, 1863 [=*hypocrita* auct. nec Putzeys, 1866]**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI
Kaliningrad region: in East Prussia was found only on the contemporaneus Polish territory (B., F.); some specimens of this species were collected by author in pine forest in Lithuanian part of Curonian Spit near the settlement of Nida (27.07.2007 – 1 exp., 29.07.2007 – 2 exp.). It is the nearest locality to the Kaliningrad region. The findings in Kaliningrad region are very possibly, but formally absent.

(?). ***N. rufipes* Curtis, 1829**
Type of areal: WP.
Distribution in Baltic region: —S-D—; N-E Pol. (Wigierski NP).
Kaliningrad region: the species was never found in the past and during research time at our territory, but the findings should be possible. Because the species distribution is closely connected with the warm beech forests (Freude, Harde, Lohse, Klausnitzer 2004), probably the northern margin of the species in southeastern Baltic region runs over the territoty of the south-western part of Kaliningrad region.

11. ***N. biguttatus* (Fabricius, 1779)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann and Mossakowski 2002); **3, 6, 8, 9.**

Tribus Carabini Latreille, 1802
Genus *Calosoma* Weber, 1801

(12). ***C.* (s.str.) *sycophanta* (Linnaeus, 1758)**
Type of areal: WP.
Distribution in Baltic region: —S-DE-I; WB; Lit. (1977 year) (Pileckis, Monsevičius 1982).
Kaliningrad region: 3: Svetlogorsk, Sambian peninsula, **9**: Znamensk (XIX century), **7**: Yantarny (1938 – 1 exp., 1942 – 1 exp.) (B., F.). This species has not been recorded since 1942 and is now possibly extinct in the region. The species is probably extinct in Lithuania (Tamutis 2005) and in the whole Baltic region.

13. ***C.* (s.str.) *inquisitor* (Linnaeus, 1758)**
Type of areal: WP.
Distribution in Baltic region: F-SNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 3: Svetlogorsk, Kaliningrad, **1**: Curonian Spit, **7**: Yantarny, Primorsk, **8**: Mamonovo, **9**: Chernyakhovsk, **12** (B., F.); **3**: Ryabnovka (22.05.2002, 18-19.06.2002), Svetlogorsk (2.06.2003, 15 spec.), Kaliningrad (10.06.2003, 1 exp.). The species is characterized by the sharply fluctuation of number in our region.

(14). ***C.* (*Campalita*) *auropunctatum* (Herbst, 1784)**
Type of areal: WP.
Distribution in Baltic region: —SNDEAI; WB; Lit.
Kaliningrad region: **3**: Sambian peninsula, **7**: Mechnikov (XIX century), Yantarny (origin of XX century) (B., F.); This species is now possibly extinct in Kaliningrad region.

(?) ***C. investigator* (Illiger, 1798)**
Type of areal: TP.
Distribution in Baltic region: —S——
Kaliningrad region: Kaliningrad (XVIII century), Sovetsk (XIX century) (B., F.); the findings of this species in Kaliningrad region should be doubtful, the species is extinct in the region.

Genus *Callisthenes* Fischer von Waldheim, 1820

(?). ***C. reticulatus* (Fabricius, 1787)**
Type of areal: WCP.
Distribution in Baltic region: —S-D—; WB.
Kaliningrad region: **7**: near the settlement of Russkoe (district Primorsk, medium of XIX century) (B., F.); new findings of the species on our territory are very doubtful, the species is extinct in the region.

Genus *Carabus* Linnaeus, 1758

15. ***C.* (*Eucarabus*) *arvensis* ssp. *arvensis* Herbst, 1784**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: very often in south of the region (B., F.); **9**: Zehlau bog (Främbs, Dormann and Mossakowski 2002); **3, 6, 8, 9, 11.**

16. ***C.* (s.str.) *granulatus* ssp. *granulatus* Linnaeus, 1758**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere the most common species except Baltic Spit (B., F.); **9**: Zehlau bog (Främbs, Dormann and Mossakowski 2002); omnipresent and numerous: **1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.**

(17). ***C.* (s.str.) *menetriesi* Hummel, 1827**
Type of areal: WP.
Distribution in Baltic region: -K—EAI; WB.
Kaliningrad region: the species is known from Masurian Lake Region in Northern Poland, where it is distributed very local and its populations are isolated; in East Prussia some specimens (to all appearance imported with wood from Russian Empire) were recorded only in spring 1886 from Königsberg (B., F.); The findings in Kaliningrad region should be possible in Pollesky and Slavsky districts.

(18). ***C.* (*Limnocarabus*) *clathratus* ssp. *clathratus* Linnaeus, 1761**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit. (the Curonian Spit).
Kaliningrad region: everywhere, but not often (B., F.); in research time was not found, but the findings in Kaliningrad region should be very possible.

19. ***C.* (*Autocarabus*) *cancellatus* ssp. *cancellatus* Illiger, 1798**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **3, 6, 9, 11, 12.**

20. ***C.* (*Archicarabus*) *nemoralis* ssp. *nemoralis* O.F. Müller, 1764**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere not seldom (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); omnipresent: **2, 3, 4, 5, 6, 8, 9, 10, 11, 12.**

21. ***C.* (*Oreocarabus*) *hortensis* ssp. *hortensis* Linnaeus, 1758**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.

Kaliningrad region: everywhere not seldom (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); omnipresent: **2, 3, 4, 5, 6, 8, 9, 10, 11, 12.**

22. ***C.* (*Oreocarabus*) *glabratus* ssp. *glabratus* Paykull, 1790**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere not seldom (B., F.); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); **3, 6.**

23. ***C.* (*Hemicarabus*) *nitens* Linnaeus, 1758**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere not seldom (B., F.); **9**: the species was noted on Zehlau bog in 1989 only (N.I. Sakhnov). The further findings in Kaliningrad region should be very possible.

24. ***C.* (*Tomocarabus*) *convexus* ssp. *convexus* Fabricius, 1775**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit. (Ferenca et al. 2002)
Kaliningrad region: everywhere not seldom (B., F.); **1, 3, 8, 11.**

25. ***C.* (*Megodontus*) *violaceus* ssp. *violaceus* Linnaeus, 1758**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere not seldom (B., F.); **3**: the stable, but not numerous population of this species have been observed (1998-2008) in the mixed forests in the central and northern parts of the Sambian peninsula.

26. ***C.* (*Procrustes*) *coriaceus* ssp. *coriaceus* Linnaeus, 1758**
Type of areal: WP.
Distribution in Baltic region: —SNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); **3, 7, 8**: the stable, but not numerous population of this species have been observed (1989-2008) in the deciduous and mixed forests of the Sambian peninsula and of the shores of Kaliningrad gulf. The highes population density is noted for coastal parks of Yantarny (08.1986) and Otradnoe (08.2008), **11**: myxed forest near Strelnya in the Bagrationovsk district (30.03.1999, 1 spec.).

(?) ***C.* (*Chaetocarabus*) *intricatus* Linnaeus, 1761**
Type of areal: WP.
Distribution in Baltic region: —S-DEA-; WB; Lit.
Kaliningrad region: this species was found in Poland in thirty kilometers from border with Kaliningrad region (B., F.). It is very rare in Lithuania, where are known only two localities, one of them is situated in the mixed forest in the right side of valley of river Nemunas in Central Lithuania (Lietuvos Raudonoji Knyga, 2007). The occurence in Kaliningrad region is probably, but till now any localities are unknown.

Tribus Cychrini Laporte de Castelnau, 1834
Genus *Cychrus* Fabricius, 1794

27. ***C. caraboides* (Linnaeus, 1758)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere not seldom (B., F.); **9**: Zehlau bog (Främbs, Dormann and Mossakowski, 2002); omnipresent in the deciduous and mixed forests: **2, 3, 4, 5, 6, 8, 9, 10, 11, 12.**

Subfamily Cicindelinae Latreille, 1802
Genus *Cicindela* Linnaeus, 1758

(28). ***C. sylvatica* Linnaeus, 1758**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); the stable population of this species was

observed by author in pine forest in Lithuanian part of Curonian Spit near the settlement of Smiltinė (07-08.2002). It is the nearest locality to the Kaliningrad region (Alekseev, 2003). The findings in Kaliningrad region are very possibly, but it was not made in research time.

29. ***C. hybrida*** **Linnaeus, 1758**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); omnipresent: **1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12.**

30. ***C. maritima*** **Latreille & Dejean, 1822**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; Lit.
Kaliningrad region: often (B., F.); **1** - this species was caught in the region repeatedly at the coast of the Baltic Sea on the Curonian Spit only (Alekseev, 2003).

31. ***C. campestris*** **Linnaeus, 1758**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: everywhere not seldom (B., F.); **3, 6, 8, 9, 11, 12.**

Genus *Cylindera* Westwood, 1831

(32). ***C.*** **(s.str.)** ***germanica*** **(Linnaeus, 1758)**
Type of areal: WCP.
Distribution in Baltic region: ——EAI; Lit.
Kaliningrad region: 7: Yantarny, Baltiysk, **3**: Kaliningrad, **9**: Komsomolsk, Chernyakhovsk, Znamensk (B., F.); in research time was not found.

(33). ***C.*** **(*Eugrapha*)** ***arenaria*** **(Fuessly, 1775) ssp.** ***viennensis*** **(Schrank, 1781)**
Type of areal: WP.
Distribution in Baltic region: ———A-; Lit.
Kaliningrad region: 1: Zelenogradsk, **3**: Svetlogorsk, **7**: Baltiysk (B., F.); the species was not found in research time.

Subfamily Loricerinae Bonelli, 1810
Genus *Loricera* Latreille, 1802

34. ***L. pilicornis*** **(Fabricius, 1775)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); omnipresent in the forests and parks: **1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.**

Subfamily Elaphrinae Latreille, 1802
Genus *Blethisa* Bonelli, 1810

35. ***B. multipunctata*** **(Linnaeus, 1758)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit. (the Curonian Spit).
Kaliningrad region: everywhere not often (B., F.); **1** (Alekseev, 2005): near the settlement of Rybatchiy (5.05.1989, 1 spec.), **3**: near the settlement of Sosnovka in Zelenogradsk district (25.05.2003, 1 spec.).

Genus *Elaphrus* Fabricius, 1775

(36). ***E.*** **(s.str.)** ***uliginosus*** **Fabricius, 1792**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 9: Znamensk, **3, 7, 8**: seasides (B., F.); the species was not found in research time.

37. ***E.*** **(s.str.)** ***cupreus*** **Duftschmid, 1812**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1** (Alekseev, 2005), **2, 3, 6, 8, 9, 12.**

38. ***E.*** **(*Trichelaphrus*)** ***riparius*** **(Linnaeus, 1758)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere common (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); omnipresent and numerous on the shores of different waterbodies: **1** (Alekseev, 2005), **2, 3, 4, 5, 6, 8, 9, 10, 11, 12.**

(39). ***E.* (*Elaphroterus*) *aureus* P. W. J. Müller, 1821**
Type of areal: WP.
Distribution in Baltic region: ——EAI; Lit. (Ferenca et al. 2002); N-E Pol.
Kaliningrad region: 8: Mamonovo (1908), **11**: Kornevo (B., F.); it was not found in research time.

Subfamily Scaritinae Bonelli, 1810
Tribus Clivinini Rafinesque, 1815
Genus *Clivina* Latreille, 1802

40. ***C. fossor* (Linnaeus, 1758) [=*arenaria* Fabricius, 1792]**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); omnipresent on meadows and different shores: **1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.**

41. ***C. collaris* (Herbst, 1784) [=*contracta* Geoffroy, 1785]**
Type of areal: WCP.
Distribution in Baltic region: —S-DEAI; WB; Lit.
Kaliningrad region: more seldom, but everywhere (B., F.); **8** (not rare, but only near the Kaliningrad gulf).

Genus *Dyschirius* Bonelli, 1810

(?) ***D.* (s.str.) *digitatus* (Dejean, 1825)**
Type of areal: WP.
Distribution in Baltic region: ———AI; WB; Lit.
Kaliningrad region: only south (Polish) part of East Prussia (B., F.); the species was not found in research time, but the occurrence is very possible.

42. ***D.* (s.str.) *thoracicus* (Rossi, 1790) [=*arenosus* Stephens, 1827]**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 9: Pravdinsk, Chernyakhovsk (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); omnipresent and numerous on the shores of rivers, lakes and gulfs: **1, 3, 4, 6, 9.**

43. ***D.* (s.str.) *obscurus* (Gyllenhal, 1827)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 9: Chernyakhovsk (B., F.); **1**: Morskoe - on sandy shore of Curonian gulf (11.05.2008, 1 spec.). This species was found by author also in Lithuanian part of Curonian Spit near the settlement of Nida (27.07.2007, 2 spec.), **7**: Yantarny - Baltic seaside (6.07.2008, 1 spec.).

(44). ***D.* (s.str.) *angustatus* (Ahrens, 1830)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; N-E Pol.
Kaliningrad region: 3: Svetlogorsk, **7**: Primorsk (B., F.); the species was not found in research time, the findings are very possible.

(45). ***D.* (*Dyschiriodes*) *nitidus* (Dejean, 1825)**
Type of areal: WCP.
Distribution in Baltic region: FK—EAI; WB; Lit.; N-E Pol.
Kaliningrad region: 3: Svetlogorsk, Kaliningrad, Sambian peninsula (B., F.); the species was not found in research time, the findings are very possible.

(?). ***D. neresheimeri* Wagner, 1915**
Type of areal: WP.
Distribution in Baltic region: —S—EAI; WB; Lit.; N-E Pol.
Kaliningrad region: the species was not found in the past and during research time, but the findings should be very possible.

(46). ***D. politus* (Dejean, 1825)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 3: Svetlogorsk, Kaliningrad, **7**: Baltiysk, Primorsk, Baltic Spit (B., F.); the species was not found in research time, the findings are very possible.

(47). ***D. impunctipennis*** **Dawson, 1854**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; Lit.
Kaliningrad region: 1: Curonian Spit (B., F.); the species was not found in research time.
48. ***D. aeneus*** **(Dejean, 1825)**
Type of areal: TP.
Distribution in Baltic region: F-SNDEAI; WB; Lit.
Kaliningrad region: 3: Svetlogorsk (B., F.); **1**: Rybatchiy (Sharova, Grüntal, 1973); **1, 2, 5.**
49. ***D. tristis*** **Stephens, 1827 [=*luedersi* Wagner, 1915]**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 3 or **8**: Kaliningrad, **9**: Chernyakhovsk (B., F.); **3**: Kaliningrad (24.05.1997, 2 spec.).
(?). ***D. intermedius*** **Putzeys, 1846**
Type of areal: WP.
Distribution in Baltic region: -KS-D-AI; WB; Juodkrante (B., F.); Lit.
Kaliningrad region: the species was not recorded from northern East Prussia (except the Curonian Spit) and during research time, but the findings should be very possible.
(?). ***D. laeviusculus*** **Putzeys, 1846**
Type of areal: WP.
Distribution in Baltic region: —S-DEAI; Lit.
Kaliningrad region: the species was not found in the past and during research time, but the findings should be very possible.
(?) ***D. rufipes*** **(Dejean, 1825)**
Type of areal: WP.
Distribution in Baltic region: Finnland, Polen (Freude, Harde, Lohse, Klausnitzer 2004).
Kaliningrad region: the species was not found in the past and during research time, but the findings should be possible.
50. ***D. globosus*** **(Herbst, 1784)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); **1, 3, 6, 7, 8, 9.**

Subfamily Trechinae Bonelli, 1810
[=Psydrinae LeConte, 1853]
Tribus Broscini Hope, 1838
Genus *Broscus* Panzer, 1813

51. ***B. cephalotes*** **(Linnaeus, 1758)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere often (B., F.); **3**: in collections of KSTU is one specimen from Kaliningrad (Lesnoe lake, 11.07.1978); **12**: verbal communication (Sakhnov N.I.) about occurense of this species in the Ozersk district. This species is typical in Latvia (Bukejs, 2007) and Lithuania for agrocenosis with sandy soil, but in recent Kaliningrad region it occurs quite rare. The further findings in suitable habitats in the western and southern parts of Kaliningrad region should be very possible.

Genus *Miscodera* Eschscholtz, 1830

(52). ***M. arctica*** **(Paykull, 1798)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 3: Svetlogorsk, **8**: Ladushkin, Kaliningrad (B., F.); the species was not found during research time, but the findings should be possible.

Tribus Patrobini Kirby, 1837
Genus *Patrobus* Dejean, 1821

(?). ***P. septentrionis*** **Dejean, 1828 [=*australis* J.Sahlberg, 1875]**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI
Kaliningrad region: the species was not found in the past and during research time, but the findings should be possible.

(?). ***P. assimilis*** **Chaudoir, 1844**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.

Kaliningrad region: the species was not found in the past and during research time, but the findings should be possible.

53. ***P. atrorufus* (Strom, 1768) [=*exavatus* Paykull, 1790]**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere, but not often (B., F.); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); **3, 6, 8, 9**.

Tribus Trechini Bonelli, 1810
Genus *Epaphius* Stephens, 1827

54. ***E. secalis* (Paykull, 1790)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); **9**: Chernyakhovsk, a barren in the city (5.09.1994, 1 spec., det. Kataev), **3**: Kaliningrad (pittfall trap in the moisten broad-leaf forest, 24.07-3.08.2008, 1 spec.).

55. ***E. rivularis* (Gyllenhal, 1810)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 1: Zelenogradsk, **3**: Svetlogorsk, **7**: Yantarny (B., F.); **3**: Svetlogorsk (the suburb, under stones, 8.08.2008, 8 spec.); Kaliningrad (the suburb, under stone, 10.08.2008, 1 spec.).

Genus *Trechus* Clairville, 1806

56. ***T. rubens* (Fabricius, 1792)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 1: Zelenogradsk, **3**: Svetlogorsk, Kaliningrad (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973).
57. ***T. quadristriatus* (Schranck, 1781)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere common (B., F.); **1, 3, 6, 9**.

(?) ***T. austriacus* Dejean, 1831**
Type of areal: WP.
Distribution in Baltic region: ———AI
Kaliningrad region: this synanthropic species lived in old cellars or outbuildings (Aleksandrowicz 1991) and was never registered in Kaliningrad region, but the fndings are possible.

Genus *Trechoblemus* Ganglbauer, 1891

(58). ***T. micros* (Herbst, 1784)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 3: Sambian peninsula, Kaliningrad (B., F.); the species not found in research time, but the findings should be possible.

Genus *Blemus* Dejean, 1821 [=*Lasiotrechus* Ganglbauer, 1892]

59. ***B. discus* (Fabricius, 1792)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 3: Svetlogorsk, **8**: Mamonovo, Kaliningrad, **9**: Chernyakhovsk (B., F.); **9**: 5 km to NO of Chernyakhovsk (25.08.1989, 1 spec.), near the settlement of Gremyachye (23.09.1994, 1 spec.).

Tribus Bembidiini Stephens, 1827
Genus *Asaphidion* Des Gozis, 1886

(60). ***A. caraboides* (Schrank, 1781)**
Type of areal: WP.
Distribution in Baltic region: ———I; Lit.
Kaliningrad region: 7: Baltic Spit (B., F.); the species was not found in research time, but the findings should be possible.
61. ***A. pallipes* (Duftschmid, 1812)**
Type of areal: WCP.

Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 3: Svetlogorsk, Kaliningrad, **7**: Yantarny, **9**: Chernyakhovsk (B., F.); **6**: near the settlement of Dolzhanskoe, Krasnoznamensk district (29.06.1997, 1 spec.; 2.07.2002, 2 spec.), **3**: near the settlement of Chkalovsk, Guryevsk district (18.06.2007, 1 spec.).

62. ***A. flavipes*** **(Linnaeus, 1761)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1** (Alekseev, 2005), **2**, **3**, **9**.

Genus *Bembidion* Latreille, 1802 [=*Bembidium* Gyllenhal,1810]

63. ***B.*** **(*Odontium*) *striatum*** **(Fabricius, 1792)**
Type of areal: WCP.
Distribution in Baltic region: FK—DEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 3: Sambian peninsula, Svetlogorsk (B., F.); **5**.

64. ***B.*** **(*Bracteon*) *velox*** **(Linnaeus, 1761)**
Type of areal: WCP.
Distribution in Baltic region: FKSN-EAI; WB; Lit.
Kaliningrad region: 1: Rybachiy, **3**: Kaliningrad (B., F.); **1**: 23 km of the Curonian Spit (19.06.2007, 2 exp.)

65. ***B.*** **(*Bracteon*) *argenteolum*** **Ahrens, 1812**
Type of areal: WCP.
Distribution in Baltic region: -KSN-EAI; WB; Lit.
Kaliningrad region: 2, **5**: Sovetsk, **1**: Rybachiy, **3**: Svetlogorsk, **7**: Primorsk, Baltiysk (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1** (Alekseev, 2005), **9**.

66. ***B.*** **(*Bracteon*) *litorale*** **(Olivier, 1791)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 3: Kaliningrad, **11**: Kornevo, Bagrationovsk, **9**: Komsomolsk (B., F.); **9**: near the settlement of Pastuhovo in Chernyakhovsk district, the shore of Golubaya river (26.06.2006, 3 spec.).

(?). ***B.*** **(*Neja*) *nigricorne*** **Gyllenhal, 1827**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI
Kaliningrad region: the species was not found in the region, but the findings should be possible.

(67). ***B.*** **(*Chlorodium*) *pygmaeum*** **(Fabricius, 1792)**
Type of areal: WP.
Distribution in Baltic region: FK—EAI; WB; Lit.
Kaliningrad region: 1: Zelenogradsk, **3**: Svetlogorsk, Kaliningrad (B., F.); the species was not found during research time, but the findings should be possible.

68. ***B.*** **(*Metallina*) *lampros*** **(Herbst, 1784)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); omnipresent, in mixed forests and on shores of different waterbodies: **1**, **2**, **3**, **4**, **5**, **6**, **7**, **8**, **9**, **10**, **11**, **12**.

69. ***B.*** **(*Metallina*) *properans*** **(Stephens, 1828)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: presumably often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **3**, **8**, **9**.

(?). ***B.*** **(*Phila*) *obtusum*** **Audinet-Serville, 1821**
Type of areal: WP.
Distribution in Baltic region: —SNDEAI, Lit. – the Curonian Spit (Tamutis, 2003).
Kaliningrad region: the species was not found in the region, but the findings should be possible.

70. ***B.*** **(*Princidium*) *punctulatum*** **Drapiez, 1820**
Type of areal: WP.

Distribution in Baltic region: FK—EAI; WB; Lit.; N-E Pol.
Kaliningrad region: 3: Sambian peninsula, Kaliningrad, **8**: Mamonovo (B., F.); **6**: 5 km to O of Chernyakhovsk, the shore of Angrappa river (29.08.1994, 1 spec., det. Aleksandrovich), **9**: near the settlement of Pastuhovo in Chernyakhovsk district, the shore of Golubaja river (26.06.2006, 1 spec.).

(71). ***B.*** **(*Testedium*) *bipunctatum* (Linnaeus, 1761)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; N-E Pol.
Kaliningrad region: 3: Svetlogorsk, Kaliningrad, **9**: Komsomolsk (B., F.); the species not found in research time, but the findings should be possible.

72. ***B.*** **(*Paraprincidium*) *ruficolle* (Panzer, 1797)**
Type of areal: WCP.
Distribution in Baltic region: FKS-DEAI; WB
Kaliningrad region: 3: Svetlogorsk (B., F.); **9**: near the settlement of Pastuhovo in Chernyakhovsk district, the shore of Golubaja river (26.06.2006, 1 spec.).

73. ***B.*** **(*Actedium*) *pallidipenne* (Illiger, 1802)**
Type of areal: WP.
Distribution in Baltic region: —SNDEAI; Lit.
Kaliningrad region: 3: Svetlogorsk, **7**: Baltiysk, Primorsk, Baltic Spit (B., F.); **1** (Sharova, Grüntal 1973), **7**: Yantarny (6.07.2008, 1 spec.).

74. ***B.*** **(*Nepha*) *illigeri* Netolitzky, 1914 [=*genei* auct. nec Kuster, 1847]**
Type of areal: WP.
Distribution in Baltic region: F-S-DEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); **3, 6, 9**.

(?). ***B.*** **(*Peryphus*) *monticola* Sturm, 1825**
Type of areal: WP.
Distribution in Baltic region: FK—DEAI; WB; N-E Pol.
Kaliningrad region: the species was not taken in the region, but the findings should be very possible.

(75). ***B.*** **(*Peryphus*) *deletum* Audinet-Serville, 1821 [=*nitidulum* (Marsham, 1802) nec (Schrank, 1781)]**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; Lit.; N-E Pol.
Kaliningrad region: 3: Sambian peninsula, Svetlogorsk, **8**: Mamonovo, **9**: Chernyakhovsk, **12**: near Vyshtynetskoe Lake (B., F.); the species not found in research time, but the findings should be possible.

(76). ***B.*** **(*Peryphus*) *stephensi* Crotch, 1866**
Type of areal: WP.
Distribution in Baltic region: FKSNDEA-; Lit. (the Curonian Spit).
Kaliningrad region: 3: Svetlogorsk, **8**: Mamonovo, **9**: Komsomolsk, **9**: Chernyakhovsk (B., F.); in research time was not found.

(77). ***B.*** **(*Peryphus*) *lunatum* (Duftschmid, 1812)**
Type of areal: WCP.
Distribution in Baltic region: —SND-AI; Lit.
Kaliningrad region: 3: Svetlogorsk, **5**: Zhilino (B., F.); the species was not found in research time, but the findings should be possible.

78. ***B.*** **(*Peryphus*) *tetracolum* Say, 1823 [=*ustulatum* auct. nec (Linnaeus, 1758)]**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); **1, 3, 6, 9**.

79. ***B.*** **(*Peryphus*) *bruxellense* Wesmael, 1835 [=*rupestre* auct. nec (Linnaeus, 1758)]**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere (B., F.); **5, 6, 9**.

80. ***B.*** **(*Peryphus*) *cruciatum* Dejean, 1831 ssp. *polonicum* J.Muller, 1930 [=*andreae* auct. nec (Fabricius, 1787)]**

Type of areal: WP.
Distribution in Baltic region: FKS-DEAI; WB; Lit.
Kaliningrad region: 1: Zelenogradsk, **3**: Svetlogorsk, Kaliningrad, **9**: Komsomolsk, Chernyakhovsk (B., F.); omnipresent, but not numerous: **1, 3, 4, 6, 8, 9**.

81. ***B.*** **(*Peryphus*) *femoratum* Sturm, 1825**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **3**: Svetlogorsk (8.08.2008, 2 spec.).

(?). ***B.*** **(*Peryphus*) *saxatile* Gyllenhal, 1827**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI
Kaliningrad region: the species was not found in the region, but the findings should be possible.

82. ***B.*** **(*Eupetedromus*) *dentellum* (Thunberg, 1787)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: everywhere not seldom (B., F.); **3, 6, 9**.

83. ***B.*** **(*Notaphus*) *varium* (Olivier, 1795)**
Type of areal: WCP.
Distribution in Baltic region: F-SNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 3: Svetlogorsk, Kaliningrad, **7**: Yantarny (B., F.); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); omnipresent, but not numerous: **1** (Alekseev, 2005), **3, 5, 6, 9**.

84. ***B.*** **(*Notaphus*) *semipunctatum* (Donovan, 1806) [=*adustum* Schaum, 1860]**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 3: Sambian peninsula, Kaliningrad, **7**: Mechnikov (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1, 3, 5, 6**.

85. ***B.*** **(*Notaphus*) *obliquum* Sturm, 1825**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1, 3, 8, 12**.

(?). ***B.*** **(*Emphanes*) *minimum* (Fabricius, 1792)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDE-I; eastern Latvia (Telnov, 2006); Lit.
Kaliningrad region: the species was not found in the region, but the findings should be possible.

*86. ***B.*** **(*Emphanes*) *azurescens* (Dalla Torre, 1877)**
Type of areal: WP.
Distribution in Baltic region: FKS—EAI; WB; Lit.
Kaliningrad region: 1: Rybatchiy (Sharova, Grüntal 1973); **5, 6, 9**.

(?). ***B.*** **(*Emphanes*) *tenellum* Erichson, 1837**
Type of areal: WP.
Distribution in Baltic region: —S-DEAI
Kaliningrad region: the species was not found in the region, but the findings should be possible.

87. ***B.*** **(*Trepanes*) *articulatum* (Panzer, 1796)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); omnipresent: **1** (Alekseev, 2005), **2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12**.

88. ***B.*** **(*Trepanes*) *octomaculatum* (Goeze, 1777)**
Type of areal: WP.
Distribution in Baltic region: F-S-D-AI; Lit.
Kaliningrad region: 9: Chernyakhovsk (B., F.); **1** (Alekseev, 2005), **3, 9**.

89. ***B.*** **(*Trepanedoris*) *doris* (Panzer, 1797)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **3, 6, 9**. The species should be wider distributed.

90. ***B.* (*Semicampa*) *schuppelii* Dejean, 1831**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; Lit.
Kaliningrad region: 8: Mamonovo, **9**: Chernyakhovsk (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973).

91. ***B.* (*Semicampa*) *gilvipes* Sturm, 1825**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; Lit.; N-E Pol.
Kaliningrad region: 1: Zelenogradsk, **7**: Yantarny, Mechnikov, **8**: Mamonovo (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1, 3, 5**.

(?). ***B.* (*Diplocampa*) *fumigatum* (Duftschmid, 1812)**
Type of areal: WP.
Distribution in Baltic region: —SNDEAI
Kaliningrad region: the species was not found in the region, but the findings should be possible.

92. ***B.* (*Diplocampa*) *assimile* Gyllenhal, 1810**
Type of areal: WP.
Distribution in Baltic region: F-SNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1, 3, 8**.

(93). ***B.* (*Diplocampa*) *transparens* (Gebler, 1829)**
Type of areal: AA.
Distribution in Baltic region: FKSNDEA-
Kaliningrad region: 1: Zelenogradsk (23.05.1895), **3**: Svetlogorsk (05-07.1912), Kaliningrad (26.04.1903) (B., F.); the species not found in research time, but the findings should be possible.

94. ***B.* (s.str.) *quadrimaculatum* (Linnaeus, 1761)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); omnipresent: **1** (Alekseev, 2005), **3, 6, 7, 8, 9**.

(95). ***B.* (s.str.) *humerale* Sturm, 1825**
Type of areal: WP.
Distribution in Baltic region: FKS-DEAI
Kaliningrad region: 7: Primorsk, **9**: Zehlau bog, Chernyakhovsk (B., F.); the species not found in research time, but the findings should be possible.

(?). ***B.* (s.str.) *quadripustulatum* Audinet-Serville, 1821** [=*quadriguttatum* Olivier, 1795]
Type of areal: WP.
Distribution in Baltic region: —S-D—I; Lit.
Kaliningrad region: the species was not recorded from north part of East Prussia (B., F.); the species was not found in research time also, but the findings should be possible.

96. ***B.* (*Philochthus*) *biguttatum* (Fabricius, 1779)**
Type of areal: WP.
Distribution in Baltic region: FKS-DEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1, 3, 6, 9**.

(?). ***B.* (*Philochthus*) *lunulatum* (Geoffroy, 1785)**
Type of areal: WP.
Distribution in Baltic region: —S-D-AI; Lit.
Kaliningrad region: the species is known from the south (Polish) part of East Prussia only (B., F.) and was not found in research time. The findings should be possible.

(?). ***B.* (*Philochthus*) *aeneum* Germar, 1824**
Type of areal: WP.
Distribution in Baltic region: FKSND-AI
Kaliningrad region: the species not found in Kaliningrad region, but the findings should be possible.

97. ***B.* (*Philochthus*) *guttula* (Fabricius, 1792)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal, 1973); omnipresent: **1** (Alekseev, 2005), **3, 5, 6, 8, 9**.

*98. ***B.* (*Philochthus*) *neresheimeri* Muller, 1929**
Type of areal: WP.

Distribution in Baltic region: ———AI; WB.
Kaliningrad region: 1: Rybatchiy (Sharova, Grüntal, 1973).

(99). ***B.* (*Philochthus*) *mannerheimii* Sahlberg, 1827 [=*unicolor* Chaudoir, 1850]**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 3: Sambian peninsula, Guryevsk, Kaliningrad, **7**: Primorsk, **9**: Chernyakhovsk (B., F.); the species was not found in research time, but the further findings should be very possible.

Genus *Ocys* Stephens, 1828

(100). ***O. quinquestriatus* (Gyllenhal, 1810)**
Type of areal: WP.
Distribution in Baltic region: —SNDEA-; Lit.
Kaliningrad region: 3: Kaliningrad (B., F.); the species was not found in research time, but the findings should be possible.

Genus *Tachys* Dejean, 1821 [=*Paratachys* Casey, 1918]

(?) ***T. bistriatus* (Duftschmid, 1812)**
Type of areal: WP.
Distribution in Baltic region: FK—D-AI; Lit.; N-E Pol.
Kaliningrad region: the species was not found in research time, but the findings should be very possible.

Genus *Tachyta* Kirby, 1837

101. ***T. nana* (Gyllenhal, 1810)
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; Lit. (Ferenca, 2003); N-E Pol.
Kaliningrad region: the species was not noted from the north part of East Prussia (B., F.), but occurs not seldom in whole Kaliningrad region in forests under the bark of coniferous and deciduous stocks: **1**, **3**, **6**, **8**, **9**.

Subfamily Harpalinae Bonelli, 1810

Tribus Pterostichini Bonelli, 1810
Genus *Stomis* Clairville, 1806

102. ***S. pumicatus* (Panzer, 1796)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 7: Mechnikov, **3**: Guryevsk, Kaliningrad, **9**: Chernyakhovsk (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **3**, **12**.

Genus *Poecilus* Bonelli, 1810

(103). ***P.* (s.str.) *punctulatus* (Schaller, 1783)**
Type of areal: WCP.
Distribution in Baltic region: —S-DEAI; WB; Lit.
Kaliningrad region: 3: Svetlogorsk, Kaliningrad, **1**: the Curonian Spit (B., F.); the species was not found in the research time, but the findings should be possible.

104. ***P. lepidus* (Leske, 1785) [=*dimidiatus* (Olivier, 1795) nec (Rossi, 1790) =*virens* (O. F. Mueller, 1776)]**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere often (B., F.); omnipresent: **1**, **2**, **3**, **4**, **5**, **6**, **7**, **8**, **9**, **10**, **11**, **12**.

105. ***P. cupreus* (Linnaeus, 1758)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); omnipresent and numerous: **1**, **2**, **3**, **4**, **5**, **6**, **7**, **8**, **9**, **10**, **11**, **12**.

106. ***P. versicolor* (Sturm, 1824) [=*caerulescens* auct. nec (Linnaeus, 1758)]**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau

bog (Främbs, Dormann, Mossakowski 2002); omnipresen and numeroust: **1, 2, 3, 4, 5, 6, 8, 9, 11, 12.**

Genus *Pterostichus* Bonelli, 1810

107. ***P.* (*Argutor*) *vernalis* (Panzer, 1796) [=*crenatus* (Duftschmid, 1812)]**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1, 3.**

108. ***P.* (*Adelosia*) *macer* (Marsham, 1802)**
Type of areal: WCP.
Distribution in Baltic region: ——DEAI; Lit.
Kaliningrad region: **3**: Sambian peninsula, Svetlogorsk, Kaliningrad, **7**: Mechnikov, **8**: Mamonovo, **9**: Chernyakhovsk (B., F.); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); **9**: Cherniakhovsk (20.05.1994, 1 spec.).

109. ***P.* (*Melanins*) *aterrimus* (Herbst, 1784)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI: WB; Lit.; N-E Pol.
Kaliningrad region: everywhere on seasides (B., F.); wide distributed, but not often: **3, 4, 5, 8, 9, 12.**

110. ***P.* (*Eosteropus*) *aethiops* (Panzer, 1796)**
Type of areal: WP.
Distribution in Baltic region: FK—dEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere not selten (B., F.); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002).

111. ***P.* (*Bothriopterus*) *oblongopunctatus* (Fabricius, 1787)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); omnipresent and everywhere numerous: **1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.**

112. ***P.* (*Bothriopterus*) *quadrifoveolatus* Letzner, 1852 [=*angustatus* (Duftschmid, 1812) nec (Fabricius, 1787)]**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB.
Kaliningrad region: **8**: Mamonovo, **3**: Kaliningrad (B., F.); **1, 3.**

113. ***P.* (*Platisma*) *niger* (Schaller, 1783)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); omnipresent: **1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12.**

114. ***P.* (*Morphnosoma*) *melanarius* (Illiger, 1798) [=*vulgaris* auct. nec (Linnaeus, 1758)]**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann and Mossakowski 2002); omnipresent: **1, 2, 3, 6, 7, 8, 9, 10, 11, 12.**

115. ***P.* (*Pseudomaseus*) *nigrita* (Paykull, 1790)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1, 3, 4, 6, 8, 9.**

*116. ***P.* (*Pseudomaseus*) *rhaeticus* Heer, 1837**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; N-E Pol.
Kaliningrad region: **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); **9**: Zehlau bog (17.05.1998, 2 spec., 9.05.2008, 1 spec.).

117. ***P.* (*Pseudomaseus*) *anthracinus* (Illiger, 1798)**
Type of areal: WP.
Distribution in Baltic region: -KS-DEAI; WB; Lit.

Kaliningrad region: everywhere not seldom (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); omnipresent: **1, 3, 6, 8, 9, 11.**

118. ***P.* (*Pseudomaseus*) *gracilis* (Dejean, 1828) [=*guentheri* (Sturm, 1824)]**
Type of areal: WP.
Distribution in Baltic region: FKS-DEAI; WB; Lit.
Kaliningrad region: 1: Zelenogradsk, **3**: Sambian peninsula, Kaliningrad, **7**: Mechnikov, Primorsk (B., F.); **1**: Rybatchiy (pitfall trap, on shore of the Curonian gulf, 4.04.1997).

119. ***P.* (*Pseudomaseus*) *minor* (Gyllenhal, 1827) [=*brunneus* (Sturm, 1824)]**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1, 3, 8, 9.**

120. ***P.* (*Phonias*) *strenuus* (Panzer, 1796)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); **1, 3, 8.**

121. ***P.* (*Phonias*) *diligens* (Sturm, 1824)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); **1, 8, 9, 11.**

Tribus Sphodrini Laporte de Castelnau, 1834
Genus *Calathus* Bonelli, 1810

122. ***C.* (s.str.) *fuscipes* (Goeze, 1777)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1, 3, 6, 7, 9, 12.**

123. ***C.* (*Neocalathus*) *erratus* (Sahlberg, 1827)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere not seldom (B., F.); **1** (Alekseev, 2005), **3, 6, 9.**

124. ***C.* (*Neocalathus*) *ambiguus* (Paykull, 1790)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 3: Sambian peninsula, Svetlogorsk, Kaliningrad, **8**: Ladushkin (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **3**: Otradnoe (Baltic Sea coast, 3.07.2007, 2 spec.), **7**: Baltiysk (21.06.2008, 3 exp.).

125. ***C.* (*Neocalathus*) *melanocephalus* (Linnaeus, 1758)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere often (B., F.); omnipresent: **1** (Alekseev, 2005), **2, 3, 6, 7, 8, 9, 11, 12.**

(?). ***C.* (*Neocalathus*) *mollis* (Marsham, 1802) [=*ochropterus* auct. nec (Duftschmid, 1812)]**
Type of areal: WP.
Distribution in Baltic region: —SNDEAI; Lit.
Kaliningrad region: the species was not reported from the region, but the findings on sand coastal dunes should be very possible.

126. ***C.* (*Neocalathus*) *micropterus* (Duftschmid, 1812)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); **1** (Alekseev, 2005), **3, 6, 8, 9, 11, 12.**

Genus *Dolichus* Bonelli, 1810

*127. ***D. halensis* (Schaller, 1783)**
Type of areal: TP.

Distribution in Baltic region: —S-D—I; WB; Lit.
Kaliningrad region: only in Poland (B., F.); Ch. (Alekseev, 2002) - **9**: on the potato field near Chernyakhovsk (29.06.1996, 1 exp.).

Genus *Sphodrus* Clairville, 1806

(128). ***S. leucophthalmus* (Linnaeus, 1758)**
Type of areal: WP.
Distribution in Baltic region: F-S-DEAI; Lit.
Kaliningrad region: 8: Mamonovo, **9**: Chernyakhovsk, **10**: Gusev (B., F.); the species was not found in research time, but the findings in south parts of Kaliningrad region should be possible. This species is believed to prey on the larvae of *Blaps* in old cellars (Luff, 2006).

Genus *Laemostenus* Bonelli, 1810

129. ***L. (Pristonychus) terricola* ssp. *terricola* (Herbst, 1784)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not selten (B., F.); **6**: this synanthropical species (Aleksandrovich, 1991) was found till now only once under a stone in the mixed forest near Chernyakhovsk (05.1986, 2 spec.).

Tribus Platynini Bonelli, 1810
Genus *Synuchus* Gyllenhal, 1810

130. ***S. vivalis* (Illiger, 1798) [=*nivalis* (Panzer, 1797) nec (Paykull, 1790)]**

Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere, but selten (B., F.); **1**, **3**: Kaliningrad (pitfall traps, moisten desiduous forest, 3.08.2008, 5 spec.), **6**.

Genus *Olisthopus* Dejean, 1828

(131). ***O. rotundatus* (Paykull, 1790)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; Lit.; N-E Pol.
Kaliningrad region: 3: Kaliningrad, **9**: Znamensk, **7**, **8**: shores of Baltic Sea (B., F.); the species was not found in research time, but the findings should be possible.

Genus *Sericoda* Kirby, 1837

(132). ***S. quadripunctata* (DeGeer, 1774)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 7: Mechnikov, **1**: Zelenogradsk, **3**: Svetlogorsk, Kaliningrad (B., F.); the species was not found in research time, but the findings in western parts of the region should be possible.

Genus *Anchomenus* Bonelli, 1810

133. ***A. dorsalis* (Pontoppidan, 1763)**
Type of areal: WCP.
Distribution in Baltic region: F-SNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); omnipresent: **1**, **3**, **4**, **5**, **6**, **8**, **9**, **11**, **12**.

Genus *Oxypselaphus* Chaudoir, 1843

134. ***O. obscurus* (Herbst, 1784)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); omnipresent in parks and forests, especially foliaceous: **1**, **3**, **4**, **5**, **6**, **8**, **9**, **10**, **11**, **12**.

Genus *Paranchus* Lindroth, 1974

135. ***P. albipes* (Fabricius, 1796) [=*ruficornis* (Goeze, 1777) nec (DeGeer, 1774)]**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.

Kaliningrad region: everywhere not seldom (B., F.); **3**: lakeside in Kolosovka (11.05.2003, 7 exp.), the Baltic sea coast near Otradnoe (2.07.2008, 5 exp.), **8**: the coast of the Kaliningrad Gulf near Ushakovo (7.05.2007, 1 spec.).

Genus *Platynus* Bonelli, 1810 [=*Batenus* Motschulsky, 1864]

136. ***P. livens* (Gyllenhal, 1810)**
Type of areal: WCP.
Distribution in Baltic region: FKS-DEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 3: Kaliningrad, **1**, **3**, **7**: everywhere on sea coasts (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1**, **3**, **7**.

*137. ***P. mannerheimii* (Dejean, 1828)**
Type of areal: H.
Distribution in Baltic region: FKSN-EAI; WB
Kaliningrad region: 9: Zehlau bog (Främbs, Dormann, Mossakowski 2002).

Genus *Limodromus* Motschulsky, 1864

138. ***L. assimilis* (Paykull, 1790)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); omnipresent and numerous: **1**, **2**, **3**, **4**, **5**, **6**, **7**, **8**, **9**, **10**, **11**, **12**.

139. ***L. krynickii* (Sperk, 1835)**

Type of areal: WCP.
Distribution in Baltic region: —S-DEAI; WB; Lit.
Kaliningrad region: 3: Svetlogorsk, Kaliningrad (B., F.); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); **1**, **3** (the species should be wider distributed in the region).

(140). ***L. longiventris* Mannerheim, 1825**

Type of areal: WCP.
Distribution in Baltic region: —S—EAI
Kaliningrad region: 3: Kaliningrad (B., F.); the species was not found in research time, but the findings are possible.

Genus *Agonum* Bonelli, 1810

141. ***A.* (*Europhilus*) *micans* Nicolai, 1822**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 3: Svetlogorsk, Kaliningrad, **9**: Chernyakhovsk (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1**, **3**, **8** (the species should be wider distributed in the region and could be found in **4** and **7** also).

142. ***A.* (*Europhilus*) *piceum* (Linnaeus, 1758)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 3, **7**: on sea coasts, Kaliningrad, **9**: Chernyakhovsk (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **3**, **6**, **8**, **9**.

143. ***A.* (*Europhilus*) *gracile* Sturm, 1824 [=*latvicum* Barsevskis, 1993]**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1**, **3**.

144. ***A.* (*Europhilus*) *fuliginosum* (Panzer, 1809)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); **1**, **3**, **6**, **8**, **9**.

(145). ***A.* (*Europhilus*) *thoreyi* Dejean, 1828 [=*pelidnum* (Paykull, 1790) nec (Herbst, 1784)]**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 1: Zelenogradsk, **3**: Svetlogorsk, Kaliningrad (B., F.); the species was

not found in research time, but the findings should be possible.

(?). *A.* **(s.str.)** ***munsteri*** **(Hellen, 1935)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEA-; WB
Kaliningrad region: this species was noted as "Zel." (Alekseev, 2002). After the verification of specimen, the incorrect determination was stated, therefore this species was excluded from the list. The findings in Kaliningrad region are possible but unknown at present.

(146). *A.* **(s.str.)** ***gracilipes*** **(Duftschmid, 1812)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 3, 7: on seaside (B., F.); the species was not found in research time, but the findings should be possible.

147. *A.* **(s.str.)** ***marginatum*** **(Linnaeus, 1758)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: everywhere not seldom (B., F.); at present the species occurs rare on shores of the Curonian and Kaliningrad gulfs. In Kaliningrad region was found by author twice (**1**: Zelenogradsk, 26.05.1998, 1 spec.; **8**: near the settlement of Ushakovo, 7.08.2007, 1 spec.) and also near the settlement of Nida (29.07.2007) in Lithuania.

148. *A.* **(s.str.)** ***muelleri*** **(Herbst, 1784)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **6**.

149. *A.* **(*Agonothorax*)** ***sexpunctatum*** **(Linnaeus, 1758)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); omnipresent, but not numerous: **1, 3, 4, 5, 6, 8, 9, 11, 12**.

150. *A.* **(*Agonothorax*)** ***impressum*** **(Panzer, 1796)**
Type of areal: TP.
Distribution in Baltic region: -K—EAI; WB; Lit.; N-E Pol.
Kaliningrad region: 1: Rybachiy (Curonian Spit), **3**: Svetlogorsk, **7**: Primorsk, **8**: Kaliningrad, **5**: Sovetsk (B., F.); **1** (Alekseev, 2005): in research time was found once on shore of the Curonian gulf near the settlement of Morskoe (30.05.2003, 1 spec.).

151. *A.* **(*Agonothorax*)** ***ericeti*** **(Panzer, 1809)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; Lit.; N-E Pol.
Kaliningrad region: 3: Kaliningrad, **9**: Zehlau Bog, Chernyakhovsk (B., F.); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); **9**: the stable and numerous population of this species have been observed (1998-2007) on the Zehlau bog (25.04.1998, 3 spec., etc.). Should be very possible the occurrence of this species on bogs in Slavsk and Polessk districts.

152. *A.* **(*Agonothorax*)** ***dolens*** **(Sahlberg, 1827)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; N-E Pol.
Kaliningrad region: 3: Sambian peninsula, Svetlogorsk, Kaliningrad, **9**: Chernyakhovsk (B., F.); **1, 3, 8**.

153. *A.* **(*Agonothorax*)** ***versutum*** **Sturm, 1824**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 3: Sambian peninsula, Svetlogorsk, Kaliningrad, **9**: Chernyakhovsk (B., F.); **1, 3, 9**.

154. *A.* **(*Agonothorax*)** ***viduum*** **(Panzer, 1796)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1, 6, 9, 12.**

155. ***A.* (*Agonothorax*) *emarginatum* (Gyllenhal, 1827) [=*afrum* (Duftschmid, 1812) nec (Thunberg, 1787);**
=*moestum* auct. nec (Duftschmid, 1812)]
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: everywhere often (B., F.); **1** (Alekseev, 2005), **2**, **3**, **9**.

156. ***A.* (*Agonothorax*) duftschmidi Schmidt, 1994 [=*moestum* (Duftschmid, 1812) nec (Gmelin, 1790)]
Type of areal: WCP.
Distribution in Baltic region: —S-D-AI, Lit. (Barševskis, 2001).
Kaliningrad region: the bank of Divnoe lake near the settlement of Kholmogorovka in Zelenogradsky district (14.04.2007, 1 spec.).

157. ***A.* (*Agonothorax*) *lugens* (Duftschmid, 1812)**
Type of areal: WP.
Distribution in Baltic region: F-S-DEAI; WB; Lit.
Kaliningrad region: **3**: Svetlogorsk, Kaliningrad (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973).

Tribus Zabrini Bonelli, 1810 [=Amarini Bonelli, 1810]
Genus *Amara* Bonelli, 1810

(158). ***A.* (*Zezea*) *strenua* Zimmermann, 1832**
Type of areal: WP.
Distribution in Baltic region: ——D-A-
Kaliningrad region: **3**: Svetlogorsk (B., F.); the species was not found in research time, but the findings should be possible.

(159). ***A.* (*Zezea*) *plebeja* (Gyllenhal, 1810)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); the species was not found in research time, but the findings should be possible.

(160). ***A.* (*Zezea*) *concinna* Zimmermann, 1832**
Type of areal: WP.
Distribution in Baltic region: ———I;
Kaliningrad region: **3**: Kaliningrad (B., F.); the species was not found in research time, but the findings should be possible.

(?). ***A.* (s.str.) *tricuspidata* Dejean, 1831**
Type of areal: WCP.
Distribution in Baltic region: WB
Kaliningrad region: Kaliningrad - medium of XIX century (B., F.); the species not found in research time and the further findings should be doubtful.

161. ***A.* (s.str.) *similata* (Gyllenhal, 1810)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); **1**, **3**, **6**, **9**.

(162). ***A.* (s.str.) *ovata* (Fabricius, 1792)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: **7**: Yantarny, **3** or **8**: Kaliningrad, **5**: Zhilino (B., F.); the species was not found in research time, but the findings should be possible.

(?). ***Amara* (s.str.) *montivaga* Sturm, 1825**
Type of areal: WP.
Distribution in Baltic region: FKSN——; N-E Pol.
Kaliningrad region: the species was not recorded from Kaliningrad region, but the findings should be probable.

(163). ***A.* (s.str.) *nitida* Sturm, 1825**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: **3**: Zelenogradsk, Kaliningrad, **8**: Ladushkin (B., F.); the species not found in research time, but the findings should be possible.

164. ***A.* (s.str.) *communis* (Panzer, 1797)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.

Kaliningrad region: everywhere not seldom (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973).

(165). ***A.* (s.str.) *pulpani* Kult, 1949 [=*pseudocommunis* Burakowski, 1957]**
Type of areal: WP.
Distribution in Baltic region: ———A-
Kaliningrad region: **7**: Yantarny (2 exp. 1938) (B., F.); the species was not taken in research time, but the findings should be possible.

(166). ***A.* (s.str.) *convexior* Stephens, 1828**
Type of areal: WP.
Distribution in Baltic region: FKSND-AI; WB; Lit.
Kaliningrad region: **1**: Rybatchiy (Curonian Spit), **8**: Mamonovo (B., F.); the species was not found in research time, but the findings should be possible.

167. ***A.* (s.str.) *lunicollis* Schiodte, 1837**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); **9**: near the settlemnt of Nivenskoe in Guryevsk distrikt (20.04.1997, 1 spec., det. Aleksandrovich)

(168). ***A.* (s.str.) *curta* Dejean, 1828**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); the species was not found in research time, but the findings in the western parts of Kaliningrad region should be very possible.

*169. ***A.* (s.str.) *littorea* Thomson, 1857**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; Lit.; N-E Pol.
Kaliningrad region: **1**, **3** (Alekseev, 2005).

170. ***A.* (s.str.) *aenea* (DeGeer, 1774)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); ominipresent and numerous: **1** (Alekseev, 2005), **3**, **4**, **5**, **6**, **8**, **9**, **11**, **12**.

171. ***A.* (s.str.) *spreta* Dejean, 1831**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); **1**, **3**, **6**.

172. ***A.* (s.str.) *famelica* Zimmermann, 1832**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB.
Kaliningrad region: **1**: Zelenogradsk, **7**: Mechnikov, **3**: Kaliningrad (B., F.); 1: Rybatchiy (27.07.2008, 1 spec.).

173. ***A.* (s.str.) *eurynota* (Panzer, 1796)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: everywhere not seldom (B., F.); **1**, **3**, **6**, **9**.

174. ***A.* (s.str.) *familiaris* (Duftschmid, 1812)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); ominipresent: **1**, **3**, **6**, **8**, **9**.

(175). ***A.* (s.str.) *lucida* (Duftschmid, 1812)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; Lit.
Kaliningrad region: **3**: Svetlogorsk, **7**: Mechnikov, **3**: Kaliningrad (B., F.); the species was not found in research time, but the findings should be possible.

176. ***A.* (s.str.) *tibialis* (Paykull, 1798)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **3**: Kaliningrad (06.2002, 1 spec.).

(?). ***A. (Celia) erratica* (Duftschmid, 1812)**
Type of areal: H.
Distribution in Baltic region: FKSN-EAI; Lit.
Kaliningrad region: the species was not found in the region, but the findings should be possible.

177. ***A. (Celia) ingenua* (Duftschmid, 1812)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: **3** or **8**: Kaliningrad (B., F.); near the settlemnt of Dovatorovka in Chernyakhovsk distrikt (15.09.1994, 1 spec.).
(?). ***A. (Celia) cursitans* Zimmermann, 1832**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; Lit.
Kaliningrad region: the species was not found in the region till now, but the findings should be possible.

(178). ***A. (Celia) municipalis* (Duftschmid, 1812)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: **3**: Svetlogorsk, **7**: Baltiysk, **3**: Kaliningrad, **12**: near Vyshtynetskoe Lake (B., F.); the species not found in research time, but the findings should be possible.

179. ***A. (Celia) bifrons* (Gyllenhal, 1810)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); **1**, **3**: Kaliningrad (22.09.1995, 1 spec., det. Aleksandrovich; 2.05.2008, 1 spec.), **8**.

(180). ***A. (Celia) infima* (Duftschmid, 1812)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; N-E Pol.
Kaliningrad region: **3**: Svetlogorsk (B., F.); the species was not found in research time, but the findings should be possible.

(181). ***A. (Celia) praetermissa* (Sahlberg, 1827)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; Lit.; N-E Pol.
Kaliningrad region: **1**: Zelenogradsk, **3**: Svetlogorsk, Kaliningrad (B., F.); the species was not found in research time, but the findings should be possible.

182. ***A. (Acrodon) brunnea* (Gyllenhal, 1810)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: **1**: Zelenogradsk, **3**: Svetlogorsk, **7**: Yantarny, Primorsk, **3**: Kaliningrad, **9**: Pravdinsk (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); **1**, **3**, **6**, **8**, **9**.

183. ***A. (Paracelia) quenseli* (Schonherr, 1806)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; Lit.
Kaliningrad region: **3**, **7**: on sea coasts, **7**: Mamonovo, **3**: Kaliningrad, **9**: Komsomolsk (B., F.); **3**: near the settlement of Pionersky Kurort (7.07.2003, 1 spec.).

(?). ***A. (Pseudobradytus) crenata* Dejean, 1828**
Type of areal: WP.
Distribution in Baltic region: F-S-D-AI
Kaliningrad region: the species was never found in the region till now, but the findings should be possible.

184. ***A. (Bradytus) apricaria* (Paykull, 1790)**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: everywhere often (B., F.); **3**, **6**, **9**.

185. ***A. (Bradytus) fulva* (Muller, 1776)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere (B., F.); omnipresent: **1** (Alekseev, 2005), **3**, **4**, **5**, **6**, **8**, **9**, **11**, **12**.

(?). ***A. (Bradytus) majuscula* (Chaudoir, 1850)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.

Kaliningrad region: the species was not found in the region till now, but the findings should be very possible.

186. ***A.* (*Bradytus*) *consularis* (Duftschmid, 1812)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere but seldom (B., F.); **1**, **3**, **6**, **8**, **9**.

(187). ***A.* (*Percosia*) *equestris* (Duftschmid, 1812)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: **3**: Sambian peninsula, Svetlogorsk, **8**: Ladushkin, Kaliningrad, **9**: Pravdinsk (B., F.); the species was not found in research time, but the findings should be possible.

Genus *Curtonotus* Stephens, 1828

188. ***C. aulica* (Panzer, 1796)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere (B., F.); **1**, **3**, **6**, **7**, **8**, **9**.

(?). ***C. gebleri* Dejean, 1831 [=*helleri* Gredler, 1868]**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; Lit.; N-E Pol.
Kaliningrad region: the species was not found in the region till now, but the findings should be very possible.

(189). ***C. convexiuscula* (Marsham, 1802)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEA-
Kaliningrad region: **7**: Yantarny (B., F.); the species was not found in research time, but the findings should be possible.

Tribus Panagaeini Bonelli, 1810
Genus *Panagaeus* Latreille, 1802

190. ***P. cruxmajor* (Linnaeus, 1758)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere, but not often (B., F.); **1**: Morskoe (30.05.2003, 1 exp.), Rybachiy (07.1994, 1 exp.); **3**: Svetlogorsk (2.06.2003 - 1 exp., 6.06.2004 – 2 exp.), Kolosovka (06.2004, 4 exp.). The species is characterized by the sharply fluctuation of number in our region.

(191). ***P. bipustulatus* (Fabricius, 1775)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; Lit.
Kaliningrad region: **1**: Curonian Spit, **3**: Svetlogorsk, Kaliningrad, **9**: Komsomolsk (B., F.); the species was not found in research time, but the findings should be very possible.

Tribus Chlaeniini Brulle, 1834
Genus *Chlaenius* Bonelli, 1810

192. ***Ch.* (*Chlaeniellus*) *tristis* (Schaller, 1783)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: **3**, **7**: on sea coasts, Kaliningrad (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973).

193. ***Ch.* (*Chlaeniellus*) *nigricornis* (Fabricius, 1787)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); **4**, **8**: near the settlement of Znamenka-Novaya in Bagrationovk distrikt (16.05.1999, 2 spec.), **3**: Kaliningrad (28.04.2008, 2 spec.).

194. ***Ch.* (*Chlaeniellus*) *nitidulus* (Schrank, 1781)**
Type of areal: WP.
Distribution in Baltic region: FKS-DEAI; WB; Lit.
Kaliningrad region: **7**: Baltiysk (B., F.); **9**: Chernyakhovsk (07.1992), **12**: Forest Krasny (7.08.2001, 1 spec.).

195. ***Ch.* (*Chlaeniellus*) *vestitus* (Paykull, 1790)**
Type of areal: WP.
Distribution in Baltic region: —S-D-AI; WB; Lit.
Kaliningrad region: 3: Svetlogorsk, Kaliningrad (B., F.); **1** (Alekseev, 2005), **3**: Kaliningrad (20.06.1999 - 1 spec., 18.06.2007 – 1 spec.), **8:** near the settlement of Znamenka-Novaya in Bagrationovk distrikt (7.05.2007, 1 spec.), near Mamonovo (5.06.2007, 1 spec.). The greatest aggregation of this beetle was observed on sandy shore of Curonian gulf near the settlement of Pervalka [Lithuania] – under a pine stump were caught 19 specimens (28.07.2007).

(196). ***Ch.* (*Agostenus*) *sulcicollis* (Paykull, 1798)**
Type of areal: WCP.
Distribution in Baltic region: F-S-DEAI; WB; Lit.
Kaliningrad region: 3, **7**: on sea coasts, **3**: Svetlogorsk, **10**: Gusev (B., F.); the species was not found in research time, but the findings should be very possible.

(197). ***Ch.* (*Agostenus*) *quadrisulcatus* (Paykull, 1790)**
Type of areal: WP.
Distribution in Baltic region: -KS-DEA-
Kaliningrad region: 3: Svetlogorsk (B., F.); the species was not found in research time, but the findings should be possible.

(198). ***Ch.* (*Agostenus*) *costulatus* (Motschulsky, 1859)**
Type of areal: WP.
Distribution in Baltic region: FKS—EAI; WB; Lit.
Kaliningrad region: 8: Mamonovo, **3**: Kaliningrad, **12**: near Vyshtynetskoe Lake (B., F.); the species was not found in research time, but the findings should be very possible.

Tribus Oodini LaFerte-Senectere, 1851
Genus *Oodes* Bonelli, 1810

199. ***O. helopioides* (Fabricius, 1792)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); **1**, **3**, **6**, **8**, **9**.

(200). ***O. gracilis* Villa & Villa, 1833**
Type of areal: WP.
Distribution in Baltic region: —S—EAI; WB
Kaliningrad region: 7: Yantarny, Baltic Spit (B., F.); the species was not found in research time, but the findings should be possible.

Tribus Licinini Bonelli, 1810
Genus *Badister* Clairville, 1806

201. ***B.* (s.str.) *unipustulatus* Bonelli, 1813**
Type of areal: WP.
Distribution in Baltic region: FKS-DEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 1: Zelenogradsk, **3**: Sambian peninsula, Svetlogorsk, Kaliningrad, **9**: Chernyakhovsk (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1** (Alekseev, 2005): Zelenogradsk, near the settlement of Lesnoe.

202. ***B.* (s.str.) *bullatus* (Schrank, 1798) [=*bipustulatus* (Fabricius, 1792) nec (Fabricius, 1775)]**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere not seldom (B., F.); **4**: near the settlement of Kashirskoe in Zelenogradsk district (22.05.1999, 1 spec.).

203. ***B.* (s.str.) *meridionalis* Puel, 1925 [=*kineli* Makolski, 1952]
Type of areal: WP.
Distribution in Baltic region: —S-DEAI; WB; N-E Pol.
Kaliningrad region: the findings in East Prussia were unknown (B., F.); **9**: near the settlement of Berezovka in Gvardeysk district (03.07.1996, 1 spec.)

*204. ***B.* (s.str.) *lacertosus* Sturm, 1815**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.

Kaliningrad region: known from south part of East Prussia only (B., F.); **9**: Zehlau bog (Främbs, Dormann and Mossakowski 2002); **1**: near the settlement of Rybatchiy (27.04.1997, 4 spec.), **8:** near the settlement of Znamenka-Novaya in Bagrationovk distrikt (29.04.1999, 1 spec.).

205. ***B.* (*Trimorphus*) *sodalis* (Duftschmid, 1812)**
Type of areal: WP.
Distribution in Baltic region: -KSNDEAI; WB; Lit.
Kaliningrad region: 3: Kaliningrad, Guryevsk, **9**: Chernyakhovsk (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1** (Alekseev, 2005), **3**, **6**, **9**.

206. ***B.* (*Baudia*) *peltatus* (Panzer, 1796)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 7: Yantarny, **3**: Kaliningrad (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1**, **3**.

207. ***B.* (*Baudia*) *dilatatus* Chaudoir, 1837**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 7: Yantarny, **3**: Kaliningrad (B., F.); **3**: Svetlogorsk (05.2004, 1 spec.). The species was found by author also near the settlement of Pervalka [Lithuanian part of the Curonian Spit] (10.06.2003, 1 spec.).

(?). ***B.* (*Baudia*) *collaris* Motschulsky, 1844 [=*anomalus* (Perris, 1866) =*striatulus* Hansen, 1944]**
Type of areal: WP.
Distribution in Baltic region: —S-DEAI; WB; N-E Pol.
Kaliningrad region: the species was not found in the region, but the findings should be very possible.

Genus *Licinus* Latreille, 1802

(208). ***L. depressus* (Paykull, 1790)**
Type of areal: WCP.
Distribution in Baltic region: F-SNDEAI; Lit. (Ferenca et al. 2002)
Kaliningrad region: 1: Zelenogradsk, **3**: Sambian peninsula, Svetlogorsk, **8**: Mamonovo, Kaliningrad (B., F.); the species was not found in research time, but the findings should be possible.

Tribus Harpalini Bonelli, 1810
Genus *Ophonus* Stephens, 1828

(209). ***O. laticollis* (Mannerheim, 1825) [=*nitidulus* Stephens, 1828 =*punctatulus* (Duftschmid, 1812) nec (Fabricius, 1792)]**
Type of areal: WCP.
Distribution in Baltic region: FKS-DEAI; Lit.
Kaliningrad region: 9: Pravdinsk, Chernyakhovsk (B., F.); the species was not found in research time, but the findings should be possible.

210. ***O. puncticollis* (Paykull, 1798)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; N-E Pol.
Kaliningrad region: 8: Mamonovo, Kaliningrad (B., F.); **3**: Kaliningrad (5.08.2008, 3 exp.).

211. ***O. rufibarbis* (Fabricius, 1792) [=*seladon* (Schauberger, 1926)]**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; Lit.; N-E Pol.
Kaliningrad region: 1: Zelenogradsk, **3**: Svetlogorsk, Kaliningrad, **7**: Yantarny, Baltiysk, **9**: Pravdinsk, Chernyakhovsk (B., F.); **3**: Svetlogorsk (28.06.1999, 2 exp.; 2.07.2008, 1 spec.), Kaliningrad (2.06.2008, 1 spec.), **6** (Alekseev, 2002).

(?). ***Ophonus puncticeps* Stephens, 1828.**
Type of areal: WP.
Distribution in Baltic region: N-E Pol.
Kaliningrad region: the species was not noted from Kaliningrad region, but the findings should be possible.

Genus *Harpalus* Latreille, 1802
[=*Pseudoophonus* Motschulsky, 1844
=*Semiophonus* Schauberger, 1933]

212. ***H.* (*Pseudoophonus*) *griseus* (Panzer, 1796)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere (B., F.); **1**, **3**, **7**.

213. ***H.* (*Pseudoophonus*) *rufipes* (DeGeer, 1774) [=*pubescens* (Muller, 1776)]**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere common (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); omnipresent: **1**, **2**, **3**, **4**, **5**, **6**, **7**, **8**, **9**, **10**, **11**, **12**.

(214). ***H.* (*Pardileus*) *calceatus* (Duftschmid, 1812)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: **3**: Svetlogorsk, **7**: Yantarny, **3**: Kaliningrad, **12**: near Vyshtynetskoe Lake (B., F.); the species was not found in research time, but the findings should be possible.

(215). ***H. (Cryptophonus) melancholicus* Dejean, 1829**
Type of areal: WP.
Distribution in Baltic region: —S-D—; Lithuania (Tamutis, Ferenca 2006).
Kaliningrad region: **3**: Kaliningrad - orygin of XX century (B., F.); the species was not found in research time, but the findings should be possible.

216. ***H.* (s.str.) *affinis* (Schrank, 1781) [=*aeneus* (Fabricius, 1775) nec (DeGeer, 1774)]**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere common (B., F.); omnipresent: **1**, **2**, **3**, **4**, **5**, **6**, **7**, **8**, **9**, **10**, **11**, **12**.

217. ***H.* (s.str.) *distinguendus* (Duftschmid, 1812)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; Lit.
Kaliningrad region: **7**: Baltic Spit, **3** or **8**: Kaliningrad (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973).

218. ***H.* (s.str.) *smaragdinus* (Duftschmid, 1812)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: **1**: Zelenogradsk, **3**: Svetlogorsk, **7**: Baltiysk, Yantarny (B., F.); **1**, **3**, **7**.

219. ***H.* (s.str.) *serripes* (Quensel, 1806)**
Type of areal: WP.
Distribution in Baltic region: —S-D—I; N-E Pol.
Kaliningrad region: **3**: Sambian peninsula, Svetlogorsk, **7**: Yantarny, Baltiysk, **8**: Kaliningrad, Ladushkin (B., F.); **7**: Baltiysk (25.05.2008, 2 exp.; 21.06.2008, 2 exp.).

(220). ***H.* (s.str.) *autumnalis* (Duftschmid, 1812)**
Type of areal: WP.
Distribution in Baltic region: —S—AI; WB; Lit.; N-E Pol.
Kaliningrad region: **1**: Zelenogradsk, **3**: Sambian peninsula, Kaliningrad, **5**: Zhilino (B., F.); the species was not found in research time, but the findings should be possible.

(221) ***H.* (s.str.) *solitaris* Dejean, 1829 [=*fuliginosus* (Duftschmid, 1812) nec (Panzer, 1809)]**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: **1**: Zelenogradsk, **3**: Svetlogorsk, **7**: Yantarny, Mechnikov, **8**: Kaliningrad (B., F.); the species was not found in research time, but the findings should be possible.

222. ***H.* (s.str.) *latus* (Linnaeus, 1758)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol. (Wigierski NP).
Kaliningrad region: everywhere common (B., F); **1**: Rybatchiy (Sharova, Grüntal 1973); **1**, **3** (Alekseev, 2005), **12**: Uvarovo (11.07.2000, 1 spec.), Krasnolesye (8.06.2008, 1 spec.).

223. ***H.* (s.str.) *luteicornis* (Duftschmid, 1812)**
Type of areal: WP.
Distribution in Baltic region: FKSN-EAI; WB; Lit.; N-E Pol.

Kaliningrad region: **3**: Svetlogorsk (B., F); **3**: Svetlogorsk (2.06.2003 – 1 exp.; 6.06.2004 – 3 exp.), Kaliningrad (8.06.1996, 1 exp., det Aleksandrovitch), **7**: Baltiysk (25.05.2008, 1 spec.).

224. ***H.*** **(s.str.)** ***signaticornis*** **(Duftschmid, 1812)**
Type of areal: WP.
Distribution in Baltic region: —S-DE-I; WB; Lit.; N-E Pol.
Kaliningrad region: **7**: Yantarny (B., F); **1**: Zelenogradsk (13.05.2001, 1 exp., det. Aleksandrovich), **3**: Svetlogorsk (6.06.2004, 5 exp.), Ryabinovka (22.05.2003, 1 exp.) and also near the settlement of Pervalka [Lithuania] (10.06.2007, 3 exp.).

*225. ***H.*** **(s.str.)** ***xanthopus*** **Gemminger & Harold, 1868 ssp.** ***winkleri*** **Schauberger, 1923**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; Lit.; N-E Pol.
Kaliningrad region: the findings from the nothern part of East Prussia were unknown (B., F.); **3** (Alekseev, 2002); and also near the settlement of Pervalka [Lithuania] (10.06.2007, 1 exp.).

226. ***H.*** **(s.str.)** ***laevipes*** **Zetterstedt, 1828 [=*quadripunctatus* Dejean, 1829]**
Type of areal: H.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **3**: Svetlogorsk (9.06.1996, 2 exp.; 2.06.2003, 1 spec.), **6**: near the settlement of Nemanskoe in Krasnoznamensk district (4.07.1997, 2 exp.), **7**: Baltic Spit (06.07.2005, 1 exp.);

227. ***H.*** **(s.str.)** ***rubripes*** **(Duftschmid, 1812)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: **1**: Zelenogradsk, **3**: Svetlogorsk, **7**: Primorsk, **8**: Ladushkin (B., F.); **3** (Svetlogorsk, Kaliningrad), **6**: Chernyakhovsk (11.06.1999, 1 spec.), **8**: near the settlement of Znamenka-Novaya in Bagrationovk distrikt (12.06.1989, 1 spec.; 5.06.2007, 1 spec.), near the settlement of Slavskoe in Bagrationovk distrikt (24.05.1996, 1 spec.), **9**: near the settlement of Ozerki in Gvardeysk district (21.05.2007, 1 spec.).

(?) ***H. progrediens*** **Schauberger, 1922**
Type of areal: WCP.
Distribution in Baltic region: ——EA-; N-E Pol. (Wigierski NP).
Kaliningrad region: the species was never noted from Kaliningrad region, but the findings should be possible.

228. ***H.*** **(s.str.)** ***rufipalpis*** **Sturm, 1818 [=*rufitarsis* (Duftschmid, 1812) nec (Illiger, 1802)]**
Type of areal: WP.
Distribution in Baltic region: F-S-DEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); **3, 8, 9**.

(229). ***H.*** **(s.str.)** ***neglectus*** **Audinet-Serville, 1821**
Type of areal: WP.
Distribution in Baltic region: —S-D—I; Lit.
Kaliningrad region: **1**: Curonian Spit, **7**: Yantarny, Primorsk, Baltiysk, Mechnikov (B., F.); the species was not found in research time, but the findings should be possible.

(230). ***H.*** **(s.str.)** ***servus*** **(Duftschmid, 1812)**
Type of areal: WCP.
Distribution in Baltic region: —S-D-AI; WB; Lit.
Kaliningrad region: **1**: Zelenogradsk, **7**: Yantarny, **3** or **8**: Kaliningrad (B., F.); the species was not found in research time, but the findings should be possible.

231. ***H.*** **(s.str.)** ***tardus*** **(Panzer, 1796)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); near Chernyakhovsk (08.1998, 1 spec.).

(232). ***H.*** **(s.str.)** ***anxius*** **(Duftschmid, 1812) [=*atratus* Latreille, 1804]**

Type of areal: WCP.
Distribution in Baltic region: FKS-DEAI; WB; Lit.
Kaliningrad region: 7: Yantarny, Mechnikov, **8**: Kaliningrad, Ladushkin (B., F.); the species not found in research time, but the findings should be possible.

(233). ***H.* (s.str.) *picipennis* (Duftschmid, 1812)**
Type of areal: WP.
Distribution in Baltic region: —S-DEAI; Lit.
Kaliningrad region: 7: Mechnikov, **8**: Ladushkin, Kaliningrad (B., F.); the species not found in research time, but the findings should be possible.

(?). ***H.* (s.str.) *pumilus* Sturm, 1818 [=*vernalis* (Fabricius, 1801) nec (Panzer, 1796)]**
Type of areal: WCP.
Distribution in Baltic region: —S-D-AI; WB; Lit.
Kaliningrad region: the findings from the nothern part of East Prussia were unknown (B., F.) and also it was not found in research time, but the occurrence in the region is possible.

(234). ***H.* (s.str.) *hirtipes* (Panzer, 1797)**
Type of areal: WCP.
Distribution in Baltic region: —S-DEAI; WB; Lit.
Kaliningrad region: 3: Svetlogorsk, Kaliningrad (B., F.); the species was not found in research time, but the findings should be possible.

(235). ***H.* (*Haploharpalus*) *froelichii* Sturm, 1818**
Type of areal: TP.
Distribution in Baltic region: -KS-DEAI; WB; N-E Pol.
Kaliningrad region: 3: Svetlogorsk, Sambian peninsula (B., F.); the species was not found in research time, but the findings should be possible.

236. ***H.* (*Acardystus*) *flavescens* (Piller & Mitterpacher, 1783) [=*rufus* Bruggemann, 1873]**
Type of areal: WP.
Distribution in Baltic region: FKS-D-AI; WB; Lit.
Kaliningrad region: 3: Svetlogorsk, Guryevsk, **8**: Ladushkin (B., F.); **1** (Alekseev, 2002): sandy dunes near Curonian gulf, 23 km to NO of Zelenogradsk (18.07.1996, 1 exp.). By author this species was found also in the settlement Nida [Lithuanian part of Curonian Spit] on sandy mound (29.07.2007, 11 exp.).

Genus *Anisodactylus* Dejean, 1829

237. ***A. binotatus* (Fabricius, 1787)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere often (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); omnipresent: **1**, **2**, **3**, **6**, **8**, **9**.

(?). ***A. nemorivagus* (Duftschmid, 1812)**
Type of areal: WP.
Distribution in Baltic region: FK—D—I; WB.
Kaliningrad region: the findings from the nothern part of East Prussia were unknown (B., F.) and also it was not found in research time, but the occurrence in the region is possible.

(238). ***A. signatus* (Panzer, 1797)**
Type of areal: TP.
Distribution in Baltic region: ——D-AI; WB.
Kaliningrad region: 3 or **8**: Kaliningrad (B., F.); the species was not found in research time, but the findings should be possible.

Genus *Diachromus* Erichson, 1837

(239). ***D. germanus* (Linnaeus, 1758)**
Type of areal: WP.
Distribution in Baltic region: ——D-AI; Lit.
Kaliningrad region: 11: Bagrationovsk, **3** or **8**: Kaliningrad (B., F.); the species was not found in research time, but the findings (for example, on Curonian Spit) should be possible.

Genus *Stenolophus* Dejean, 1821

(240). ***S. teutonus* (Schrank, 1781)**
Type of areal: WP.
Distribution in Baltic region: —S-D-AI; WB; Lit. (Ferenca et al. 2002); N-E Pol.

Kaliningrad region: 3: Svetlogorsk (B., F.); the species was not found in research time, but the findings should be possible.

241. ***S. mixtus* (Herbst, 1784)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 3: Svetlogorsk, Kaliningrad (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1, 3, 6, 8, 9**.

Genus *Bradycellus* Erichson, 1837
[=*Tetraplatypus* Tschitscherine, 1897]

(242). ***B.* (*Tetraplatypus*) *ruficollis* (Stephens, 1828) [=*similis* (Dejean, 1829)]**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; N-E Pol.
Kaliningrad region: 3: Svetlogorsk, Kaliningrad, **9**: Zehlau bog (B., F.); the species was not found in research time, but the findings should be possible.

243. ***B.* (s. str.) *harpalinus* (Audinet-Serville, 1821)**
Type of areal: WP.
Distribution in Baltic region: -KSNDEAI; Lit.; N-E Pol.
Kaliningrad region: 3: Sambian peninsula, Svetlogorsk, **9**: Zehlau bog (B., F.); **1** (Alekseev, 2005): Rybachiy (8.08.1997, 1 spec.), **3**.

*244. ***B.* (s. str.) *csikii* Laczo, 1912**
Type of areal: WP.
Distribution in Baltic region: F-S-D—; WB; N-E Pol.
Kaliningrad region: 9 (Alekseev, 2002). This unical specimen from vicinity of Chernyakhovsk is lose and possibility of verification and data' updating is absent.

245. ***B.* (s. str.) *caucasicus* (Chaudoir, 1846) [=*collaris* (Paykull, 1798) nec (Herbst, 1784)]**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); **6**.

(?). ***Bradycellus* (s. str.) *verbasci* (Duftschmid,1812).**
Type of areal: WP.
Distribution in Baltic region: N-E Pol.
Kaliningrad region: the findings from East Prussia were unknown (B., F.) and also it was not found in research time, but the occurrence in the region is possible.

Genus *Dicheirotrichus* Jacquelin du Val, 1857
[=*Trichocellus* Ganglbauer, 1892]

(?). ***D. gustavii* Crotch, 1871 [=*pubescens* (Paykull, 1790) nec (Mueller, 1776)]**
Type of areal: WP.
Distribution in Baltic region: -KSND—
Kaliningrad region: 3: near Kaliningrad – origin of the XX century (B., F.); the occurrence of this species in Kaliningrad region is doubtful and should be confirmed.

(246). ***D. rufithorax* (Sahlberg, 1827)**
Type of areal: WCP.
Distribution in Baltic region: FKSN-EAI; Lit.
Kaliningrad region: 3: Sambian peninsula, **7**: Yantarny, Baltiysk, Primorsk, **3**: Kaliningrad, **9**: Pravdinsk, Chernyakhovsk (B., F.); the species not found in research time, but the findings should be very possible.

247. ***D. cognatus* (Gyllenhal, 1827)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; Lit.
Kaliningrad region: 3: Svetlogorsk, Kaliningrad, **9**: Chernyakhovsk (B., F.); **3**: Svetlogorsk (6.06.2004, 1 spec.), **9**: near settlement Ozerki in Gvardeysk district (9.05.2008, 1 exp.).

248. ***D. placidus* (Gyllenhal, 1827)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 1: Lesnoe, **3**: Svetlogorsk, Kaliningrad, **7**: Primorsk, **9**: Chernyakhovsk (B., F.); **1**: Rybatchiy (20.04.1997, 1 spec., det.

Aleksandrovitch), **3**: settlement Pereslavskoe in Zelenogradsk district (15.04.2008, 1 exp.).

Genus *Acupalpus* Dejean, 1829

249. ***A. flavicollis* (Sturm, 1825)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 3: Svetlogorsk, Kaliningrad, **7**: Mechnikov, Yantarny (B., F.); **3**: Svetlogorsk (2.06.2003, 1 spec.; 6.06.2004, 2 spec.)

(250). ***A. brunnipes* (Sturm, 1825)**
Type of areal: WP.
Distribution in Baltic region: —SN-E-I; WB.
Kaliningrad region: 7: Yantarny (B., F.); the species not found in research time, but the findings should be possible.

251. ***A. meridianus* (Linnaeus, 1761)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: everywhere found (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); omnipresent: **1** (Alekseev, 2005), **2, 3, 4, 5, 6, 8, 9**.

(252). ***A. parvulus* (Sturm, 1825) [=*dorsalis* (Fabricius, 1787) nec (Pontoppidan, 1763)]**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); the species not found in research time, but the findings should be very possible.

253. ***A. exiguus* Dejean, 1829**
Type of areal: WCP.
Distribution in Baltic region: FKS-DEAI; Lit. (Ferenca et al. 2006); N-E Pol.
Kaliningrad region: 7: Yantarny, Primorsk, **3**: Kaliningrad, **9**: Chernyakhovsk (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); **1, 3, 8**.

(?). ***A. luteatus* (Duftschmid, 1812)**
Type of areal: WP.
Distribution in Baltic region: Lit. (Tamutis, Ferenca 2006).
Kaliningrad region: the findings from East Prussia were unknown (B., F.) and also it was not found in research time, but the occurrence in the region (at the northern limit of range) is possible.

(?). ***A. suturalis* Dejean, 1829**
Type of areal: WP.
Distribution in Baltic region: ———A-; Lit. (Ferenca et al. 2006).
Kaliningrad region: the findings from East Prussia were unknown (B., F.) and also it was not found in research time, but the occurrence in the region is possible.

Genus *Anthracus* Motschulsky, 1850

254. ***A. consputus* (Duftschmid, 1812)**
Type of areal: WCP.
Distribution in Baltic region: F-S-DEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 1: Rybachiy, Zelenogradsk, **7**: Primorsk, **3**: Kaliningrad, **9**: Pravdinsk, Chernyakhovsk (B., F.); **1**: Rybatchiy (Sharova, Grüntal 1973); **1, 3, 6, 9**.

Tribus Cyclosomini Laporte de Castelnau, 1834
Genus *Masoreus* Dejean, 1821

255. ***M. wetterhallii* (Gyllenhal, 1813)**
Type of areal: WP.
Distribution in Baltic region: —SNDEAI; WB; Lit. (Ferenca et al. 2002).
Kaliningrad region: 3: Sambian peninsula, Svetlogorsk, **8**: Mamonovo (B., F.); **1** (Alekseev 2003, Alekseev 2005): 23 km NO to Zelenogradsk (19.07.1996, 1 spec.), Rybatchiy (06.08.1998, 1 spec.), Lesnoe (11.08.2000, 1 spec.), **7**: Baltiysk (21.06.2008, 1 exp.).

Tribus Odacanthini Laporte de Castelnau, 1834
Genus *Odacantha* Paykull, 1798

256. ***O. melanura* (Linnaeus, 1767)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.

Kaliningrad region: 1, 3, 7: everywhere on the sea coasts (B., F.); **1**: Rybachiy (Sharova, Grüntal 1973); omnipresent on shores of lakes and gulfs: **1** (Alekseev, 2005), **3, 6, 8, 9, 10**.

Tribus Lebiini Bonelli, 1810
Genus *Lebia* Latreille, 1802

(257). ***L. cyanocephala* (Linnaeus, 1758)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI
Kaliningrad region: Kaliningrad (XIX century) (B., F.); the species was not found in research time, but the findings should be possible.

258. ***L. chlorocephala* (Hoffmannsegg, 1803)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 3: Svetlogorsk, **8**: Mamonovo, Kaliningrad, **9**: Chernyakhovsk (B., F.); **1** (Alekseev, 2005), **3, 6, 8, 9**.

259. ***L. cruxminor* (Linnaeus, 1758)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 3: Svetlogorsk, **7**: Yantarny (1940), **8**: Ladushkin, Mechnikov, Kaliningrad, **12**: near Vyshtynetskoe Lake (B., F.); **6**: once 5 km to the NO of Chernyakhovsk (14.05.1989, 1 exp.).

Tribus Demetriini Bates, 1886
Genus *Demetrias* Bonelli, 1810

260. ***D.* (s.str.) *monostigma* Samouelle, 1819**
Type of areal: WP.
Distribution in Baltic region: F-S-DEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 3: Sambian peninsula, Svetlogorsk, **7**: Yantarny, Mechnikov, Baltiysk, **3**: Kaliningrad (B., F.); **9**: Zehlau bog (Främbs, Dormann, Mossakowski 2002); **1** (Alekseev, 2005), **3, 7** (the Baltic Spit), **8, 9**.

(261). ***D.* (s. str.) *atricapillus* (Linnaeus, 1758)**
Type of areal: WP.
Distribution in Baltic region: —S-D-A-
Kaliningrad region: 3: Sambian peninsula (XIX century), **7**: Baltic Spit (XIX century) (B., F.); the species was not found in research time, but the findings should be possible.

262. ***D.* (*Aetophorus*) *imperialis* (Germar, 1824)**
Type of areal: WP.
Distribution in Baltic region: F-SNDEAI; WB; Lit.
Kaliningrad region: 7: Yantarny, Mechnikov, Primorsk (B., F.); **7**: Baltiysk (06.2006, 1 spec.), **8**: Kaliningrad (on *Phragmites communis* in the bottomland of the river Pregolya and in the shores of the Kaliningrad gulf – 06.1997, 1 spec.), on the sandy shores of the Kaliningrad gulf near Ladushkin (7.05.2007, 2 spec.) and near the settlement of Veseloe in Bagrationovsk district (5.06.2007, 1 spec.).

Tribus Dromiini Bonelli, 1810
Genus *Paradromius* Fowler, 1887

(263). ***P.* (s.str.) *longiceps* (Dejean, 1826)**
Type of areal: WP.
Distribution in Baltic region: F-S-DEA-
Kaliningrad region: 7: Mechnikov, Primorsk, **8**: Kaliningrad (B., F.); the species was not found in research time, but the findings should be possible.

264. ***P.* (*Manodromius*) *linearis* (Olivier, 1795)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 7: Mechnikov, **8**: Kaliningrad (B., F.); **1**: Rybachiy, Baltic Sea coast (11.08.1998, 1 exp.), **8**: near the settlement of Ulyanovka in Bagrationovsk district, on the shore of Kaliningrad gulf under pine bark (7.08.2007, 1 exp.).

Genus *Dromius* Bonelli, 1810
265. ***D. agilis* (Fabricius, 1787)**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere common (B., F.); **3, 6**.

(266). ***D. angustus*** **Brulle, 1834**
Type of areal: WP.
Distribution in Baltic region: —SND—
Kaliningrad region: 7: Primorsk, **8**: Kaliningrad (XIX century) (B., F.); the species was not found in research time, but the findings should be possible.

267. ***D. quadraticollis*** **Morawitz, 1862 [=*cordicollis* Vorbringer, 1898]**
Type of areal: TP.
Distribution in Baltic region: FKS—EAI; WB; Lit.
Kaliningrad region: 3: Kaliningrad, **9**: Chernyakhovsk, **12**: near Vyshtynetskoe Lake (B., F.); 8 km to NO of Chernyakhovsk, a slash in the mixed forest, under bark of the spruce trunk (1.05.1996 - 1 spec.).

(268). ***D. schneideri*** **Crotch, 1871 [=*marginellus* (Fabricius, 1794) nec (Herbst, 1784)]**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; Lit.; N-E Pol.
Kaliningrad region: 3 or **8**: Kaliningrad (B., F.); the species was not found in research time, but the findings should be possible.

269. ***D. fenestratus*** **(Fabricius, 1794)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 3: Svetlogorsk, **7**: Primorsk, **8**: Kaliningrad (B., F.); 6 km to NO of Chernyakhovsk, a slash in the mixed forest, under bark of the common spruce (1.05.1998 – 1 spec.; 30.03.2001 – 1 spec.).

270. ***D. quadrimaculatus*** **(Linnaeus, 1758)**
Type of areal: WP.
Distribution in Baltic region: F-SNDEAI; WB; Lit.
Kaliningrad region: everywhere not seldom (B., F.); **1, 3, 6.**

Genus *Calodromius* Reitter, 1905

271. ***C. spilotus*** **(Illiger, 1798) [=*quadrinotatus* (Panzer, 1800) nec (Fabricius, 1798)]**
Type of areal: WP.
Distribution in Baltic region: F-SNDEAI; Lit.
Kaliningrad region: 3: Svetlogorsk, **7**: Yantarny, **3** or **8**: Kaliningrad (B., F.); **1, 3, 8.**

Genus *Philorhizus* Hope, 1838

272. ***Ph. sigma*** **(Rossi, 1790)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere (B., F.); **6**: Chernyakhovsk (30.11.1994, 1 spec.).

273. ***Ph. notatus*** **(Stephens, 1827) [=*nigriventris* (Thomson, 1857)]**
Type of areal: WCP.
Distribution in Baltic region: F-SNDEA-; WB; Lit.
Kaliningrad region: 3: Sambian peninsula, Svetlogorsk, **7**: Mechnikov (B., F.); **3**: Kaliningrad (28.04.2008, 1 exp).

Genus *Microlestes* Schmidt-Goebel, 1846

274. ***M. minutulus*** **(Goeze, 1777)**
Type of areal: TP.
Distribution in Baltic region: FKS-DEAI; WB; Lit.
Kaliningrad region: everywhere, but not often, **9**: Zehlau bog (B., F.); **1**: Rybachiy (Sharova, Grüntal 1973), **1, 3, 7, 8, 9.**

275. ***M. maurus*** **(Sturm, 1827)**
Type of areal: WCP.
Distribution in Baltic region: FKS-DEAI; WB; Lit.; N-E Pol.
Kaliningrad region: 1: Rybachiy, **3**: Sambian peninsula, **6**: Chernyakhovsk (B., F.); **3**: near the settlement of Chkalovsk in Guryevsk district, a slash in the mixed forest (9.07.2007, 2 spec.).

Genus *Syntomus* Hope, 1838 [= *Metabletus* Schmidt-Goebbel, 1846]

276. ***S. truncatellus*** **(Linnaeus, 1761) [=*ai* Barsevskis, 1993]**
Type of areal: WCP.

Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: everywhere common (B., F.); **7**: Yantarny (5.05.2008, 4 exp.), Baltiysk (25.05.2008, 2 exp.).

(277). ***S. foveatus*** **(Geoffroy, 1785)**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.; N-E Pol.
Kaliningrad region: everywhere often (B., F.); the species was not found in research time, the findings are very possible.

(278). ***S. obscuroguttatus*** **(Duftschmid, 1812)**
Type of areal: WP.
Distribution in Baltic region: N-E Pol.
Kaliningrad region: 3: Kaliningrad (B., F.); the species was not found in research time, but the findings should be possible.

Genus *Lionychus* Wissmann, 1846

*279. ***L. quadrillum*** **(Duftschmid, 1812)**
Type of areal: WP.
Distribution in Baltic region: F-S——; Lit. (Ferenca et al. 2002); N-E Pol.
Kaliningrad region: the findings from East Prussia were unknown (B., F.); **1**, **3** (Alekseev, 2005): sandy bichs of Baltic Sea near Svetlogorsk, on the Curonian Spit near Rybachiy and Lesnoe (05-08. 1998-2003), **6**: 2 km to NO of Chernyakhovsk, a sandy pit (15.08.1999, 1 spec.).

Tribus Cymindini Laporte de Castelnau, 1834
Genus *Cymindis* Latreille, 1806

(280). ***C.*** **(s.str.)** ***humeralis*** **(Geoffroy, 1785)**
Type of areal: WP.
Distribution in Baltic region: —S-D-AI
Kaliningrad region: 3: Svetlogorsk, **7**: Mechnikov (B., F.); the species was not found in research time, but the findings should be possible.

(281). ***C.*** **(s.str.)** ***angularis*** **Gyllenhal, 1810**
Type of areal: WP.
Distribution in Baltic region: FKSNDEAI
Kaliningrad region: 1: Rybachiy, **3**: Svetlogorsk, **7**: Mechnikov, Primorsk, Baltiysk, **8**: Ladushkin (B., F.); the species was not found in research time, but the findings should be possible.

(282). ***C.*** **(s.str.)** ***macularis*** **Mannerheim, 1824**
Type of areal: WCP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 3: Svetlogorsk, **8**: Mamonovo, **5**: Neman (B., F.); the species was not found in research time, but the findings should be possible.

Table 1. The taxonomical and faunistical analisys of the Kaliningrad carabids

Subfamily	The number of species for the territory of Kaliningrad region in last German catalogue (B., F. excluding doubtful species)	The number of species occured in Kaliningrad region (present degree of knowlige; excluding doubtful species).	Possibly fauna (all species noted from the territory and adjancent lands).
Omophroninae	1	1	1
Carabinae	26	26	32
Cicindelinae	6	6	6
Loricerinae	1	1	1
Elaphrinae	5	5	5
Scaritinae	11	11	16
Trechinae	48	51	65
Harpalinae	172	182	200
Brachininae	0	0	1
?	270	283	327

Table 1. The zoogeographical analisys of the Kaliningrad carabids

Chorotype	The number of species for the territory of Kaliningrad region in last German catalogue (B., F. excluding doubtful species)	The number of species occured in Kaliningrad region (present degree of knowlige; excluding doubtful species).	Possibly fauna (all species noted from the territory and adjancent lands).
Holarctic	24	26	28
Transpalearctic	37	40	42
West-Central Palearctic	94	95	102
West Palearctic	114	121	154
Amphiatlantic	1	1	1
?	270	283	327

(283). ***C. (Tarulus) vaporariorum* (Linnaeus, 1758)**
Type of areal: TP.
Distribution in Baltic region: FKSNDEAI; WB; Lit.
Kaliningrad region: 3: Svetlogorsk (B., F.); the species was not found in research time, but the findings should be possible.

Subfamily Brachininae Bonelli, 1810
Genus *Brachinus* Weber, 1801

(?). ***B. crepitans* (Linnaeus, 1758)**
Type of areal: WCP.
Distribution in Baltic region: F-S-DEA-
Kaliningrad region: certain localities from East Prussia are unknown and the species was never found; the findings are theoretically probable, but should be very doubtful.

The taxonomical analisys of the Kaliningrad carabid beetles is presented in Table 1, the zoogeographical analisys is given in Table 2.

The fauna of *Carabidae* of the region is represented by species which have Holarctic, Transpalearctic, West-Central Palearctic, West Palearctic and Amphiatlantic distribution areas. The species occupying the West Palearctic (121 species, 42,6% of all species) and West-Central Palearctic (95 species – 33,5%) areas are predominants in our fauna. Other zoogeographical elements are: Transpalearctic area species - 14,1% (40 taxa), Holarctic - 9,2% (26 taxa) and Amphiatlantic – 0,4% (only 1 species – *Bembidion transparens* (Gebl.)).

Zoogeographically, the essential number of the unfound (45 species – 39,5%) and included in "possible fauna" (33 taxa) species belong to the West Palearctic zoogeographical element. Fauna of the species with larger areal is collected more comletely. This circumstance may be result from the bigger ecological flexibility of species with large distribution area, theirs agile accomodating to man-transformed biotopes and theirs comparative and absolute abundance in secondary ecosystems. Rare and stenotopic taxa (apart from a few boreal species) are presented in our region by European, Central-European, Euro-Caucasian and West-Palearctic zoogeographical groups. By a compiling of Red Lists for the territory of the region is necessary to take into account this species – the species with the restricted range and with the little adaptability to changes of the environment.

Preliminary analysisies of the pre-war list and the recent collected material is showed the declinig in number of the connected with dry open ecosystems species (from gender *Amara*, *Harpalus*, *Syntomus*, *Cymindis*), what can be specific for Kaliningrad region only. The connected with weat meadows species increase in the number and population density. Probably, it is caused by the agriculture unactivity in the region after 1945 and especially after 1991.

The collected material is the most comlete for the next subfamilies: Omophroninae (100% of registered in last German catalogue species), Loricerinae (100%), Carabinae (84,6%) and

Trechinae (75%). Noticeable smaller number of species were captured in subfamilies Harpalinae (67,4%), Scaritinae (63,6%), Elaphrinae (60%) and Cicindelinae (50%). In total, 283 species of the family *Carabidae* are inhabited the whole Kaliningrad region. To the present time we have no new data on the distribution of 81 species in our region. The degree of recognition of this family is still insufficient and the finding of further 40-50 species can be expected. This list should be supplemented by the future investigations with new findings locations and with data on new for the fauna species.

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The author is grateful to Dr. O.R Aleksandrowicz (Slupsk, Poland) and to Dr. B. M. Kataev (Zoological Institute RAS, St-Peterburg) for the determination of some carabid species in 2002-2003 years and also would like to thank Prof. A. Barševskis (Institute of Systematic Biology, Daugavpils), Dr. A. V. Derunkov (Zoological Institute of NAS of Belarus, Minsk), Dr. V. Tamutis (Kaunas) and Ulrike Eith (Freiburg) for the help with the carabidological literature sources. A.V. Pavlova (Kaliningrad) is thanked for her help by field-work.

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TO THE KNOWLEDGE OF ATTELABID-BEETLES (COLEOPTERA) OF THE WORLD FAUNA

Andrei A. Legalov

Legalov A.A. 2008. To the knowledge of Attelabid-beetles (Coleoptera) of the world fauna. *Acta Biol.Univ. Daugavpil. 8 (2): 193 - 226.*

New genera: *Jekelitrahelus* Legalov, gen.n. (type species: *Trachelophorus elegans* Voss, 1929) and *Metriotracheloides* Legalov, gen.n. (type species: *Apoderus holoxanthus* Fairmaire, 1902), new subgenera: *Chinphialodes* Legalov, subgen.n (type species: *Phialodes hubeiensis* Legalov, sp.n.) of the genus *Phialodes* Roelofs, 1874, *Protrachelophorus* Legalov, subgen.n. (type species: *Trachelophoridius minutus* Voss, 1929) of the genus Trachelophoridius Voss, 1929, and new species: *Vossieuscelus loretoensis* Legalov, sp.n. (Peru), *Omolabus kirschi* Legalov, sp.n. (Colombia), *O. westerduijni* Legalov, sp.n. (Peru), *Phialodes hubeiensis* Legalov, sp.n. (Hubei), *Humerilabus alleni* Legalov, sp.n. (Laos), *H. borneoensis* Legalov, sp.n. (Sabah), *Henicolaboides nanlingensis* Legalov, sp.n. (China) and *Paroplapoderus alleni* Legalov, sp.n. (Bhutan) are described. New synonyms: subtribe Phialodina Legalov, 2003, syn.n. (type genus: *Phialodes* Roelofs, 1874) for subtribe Attelabina Billberg, 1820, *Henicolaboides nigrocapitus* Legalov, 2007, syn.n. for *H. spinipes* (Schilsky, 1906), *Eoclitostylus* Legalov, 2003, syn.n.; (type species: *Apoderus tenuissimus* Pascoe, 1881) for *Trachelismus* Motschulsky, 1870, *Trachelophorus fausti* Voss, 1929, syn.n. for *T. signatus* Voss, 1929, *Apoderus cinctipectoralis* Voss, 1930, syn.n. for *Leptapoderus affinis* (Schilsky, 1906), *Apoderus papei* Voss, 1927, syn.n. for *L. nigroapicatus* (Jekel, 1860). New status: *Madagasocycnelus ater* (Faust, 1890), stat.n. from variation of *M. humeralis* Olivier, 1807. Resurrected status *Omolabus deceptor* (Jekel, 1860), stat.res. from synonym to *O. piceus* (Germar, 1824). New systematic placement: *Ophthalmolabus monticolus* (Voss, 1924), placem.n. from subgenus *Afroeuopsis* Legalov, 2007 to subgenus *Ophthalmolabus* s. str., *Omolabus mutabilis* (Jekel, 1860), placem.n. from subgenus *Promolabus* Legalov, 2007 to subgenus *Paralabus* Legalov, 2004, *Omolabus troglodytes* (Jekel, 1860), placem.n. from *Omolabus* incertae sedis to subgenus *Promolabus* Legalov, 2007, *Omolabus latus* Legalov, 2007, placem.n. from subgenus *Sternolaboides* Legalov, 2007 to subgenus *Xestolabus* Jekel, 1860, *Trachelismus schultzei* (Voss, 1922), placem.n. from subgenus *Trachelismus* s. str. to subgenus *Eoclitostyloides* Legalov, 2007, *Madagasocycnelus madegassus* (Hustache, 1922), placem.n. from genus *Trachelophorus* Jekel, 1860 to genus *Madagasocycnelus* Legalov, 2003, Subgenus *Atrachelophoridius* Legalov, 2007, placem.n. from genus *Trachelophoridius* Voss, 1929 to genus *Trachelophorus* Jekel, 1860, *Leptapoderus affinis* (Schilsky, 1906), placem.n. from subgenus *Paraleptapoderus* Legalov, 2003 to subgenus *Leptapoderus* s. str. *Pheleuscelus subimpressus* (Voss, 1925) and *Omolabus ecuadorensis* Legalov, 2007 in fauna of Peru, *Humerilabus fausti* (Voss, 1925) in fauna of Laos, *Paramecolabus castaneicolor* (Jekel, 1860) in fauna of Hubei and Hunan, *P. obliquus* (Heller, 1908) in fauna of Sabah, *Catalabus rasuwanus* Legalov, 2007 in fauna of India, *Henicolaboides gigantinus* (Legalov et Liu, 2005) in fauna of Laos, Cambodia and Bhutan, *Tomapoderopsis cyclops* (Faust, 1894), *Hoplapoderus caliginosus* (Faust, 1894) and *Cycnotrachelodes coeruleatus* (Faust, 1894) in fauna of Bhutan are for the first time revealed.

16 new combinations are established. By the author studied types: *Euops monticola* Voss, 1924, *Attelabus angulatus* Fabricius, 1787, *Attelabus atratus* Fabricius, 1801, *Xestolabus jatahyensis* Voss, 1925, *Attelabus bipustulatus* Fabricius, 1776, *Attelabus longirostris* Jekel, 1860, *Attelabus troglodytes* Jekel, 1860, *Euscelus nigricornis* Jekel, 1860, *Euscelus bipustulosus* Jekel, 1860, *Euscelus carneolus* var. *rubicundus* Jekel, 1860, *Attelabus sallei* Jekel, 1860, *Attelabus cribricollis* Jekel, 1860, *Attelabus jekelii* Kirsch, 1870, *Attelabus mutabilis* Jekel, 1860, *Attelabus deceptor* Jekel, 1860, *Attelabus spinipes* Schilsky, 1906, *Attelabus tuberifer* Jekel, 1860, *Attelabus costulatus* Jekel, 1860, *Apoderus benguetensis* Voss, 1922, *Apoderus badeni* Faust, 1883, *Apoderus schultzei* Voss, 1922, *Apoderus fenestratus* Heller, 1908, *Apoderus humeralis* var. *ater* Faust, 1890, *Trachelophorus signatus* Voss, 1929, *Trachelophoridius clitostyloides* Voss, 1943, *Trachelophoridius minutus* Voss, 1929, *Apoderus papei* Voss, 1927, *Apoderus affinis* Schilsky, 1906, *Apoderus subfoveolatus* Voss, 1927, *Apoderus bilineatus* Faust, 1883, *Attelabus biguttatus* Fabricius, 1801, *Apoderus crucifer* Heller, 1922 and *Apoderus flavotorosus* Faust, 1898.

Key words: Coleoptera, Curculionoidea, Attelabidae, new subgenus, new species, resurrected status, new placement, new combination.

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INTRODUCTION

The leaf-rolling weevils of the family Attelabidae are well adapted for turning of tubes. They are obligate leaf-rolling weevils. Taxa of this family usually differ well. Armament of the endophallus usually is species-specific. They are distributed everywhere but concentrate in subtropical and tropical forests.

The author continues studying of systematisation of weevils of this family (Legalov, 2001, 2003, 2004, 2005, 2006, 2007a, 2007b; Legalov, Liu, 2005). By the author is studied new materials (including typical materials). Results of this work are resulted in this paper.

MATERIAL AND METHODS

Types and specimens are kept in the following collections and museums: ACB – A. Allen Collection (USA: Boise); CBN – R. Borovec Collection (Czech Republic: Nechanice); DEI – Deutsches Entomologisches Institut (Germany: Muncheberg); ISNB – Institut Royal des Sciences Naturelles de Belgique (Belgium: Brussels); MCSN – Museo Civico di Storia Naturale «Giacomo Doria» (Italy: Genova); NMPC – National Museum of Natural History (Czech Republic: Prague); SMTD = Staatliches Museum für Tierkunde (Germany: Dresden); USNM – National Museum of Natural History, [formerly, United States National Museum] (USA: Washington); VRP – V. Ryjacek Collection (Czech Republic: Prague); ZMAN – Zoologisch Museum, Instituut voor Taxonomische Zoologie, Universiteit van Amsterdam (Netherlands: Amsterdam); ZMHB – Museum fur Naturkunde der Humboldt-Universitat (Germany: Berlin); ZMN – Zoological Museum, Institute of Animal Systematics and Ecology (Russia: Novosibirsk); ZMUC – Zoological Museum, University of Copenhagen (Denmark: Copenhagen).

RESULTS

Family Attelabidae Billberg, 1820
Subfamily Attelabinae Billberg, 1820
Supertribe Attelabitae Billberg, 1820
Tribe Euopsini Voss, 1925
Subtribe Sawadaeuopsina Legalov, 2007
Genus *Ophthalmolabus* Jekel, 1860

Subgenus *Ophthalmolabus* s. str.

***Ophthalmolabus* (s. str.) *monticolus* (Voss, 1924), placem.n.** (Figs. 1, 60-61)
Euops monticola Voss, 1924: 42

Distribution. Tanzania.
Remarks. By the author is designated lectotype – male from the collection DEI with labels «Usambara, P. Weise», «Coll. Kraatz», «Syntypus», «*Euops* (*Ophthalmolabus*) *monticola* m., Det. E. Voss», «*Euops monticola* Voss», «Coll. DEI Müncheberg», «Lectotype *Euops monticola* Voss, A. Legalov design. 2008», «*Ophthalmolabus monticolus* (Voss, 1924), A. Legalov det. 2008».

This species have been previously in subgenus *Afroeuopsis* Legalov, 2007 wrongly placed.

Tribe Euscelini Voss, 1925
Subtribe Clinolabina Legalov, 2003
Genus *Clinolabus* Jekel, 1860

***Clinolabus angulatus* (Fabricius, 1787)** (Fig. 2)
Attelabus angulatus Fabricius, 1787: 124

Distribution. Brazil, French Guiana.
Remarks. By the author is designated lectotype – female from the collection ZMUC with labels «*angulata*», «Lectotypus *Attelabus angulatus* F., A. Legalov desig. 2007», «*Clinolabus angulatus* (Fabricius, 1787), A. Legalov det. 2008».

Subtribe Euscelina Voss, 1925
Genus *Coscineuscelus* Jekel, 1860
Subgenus *Coscineusceloides* Legalov, 2007

***Coscineuscelus* (*Coscineusceloides*) *nigricornis* (Jekel, 1860)** (Figs. 3, 62)
Euscelus nigricornis Jekel, 1860: 216

Distribution. Brazil.
Remarks. By the author is designated lectotype – male from the collection MCSN with labels «Brasile, Coll. Jekel», «Typus male female», «*Euscelus* (*Coscineuscelus*) *nigricornis* Jek., Ins. Snd. II», «Syntypus *Euscelus nigricornis* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Lectotype *Euscelus nigricornis* Jek., A. Legalov design. 2008». Paralectotypes: male on one pin with lectotype and female (MCSN) with labels «Espirito Santo Brasil.», «Syntypus *Euscelus nigricornis* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Paralectotype *Euscelus nigricornis* Jek., A. Legalov design. 2008».

Genus *Vossieuscelus* Legalov, 2007

***Vossieuscelus loretoensis* Legalov, sp.n.** (Figs. 4, 63)

Holotype. Male (USNM), Peru, Loreto, Allpahuya, white sands fores, 27.IX.2006, R. Westerdjuin.
Description. Male: Body red-brown, naked. Head, strip on middle and strips on each side pronotums, oval stains on the basis of 3rd and 4th intervals of the elytra, funicle of antennae and scapus more dark. Postnotal groove, 1st and 2nd intervals of the elytra, basis of tibiae yellow. Head elongated. Rostrum short, expanded to apex, smooth. Antennae attached before the rostrum basis. Eyes large, convex. Forehead narrow, flat, with weak middle striae. Temples long, smooth. Vertex convex, smooth.

Antennae short, reaching pronotum first line. Scapus and 1st segments oval. Scapus longer than 1st segments. 2nd segment trapezoid, narrow, considerably narrower than 1st

segments. 3rd - 6th segments almost rectangular, more wider than 2nd segments. 3rd and 4th segments of equal length. 5th segment shorter than 4th segments. 6th segment, more wider than 5th segments. 7th segment transversal, much more wider than 6th segments. Clava elongated, compact, more longer than funicle. 1st segment trapezoid, longer than 2nd segments. 3rd segment pointed, more longer than 1st segments.

Pronotum almost campaniform, 1.14 wider than length. Grooves weak. Sides weakly rounded. Disk convex, smooth. Scutellum almost semicircular.

Elytra elongated, almost rectangular, 1.16 times longer than width, weakly extend to apex. Greatest width behind the middle. Humeri convex. Intervals flat, smooth. Striae very weak. Points in them small and rare.

Prothorax smooth. Precoxal part narrower than postcoxal part. Meso- and metathorax with episternum sparsely and largely punctate. Abdomen convex. 1st and 2nd ventrites wide. 1st ventrite with 4 transversal rows of erect setae. 3rd and 4th ventrites narrower.

Legs long. Forelegs strongly elongated. Profemora thick with two close located large flattened teeth before the middle. Meso- and metafemora weakly widened. Mesofemora with weak protuberance in topmost third. Metafemora without teeth. Protibiae long, curved, about mucro and tooth at apex. Meso- and metatibiae short, weakly biconcave. Tarsi long. 1st segment long-triangular. 2nd segment triangular. 3rd segment bilobed. Clausal segment elongated. Claws long. Length of body: 4.2 mm.

Diagnosis. This new species is similar to *V. huanucus* (Legalov, 2004) but differs by the other colouring of legs and antennae, weakly rounded sides of the pronotum, large teeth on profemora, armament of the endophallus.

Distribution. Peru.

Etymology. The name is formed from the name of province Loreto – «loretoensis».

Genus *Pheleuscelus* Jekel, 1860
Subgenus *Pheleusceloides* Legalov, 2007

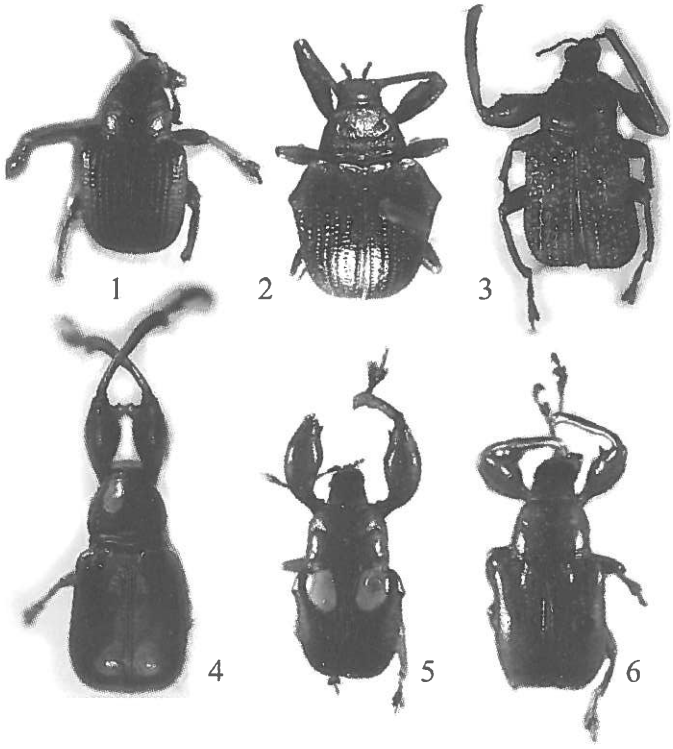
***Pheleuscelus* (*Pheleusceloides*) *subimpressus* (Voss, 1925)**
Euscelus subimpressus Voss, 1925: 37

Material. Male (ACB), Peru, Loreto, Puerto, Almendra, Al tered forest, 21.II.2007, R. Westerduijn.
Distribution. Brazil, Peru.
Remarks. This species is for the first time revealed in fauna of Peru.

Genus *Chryseuscelus* Voss, 1925

***Chryseuscelus biguttatus* (Fabricius, 1775)** (Fig. 5)
Curculio biguttatus Fabricius, 1775: 130
Euscelus bipustulosus Jekel, 1860: 214

Distribution. Jamaica, P. Rico.
Remarks. For *Euscelus bipustulosus* by the author is designated lectotype – male from the collection MCSN with labels «Jamaica, Coll. Jekel», «Typus male», «male», «*Euscelus* (*Pheleuscel*) *bipustulosus* Jek., Ins. Sn», «Syntypus *Euscelus bipustulosus* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Lectotype *Euscelus bipustulosus* Jek., A. Legalov design. 2008». Paralectotypes – 2 females (MCSN) with labels «Jamaica, Coll. Jekel», «Typus female», «Syntypus *Euscelus bipustulosus* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Paralectotype *Euscelus bipustulosus* Jek., A. Legalov design. 2008».



Figs. 1-6. Attelabidae gen. spp.: 1 – *Ophthalmolabus monticolus* (male, lectotype), 2 – *Clinolabus angulatus* (female, lectotype), 3 – *Coscineuscelus nigricornis* (male, lectotype), 4 – *Vossieuscelus loretoensis* (male, holotype), 5 – *Euscelus bipustulosus* (male, holotype), 6 – *E. carneolus* var. *rubicundus* (male, lectotype).

2000), «Lectotype *Euscelus carneolus* var. *rubicundus* Jek., A. Legalov design. 2008». Paralectotype – female (MCSN) with labels «Amazzoni, Coll. Jekel», «Syntypus *Euscelus carneolus* var. *rubicundus* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Paralectotype *Euscelus carneolus* var. *rubicundus* Jek., A. Legalov design. 2008».

Tribe Hybolabini Voss, 1925
Subtribe Hybolabina Voss, 1925
Genus *Hybolabus* Jekel, 1860

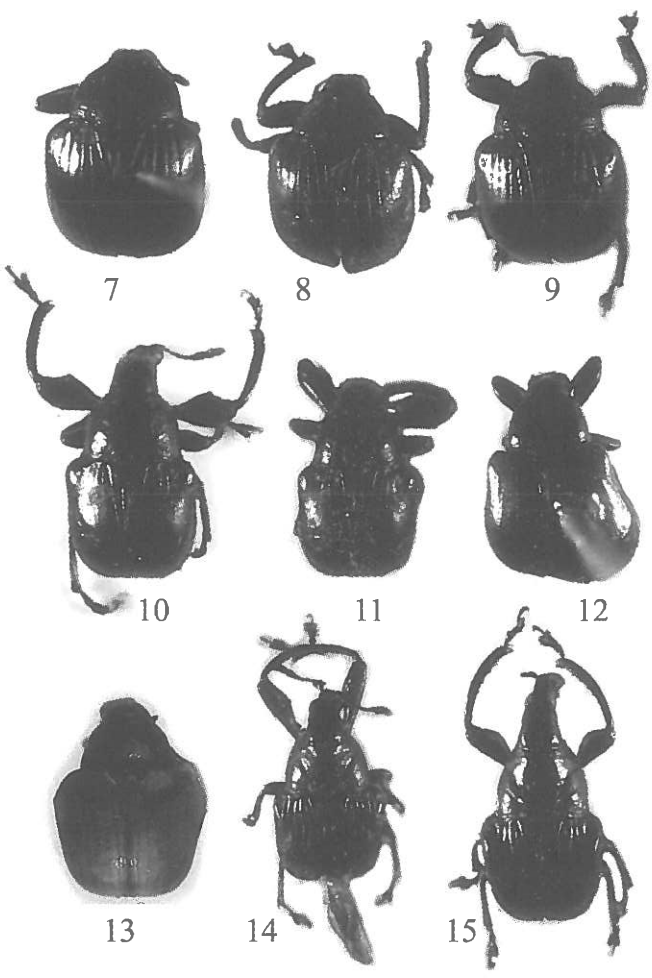
***Hybolabus ater* (Olivier, 1807)** (Figs. 7-8, 64)
Attelabus ater Olivier, 1789: 278
Attelabus atratus Fabricius, 1801: 419
Attelabus sallei Jekel, 1860: 208

Genus *Emphyleuscelus* Voss, 1925
Subgenus *Emphyleuscelus* s. str.

***Emphyleuscelus* (s. str.) *carneolus* (Erichson, 1848)** (Fig. 6)
Attelabus carneolus Erichson, 1848: 567
Euscelus carneolus var. *rubicundus* Jekel, 1860: 216

Distribution. Guyana.
Remarks. For *Euscelus carneolus* var. *rubicundus* by the author is designated lectotype – female from the collection MCSN with labels «Amazzoni, Coll. Jekel», «Syntypus *Euscelus carneolus* var. *rubicundus* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto

Distribution. Brazil, French Guiana, Guatemala, Mexico, Uruguay.
Remarks. For *Attelabus atratus* (figs. 7, 64) by the author is designated lectotype – male from the collection ZMUC with labels «Essuquibo, Schmidt, Mus. de Sehestidt, *Attelabus atratus* F.», «TYPE», «Lectotypus *Attelabus atratus* F., A. Legalov desig. 2007», «*Hybolabus ater* (Olivier, 1807), A. Legalov det. 2008». Paralectotypes: female from the collection ZMUC with labels «TYPE», «green square», «Paralectotype *Attelabus atratus* F., A. Legalov desig. 2007», «*Hybolabus ater* (Olivier, 1807), A. Legalov det. 2008» and female from the collection ZMUC with labels «*atratus*», «Paralectotype *Attelabus atratus* F., A. Legalov desig. 2007»,



Figs. 7-15. Attelabidae gen. spp.: 7 – *Attelabus atratus* (male, lectotype), 8 – *A. sallei* (female, lectotype), 9 – *A. cribricollis* (male, lectotype), 10 – *Neoxestolabus jatahyensis* (male, lectotype), 11 – *N. jatahyensis* (female, paralectotype), 12 – *Synolabus bipustulatus* (female, lectotype), 13 – *Omolabus peruanus* (female), 14 – *O. longirostris* (male, lectotype), 15 – *Attelabus jekelii* (male, paralectotype).

«*Hybolabus ater* (Olivier, 1807), A. Legalov det. 2008»

For *Attelabus sallei* (fig. 8) by the author is designated lectotype – female from the collection MCSN with labels «Mexico, Coll. Jekel», «Typus !», «*sallei* Jek., Ins. Snd.», «Syntypus *Attelabus* (*Hybolabus*) *sallei* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Lectotype *Attelabus sallei* Jek., A. Legalov design. 2008». Paralectotype – female without head and pronotum on one pin with lectotype.

***Hybolabus cyaneus* (Klug, 1825)** (Figs. 9, 65)

Attelabus cyaneus Klug, 1825: 453

Attelabus cribricollis Jekel, 1860: 209

Distribution. Brazil.

Remarks. For *Attelabus cribricollis* by the author is designated lectotype – male from the collection MCSN with labels «Para, Coll. Jekel», «Typus !», «Syntypus *Attelabus* (*Hybolabus*) *cribricollis* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Lectotype *Attelabus cribricollis* Jek., A. Legalov design. 2008». Paralectotypes: female on one pin with lectotype and 2 females (MCSN) with labels «Para, Coll. Jekel», «Typus», «Syntypus *Attelabus* (*Hybolabus*) *cribricollis* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Paralectotype *Attelabus cribricollis* Jek., A. Legalov design. 2008».

Subtribe Omolabina Legalov, 2003

Genus *Neoxestolabus* Voss, 1943

Subgenus *Neoxestolaboides* Legalov, 2004

***Neoxestolabus* (*Neoxestolaboides*) *jatahyensis* (Voss, 1925)** (Figs. 10-11, 66)

Xestolabus jatahyensis Voss, 1925: 268

Distribution. Brazil.

Remarks. By the author is designated lectotype – male from the collection DEI with labels «Jatahy, Prov. Goyas, Bresil», «Syntypus», «*Attelabus jatahyensis* n.sp., Det. E. Voss», «*Xestolabus jatahyensis* Voss», «Coll. DEI Müncheberg», «Lectotype *Xestolabus jatahyensis* Voss, A. Legalov design. 2008». Paralectotype – female from the collection DEI with labels «Jatahy, Prov. Goyas, Bresil», «Coll. Kraatz», «Syntypus», «Coll. DEI Müncheberg», «Paralectotype *Xestolabus jatahyensis* Voss, A. Legalov design. 2008».

Genus *Synolabus* Jekel, 1860
Subgenus *Synolabus* s. str.

***Synolabus* (s. str.) *bipustulatus* (Fabricius, 1776)** (Fig. 12)
Attelabus bipustulatus Fabricius, 1776: 229

Distribution. North America.

Remarks. For *Attelabus bipustulatus* by the author is studied lectotype – female from the collection ZMUC with labels «*2 pustulatus*», «*Attelabus bipustulatus* Fabr., LECTOTYPE designated by Robert W. Hamilton 1968», «*Synolabus* (s. str.) *bipustulatus* (Fabricius, 1776), A. Legalov det. 2008». Paralectotypes: 2 females with labels «*Attelabus bipustulatus* Fabr., COTYPE designated by Robert W. Hamilton' 68», «Paralectotype *Attelabus bipustulatus* F., A. Legalov det. 2008», «*Synolabus* (s. str.) *bipustulatus* (Fabricius, 1776), A. Legalov det. 2008» and with labels «*Attelabus bipustulatus* Fabr., COTYPE designated by Robert W. Hamilton 1968», «Paralectotype *Attelabus bipustulatus* F., A. Legalov det. 2008», «*Synolabus* (s. str.) *bipustulatus* (Fabricius, 1776), A. Legalov det. 2008».

Genus *Omolabus* Jekel, 1860
Subgenus *Perulabus* Legalov, 2004

***Omolabus* (*Perulabus*) *peruanus* Legalov, 2004** (Fig. 13)
Omolabus peruanus Legalov, 2004: 81

Material. Female (ACB), Peru, Loreto, Pald Seco, Lo-Nauta, 26.VI.2007, R. Westerduijn.
Distribution. Peru.

Subgenus *Sternolabus* Jekel, 1860

Key of species of subgenus *Sternolabus*

1. Cambers behind humeri more convex and striae on pronotum strongly. Columbien..... ..... *O. longirostris* (Jekel, 1860)

-. Cambers behind humeri weakly convex and striae on pronotum weakly.....2

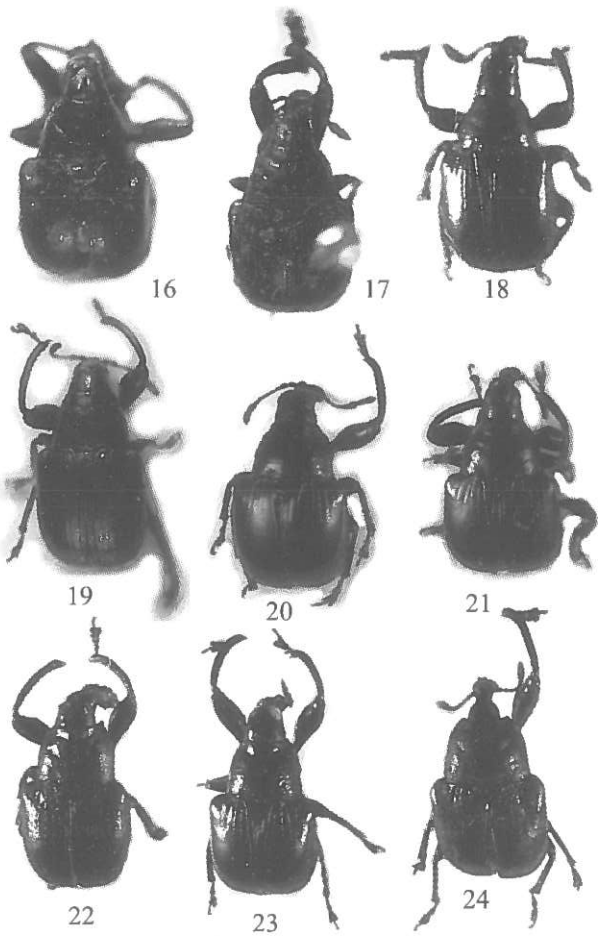
2. Body red-brown. Cambers behind humeri weakly.....*O. cuprobrunneus* Legalov, 2007

-. Body black. Cambers behind humeri strongly. .....*O. kirschi* Legalov, sp.n.

***Omolabus* (*Sternolabus*) *longirostris* (Jekel, 1860)** (Figs. 14-15, 67)
Attelabus longirostris Jekel, 1860: 207
Attelabus jekelii Kirsch, 1870: 371, **syn.n.**

Distribution. Columbia.

Remarks. By the author is designated lectotype – male from the collection MCSN with labels «Colombia, Coll. Jekel», «Typus, male, *Sternolabus longirostris* Jekel», «*Attelabus* (*Sternolabus*) *longirostris* Jek., male, Columbia», «Syntypus *Attelabus* (*Sternolabus*) *longirostris*



Figs. 16-24. Attelabidae gen. spp.: 16 – *Omolabus kirschi* (male, holotype), 17 – *O. kirschi* (female, paratype), 18 – *O. mutabilis* (female, paralectotype), 19 – *O. mutabilis* (male, lectotype), 20 – *O. troglodytes* (male, lectotype), 21 – *O. troglodytes* (female, paralectotype), 22 – *O. deceptor* (male, lectotype), 23 – *O. westerduijni* (male, holotype), 24 – *O. latus* (male, holotype).

Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Lectotype *Attelabus longirostris* Jek., A. Legalov design. 2008».

For *Attelabus jekelii* by the author has been studied lectotype - female from the collection SMTD with labels «Bogota, Kirsch», «Staatl. Museum für Tierkunde, Dresden», «Typus», «Lectotype *Attelabus jekelii* Kirsch, A. Legalov design. 2005» and designated paralectotypes – male from the collection MCSN with labels «Bogota, Coll. Jekel», «Syntypus *Attelabus jekelii* Kirsch, 1870», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Paralectotype *Attelabus jekelii* Kirsch, A. Legalov design. 2008» and male (MCSN) with labels «Bogota, ex. Kirsch, Coll. Jekel», «Syntypus *Attelabus jekelii* Kirsch, 1870», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Paralectotype *Attelabus jekelii* Kirsch, A. Legalov design. 2008».

Beetles differ only colouring (at *A. longirostris* with copper luster and *A. jekelii* is black). Morphology and armament of the endophallus are identical.

***Omolabus* (*Sternolabus*) *kirschi* Legalov, sp.n.** (Figs. 16-17, 68)

Holotype. Male (ISNB), «Columbia», «Coll. Roelofs», «Coll. R. I. Sc. N. B., Colombie».

Paratypes. Female (ZMN), «Columbia», «Coll. Roelofs», «Coll. R. I. Sc. N. B., Colombie»; female (ISNB), «Nouvelle Grenada, Goudot», «Coll. Castelnau, Coll. Roelofs», «Coll. R. I. Sc. N. B., Colombie».

Description. Body black, lustrous, naked.

Male: Head elongated. Rostrum weakly elongated, expanded to apex, punctate. Antennae attached in first third of the rostrum. Eyes large, weakly convex. Forehead narrow, convex, with 2 longitudinal striae. Temples weakly elongatet, weakly transversal wrinkled. Vertex flattened, smooth. Prementum extend in the blade.

Antennae long, reaching pronotum middle. Scapus and 1st segments oval. Scapus longer than 1st segments. 2nd - 4th segments almost trapezoid, narrower than 1st segments. 2nd segment longer than 1st segments. 3rd segment shorter and more thicker than 2nd segments. 4th segment wider than 3rd segments. 5th and 6th segments almost rounded. 7th segment shortly trapezoid. Clava elongated, compact, more shorter than funicle. 1st segment longer than 2nd segments. 3rd segment pointed, equal to 2 segment.

Pronotum almost campaniform, 1.56 times wider than length. Grooves very weak. Sides almost direct. Disk convex, almost smooth, near the basis weak transversal wrinkled, with triangular transversal striae on the middle. Scutellum almost rectangular, large, wide.

Elytra almost square, 1.17 times wider than length. Greatest width in humeri. Humeri convex. Behind humeris elongated cambers. Intervals flat, almost smooth. 1st - 3rd intervals in first third weakly convex. Striae weak. Points in them rarely and not deep.

Prothorax transversal wrinkled. Precoxal part strongly elongated. Meso- and metathorax and episternum largely and sparsely punctate. Abdomen convex, densely rugosity-punctate. 1st - 3rd ventrite wide. 4th ventrite narrower. 5th ventrite very narrow. Pygidium weakly convex, densely punctate.

Legs long. Forelegs elongated. Femora weakly wrinkled. Profemora widened. Meso- and metafemora weaker widened. Protibiae long, weakly curved, crenate on internal edge, with mucro and tooth at apex. Meso- and metatibiae shorter, weakly biconcave, weakly expanded to apex. Tarsi long. 1st segment long-triangular. 2nd segment wide-triangular. 3rd segment widely bilobed. Clausal segment elongated. Claws long. Length of body: 3.9 mm.

Female: Rostrum shorter, wider. Prementum without tooth. Antennae attached more close to the rostrum basis. Eyes weaker convex. Forehead wider. Pronotum 1.47-1.64 times wider than length. Elytra 1.13-1.15 times wider than length. Precoxal part of the prothorax weaker elongated. Tibiae with mucro and uncus. Protibiae weaker curved, shorter.

Length of body: 4.2 mm.

Distribution. Colombia.

Etymology. This new species is named in honour of T. Kirsch.

Subgenus *Paralabus* Legalov, 2004

***Omolabus* (*Paralabus*) *mutabilis* (Jekel, 1860), placem.n.** (Figs. 18-19, 69)

Attelabus mutabilis Jekel, 1860: 206

Distribution. Brazil.

Remarks. By the author is designated lectotype – male from the collection MCSN with labels «S. Paolo, Coll. Jekel», «Typus, male», «*mutabilis* Jek, S Paul, Brasil, Parzud», «Syntypus *Attelabus* (*Xestolabus*) *mutabilis* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Lectotype *Attelabus mutabilis* Jek., A. Legalov design. 2008». Paralectotype – female from the collection MCSN with labels «S. Paolo, Coll. Jekel», «Typus, female», «Syntypus *Attelabus* (*Xestolabus*) *mutabilis* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Paralectotype *Attelabus mutabilis* Jek., A. Legalov design. 2008».

This species have been previously in subgenus *Promolabus* Legalov, 2007 wrongly placed.

Subgenus *Promolabus* Legalov, 2007

***Omolabus* (*Promolabus*) *troglodytes* (Jekel, 1860), placem.n.** (Figs. 20-21, 70)
Attelabus troglodytes Jekel, 1860: 205

Distribution. Brazil.
Remarks. By the author is designated lectotype – male from the collection MCSN with labels «Amazzoni, Coll. Jekel», «Typus, male, *troglodytes* Jekel», «*Attelabus* (*Xestolabus*) *troglodytes* Jek., Amaz.», «Syntypus *Attelabus* (*Xestolabus*) *troglodytes* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Lectotype *Attelabus troglodytes* Jek., A. Legalov design. 2008». Paralectotype – female from the collection MCSN with labels «Amazzoni, Coll. Jekel», «Typus, female, *Xestolabus troglodytes* Jekel», «*Troglodytes* Jekel, Ins. Amer. Bates», «Syntypus *Attelabus* (*Xestolabus*) *troglodytes* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Paralectotype *Attelabus troglodytes* Jek., A. Legalov design. 2008».

This species have been previously in *Omolabus* incertae sedis placed.

Subgenus *Neomolabus* Legalov, 2004

***Omolabus* (*Neomolabus*) *deceptor* (Jekel, 1860), comb.n., stat.res.** (Figs. 22, 71)
Attelabus deceptor Jekel, 1860: 207

Distribution. Brazil.
Remarks. By the author is designated lectotype – male from the collection MCSN with labels «S. Paolo, Coll. Jekel», «Typus, male», «Attelabus deceptor Jek, Ins. Saund.», «Syntypus *Attelabus* (*Thyreolabus*) *deceptor* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Lectotype *Attelabus deceptor* Jek., A. Legalov design. 2008».

This species differs from *O. piceus* (Germar, 1824) by the weakly wrinkled pronotum and smooth intervals of the elytra.

Subgenus *Pseudomolabus* Legalov, 2004

***Omolabus* (*Pseudomolabus*) *westerduijni* Legalov, sp.n.** (Figs. 23, 72)

Holotype. Male (USNM), Peru, Loreto, Puerto Almendra, secondary forest edge plantation arboretum, 16.VII.2005, R. Westerduijn.
Paratypes. Female (ZMN), idem; female (ACB), Peru, Loreto, Pena Negra, on secondary scrub alchomena triplineva, 16.I.2007, R. Westerduijn; female (ACB), Peru, Loreto, Puerto Almendra, 30.IX.2007, R. Westerduijn.
Description. Body black, lustrous, naked. Mucro brown.

Male: Head elongated. Rostrum weakly elongated, expanded to apex, small punctate. Antennae located in first third of the rostrum. Eyes large, weakly convex. Forehead narrow, convex, with 2 longitudinal striae. Temples weakly elongated, smooth. Vertex weakly flattened, smooth. Prementum with 2 teeth.

Antennae long, reaching pronotum middle. Scapus and 1st segments oval. Scapus longer than 1st segments. 2nd and 3rd segments elongated, narrower than 1st segments. 4th segment almost trapezoid. 5th and 6th segments short-trapezoid. 7th segment wider. Clava elongated, compact, longer than funicle. 1st segment longer than 2nd segments. 3rd segment pointed, equal to 2nd segment.

Pronotum almost campaniform, 1.71 times wider than length. Grooves weak. Sides almost direct. Disk convex, largely and sparsely punctate. Scutellum almost rectangular, large, wide, smooth.

Elytra almost square, 1.04 times wider than length. Greatest width in humeri and behind the middle. Humeri convex, with very weak protuberance. Intervals flat, wide, almost smooth. Striae weak. Points in them rarely and not deep.

Thorax largely punctate. Precoxal part of the prothorax elongated, rugosity-punctate. Abdomen convex, small rugosity-punctate. 1st - 2nd ventrites wide. 3rd and 4th ventrites narrower. 5th ventrite very narrow. Pygidium weakly convex, densely punctate.

Legs long. Forelegs elongated. Profemora widened. Meso- and metafemora weaker widened. Protibiae long, weakly curved, crenate on internal edge, with mucro at apex. Meso- and metatibiae shorter, weakly biconcave, weakly expanded to apex. Tarsi long. 1st segment long-triangular. 2nd segment triangular. 3rd segment bilobed. Clausal segment elongated. Claws long. Length of body: 3.7 mm.

Female: Rostrum shorter, wider. Prementum without teeth. Antennae attached more close to the rostrum basis. Eyes weaker convex. Pronotum 1.27-1.46 times wider than length. Elytra 1.02-1.07 times wider than length. Humeri with small tooth. Precoxal part of the prothorax weaker elongated. Tibiae with mucro and uncus. Protibiae shorter. Length of body: 2.8-3.3 mm.

Diagnosis. This new species is similar to *O. subrugosus* Voss, 1925 but differs by the weak teeth on humeri, black body, flat smooth intervals of the elytra, armament of the endophallus. From *O. violaceus* (Jekel, 1860) it differs by the smaller sizes of the body, more dense punctate pronotum, longer and narrow rostrum, armament of the endophallus.

Distribution. Peru.

Etymology. This new species is named in honour of R. Westerduijn.

Subgenus *Xestolabus* Jekel, 1860

***Omolabus* (*Xestolabus*) *latus* Legalov, 2007, placem.n.** (Figs. 24, 73)

Omolabus latus Legalov, 2007a: 274

Distribution. Colombia.

This species have been previously in subgenus *Sternolaboides* Legalov, 2007 wrongly placed.

Subgenus *Sternolaboides* Legalov, 2007

***Omolabus* (*Sternolaboides*) *ecuadorensis* Legalov, 2007** (Figs. 25, 74)

Omolabus ecuadorensis Legalov, 2007a: 274

Material. 2 males (ACB), Peru, Loreto, Pena Negra, on secondary scrub alchomena triplineva, 16.I.2007, R. Westerduijn; female (ACB), Peru, Loreto, Puerto Almendra, from compsiandra seeds, 2.V.2005, R. Westerduijn; male (ZMN), Peru, Loreto, Nautu, roadside plants, 15.VIII.2004, R. Westerduijn.

Distribution. Ecuador, Peru.

Remarks. This species is for the first time revealed in fauna of Peru.

Tribe Attelabini Billberg, 1820

Subtribe Attelabina Billberg, 1820

Attelabides Billberg, 1820: 39

type genus: *Attelabus* Linnaeus, 1758

subtribe Phialodina Legalov, 2003: 437, **syn.n.**;

type genus: *Phialodes* Roelofs, 1874

Remarks. The Chinese species of genus *Phialodes* Roelofs, 1874 (subgenus *Chinphialodes* Legalov, subgen.n.) are transitive forms between subtribes Attelabina and Phialodina. Because of this the author is placed subtribe Phialodina Legalov, 2003, **syn.n.** in synonyms to subtribe Attelabina Billberg, 1820.

Genus *Phialodes* Roelofs, 1874

Key of subgenera of genus *Phialodes*

1. Bottom of the head without teeth. Rostrum strongly elongated of males. Antennae attached subapical. Antennae very long, reaching for first line of the elytra of males. Clava badly isolated from funicle. Eyes weakly convex. Japan.....*Phialodes* s. str.

-. Head bottom with teeth. Rostrum weakly elongated of males. Antennae attached on the rostrum middle. Antennae not long, reaching for pronotum first line. Clava well isolated from funicle. Eyes strongly convex. China.....*Chinphialodes* Legalov, subgen.n.

Subgenus *Chinphialodes* Legalov, subgen.n (Figs. 26, 75)

Type species: *Phialodes hubeiensis* Legalov, sp.n.

Description. Body black. Elytra and sometimes pronotum red. Head elongated. Antennae attached on the rostrum middle. Eyes large, strongly convex. Forehead wide. Temples elongated. Vertex convex. Head from below under eyes with two teeth directed forward of males. Antennae long, reaching pronotum first line. Clava elongated, not compact, more shortly than funicle. Pronotum almost campaniform. Grooves weak. Disk convex, smooth. Scutellum trapezoid, deep. Elytra almost rectangular. Greatest width behind the middle. Humeri weakly smoothed. Intervals flat, punctate. Striae almost reduced. Prothorax with blades directed forward sometimes of males. First line of prothorax with weak teeth directed forward of males. Abdomen convex, rugosity-punctate. Pygidium convex, small punctate. Legs long. Forelegs elongated. Femora weakly widened, wrinkled, with protuberances on inside. Tarsi long. Length of body: 6.0-7.7 mm.

Etymology. The name is formed from the words «Chinese» and «phialodes».

***Phialodes* (*Chinphialodes*) *hubeiensis* Legalov, sp.n.** (Figs. 26, 75)

Holotype. Male (VRP), China, Hubei, Jahongshan, V.2005, V. Ryjacek.

Description. Male: Body black, naked. Pronotum and elytra red.

Head elongated. Rostrum elongated, expanded to apex, small and densely punctate. Antennae attached on the rostrum middle. Eyes large, strongly convex. Forehead wide, flat with three longitudinal striae, small punctate. Temples elongated, weakly transversal wrinkled. Vertex convex, small punctate, on basis transversal-wrinkled. Head from below under eyes with two teeth directed forward.

Antennae long, reaching for pronotum first line. Scapus oval. Scapus longer than 1st segments. 1st segment almost trapezoid, wide, more widely than 2nd segments. 2nd segment narrow-trapezoid. 3rd - 5th segments clavate. 3rd segment longer than 4th segments. 4th and 5th segments of equal length. 6th segment weakly rounded, shorter than 5th segments. 7th segment almost rounded, wide. Clava elongated, not compact, shorter than funicle. 1st and 2nd segments transversal. 1st segment hardly wider than 2nd segments. 3rd segment tear-shaped, pointed, shorter than the previous segments.

Pronotum almost campaniform, 1.33 times wider than length. Grooves weak. Sides weakly rounded. Disk convex, smooth. Scutellum trapezoid, deep.

Elytra almost rectangular, almost equal length and width. Greatest width behind the middle. Humeri weakly smoothed. Intervals flat, punctate. Last interval narrow, carinate. Striae almost reduced. Prothorax rugosity-punctate, with blades directed forward. First line of prothorax with weak teeth directed forward. Mesothorax and mesepisternum rugosity-punctate. Metathorax with episternum small punctate. Abdomen convex, rugosity-punctate. 1st ventrite wide, flattened. 2nd and 3rd ventrites wide, convex.

4th ventrite narrower. 3rd and 4th ventrites flattened on the middle. 5th ventrite very narrow. Pygidium convex, small punctate.

Legs long. Forelegs elongated. Femora weakly widened, wrinkled, with protuberances on inside. Protibiae long, weakly biconcave, small crenate on internal edge with long mucro. Meso- and metatibiae shorter. Legs long. 1st segment long-triangular. 2nd segment wide-triangular. 3rd segment bilobed. Clausal segment elongated. Claws long. Length of body: 7.7 mm.

Diagnosis. This new species is close to *Ph.* (*Ch.*) *tumidus* (Zhang 1995) but differs by the red pronotum, wider elytra, stronger convex eyes, prothorax with blades directed forward, stronger convex sides of the pronotum, pointed apex of the aedeagus, armament of the endophallus.
Distribution. China (Hubei).
Etymology. The name is formed from the name of province Hubei – «hubeiensis».

Subtribe Henicolabina Legalov, 2007
Genus *Humerilabus* Legalov, 2003
Subgenus *Humerilabus* s. str.

***Humerilabus* (s. str.) *fausti* (Voss, 1925)**
Attelabus fausti Voss, 1925: 225 [RN]
Attelabus humerosus Faust, 1894: 163 [non Fahraeus, 1871]
Material. Male (ACB), female (ACB), Laos, Sing Louang Namtha, 11-27.V.2005.
Distribution. China, Laos, Myanmar.
Remarks. This species is for the first time revealed in fauna of Laos.

***Humerilabus* (s. str.) *alleni* Legalov, sp.n.** (Figs. 27, 76)
Holotype. Male (USNM), Laos, Sing Louang Namtha, 11-27.V.2005.

Description. Male: Body red-brown, naked. Elytra yellowy-brown. Rostrum apex, basis and apex of the scutellum, partially thorax, trochanters, apex of femora, 3rd segment of tarsi, apex of clausal segment and basis of claws black.

Head elongated. Rostrum short, expanded to apex, punctate. Antennae attached in first third of rostrum. Eyes large, strongly convex. Forehead wide, weakly pressed with 2 longitudinal striae. Temples long, weakly transversal wrinkled. Vertex convex, weakly wrinkled.

Antennae long, reaching the pronotum middle. Scapus and 1st segment oval. Scapus longer than 1st segments. 2nd - 7th segments elongated. 2nd segment longer than 1st segments and shorter than 3rd segments. 3rd - 5th segments of almost equal length. 6th segment shorter than 5th segments. 7th segment shorter than 6th segments. Clava elongated, compact. 1st segment longer than 2nd segments. 3rd segment elongated, pointed, hardly shorter than the previous segments.

Pronotum almost campaniform, 1.16 times wider than length. Grooves sharp. Sides weakly rounded. Disk convex, almost smooth. Scutellum trapezoid with middle striae of apex.

Elytra elongated, almost rectangular, 1.26 times longer than width. Greatest width in humeri and behind the middle. Humeri angular-convex. Intervals flat, smooth. Last interval narrow, carinate. Striae weak. Points in them rarely and not deep.

Prothorax sparsely punctate. Mesothorax and mesepisternum densely small punctate. Metathorax and metepisternum punctate. Abdomen convex, weakly flattened on the middle, weakly rugosity-punctate. 1st ventrite narrow. 2nd and 3rd ventrites wide. 4th ventrite narrower, with depression on the middle. 5th ventrite hardly narrower than 4th ventrite. Pygidium weakly convex, sparsely punctate.

Legs long. Forelegs strongly elongated. Profemora thick with tooth near apex. Meso- and metafemora weakly widened, without teeth. Protibiae long, almost direct, carinate on internal edge with long mucro. Meso- and metatibiae shorter, weakly biconcave, weakly expanded to apex. Tarsi long. 1st segment long-triangular. 2nd segment wide-triangular. 3rd segment bilobed. Clausal segment elongated. Claws long. Length of body: 9.3 mm.

Diagnosis. This new species is close to *H. vossi* Legalov, 2003 but differs by the smooth pronotum and armament of the endophallus.

Distribution. Laos.

Etymology. This new species is named in honour of Albert Allen.

***Humerilabus* (s. str.) *borneoensis* Legalov, sp.n.**
(Fig. 28)

Holotype. Female (USNM), «Mt. Tina Madl., Sabah, N. Borneo, East Malaysia, 3.III.2000, H. Sugihara».

Description. Female: Body dark red-brown, naked. Elytra yellowy-brown, except suture, basis and edges. Scapus and funicle of the antennae yellowy-brown.

Head elongated. Rostrum short, expanded to apex, punctate. Near apex punctate weaker. Antennae attached in first third of the rostrum. Eyes large, strongly convex. Forehead wide, flat with 2 longitudinal striae. Temples long, weakly transversal wrinkled. Vertex convex, weak rugosity punctate.

Antennae long and narrow, reaching pronotum middle. Scapus and 1st segments oval. Scapus longer than 1st segments. 2nd - 4th segments elongated. 2nd segment longer than 1st segments. 3rd segment equal to the 2nd segment. 4th segment shorter than 3rd segments. 5th and 6th segments almost trapezoid, shorter than the previous segments. 7th segment trapezoid, wide. Clava elongated, compact. 1st segment longer than 2nd segments. 3rd segment elongated, pointed, shorter than the previous segments.

Pronotum almost campaniform, 1.17 times wider than length. Grooves sharp. Sides almost direct. Disk convex, small punctate. Scutellum trapezoid with weak middle striae of apex.

Elytra elongated, 1.42 times longer than width, almost rectangular. Greatest width in humeri and behind the middle. Humeri angular-convex. Intervals flat, smooth. Last interval narrow, carinate. Striae weak. Points in them rarely and not deep.

Prothorax sparsely rugosity-punctate. Meso- and metathorax with episternum densely rugosity punctate. Abdomen convex, weakly flattened on the middle, weakly rugosity-punctate. 1st ventrite narrow. 2nd and 3rd ventrites wide. 4th ventrite narrower. 5th ventrite hardly narrower than 4th ventrite. Pygidium weakly convex, sparsely punctate.

Legs long. Forelegs strongly elongated. Profemora thick with tooth near apex. Meso- and metafemora weakly widened, without teeth. Protibiae long, weakly biconcave, small carinate on internal edge with long mucro and uncus. Meso- and metatibiae shorter, weakly biconcave, weakly expanded to apex. Tarsi long. 1st segment long-triangular. 2nd segment wide-triangular. 3rd segment bilobed. Clausal segment elongated. Claws long. Length of body: 9.5 mm.

Diagnosis. This new species is close to *H. prianganicus* Legalov, 2007 but differs by the small punctate pronotum, forehead without carina, dark suture and sides of the elytra, form of the endophallus.

Distribution. Malaysia (Sabah).

Etymology. The name is formed from the location «Borneo» – «borneoensis».

Genus *Paramecolabus* Jekel, 1860
Subgenus *Paramecolabus* s. str.

***Parameco labus* (s. str.) *discolor* (Fahraeus, 1839)**
Attelabus discolor Fahraeus, 1839: 301

Material. male (ACB), S India, Kerala St., Trivandrum Dt., Poonmundi Range, V.1989, Trs Nathan.
Distribution. India, Thailand.

Subgenus *Paramecolaboides* Legalov, 2007
***Paramecolabus* (*Paramecolaboides*) *castaneicolor* (Jekel, 1860)**
Attelabus castaneicolor Jekel, 1860: 190

Material. Male (ZMHB), «Kansu, Tu-kiang»; female (CBN), China, SE Hunan, Guidong env., 26'04' N, 113'56' E, 26-31.V.1994, Sausa & Jendek; female (ACB), China, W Hubei, Muyuping S. env., 1300 m, 16.V.2004, V. Ryjacek; female (ZMUC), «Mus. Westerm.», «N. China».
Distribution. China.
Remarks. This species is for the first time revealed in fauna of Hubei and Hunan.

***Paramecolabus* (*Paramecolaboides*) *obliquus* (Heller, 1908)** (Fig. 29)
Attelabus obliquus Heller, 1908: 153

Material. Female (ACB), North Borneo, Sabah, Trus Madi, V.2004, W. Tan Meng.
Distribution. Malaysia (Sabah, Sarawak).
Remarks. This species is for the first time revealed in fauna of Sabah.

Genus *Catalabus* Voss, 1925
Subgenus *Catalaboides* Legalov, 2003

***Catalabus* (*Catalaboides*) *rasuwanus* Legalov, 2007** (Figs. 30, 77)
Catalabus rasuwanus Legalov, 2007a: 281

Material. Male (NMPC), «Kurseong, Himalaya, 14.9.31».
Distribution. Nepal, North India.
Remarks. This species is for the first time revealed in fauna of India.

Subtribe Henicolabina Legalov, 2007
Genus *Henicolaboides* Legalov, 2007

***Henicolaboides gigantinus* (Legalov et Liu, 2005)**
Henicolabus gigantinus Legalov et Liu, 2005: 127

Material. 3 males (ACB), Laos, Sing, Louang Namtha, 11-27.V.2005; male (ACB), Bhutan, Wangdu Phodrang, VII.2005, Lijingki; male (ISNB), Cambodia, Rattanaki Prov., Phumi Kalai Thum, 1-19.VI.2007, Achat Li Jingke.
Distribution. Cambodia, Bhutan, China (YUN), Laos.
Remarks. This species is for the first time revealed in fauna of Laos, Cambodia and Bhutan.

Key of species of *Henicolaboides spinipes* – group

1. Head red.....*H. hypomelas* (Fairmaire, 1878)

-. Head black.....2

2. Abdomen black.....3

-. Abdomen red. Vertex black.....4

3. Beetles larger. Vertex red. Sichuan, Yunnan.....
.....*H. potanini* Legalov, 2007

-. Beetles smaller. Vertex black. Sichuan.....
.....*H. haemati deus* (Voss, 1930)

4. Teeth on profemora long and sharp, little shorter of females. Vietnam....*H. sapansis* Legalov, 2007

-. Teeth on profemora short, weakly doubled at apex, much shorter of females.....5

5. Beetles smaller and narrow. Basis of the head black. China.....*H. spinipes* (Schilsky, 1906)

-. Beetles larger and wide. Basis of the head red. SE China.....*H. nanlingensis* Legalov, sp.n.

***Henicolaboides spinipes* (Schilsky, 1906)** (Fig. 31)

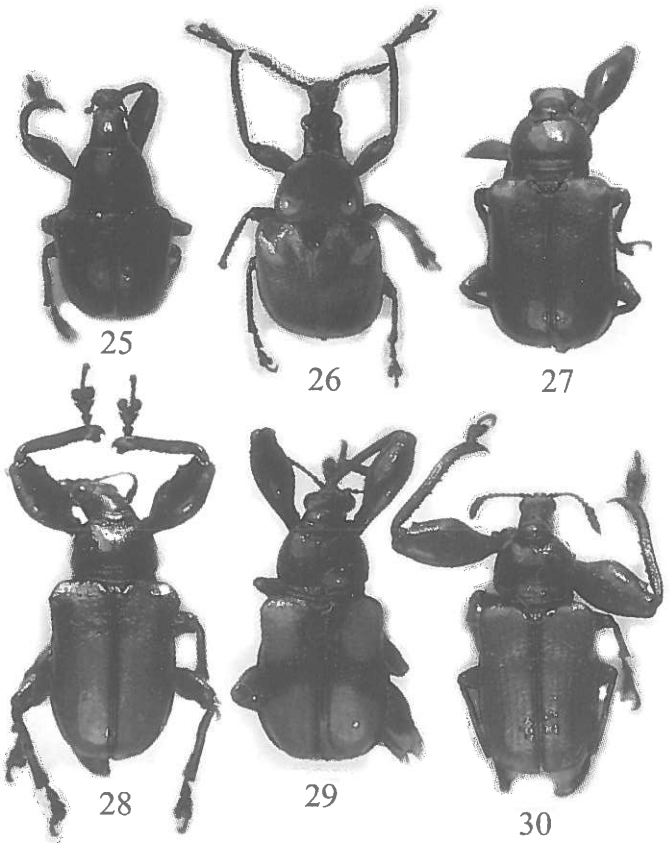
Attelabus spinipes Schilsky, 1906: 88

Henicolaboides nigrocapitus Legalov, 2007a: 283, **syn.n.**

Distribution. E, SE, S China.

Remarks. By the author is designated lectotype – female from the collection ZMHB with labels «Museum Paris, env. de Pekin, A. David, 1878», «Type», «Coll. Schilsky», «*Attelabus spinipes* Schilsky (Type – 1905)», «SYNTYPUS *Attelabus spinipes* Schilsky, 1906, labelled by MNHUB 2008», «Lectotype *Attelabus spinipes* Schilsky, A. Legalov design. 2008», «*Henicolaboides spinipes* (Schilsky, 1906), A. Legalov det. 2008».

An investigation of types has shown that *Henicolaboides nigrocapitus* Legalov, 2007, **syn.n.** is synonym of *Attelabus spinipes* Schilsky, 1906.



Figs. 25-30. Attelabidae gen. spp.: 25 – *Omolabus ecuadorensis* (male), 26 – *Phialodes hubeiensis* (male, holotype), 27 – *Humerilabus alleni* (male, holotype), 28 – *H. borneoensis* (female, holotype), 29 – *Paramecolabus obliquus* (female), 30 – *Catalabus rasuwanus* (male).

***Henicolaboides nanlingensis* Legalov, sp.n.** (Figs. 32, 78)

Holotype. Male (ISNB), China, Nanling Ruyuan, Guangdong, stream, 1500 m, 9.V.2004, P. Grootaert.

Paratype. Male (ISNB), Chine, Nanling, 9.V.2004, P. Grootaert.

Description. Male: Body black, naked. Head basis, pronotum, scutellum, elytra, mesepisternum, apex of metepisternum, abdomen, mucro red-brown.

Rostrum short, expanded to apex, punctate. Antennae attached before the rostrum basis. Eyes large, strongly convex. Forehead wide, flat with 3 longitudinal striae. Temples weakly elongated, weakly transversal wrinkled. Vertex convex, smooth.

Antennae long, reaching the pronotum middle. Scapus and 1st segments oval. Scapus hardly longer than 1st segments. 2nd -

4th segments short-oval. 2nd segment shorter than 1st segments. 5th and 6th segments rounded. 7th segment almost trapezoid, wide. Clava elongated, compact, little shorter than funicle. 1st segment longer than 2nd segments. 3rd segment elongated, pointed, longer than 1st segments.

Pronotum almost campaniform, 1.5 times wider than length. Grooves weak. Sides weakly rounded. Disk convex, very small punctate. Scutellum trapezoid.

Elytra elongated, 1.08 times longer than width, almost rectangular. Greatest width behind the middle. Humeri convex. Intervals flat, smooth. Last interval narrow, carinate. Striae weak. Points in them rarely and not deep.

Prothorax sparsely punctate. Mesothorax rugosity-punctate. Metathorax with episternum densely punctate. Abdomen convex, weakly flattened with erect setae on the middle, weakly rugosity-punctate. 1st ventrite hardly narrower than 2nd ventrite. 2nd and 3rd ventrites wide. 4th ventrite narrower. 5th ventrite narrower than 4th ventrite. Pygidium convex, punctate.

Legs long. Forelegs elongated. Profemora thick with tooth near apex. Meso- and metafemora weakly widened, with tooth. Protibiae long, almost direct, small carinate on internal edge with long mucro. Meso- and metatibiae shorter, weakly biconcave, weakly expanded to apex. Tarsi long. 1st segment long-triangular. 2nd segment triangular. 3rd segment bilobed. Clausal segment elongated. Claws long. Length of body: 6 mm.

Distribution. China (Guangdong).

Etymology. The name is formed from the location «Nanling» – «nanlingensis».

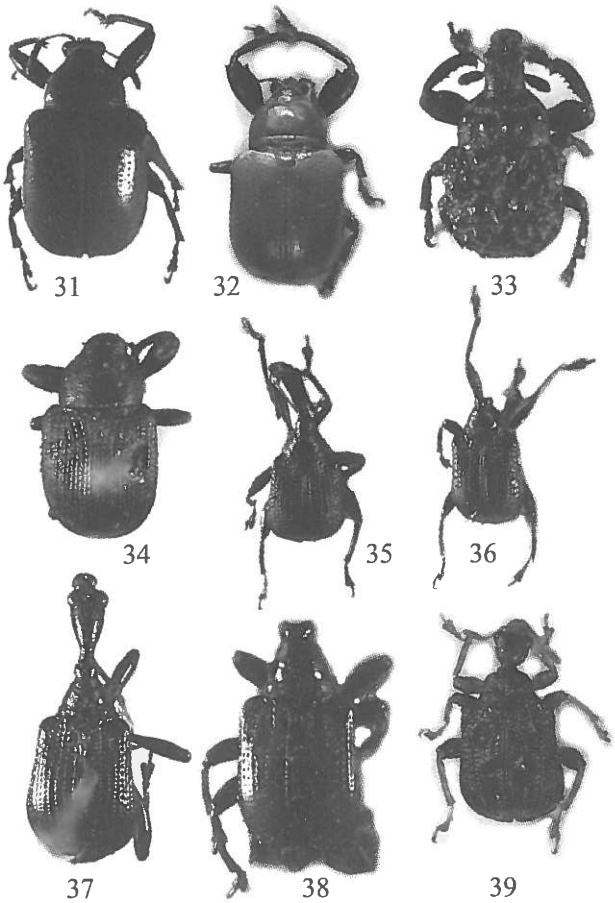
Tribe Lagenoderini Voss, 1925
Subtribe Lagenoderina Voss, 1925
Genus *Scotopsinus* Voss, 1925

***Scotopsinus tuberifer* (Jekel, 1860)**
(Figs. 33, 79)

Attelabus tuberifer Jekel, 1860: 211

Distribution. S-Africa.

Remarks. By the author is designated lectotype – prepared male from the collection MCSN with labels «Natal,



Figs. 31-39. Attelabidae gen. spp.: 31 – *Henicolaboides spinipes* (female, lectotype), 32 – *H. nanlingensis* (male, holotype), 33 – *Scotopsinus tuberifer* (male, lectotype), 34 – *Pleurolabus costulatus* (female, lectotype), 35 – *Trachelismus benguetensis* (female, paralectotype), 36 – *T. benguetensis* (male, lectotype), 37 – *Apoderus badeni* (female, paralectotype), 38 – *Borneocorynus fenestratus* (male, lectotype), 39 – *Paroplapoderus alleni* (male, holotype).

Coll. Jekel», «185 Laccom.», «Typus», «Syntypus *Attelabus* (*Phymatolabus*) *tuberifer* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Lectotype *Attelabus tuberifer* Jek., A. Legalov design. 2008». Paralectotypes: male on one pin with lectotype, male and female with labels «Natal, Coll. Jekel», «Typus», «Syntypus *Attelabus* (*Phymatolabus*) *tuberifer* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Paralectotype *Attelabus tuberifer* Jek., A. Legalov design. 2008», female with labels «Natal, Coll. Jekel», «Typus, *Phymatolabus tuberifer* Jekel.», «*Tuberifer* Jekel. Ins. Fauna Natal», «Syntypus *Attelabus* (*Phymatolabus*) *tuberifer* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Paralectotype *Attelabus tuberifer* Jek., A. Legalov design. 2008».

Subtribe Pleurolabina Legalov, 2003
Genus *Pleurolabus* Jekel, 1860
Subgenus *Pleurolabus* s. str.

***Pleurolabus* (s. str.) *costulatus* (Jekel, 1860)**
(Fig. 34)
Attelabus costulatus Jekel, 1860: 210

Distribution. S-Africa.
Remarks. By the author is designated lectotype – female from the collection MCSN with labels «Natal, Coll. Jekel», «Typus, *costatus* Jekel», «*Attelabus* (*Pleurolabus*) *costatus* Jek., Natal», «Syntypus *Attelabus* (*Pleurolabus*) *costulatus* Jekel, 1860», «Museo Genova, coll. H. Jekel, via coll. A. Solari (acqusto 2000), «Lectotype *Attelabus costulatus* Jek., A. Legalov design. 2008».

Subfamily Apoderinae Jekel, 1860
Tribe Clitostylini Voss, 1926
Subtribe Clitostylina Voss, 1926

Genus *Trachelismus* Motschulsky, 1870
Trachelismus Motschulsky, 1870: 86
Type species: *Apoderus macrostylus* Motschulsky, 1861
Clitostylus Voss, 1929: 193; type species: *Apoderus macrostylus* Motschulsky, 1861
Eoclitostylus Legalov, 2003: 475, **syn.n.**; type species: *Apoderus tenuissimus* Pascoe, 1881

Remarks. An investigation of type materials from SMTD and Philippine materials has shown that *Eoclitostylus* Legalov, 2003: 475, **syn.n.** is synonym of *Trachelismus* Motschulsky, 1870. Differences in neck structure of *Trachelismus* and *Eoclitostylus* are variability. To genus *Trachelismus* concern *Trachelismus* (s. str.) *benguetensis* (Voss, 1922), **comb.n.**, *T.* (s. str.) *distinguendus* (Voss, 1929), **comb.n.**, *T.* (s. str.) *macrostylus* (Motschulsky, 1861), *T.* (s. str.) *protractus* (Voss, 1929), **comb.n.**, *T.* (s. str.) *tenuissimus* (Pascoe, 1881), **comb.n.**, *T.* (*Eoclitostyloides*) *klassi* (Legalov, 2007), comb.n., *T.* (*E.*) *prolixus* (Voss, 1929), **comb.n.** and *T.* (*E.*) *schultzei* (Voss, 1922), **comb.n.**

Subgenus *Trachelismus* s. str.
***Trachelismus* (s. str.) *benguetensis* (Voss, 1922)**
(Figs. 35-36, 80)
Apoderus benguetensis Voss, 1922: 164

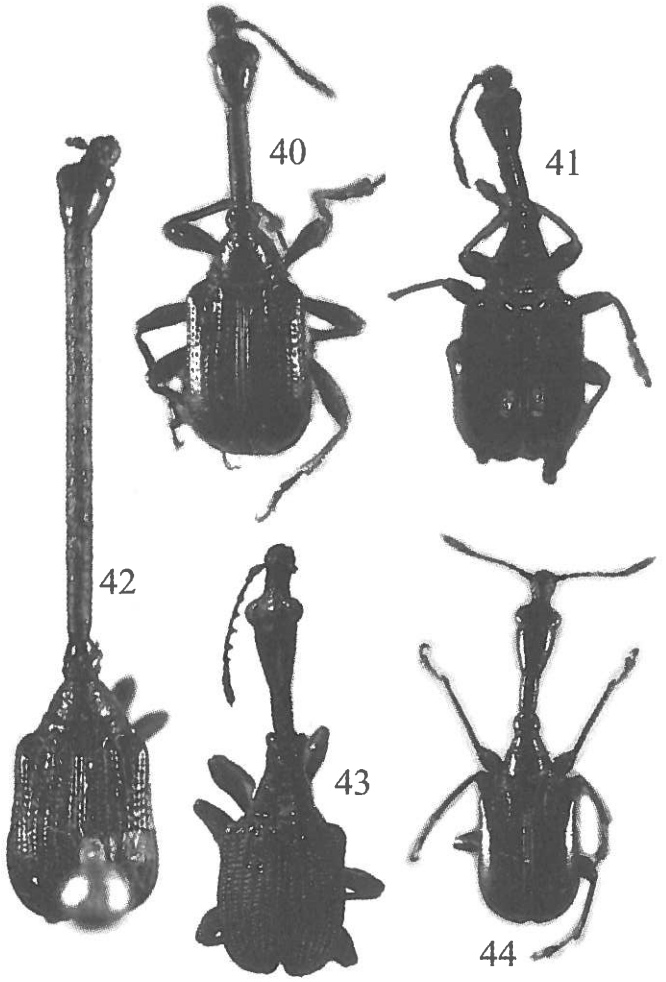
Distribution. Philippines
Remarks. By the author is designated lectotype – male from the collection SMTD with labels «Luzon, P.I., Benguer, Baguio», «Coll. W. Schultze, Ankauf 1942», «Typus», «Staatl. Museum für Tierkunde, Dresden», «*Apoderus benguetensis* n.sp., Det. E. Voss», «Lectotype *Apoderus benguetensis* Voss, A. Legalov design. 2008». Paralectotype - female from the collection SMTD with labels «Luzon, P.I., Benguer, Baguio», «Coll. W. Schultze, Ankauf 1942», «Typus»,

«Staatl. Museum für Tierkunde, Dresden», «Paralectotype *Apoderus benguetensis* Voss, A. Legalov design. 2008».

***Trachelismus* (s. str.) *macrostylus* (Motschulsky, 1861)** (Figs. 37, 42, 81)
Apoderus macrostylus Motschulsky, 1861: 629
Apoderus badeni Faust, 1883: 461

Distribution. Philippines.

Remarks. By the author is designated lectotype – male from the collection SMTD with labels «male, Philippin., Dohrn», «Coll. J. Faust, Ankauf 1900», «*badeni* Faust», «type», «Staatl. Museum für Tierkunde, Dresden», «Lectotype *Apoderus badeni* Fst., A. Legalov design. 2008». Paralectotype - female from the collection SMTD with labels «Philippin., Baden», «Coll. J. Faust, Ankauf 1900», «type», «Staatl. Museum für Tierkunde, Dresden», «Paralectotype *Apoderus badeni* Fst., A. Legalov design. 2008».



Figs. 40-44. Attelabidae gen. spp.: 40 – *Trachelismus schultzei* (male, lectotype), 41 – *Madagasocycnelus ater* (male, lectotype), 42 – *Apoderus badeni* (male, lectotype), 43 – *Trachelophorus asperipennis* (male), 44 – *Madagasocycnelus madegassus* (male).

Subgenus *Eoclitostyloides* Legalov, 2007

***Trachelismus* (*Eoclitostyloides*) *schultzei* (Voss, 1922), placem.n.** (Figs. 40, 82)
Apoderus schultzei Voss, 1922: 164

Distribution. Philippines.

Remarks. By the author is designated lectotype – male from the collection SMTD with labels «Mindanao, P.I., Zamboanga», «Typus», «Coll. W. Schultze, Ankauf 1942», «Staatl. Museum für Tierkunde, Dresden», «*Apoderus schultzei* n.sp., Det. E. Voss», «Lectotype *Apoderus schultzei* Voss, A. Legalov design. 2008».

This species have been wrongly placed previously in nominative subgenus.

Subtribe Pseudophrysina Legalov, 2003

Genus *Borneocorynus* Legalov, 2003

***Borneocorynus fenestratus* (Heller, 1908)** (Figs. 38, 83)
Apoderus fenestratus Heller, 1908: 150

Distribution. Malaysia (Sabah).
Remarks. By the author is studied lectotype – male from the collection SMTD with labels «Labuan, Mus. Dresden», «Coll. J. Faust, Ankauf 1900», «*Apoderus fenestratus* Faust», «Staatl. Museum für Tierkunde, Dresden», «Lectotype *Apoderus fenestratus* Hell., A. Legalov design. 2008».

Tribe Hoplapoderini Voss, 1926
Subtribe Hoplapoderina Voss, 1926
Genus *Tomapoderopsis* Legalov, 2003

***Tomapoderopsis cyclops* (Faust, 1894)**
Apoderus flaviceps f. *cyclops* Faust, 1894: 155

Material. Male (ACB), Bhutan, Wangdu Phodrang, VII.2005, Lijingki.
Distribution. Bhutan, China, Myanmar.
Remarks. This species is for the first time revealed in fauna of Bhutan.

Genus *Paroplapoderus* Voss, 1926
Subgenus *Pseudplapoderus* Legalov, 2003

***Paroplapoderus* (*Pseudplapoderus*) *alleni* Legalov, sp.n.** (Figs. 39, 84)
Holotype. Male (USNM), Bhutan, Wangdu Phodrang, VII.2005, Lijingki.

Description.
Male: Body red-brown. Antennae, legs and abdomen yellowy-brown.

Apex of rostrum, mandible, stain on forehead, strips on temples and neck, sides, 4 stains on pronotum disk, scutellum, most part of the elytra, thorax, 3 stains on 1st ventrite, 2 stains on pygidium, apex of metafemora black. Strips on pro- and mesofemora, claws brown.

Head short and wide. Rostrum short, expanded to apex, lustrous, small punctate. Antennae attached before the rostrum basis. Eyes large, convex. Forehead flat, sparsely punctate with middle striae. Vertex with longitudinal striae, transversal-wrinkled. Neck short.

Antennae short, reaching pronotum first line. Scapus oval, longer than two subsequent segments. 1st segment short-oval. 2nd segment trapezoid, considerably narrower than 1st segments. 3rd segment trapezoid, wider and longer than 2nd segments. 4th segment clavate. 5th and 6th segments shortly trapezoid. 7th segment transversal. Clava compact, narrow. 1st segment weakly elongated. 2nd segment shorter than 1st segments. 3rd segment pointed, shorter than the previous segments.

Pronotum campaniform, 1.44 times wider than length. Pronotal groove narrow. Postnotal groove wide. Greatest width of the basis. Sides weakly rounded. Disk roughly rugosity-punctate. Scutellum wide, semicircular.

Elytra almost rectangular, 1.05 times longer than width, with 4 thorns. Humeri convex, with tooth. Greatest width behind the middle. Penultimate interval carinate in topmost third. Elytra with 3 veins. Intervals convex. Points on elytra large.

Thorax and metepisternum rugosity-punctate. Abdomen convex, densely rugosity-punctate. 1st ventrite with blades, narrower than 2nd ventrite. 2nd - 3rd ventrites wide. 4th and 5th ventrites narrower than the previous ventrites. Pygidium densely punctate.

Legs long. Femora widened. Protibiae almost direct, narrow, expanded to apex. Meso- and metatibiae weakly biconcave. Tarsi long. 1st segment elongated. 2nd segment triangular. 3rd segment bilobed. Clausal segment elongated. Length of body: 5.3 mm.

Diagnosis. This new species is close to *P. tentator* (Faust, 1894) but differs by the smaller sizes of the body, more dark body, weaker thorns on elytra, 1st ventrite with 2 dark stains, pygidium with 2 dark stains, pointed aedeagus and armament of the endophallus.

Etymology. This new species is named in honour of Albert Allen.

Genus *Hoplapoderus* Jekel, 1860

***Hoplapoderus caliginosus* (Faust, 1894)**

Apoderus gemmatus var. *caliginosus* Faust, 1894: 157

Material. 2 males (ACB), Bhutan, Wangdu Phodrang, VII.2005, Lijingki.

Distribution. Bhutan, China (Sichuan, Yunnan), Myanmar, Thailand, Vietnam.

Remarks. This species is for the first time revealed in fauna of Bhutan.

Tribe Trachelophorini Voss, 1926

Key of genera of tribe Trachelophorini

1. 1st ventrite without blades directed to metathorax or with very weak blades.....2

-. 1st ventrite with blades directed to metathorax. 6

2. Elytra with two protuberances. 4th interval with protuberance in first quarter. Humeri with tooth ..... *Dentrachelophorus* Legalov, 2007

-. Elytra without protuberances. Humeri without teeth.....

3. 2nd-6th segments of antennae simple, oviform, their apexes not expanded of males. 4

-. 2nd-5th segments of antennae angularly expanded inside of males. ....*Trachelophorus* Jekel, 1860

4. Antennae very long of males, reaching pronotum. Last segment of the clava strongly elongated. Pronotum red-brown. Thorax black..... .....*Vossitrachelophorus* Legalov, 2003

–. Antennae short of males, not reaching pronotum. Last segment of the clava not extended. Pronotum weakly elongated.....5

5. Pronotal groove weakly of males. Pronotum and thorax red..... .....*Pseudotrachelophorus* Legalov, 2007

-. Pronotal groove sharp of males. Pronotum and thorax black.....*Madagasocycnelus* Legalov, 2003

6. Segments of antennae simple, oviform, their apexes not expanded.....

-. Segments of antennae angularly expanded inside of males.....8

7. Intervals of the elytra flat. Striae weak. Neck long. Aedeagus apex weakly pointed. Basal sclerite occupies two thirds of endophallus.....*Jekelitrahelus* Legalov, gen.n.

-. Intervals of the elytra convex. Striae clear. Neck short. Aedeagus apex strongly pointed. Basal sclerite occupies less than half of endophallus..... .....*Metriotracheloides* Legalov, gen.n.

8. 6th and 7th segments of antennae angularly expanded inside of males..... .....*Metriotrachelus* Jekel, 1860

-. 4th-7th segments of antennae angularly expanded inside of males..... .....*Trachelophoridius* Voss, 1929

Genus *Madagasocycnelus* Legalov, 2003

Madagasocycnelus Legalov, 2003: 517

Type species: *Apoderus humeralis* Olivier, 1807

Remarks. Species of this genus are very close. They differ colouring of the body and basal sclerite of the endophallus.

Key of species of genus *Madagasocycnelus*

1. Abdomen yellow.....2

-. Abdomen black.....3

2. Body black. Legs, basis of the elytra yellow. Basal sclerite of the endophallus (fig. 87)..... .....*M. humeralis* (Olivier, 1807)

-. Body black. Antennae and femora yellowy-brown. Tibiae and tarsi yellow. Basal sclerite of the endophallus (fig. 85).....*M. ater* (Faust, 1890)

3. Tibiae yellow. Basal sclerite of the endophallus (fig. 86).....*M. madegassus* (Hustache, 1922)

-. Tibiae dark. .....*M. michaelis* (Hustache, 1955)

***Madagasocycnelus ater* (Faust, 1890), comb.n., stat.n.** (Figs. 41, 85)

Apoderus humeralis var. *ater* Faust, 1890b: 166

Apoderus flavicornis var. *shawi* Hustache, 1922: 417

Distribution. Madagascar.

Remarks. By the author has been designated lectotype - male from the collection SMTD with labels «gold small square», «Madagascar, Richter», «Coll. J. Faust, Ankauf 1900», «Staatl. Museum für Tierkunde, Dresden», «Type», «var. *ater* Faust», «Lectotype *Apoderus humeralis* v. *ater* Fst., A. Legalov design. 2005». Paralectotypes - male and female with labels «gold small square», «Madagascar, Baden», «Coll. J. Faust, Ankauf 1900», «Staatl. Museum für Tierkunde, Dresden», «Type», «var. *ater* Faust», «Paralectotype *Apoderus humeralis* v. *ater* Fst., A. Legalov design. 2005».

Thise species distinguish from *M. humeralis* by the form of basal sclerite and other colouring of the body.

***Madagasocycnelus madegassus* (Hustache, 1922), comb.n., placem.n.** (Figs. 44, 86)

Apoderus madegassus Hustache, 1922: 417

Distribution. Madagascar.

Remarks. This species have been wrongly placed previously in genus *Trachelophorus* Jekel, 1860.

Genus *Trachelophorus* Jekel, 1860

Apoderus subgenus *Trachelophorus* Jekel, 1860: 158

Type species: *Apoderus giraffa* Jekel, 1860

Key of subgenera of genus *Trachelophorus*

1. Protuberance on 2nd ventrite present of males.2

-. Protuberance on 2nd ventrite absent of males.3

2. Pronotum strongly elongated of males. Body black.....*Nigrotrachelophorus* Legalov, 2003

-. Pronotum weakly elongated of males. Body red-brown, if it black, so abdomen red and apex of the aedeagus straight line. ....*Eotrachelophorus* Legalov, 2003

3. Intervals of the elytra convex and wrinkled..... .....*Atrachelophoridius* Legalov, 2007

-. Intervals of elytra flat and smooth.....4

9. Pronotum strongly elongated. Body black. Scutellum, elytra and abdomen red. Basal sclerite large.....*Trachelophorus* s. str.

-. Pronotum weakly elongated, trapezoid, with depression before pronotal groove. Basal sclerite small.....*Atrachelophorus* Legalov, 2007

Subgenus *Atrachelophoridius* Legalov, 2007, placem.n. (Figs. 43, 88)

Type species: *Attelabus asperipennis* Fairmaire, 1898

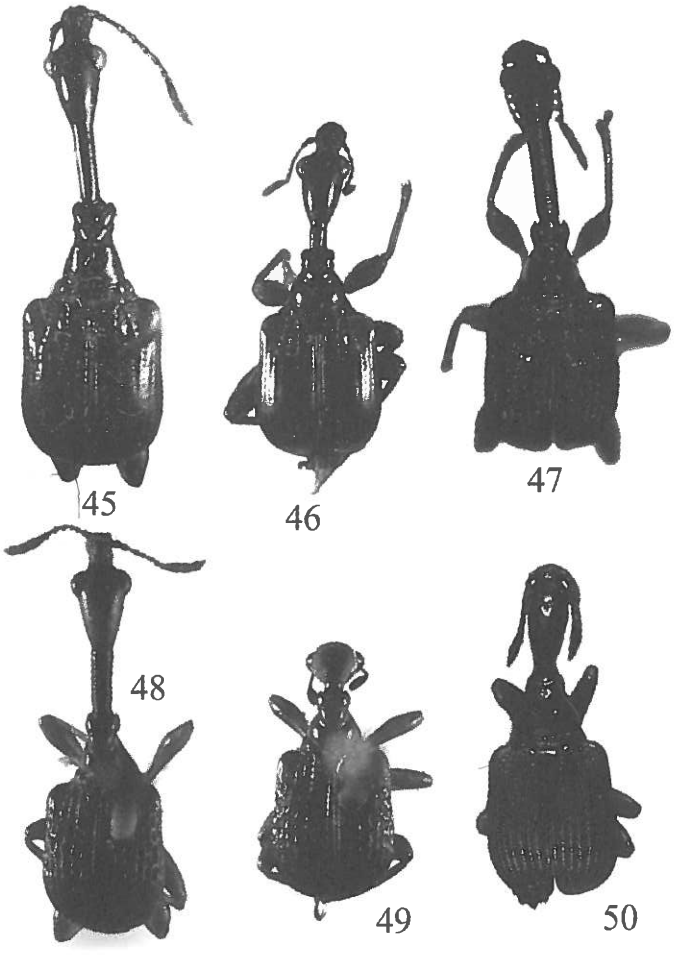
Remarks. Monotypical subgenus with *T.* (*A.*) *asperipennis* (Fairmaire, 1898).

Subgenus *Atrachelophorus* Legalov, 2007

***Trachelophorus* (*Atrachelophorus*) *signatus* Voss, 1929** (Figs. 45-46, 91)

Trachelophorus signatus Voss, 1929: 158

Trachelophorus fausti Voss, 1929: 158, **syn.n.**



Figs. 45-50. Attelabidae gen. spp.: 45 – *Trachelophorus signatus* (male, lectotype), 46 – *T. signatus* (female, paralectotype), 47 – *Trachelophoridius clitostyloides* (male, lectotype), 48 – *T. minutus* (male, lectotype), 49 – *T. minutus* (female, paralectotype), 50 – *Metriotracheloides holoxanthus* (male).

Distribution. Madagascar.

Remarks. By the author is designated lectotype – male from the collection DEI with labels «Sihanaka, O. Madag., XI.-XII., 800 m, Heyne, Berlin – Wilm.», «Staudinger & Bang-Haas dedit.», «Syntypus», «*Trachelophorus signatus* n.sp., Det. E. Voss», «*Trachelophorus signatus* Voss», «Coll. DEI Müncheberg», «Lectotype *Trachelophorus signatus* Voss, A. Legalov desing. 2008». Paralectotype – female from the collection DEI with labels «Sihanaka, O. Madag., XI.-XII., 800 m, Heyne, Berlin – Wilm.», «Staudinger & Bang-Haas dedit.», «Syntypus», «Coll. DEI Müncheberg», «Paralectotype *Trachelophorus signatus* Voss, A. Legalov desing. 2008».

By the author is studied specimen – female from the collection DEI with labels «Madagascar, Sahan hava, Fianarantsoa», «Museum Paris, 1934, R. Catala», «Syntypus», «*Trachelophorus fausti* m.», «*Trachelophorus fausti* Voss», «Coll. DEI Müncheberg».

An investigation of extensive material from Madagascar and types of *Trachelophorus signatus* has shown that *T. fausti* Voss, 1929: 158, **syn.n.** is synonym of *T. signatus* Voss, 1929, that it is very variable species.

Subgenus *Eotrachelophorus* Legalov, 2003

Remarks. 4 species (*T.* (*E.*) *abdominalis* (Gyllenhal, 1839), *T.* (*E.*) *sicardi* Hustache, 1933, *T.* (*E.*) *camelus* (Olivier, 1807), *T.* (*E.*) *castaneus* (Klug, 1860)) concern to this subgenus.

Genus *Trachelophoridius* Voss, 1929
Type species: *Apoderus flavicornis* Gyllenhal, 1839

Key of subgenera of genus *Trachelophoridius*

1. Intervals of the elytra flat. Elytral striae weak. Sculpture of the pronotum more gentle.....*Trachelophoridius* s. str.

-. Intervals of the elytra convex. Elytral striae sharp, deep, sometimes wide. Sculpture of the pronotum sharper.....*Protrachelophorus* Legalov, subgen.n.

Subgenus *Protrachelophorus* Legalov, subgen.n. (Figs. 47-49, 89-90, 92)
Type species: *Trachelophoridius minutus* Voss, 1929

Body red-brown, sometimes with more dark parts. Head elongated. Forehead convex, wide. Temples elongated, narrowed to long neck of males and to short neck of females. Neck of males wrinkled. Antennae of males long. 5th-7th segments of the funicle thornlikely expanded inside. Clava narrow, long, weakly pointed. Antennae of females short, segments no expanded to apex, no dentate. Pronotum trapezoid, of females wide, of males elongated. Disk weakly transversal-wrinkled or nearly so smooth, with striae behind middle. Pronotal groove sharply isolated. Elytra wide, almost rectangular, with greatest width behind middle. Intervals convex, strongly or weakly wrinkled. Points in striae large and rough. Mesothorax without protuberance. Abdomen convex. 1st ventrite with weakly blades. Pygidium convex, punctate. Legs long, of females shorter. Femora weakly widened. Tibiae weakly curved. Length of body: 4.0-7.5 mm.

Remarks. 4 species (*T.* (*P.*) *clitostyloides* Voss, 1943, *T.* (*P.*) *minutus* Voss, 1929, *T.* (*P.*) *regularis* Ter-Minassian, 1986, *T.* (*P.*) *tamatavoensis* Voss, 1929) concern to this subgenus.
Etymology. The name is formed by addition of the prefix «pro-» to «trachelophorus».

***Trachelophoridius* (*Protrachelophorus*) *clitostyloides* Voss, 1943** (Figs. 47, 92)
Trachelophoridius clitostyloides Voss, 1943: 33

Distribution. Madagascar.
Remarks. By the author is designated lectotype - male from the collection SMTD with labels «Tananarivo, Madag.», «Samml. K. F. Hartmann, Ankauf, 1941», «Staatl. Museum für Tierkunde, Dresden», «*Trachelophoridius asperipennis* Fairm., Det. E. Voss», «Lectotype *Trachelophoridius clitostyloides* Voss, A. Legalov design. 2008». Paralectotypes: male (SMTD) with labels «Tamatavo, Madagascar», «Samml. K. F. Hartmann, Ankauf, 1941», «Staatl. Museum für Tierkunde, Dresden», «Paralectotype *Trachelophoridius clitostyloides* Voss, A. Legalov design. 2008» and female (SMTD) with with labels «Madagascar, Tananarivo», «Samml. K. F. Hartmann, Ankauf, 1941», «Staatl. Museum für Tierkunde, Dresden», «Paralectotype *Trachelophoridius clitostyloides* Voss, A. Legalov design. 2008».

***Trachelophoridius* (*Protrachelophorus*) *minutus* Voss, 1929** (Figs. 48-49, 89-90)
Trachelophoridius minutus Voss, 1929: 182

Distribution. Madagascar.
Remarks. By the author is designated lectotype – male from the collection ZMHB with labels «Madagascar int. austr.», «363»,

«*Trachelophoridius minutus* n.sp., Det. E. Voss», «SYNTYPUS *Trachelophoridius minutus* Voss, 1929, labeled by MNHUB 2008», «Lectotype *Trachelophoridius minutus* Voss, 1929, A. Legalov design. 2008». Paralectotype - female from the collection ZMHB with labels «Madagascar int. austr.», «SYNTYPUS *Trachelophoridius minutus* Voss, 1929, labeled by MNHUB 2008», «Paralectotype *Trachelophoridius minutus* Voss, 1929, A. Legalov design. 2008».

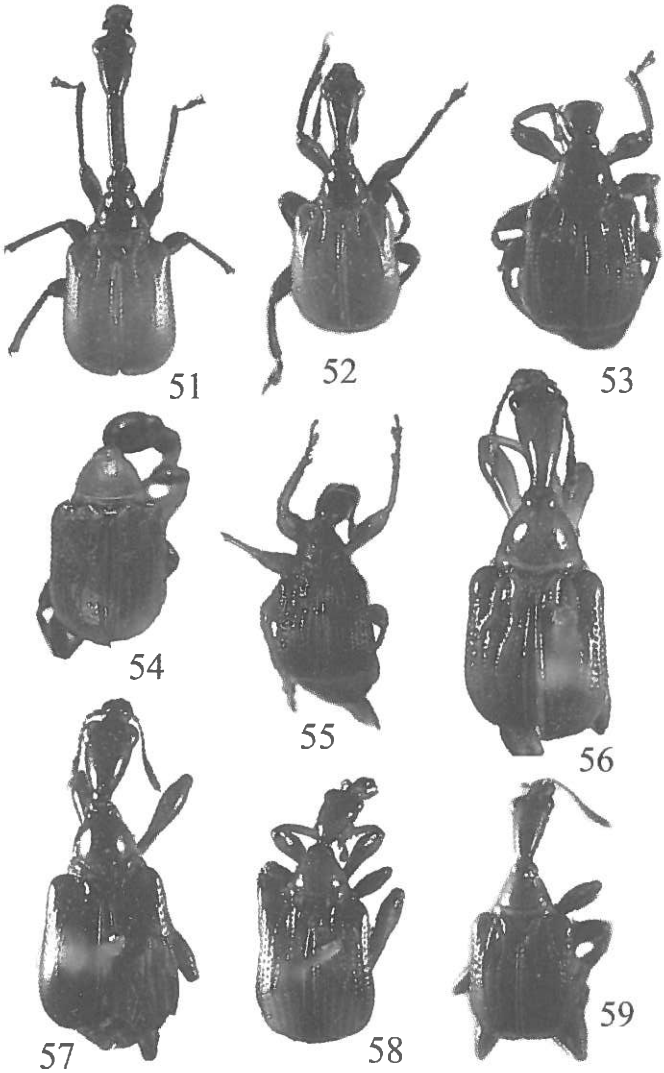
Genus *Jekelitrahelus* Legalov, gen.n. (Figs. 51-52, 93)

Type species: *Trachelophorus elegans* Voss, 1929

Description. Body black. Scutellum, elytra and abdomen red, most part of the postnotal groove yellow-red or only abdomen red, legs dark brown. Head elongated. Rostrum short, expanded to apex. Antennae attached on the rostrum middle. Eyes large, convex. Forehead flat, wide, smooth. Vertex convex, smooth. Temples elongated, narrowed to long neck. Neck 1.29-3.0 times longer than heads of males.

Antennae long, not reaching pronotum. Funicle segments simple, their apexes not expanded of males.

Pronotum campaniform. Disk smooth, with weak transversal



Figs. 51-59. Attelabidae gen. spp.: 51 – *Jekelitrahelus elegans* (male), 52 – *J. elegans* (female), 53 – *Leptapoderus affinis* (female, lectotype), 54 – *Apoderus papei* (female, lectotype), 55 – *Heterapoderopsis subfoveolatus* (male, lectotype), 56 – *Apoderus bilineatus* (male, lectotype), 57 – *Physapoderus biguttatus* (female, lectotype), 58 – *Physapoderus crucifer* (male, lectotype), 59 – *Eocentrocorynus flavotorosus* (male, paralectotype).

striae. Sides almost direct. Pronotal groove sharp of males and weak of females. Scutellum wide, pentagonal.

Elytra wide, almost rectangular. Greatest width behind the middle. Humeri weakly convex. Intervals flat, wide, small punctate. Striae weak. Points in them small, not deep.

Thorax sparsely punctate. Precoxal part elongated, wrinkled. Abdomen convex, punctate, weakly flattened on middle of males. 1st and 2nd ventrites wide. 3rd and 4th ventrites narrower. 5th ventrite narrow, densely punctate. Pygidium convex, punctate.

Legs long. Femora weakly widened. Tibiae weakly curved, weakly expanded to apex. Tarsi long. Length of body: 3.5-8.1 mm.

Remarks. 2 species (*Jekelitrahelus elegans* (Voss, 1929), **comb.n.** and *J. alluaudi* (Hustache, 1922), **comb.n.**) concern to this genus.
Etymology. This new species is named in honour of H. Jekel.

Genus *Metriotracheloides* Legalov, gen.n. (Figs. 50, 94-95)
Type species: *Apoderus holoxanthus* Fairmaire, 1902

Description. Body red-brown. Clava of antennae sometimes dark.

Head elongated. Rostrum short, expanded to apex. Antennae located behind middle of males and on middle of the rostrum of females. Eyes large, convex. Forehead flat, wide, with two longitudinal striae. Vertex convex, smooth, with middle line. Temples elongated, narrowed to neck. Neck short of both sexes.

Antennae long, reaching pronotum. Funicle segments simple, their apexes not expanded of males.

Pronotum campaniform. Disk smooth, with transversal triangular striae. Sides weakly rounded. Pronotal groove weak. Scutellum wide, pentagonal.

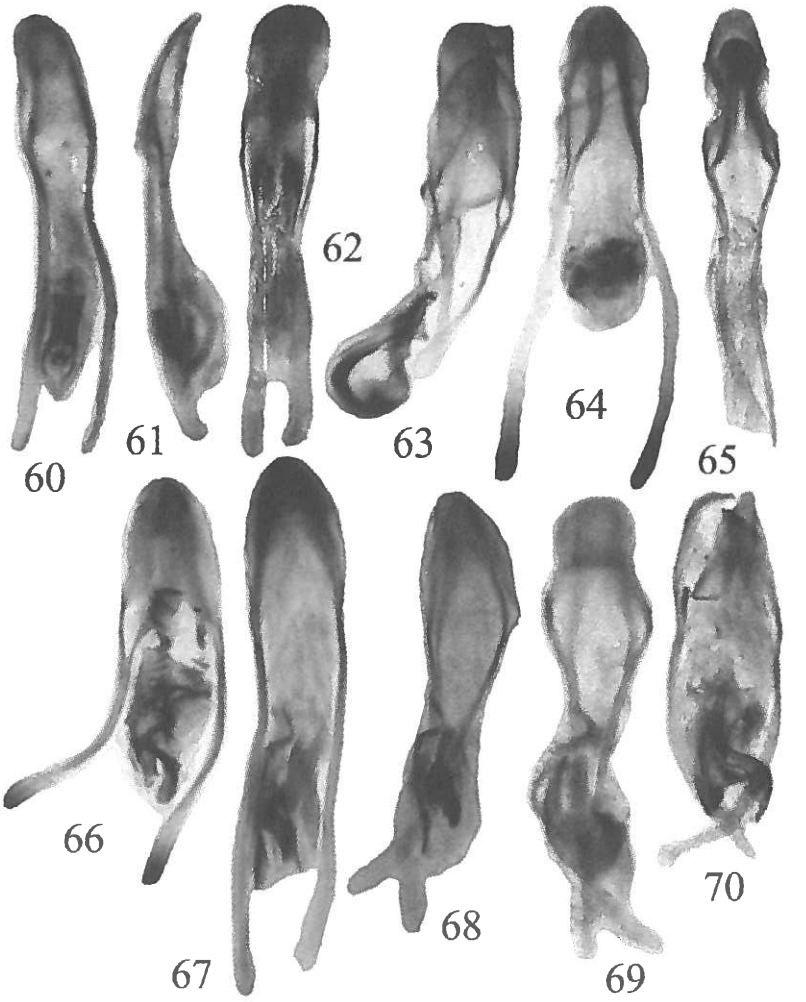
Elytra wide, almost rectangular. Greatest width behind middle. Humeri weakly convex. Intervals weakly convex, wide, smooth or transversal-wrinkled. Striae clear. Points in them dense and deep.

Prothorax almost smooth. Precoxal part of the prothorax elongated. Mesothorax and mesepisternum densely punctate. Metathorax and metepisternum sparsely punctate.

Abdomen convex, punctate, weakly flattened on the middle of males. 1st and 2nd ventrites wide. 1st ventrite with blades. 3rd and 4th ventrites narrower. 5th ventrite narrow. Pygidium convex, punctate.

Legs long. Femora weakly widened. Tibiae weakly biconcave, weakly expanded to apex. Tarsi long. Length of body: 6.0-9.0 mm.
Remarks. 3 species (*Metriotracheloides holoxanthus* (Fairmaire, 1902), **comb.n.**, *M. olsufievi* (Hustache, 1939), **comb.n.**, *M. uniformis* (Gyllenhal, 1839), **comb.n.**) concern to this genus.
Etymology. The name is formed by addition of the the ending «-oides» to «metriotrachelus».

Tribe Apoderini Jekel, 1860Subtribe Leptapoderina Legalov, 2003
Genus *Leptapoderus* Jekel, 1860
Subgenus *Leptapoderus* s. str.



Figs. 60-70. Male genitalia: 60-61 – *Ophthalmolabus monticolus*, 62 – *Coscineuscelus nigricornis*, 63 – *Vossieuscelus loretoensis*, 64 – *Attelabus atratus*, 65 – *A. cribricollis*, 66 – *Neoxestolabus jatahyensis*, 67 – *Attelabus jekelii*, 68 – *Omolabus kirschi*, 69 – *O. mutabilis*, 70 – *O. troglodytes*.

***Leptapoderus* (s. str.) *affinis* (Schilsky, 1906), placem.n.** (Fig. 53)

Apoderus affinis Schilsky, 1906: 77

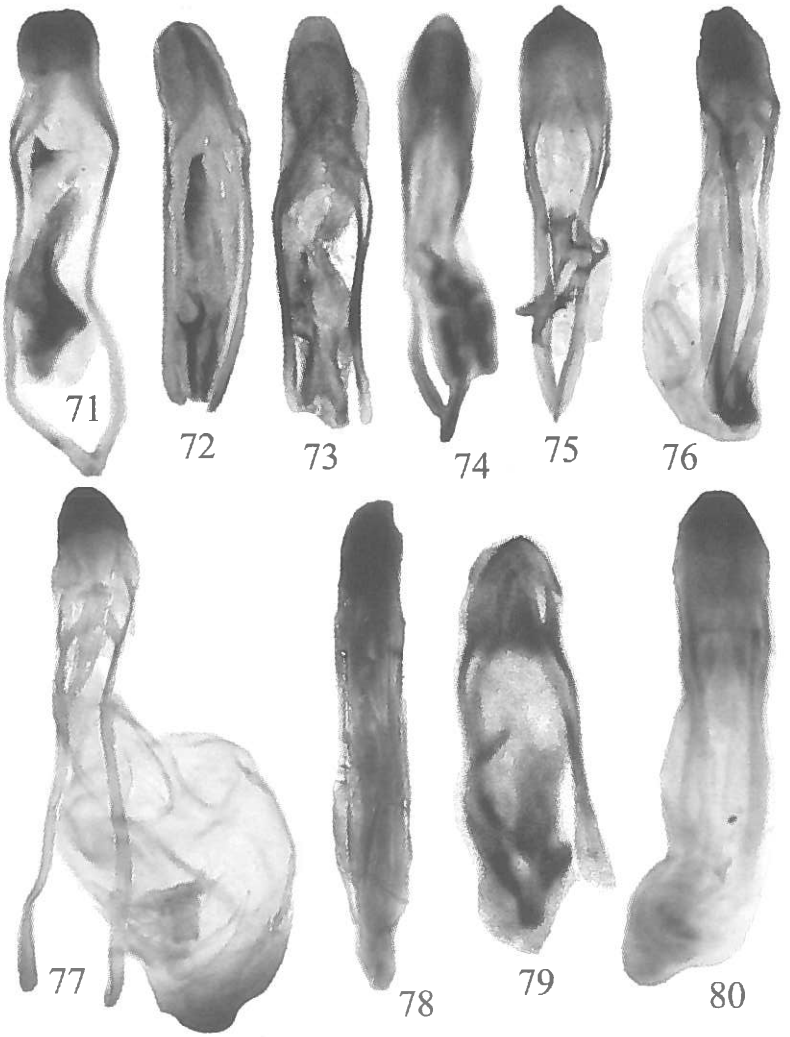
Apoderus cinctipectoralis Voss, 1930: 86, **syn.n.**

Distribution. E and ES China.

Remarks. By the author is designated lectotype – female from the collection ZMHB with labels «Museum Paris, env. de Pekin, A. David, 1878», «Type», «Coll. Schilsky», «*Apoderus affinis* Schilsky (Type – 1905)», «SYNTYPUS *Apoderus affinis* Schilsky, 1906, labelled by MNHUB 2008», «Lectotype *Apoderus affinis* Schilsky, A. Legalov design. 2008», «*Leptapoderus affinis* Schils., A. Legalov det. 2008».

This species have been wrongly placed previously in subgenus *Paraleptapoderus* Legalov, 2003.

An investigation of types has shown that *Apoderus cinctipectoralis* Voss, 193, **syn.n.** is synonym of *A. affinis* Schilsky, 1906.



Figs. 71-80. Male genitalia: 71 – *Omolabus deceptor*, 72 – *O. westerduijni*, 73 – *O. latus*, 74 – *O. ecuadorensis*, 75 – *Phialodes hubeiensis*, 76 – *Humerilabus alleni*, 77 – *Catalabus rasuwanus*, 78 – *Henicolaboides nanlingensis*, 79 – *Scotopsinus tuberifer*, 80 – *Trachelismus benguetensis*.

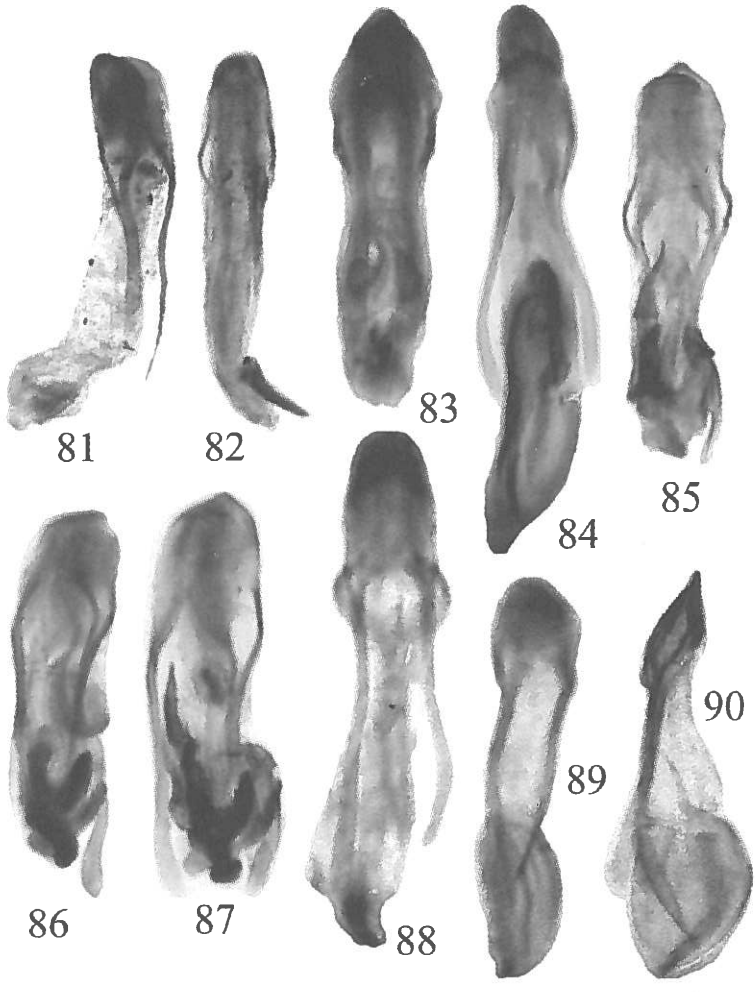
Subgenus *Leptapoderidius* Legalov, 2007

***Leptapoderus* (*Leptapoderidius*) *nigroapicatus* (Jekel, 1860)** (Fig. 54)

Apoderus nigroapicatus Jekel, 1860: 175
Apoderus apicalis Faust, 1890a: 257
Apoderus papei Voss, 1927: 10, **syn.n.**

Distribution. China, India.

Remarks. By the author is designated lectotype – female from the collection DEI with labels «China, Tsintau», «Coll. Kraatz», «Holotypus», «*Apoderus papei* n. sp., Det. E. Voss», «Coll. DEI Müncheberg», «*Apoderus papei* Voss», «Lectotype *Apoderus papei* Voss, A. Legalov desing. 2008».



Figs. 81-90. Male genitalia: 81 – *Apoderus badeni*, 82 – *Trachelismus schultzei*, 83 – *Borneocorynus fenestratus*, 84 – *Paroplapoderus alleni*, 85 – *Madagasocycnelus ater*, 86 – *M. madegassus*, 87 – *M. humeralis*, 88 – *Trachelophorus asperipennis*, 89-90 – *Trachelophoridius minutus*.

An investigation of *Apoderus papei*-type has shown that it is synonym of *Leptapoderus nigroapicatus* (Jekel, 1860) wilch is widespread in China.

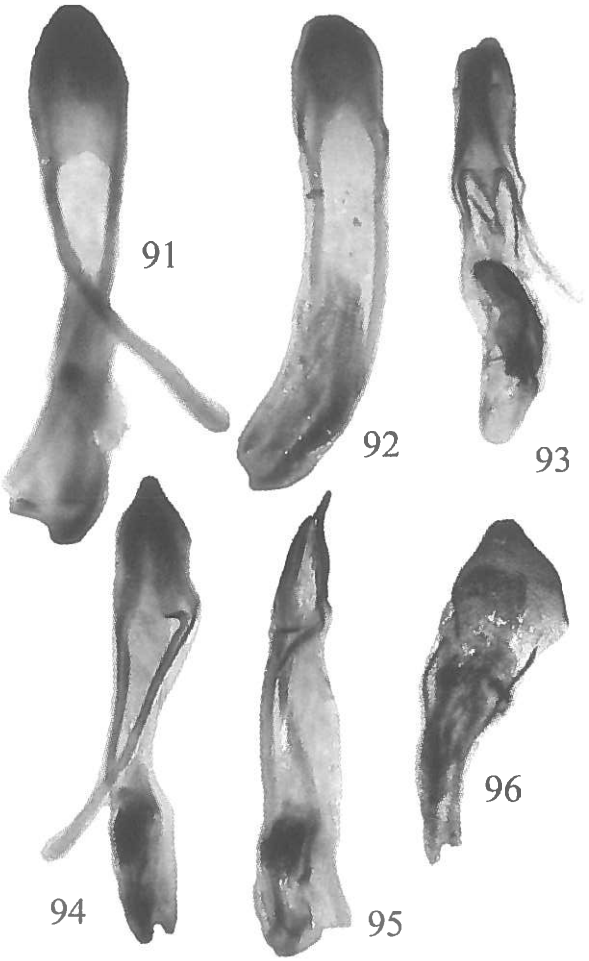
Genus *Heterapoderopsis* Legalov, 2003

***Heterapoderopsis subfoveolatus* (Voss, 1927)**
(Fig. 55)

Apoderus subfoveolatus Voss, 1927: 10

Distribution. Indonesia (Sumatra).

Remarks. By the author is designated lectotype – male from the collection ZMAN with labels «J. B. Corporaal, Sumatra's O. K., Lau Rikit, 2.1918, 300 m», «*Apoderus* (*Heterapoderus*) *subfoveolatus* Voss, 1927, ZMAN type COLE. 1638.3», «Lectotype *Apoderus subfoveolatus* Voss, A. Legalov design. 2008». Paralectotypes: female (ZMAN) with labels «J. B. Corporaal, Sumatra's O. K., Lau Rikit, 2.1918, 300 m»,



Figs. 91-96. Male genitalia: 91 – *Trachelophorus signatus*, 92 – *Trachelophoridius clitostyloides*, 93 – *Jekelitrahelus elegans,* 94-95 – *Metriotracheloides holoxanthus,* 96 – *Eocentrocorynus flavotorosus.*

«*Apoderus subfoveolatus* n.sp., Det. E. Voss», «*Apoderus* (*Heterapoderus*) *subfoveolatus* Voss, 1927, ZMAN type COLE. 1638.1», «Paralectotype *Apoderus subfoveolatus* Voss, A. Legalov design. 2008»; female (ZMAN) with labels «J. B. Corporaal, Sumatra's O. K., Lau Rikit, 2.1918, 300 m», «*Apoderus* (*Heterapoderus*) *subfoveolatus* Voss, 1927, ZMAN type COLE. 1638.2», «Paralectotype *Apoderus subfoveolatus* Voss, A. Legalov design. 2008»; female (ZMAN) with labels «J. B. Corporaal, Sumatra's O. K., Marihat, 2.4.1918», «*Apoderus subfoveolatus* n.sp., Det. E. Voss», «*Apoderus* (*Heterapoderus*) *subfoveolatus* Voss, 1927, ZMAN type COLE. 1638.4», «Paralectotype *Apoderus subfoveolatus* Voss, A. Legalov design. 2008».

Subtribe Centrocorynina Legalov, 2003
Genus *Alexsandricorynus* Legalov, 2003

***Alexsandricorynus assamensis* (Boheman, 1845)** (Fig. 56)

Apoderus assamensis Boheman, 1845: 354
Apoderus bilineatus Faust, 1883: 464

Distribution. SE Asia.
Remarks. For *Apoderus bilineatus* by the author is designated lectotype – male from the collection SMTD with labels «brown small square», «male, Cochinchina, Allard», «*bilineatus* Faust», «type», «Coll. J. Faust, Ankauf 1900», «Staatl. Museum für Tierkunde, Dresden», «Lectotype *Apoderus bilineatus* Fst., A. Legalov design. 2008».

Genus *Physapoderus* Jekel, 1860
Subgenus *Phrysapoderus* s. str.
***Physapoderus* (s. str.) *biguttatus* (Fabricius, 1801)** (Fig. 57)
Attelabus biguttatus Fabricius, 1801: 418

Distribution. Indonesia (Kalimantan, Sumatra), Malaysia (Penang, Sarawak), Singapore.
Remarks. By the author is designated lectotype – female from the collection ZMUC with labels «Sumatra, Daldorff, Mus. S. F. L., *Attelabus biguttatus* F.», «Lectotypus *Attelabus biguttatus* F., A. Legalov desig. 2007», «*Physapoderus* (s. str.) *biguttatus* (Fabricius, 1801), A. Legalov det. 2008». Paralectotypes: female from the collection ZMUC with labels «green square», «Paralectotype *Attelabus biguttatus* F., A. Legalov desig. 2007», «*Physapoderus* (s. str.) *biguttatus* (Fabricius, 1801), A. Legalov det. 2008» and male from the collection ZMUC with labels «2*guttatus*», «Paralectotype *Attelabus biguttatus* F., A. Legalov desig. 2007», «*Physapoderus* (s. str.) *biguttatus* (Fabricius, 1801), A. Legalov det. 2008».

Subgenus *Eophrysapoderus* Legalov, 2007
***Physapoderus* (*Eophrysapoderus*) *crucifer* (Heller, 1922)** (Fig. 58)
Apoderus crucifer Heller, 1922: 13

Distribution. S and SE China, Vietnam.
Remarks. By the author is designated lectotype – male from the collection SMTD with labels «male», «Chapa, pr., Laokay, Tonkin, V. de Salvazar», «1913, 40», «*crucifer*, Typus», «Staatl. Museum für Tierkunde, Dresden», «Lectotype *Apoderus crucifer* Hell., A. Legalov design. 2008».

Genus *Eocentrocorynus* Legalov, 2003
Subgenus *Eocentrocorynus* s. str.

***Eocentrocorynus* (s. str.) *flavotorosus* (Faust, 1898)** (Figs. 59, 96)
Apoderus flavotorosus Faust, 1898: 296
Distribution. S India.
Remarks. By the author is studied lectotype – female from the collection SMTD with labels «gold small square», «Belgaum, Andrewes», «Coll. J. Faust, Ankauf 1900», «Staatl. Museum für Tierkunde, Dresden», «Type», «*flavotorosus* Fst.», «Lectotype *Apoderus flavotorosus* Fst., A. Legalov design. 2005». Paralectotypes – male and female from the collection SMTD with labels «gold small square», «male, Belgaum, Andrewes», «*flavotorosus* Fst.», «Coll. J. Faust, Ankauf 1900», «Staatl. Museum für Tierkunde, Dresden», «Type», «Paralectotype *Apoderus flavotorosus* Fst., A. Legalov design. 2008».

Subtribe Cycnotrachelina Legalov, 2003
Genus *Cycnotrachelodes* Voss, 1955
Subgenus *Pseudcycnolodes* Legalov, 2003
***Cycnotrachelodes* (*Pseudcycnolodes*) *coeruleatus* (Faust, 1894)**
Apoderus coeruleatus Faust, 1894: 159

Cycnotrachelus subcoeruleus Voss, 1929: 117

Material. Female (ACB), Bhutan, Wangdu Phodrang, VII.2005, Lijingki.

Distribution. Bhutan, China, Laos, Myanmar, Thailand, Vietnam.

Remarks. This species is for the first time revealed in fauna of Bhutan.

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FAUNISTIC RECORDS OF THE BEETLES (HEXAPODA: COLEOPTERA) IN LATVIA. 2.

Arvīds Barševskis, Andris Bukejs, Alexander Anichtchenko

Barševskis A., Bukejs A., Anichtchenko A 2008. Faunistic records of the beetles (Hexapoda: Coleoptera) in Latvia. 2. *Acta Biol. Univ. Daugavp., 8 (2): 227 – 258.*

The article conteint new information about distribution data of 230 species of the beetles (Hexapoda: Coleoptera) in Latvia. 2 species - *Harpalus modestus* Dejean (CARABIDAE) & *Platycis cosnardi* (Chevrolat) (LYCIDAE) are new for the fauna of Latvia, from which 19 are very rare species with few known localities in Latvia, 9 species are protected in Latvia, but 18 species are included in the list of special & indicator species of woodland key habitats.

Key words: Beetles, Coleoptera, fauna, Latvia, rare, protected, species, woodland key habitats.

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INTRODUCTION

The article continues a series of the publications "Faunistic records of the beetles (Hexapoda: Coleoptera) in Latvia", devoted to the study of beetles (Hexapoda: Coleoptera) fauna of Republic of Latvia. The first article of this seriees (Barševskis et al. 2004) contains the information about 252 beetles species, from which 3 species were indicated for the first time in the fauna of Latvia.

There is the information about 230 species of the beetles from 46 families. 2 species - *Harpalus modestus* Dejean (CARABIDAE) & *Platycis cosnardi* (Chevrolat) (LYCIDAE) are new for the fauna of Latvia (in the species list marked with *). 19 species: *Bembidion obtusum* Audinet-Serville, *B. monticola* Sturm, *Platynus mannerheimii* (Dejean), *Harpalus signaticornis* (Duftschmid), *Cymindis macularis* Mannerheim (CARABIDAE), *Maladera holosericea* Mannerheim (SCARABAEIDAE), *Hylis procerulus* (Mannerheim), *Rhacopus sahlbergi* (Mannerheim) (EUCNEMIDAE), *Denticollis rubens* Piller & Mitterpacher, *Calambus bipustulatus* (Linnaeus), *Dicronychus equisetoides* Lohse (ELATERIDAE), *Aplocnemus impressus* (Marsham), *Charopus graminicola* (Dejean), *Paratinus femoralis* (Erichson) (MELYRIDAE), *Cucujus*

cinnaberinus (Scopoli) (CUCUJIDAE), *Rushia parreyssii* (Mulsant) (MELANDRYIDAE), *Allecula morio* (Fabricius), *Omophlus betulae* (Herbst) (TENEBRIONIDAE), *Tropideres albirostris* (Herbst) (ANTHRIBIDAE) are very rare species with few known localities in Latvia. 9 species are protected in Latvia: *Calosoma inquisitor* (Linnaeus) (CARABIDAE), *Oxyporus mannerheimi* Gyllenhal, *Velleius dilatatus* (Fabricius) (STAPHYLINIDAE), *Dorcus parallelopipedus* (Linnaeus), *Ceruchus chrysomelinus* (Hochenwarth) (LUCANIDAE), *Protaetia marmorata* (Fabricius) (SCARABAEIDAE), *Chalcophora mariana* (Linnaeus) (BUPRESTIDAE), *Denticollis rubens* Piller & Mitterpacher (ELATERIDAE), *Cucujus cinnaberinus* (Scopoli) (CUCUJIDAE). 18 species in Latvia are included in the list of special & indicator species of woodland key habitats: *Velleius dilatatus* (Fabricius) (STAPHYLINIDAE), *Dorcus parallelopipedus* (Linnaeus), *Ceruchus chrysomelinus* (Hochenwarth) (LUCANIDAE), *Protaetia marmorata* (Fabricius), *Gnorimus nobilis* (Linnaeus) (SCARABAEIDAE), *Chalcophora mariana* (Linnaeus), *Poecilonota variolosa* (Paykull) (BUPRESTIDAE), *Harminius undulatus* (De Geer) (ELATERIDAE), *Lymexylon navale* (Linnaeus) (LYMEXYLIDAE), *Peltis grossa* (Linnaeus), *Thymalus limbatus* (Fabricius), *Grynocharis oblonga* (Linnaeus) (TROGOSSITIDAE), *Dendrophagus crenatus* (Paykull) (SILVANIDAE), *Mycetophagus quadripustulatus* (Linnaeus) (MYCETOPHAGIDAE), *Melandrya dubia* (Schaller) (MELANDRYIDAE), *Prionychus ater* (Fabricius), *Pseudocistela ceramboides* (Linnaeus), *Neomida haemorrhoidalis* (Fabricius) (TENEBRIONIDAE).

The material collected in various habitats and different places of Latvia with entomological net, different traps (windows traps, Malayse traps, pitfall traps etc.) and with visual observation of microhabitats (under different objects, on soil, plants etc.). The material, which are used in this article is stored in the collection of Institute of Systematic Biology Daugavpils University (DUBC) in Daugavpils, Latvia.

The systematics, which is applied in H. Silfverberg's (2004) catalogue, is used as the basis in species list ot this article. In the species list after the species name the place and collecting date are indicated., but in the brackets are indicated the number of collected specimens and name of the collector.

The records published in the article will complete the information about the beetles species distribution in Latvia.

FAUNISTICS

CARABIDAE

***1. Leistus terminatus* (Panzer, 1793)**

Daugavpils Distr.: Bebrene, 07.X.2006., (2, E.Rudans leg.), Geitvinišķi, Nature Park "Daugavas loki", 13.VIII.- 17.IX.2008., (3, A.Bukejs, A.Pankjāns leg.); **Madona Distr.:** Krustkalni Nature Reserve, 56°46`95``N 26°08`63``E, 07.VII.2006., (14, A.Pankjāns, A.Barševskis, E.Rudāns), 10.VIII.2006., (3, A.Barševskis leg.); **Preiļi Distr.:** Gailiši, 15.VII.2006., (1, A.Pankjāns leg.), Rīga Distr.: Olaine, 19.IX.2006., (3, J.Donis leg.).

***2. Leistus ferrugineus* (Linnaeus, 1758)**

Aizkraukle Distr.: Taurkalne, 16.VI.2006., (1, J.Donis leg.); **Daugavpils Distr.:** Rozališķi, Nature Park "Daugavas loki", 13.VIII.-17.IX.2008., (1, A.Bukejs, A.Pankjāns leg.); **Talsi Distr.:** Slītere National Park, 27.VI.2006., (1, A.Barševskis, U.Valainis, A.Pankjāns), 26.X.2006., (1, E.Rudāns leg.).

3. Leistus piceus **Frölich, 1799**
Daugavpils Distr.: Ilgas, Silene Nature Park, 12.VI.1995., (1, A.Barševskis leg.); **Talsi Distr.:** Slītere National Park, VI.2002., (5, U.Valainis, A.Barševskis leg.), VII.2002., (1, A.Barševskis leg.), 06.VIII.2002., (1, A.Barševskis leg.).

4. Nebria brevicollis **(Fabricius, 1792)**
Madona Distr.: Lubāna, „Ezernieki", 21.08.2008., (1, A.Barševskis leg.); **Talsi Distr.:** Slītere, Zilie kalni, Slītere National Park, 13.IX.2005., (2, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 03.IX.2004., (2, U.Valainis leg.), 10.VI.2005., (1, A.Barševskis leg.), 15.VII.2008., (2, V.Aleksejev., A.Pavlova leg.), IX.2008., (1, A.Barševskis leg.), Ugāle, VI.2002., (2, A.Barševskis leg.).

5. Calosoma inquisitor **(Linnaeus, 1758)**
Krāslava Distr.: Krāslava (1, A.Uzula leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, VI.2003., (1, U.Valainis leg.), 25.VI.2004., (10), 14.V.2004., (2, A.Barševskis leg.), 10.VI.2005., (1, A.Barševskis leg.), 11.VII.2005., (1, U.Valainis leg.), 29.VI.2006., (8, A.Barševskis leg.), VII.2007., (1, A.Barševskis leg.). Protected species in Latvia. Rare.

6. Carabus convexus **Fabricius, 1775**
Daugavpils Distr.: Ilgas, Silene Nature Park, IV.2002., (6, A.Barševskis leg.), VI.2002., (2, A.Barševskis leg.), 15.IV.2003., (1, U.Valainis leg.), Geitvinišķi, Nature Park "Daugavas loki", 13.VIII.-17.IX.2008., (3, A.Bukejs, A.Pankjāns leg.), Vecsīķeļi, Nature Park "Daugavas loki", 23.V.-25.VI.2008., (2, R.Cibuļskis, U.Valainis, K.Aksjuta leg.); **Krāslava Distr.:** Šķeltova, "Barševski", VI.2002., (1, A.Barševskis leg.), Tartaks, Nature Park "Daugavas loki", 04.VII.2008., (1, A.Soldāns leg.).

7. Carabus coriaceus **Linnaeus, 1758**
Daugavpils Distr.: Elerne, 07.VI.2002., (1, A.Barševskis leg.); 9,7 km N Saliena, Nature Park "Daugavas Loki", 55°54`39``N 26°53`25``E, 13.VIII-17.IX.2008., left bank of the Daugava River, pine forest, (8, A.Bukejs, A.Pankjāns leg.); **Krāslava Distr.:** Šķeltova, "Barševski", IX.2008., (1, A.Barševskis leg.); **Madona Distr.:** Kalsnava, 27.VIII.2007., (1, J.Donis leg.), Lejasciems, 57°14`16``N 26°37`50``E, 10.VII.2005., (1, J.Laizāns, A.Barševskis leg.); **Rēzekne Distr.:** Rēzekne, Nakotnes Str. 17/19, IX.2007., (1, J.Burovs leg.); **Talsi Distr.:** Slītere National Park, Zilie Kalni, V.2006., (1, A.Barševskis leg.); **Valka Distr.:** Launkalne local municipality, Mežole, 30.VIII.2005., (1, J.Donis leg.), 15.X.2005., (4, J.Donis leg.), 17.VI.2007., (1, J.Donis leg.), 16.VII.2007., (1, J.Donis leg.), VII-IX.2007., (4, J.Donis leg.).

8. Elaphrus aureus **Müller, 1821**
Cēsis Distr.: Liepas, Rauguļi, 03.VII.2006., (5, A.Barševskis, U.Valainis, A.Pankjans leg.).

9. Miscodera arctica **(Paykull, 1790)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 16-18.VIII.2002., (4, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, 29.XI.2006., (1, A.Barševskis leg.).

10. Patrobus septentrionis **Dejean, 1828**
Daugavpils Distr.: Ilgas, Silene Nature Park, 16-18.VIII.2002., (1, A.Barševskis leg.). Rare species.

11. Blemus discus **(Fabricius, 1792)**
Ventspils Distr.: Moricsala Island, Moricsala Nature Reserve, 11.VIII.2006., (1, E.Rudāns leg.).

12. Bembidion obtusum **Audinet-Serville, 1821**
Limbaži Distr.: Dunte, 16.VIII.2008., (6, A.Barševskis leg.); Salacgrīva, Veczemu rock, 17.VIII.2008., (4, A.Barševskis leg.). Very rare species with few known localities.

13. Bembidion pallidipenne **(Illiger, 1802)**
Ventspils Distr.: Jūrkalne, 56°59'13"N 21°21'25"E, 28.VII.2005., (1, A.Barševskis, A.Bukejs, U.Valainis leg.). Rare species.

14. Bembidion monticola **Sturm, 1825**
Limbaži Distr.: Vīķi, 57°51'42"N 24°47'53"E, 22.VIII.2006., (1, A.Pankjāns leg.). In the Latvian fauna very rare species with few known localities.

15. Bembidion schueppelii **Dejean, 1831**
Daugavpils Distr.: Elerne, Muravki, 29.XII.2006., (1, A.Barševskis, K.Barševska leg.); 2,8 kn S Naujene, Starozamkovij rov, Nature Park "Daugavas Loki", 55°54`710``N 26°43`515``E, 09.V.2008., (2, U.Valainis leg.); **Liepāja Distr.:** Pape, 21.VI.1996., (1, N.Savenkovs leg.); **Limbaži Distr.:** Staicele, 57°51`69``N 24°41`83``E, 22.VIII.2006., (5, A.Barševskis leg.); Vīķi, 57°51`42``N 24°47`53``E, 22.VIII.2006., (7, A.Barševskis leg.); **Preiļi Distr.:** Jersika, Dimanti, 23.XII.2006., (1, A.Barševskis, K.Barševska leg.); **Rīga Distr.:** Carnikava, 31.V.1995., near Gauja River, (1, N.Savenkovs leg.); **Valmiera Distr.:** Mazsalaca, 57°43`04``N 25°07`75``E, 21.VIII.2006., (11, A.Barševskis, A.Pankjāns leg.).

16. Bembidion gilvipes **Sturm, 1825**
Daugavpils Distr.: Bebrene, 15-17.XII.2006., (1, E.Rudāns leg.), 23-28.I.2007., (1, E.Rudāns leg.); Elerne, Muravki, 29.XII.2006., (1, A.Barševskis, K.Barševska leg.); Naujene, Nature Park "Daugavas Loki", 55°54`44``N 26°49`28``E, 29.IV.2008., valley of the Daugava River, (1, A.Pankjāns, U.Valainis leg.); **Preiļi Distr.:** Jersika, Dimanti, 23.XII.2006., (2, A.Barševskis, K.Barševska leg.).

17. Bembidion humerale **Sturm, 1825**
Talsi Distr.: Stende, 57°07'19"N 22°32'26"E, 19.VII.2007., (1, A.Barševskis, U.Valainis, A.Pankjans, A.Soldāns leg.).

18. Platynus mannerheimii **(Dejean, 1828)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 09.VI.1997., (1, A.Barševskis leg.). Very rare species with few known localities.

19. Amara ingenua **(Duftschmid, 1812)**
Jēkabpils Distr.: Dunava, 30.IX.2007., (1, A.Barševskis leg.).

20. Panagaeus cruxmajor **(Linnaeus, 1758)**
Daugavpils Distr.: Bebrene, 17.XI.2006., (2, E.Rudāns leg.), 19.XI.2006., (2, E.Rudāns leg.); Daugavpils, Viduspoguļanka, N side of Lake Plotičku, 55°54'943"N 26°29'789"E, 21.IV.2008., (1, A.Pankjāns leg.); Maļinova, 14.IV.2007., (1, M.Murd leg.); Šedere, Straumēni, 05-06.IV.2008., (1, M.Janovska leg.); **Jēkabpils Distr.:** Dunava, 16.IV.2006., (1, A.Barševskis leg.), 27.V.2005., (1, A.Barševskis leg.); **Krāslava Distr.:** Šķeltova, "Barševski", 26.XI.2006., (1, A.Barševskis, K.Barševskis leg.); **Ludza Distr.:** Mērdzene, 2 km E Rūzoni, 21.IX.2007., (1, R.Cibuļskis leg.); **Preiļi Distr.:** Jersika, "Kurpnieki", 17.IV.2005., (1, A.Barševskis leg.), 22.V.2005., (1, A.Barševskis leg.), 07.VI.2006., (1, A.Barševskis, K.Barševska), 22-25.VI.2007., (1, A.Barševskis leg.).

21. Badister unipustulatus **Bonelli, 1813**
Daugavpils Distr., Šedere, Straumēni, 16.III.2008., (1, M.Janovska leg.).

22. Harpalus signaticornis **(Duftschmid, 1812)**
Daugavpils Distr.: Šedere, Straumēni, 01-03.V.2008., (1, M.Janovska leg.); Stropi, VIII.2001., (1, A.Bukejs leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 14.V.2004., (1, A.Barševskis leg.). Very rare species in Latvia, with five known localities only. North border of main distribution area.

23. Harpalus servus **(Duftschmid, 1812)**

Daugavpils Distr.: Līksna parish, 3 km N Daugavpils, 24.IV.2008., inland dunes, pine forest, (1, A.Bukejs leg.).

***24.* Harpalus modestus* Dejean, 1829**
Jēkabpils Distr.: Dunava, 20.VII.2008., (1, A.Barševskis leg.). New species for Latvian fauna. In Fennoscandia and Baltia known also from Lithuania (Silfverberg 2004).

***25. Odacantha melanura* (Linnaeus, 1767)**
Krāslava Distr.: 3,6 km NEE Skaista, Grundāni, Lake Drīdzis Nature Park, 15.VII.2008., (1, R.Cibuļskis leg.); **Ventspils Distr.:** Usma forestry env., 05.V.2008., (1, A.Pankjāns, U.Valainis, A.Soldāns, E.Tamanis leg.).

***26. Lebia cruxminor* (Linnaeus, 1758)**
Daugavpils Distr.: Butišķi, 25.VII.2008., valley of the Daugava River, (1, A.Bukejs leg.); Šedere, Straumēni, 01-03.V.2008., (1, M.Janovska leg.); **Jēkabpils Distr.:** Dignāja, 01.VIII.2005., (1, A.Barševskis leg.); **Kuldīga Distr.:** Alsunga, Augšužava Nature Pretection Area, 28.VIII.2005., (1, A.Barševskis, A.Bukejs, U.Valainis leg.); **Talsi Distr.:** Slītere National Park, 26.VI.2002., (1, A.Barševskis leg.).

***27. Demetrias imperialis* (Germar, 1824)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 19.-22.VI.2006., (1, E.Rudāns leg.).

***28. Paradromius linearis* (Olivier, 1795)**
Liepāja Distr.: Pavilosta, dunes, 13.VIII.2008., (1, A.Barševskis leg.); **Talsi Distr.:** Slītere National Park, Zilie Kalni, 10.VII.2004., (8, A.Barševskis & R.Cibuļskis leg.).

***29. Cimyndis macularis* Mannerheim, 1824**
Daugavpils Distr.: Līksna local municipality, Mežciems env., near Rīga-Krāslava beltway, VII.2001., (1, A.Barševskis leg.). Very rare species in Latvia, with five known localities only.

SPHAERITIDAE

***30. Sphaerites glabratus* (Fabricius, 1792)**
Rīga Distr.: Olaine, 14.VIII.2006., (1, J.Donis leg.).

HISTERIDAE

***31. Margarinotus bipustulatus* (Schrank, 1781)**
Jēkabpils Distr.: Sala, 24.07.2001., (1, K.Uģeļska leg.). Rare species.

***32. Margarinotus purpurascens* (Herbst, 1792)**
Daugavpils Distr., Elerne, Nature Park „Daugavas loki", 05.2002., (1, A.Barševskis leg.).

***33. Atholus bimaculatus* (Linnaeus, 1758)**
Daugavpils Distr.:, Bebrene, 09.09.2006., (1, E.Rudāns leg.), Šedere, „Straumēni", 12.VIII.2007., (1, M.Janovska (Murd) leg.); Preiļi Distr.: Aglonas stacija, 02.08.2008., (1, J.Staskeviča leg.).

***34. Hololepta plana* (Sulzer, 1776)**
Ventspils Distr.: Moricsala Island, Moricsala Nature Reserve, 23.VIII.2008., (1, A.Barševskis leg.).

PLATYPSYLLINAE

***35. Platypsyllus castoris* Ritsema, 1869**
Daugavpils Distr.: Bebrene, 14.IV.2006., (6, E.Rudāns leg.).

SILPHIDAE

***36. Silpha tristis* Illiger, 1798**
Daugavpils Distr.: Šedere, „Straumēni", 19.IV.-02.V.2008., (1, M.Janovska leg.); **Ventspils Distr.:** Moricsala Nature Reserve, IX.2008., (1, A.Barševskis leg.).

***37. Silpha obscura* Linnaeus, 1758**

Ventspils Distr.: Usma, near Usmas lake, 22.VIII.2008., (1, A.Barševskis leg.)

STAPHYLINIDAE

***38. Scaphidium quadrimaculatum* Olivier, 1790**
Daugavpils Distr.: Ilgas, Silene Nature Park, VI.2002., (1, A.Barševskis leg.), 27.VI.2007., (1, A.Barševskis leg.); **Jekabpils Distr.:** Tadenava, 11.VII.2002., (1, A.Barševskis leg.); **Krāslava Distr.:** Ūdrīši, Zapoļniki, 15.IV.2007., clearing, (1, M.Murd leg.); **Talsi Distr.:** Kolka, Slītere National Park, 10.VI.2005., (1, E.Rudāns leg.); Slītere National Park, Zilie Kalni, VI.2002., (1, U.Valainis, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 14.V.2004., (5, A.Barševskis leg.), 10.VI.2005., (2, A.Barševskis leg.), 04-05.V.2008., (1, A.Pankjans, U.Valainis, E.Tamanis, A.Soldāns leg.).

***39. Oxyporus mannerheimi* Gyllenhal, 1827)**
Aizkraukle Distr.:, Sērene, Nature Park „Daugavas ieleja", 06.X.2006., (2, U.Valainis, A.Pankjāns, A.Barševskis, J.Staskeviča leg.); **Daugavpils Distr.:** Ilgas, Silene Nature Park, 02.-10.VII.2004., (1, A.Barševskis leg.); **Gulbene Distr.:** Gulbītis, near Lake Ušūrs, 04.2006., (1, A.Barševskis leg.). Protected species in Latvia.

***40. Emus hirtus* (Linnaeus, 1758)**
Daugavpils Distr.: Šedere, Šarlote, 13.V.2007., (1, K.Aksjuta leg.), 08.VII.2007., (1, M.Janovska (Murd) leg.); **Preiļi Distr.:** Rušona, Aglonas stacija, IV.2008., (1, J.Staskeviča leg.).

***41. Creophilus maxillosus* (Linnaeus, 1758)**
Aizkraukle Distr.: Taurkalne, 17.VII.2006., (1, J.Donis leg.); **Rīga Distr.:** Olaine, 01.VIII.2006., (1, J.Donis leg.), Salaspils, 01.VIII.2006., (2, J.Donis leg.).

***42. Velleius dilatatus* (Fabricius, 1787)**
Aizkraukle Distr.: Ērberģe, 13.VIII.2007., (1, J.Donis leg.), Taurkalne, 30.VII.2007., (3, J.Donis leg.), 13.VIII.2007., (1, J.Donis leg.); **Madona Distr.:** Kalsnava, 13.VIII.2007., (3, J.Donis leg.); **Rīga Distr.:** Olaine, 13.VIII.2007., (1, J.Donis leg.), Salaspils, 30.VII.2007., (1, J.Donis leg.); **Valka Distr.:** Mežole, Mežole Nature Protection Area, 15.VIII.2006., (1, J.Donis leg.), 16.VII.2007., (2, J.Donis), 13.VIII.2007., (4, J.Donis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 18.VII.2007., (1, A.Barševskis, A.Pankjāns, A.Soldāns, U.Valainis leg.). Included in the list of special & indicator species of woodland key habitats. Protected species in Latvia.

LUCANIDAE

***43. Dorcus parallelopipedus* (Linnaeus, 1758)**
Talsi Distr.: Slītere National Park, Zilie kalni, 13.IX.2005., (1, A.Barševskis leg.). Included in the list of special & indicator species of woodland key habitats. Protected species in Latvia.

***44. Ceruchus chrysomelinus* (Hochenwarth, 1785)**
Talsi Distr.: Slītere, Zilie kalni, Slītere National park, windows trap, 29.VII 2005., (1, U.Valainis leg.); **Ventspils Distr.:** Moricsala Nature Reserve, VI 2002., (1, A.Barševskis leg.), VI 2003., (1, U.Valainis leg.), 11.VII.2005., (1, U.Valainis leg.). Included in the list of special & indicator species of woodland key habitats. Protected species in Latvia.

TROGIDAE

***45. Trox sabulosus* (Linnaeus, 1758)**
Daugavpils Distr.: Elerne, Nature Park "Daugavas Loki", 16.VI.2002., (1, A.Barševskis leg.).

***46. Trox scaber* (Linnaeus, 1767)**

Daugavpils Distr.: Ilgas, Silene Nature Park, 17.VI.1997., (1, A.Barševskis leg.); **Rīga Distr.:** Olaine, 30.VI.2006., (4, J.Donis leg.), 17.VII.2006., (1, J.Donis leg.), 01.VIII.2006., (1, J.Donis leg.); **Kuldīga Distr.:** Rudbārži, 10.VI.1998., on light, (1, N.Savenkovs leg.).

GEOTRUPIDAE

47. Geotrupes spiniger **(Marsham, 1802)**
Daugavpils Distr.: Bebrene, 16.IX.2006., (1, E.Rudāns leg.).

48. Geotrupes stercorarius **(Linnaeus, 1758)**
Daugavpils Distr.: Šedere, Šarlote, 13.V.2007., dry meadow, in dung, (3, K.Aksjuta leg.).

49. Trypocopris vernalis **(Linnaeus, 1758) – Aizkraukle Distr.:** Ērberģe, 14.VIII.2006., (1, J.Donis leg.), 04.IX.2006., (1, J.Donis leg.), Taurkalne, 16.VI.2006., (1, J.Donis leg.), 03.VII.2006., (4, J.Donis leg.), 17.VII.2006., (1, J.Donis leg.), 01.VIII.2006., (2, J.Donis leg.); **Daugavpils Distr.:** Ilgas, Silene Nature Park, 07.IX.2005., (1, A.Barševskis leg.); Mežciems env., near Daugavpils beltway, 22.VII.2008., inland dunes, (1, A.Barševskis leg.); Saliena, Nature Park „Daugavas loki", pine forest, 13.VIII. – 17.IX.2008., (1, A.Pankjāns, A.Bukejs leg.), Rozališķi, Daugava river valley, Nature Park „Daugavas loki" 23.V.-25.VI.2008., (1, U.Valainis, K.Aksjuta, R.Cibuļskis leg.), 13.VIII.-17.IX.2008., (3, A.Pankjāns, A.Bukejs leg.); **Jēkabpils Distr.:** Dunava, 29.VI.2008., clearing in pine forest, (1, A.Barševskis leg.); **Madona Distr.:** Kalsnava, 14.VIII.2006., (1, J.Donis leg.); **Rīga Distr.:** Salaspils, 01.VIII.2006., (1, J.Donis leg.), 14.VIII.2006., (1, J.Donis leg.), 05.IX.2006., (1, J.Donis leg.); **Talsi Distr.:** Ance, Ances purvi un meži Nature Protection Area, 27.VI.2006., (1, U.Valainis leg.), Dundaga, Pāce, 03.X.2007., (1, E.Pēterhops leg.); **Ventspils Distr.:** Blāzma, pine forest clearing, 22.VIII.2008., (1, U.Valainis, K.Aksjuta, A.Barševskis leg.).

SCARABAEIDAE

50. Onthophagus fracticornis **(Preyssler, 1790)**
Daugavpils Distr.: Šedere, Šarlote, dry meadow, 13.V.2007., (1, K.Aksjuta leg.).

51. Maladera holosericea **(Scopoli, 1772)**
Daugavpils Distr.: Ilgas, Silene Nature Park, IV.2002., (5, A.Barševskis leg.), VI.2002., (2, U.Valainis leg.). Very rare species in Latvia, with five known localities only.

52. Hoplia graminicola **(Fabricius, 1792)**
Daugavpils Distr.: Bebrene, 01.VII.2006., (1, E.Rudāns leg.); Ilgas, Silene Nature Park, VI.2002., (13, A.Barševskis leg), 02-10.VII.2004., (1, A.Barševskis leg.), 04.VII.2005., (3, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, 20-31.VII.2006., (1, K.Barševska leg.), 10-19.VI.2007., (1, K.Barševska leg.).

53. Oxythyrea funesta **(Poda, 1761)**
Daugavpils Distr.: Līksna env., near Daugavpils beltway, 22.VII.2008., inland dunes, (2, A.Barševskis leg.); Šedere, Šarlote, 19.VII.2008., (1, K.Aksjuta leg.); **Jēkabpils Distr.:** Dunava, 10-19.VI.2007., (2, K.Barševska leg.), 01-09.VIII.2007., (1, K.Barševska leg.), 02.VII.2008., (10, A.Barševskis leg.), 01-14. VIII.2008., (2, K.Barševska leg.), 09-10.VIII.2008., (4, A.Barševskis leg.); **Preiļi Distr.:** Jersika, "Kurpnieki", 15.V.2007., (1, A.Barševskis leg.), 13.VI.2008., (1, A.Barševskis leg.), 23-24.VI.2008., (1, A.Barševskis leg.), 02.VII.2008., (1, A.Barševskis leg.).

54. Protaetia marmorata **(Fabricius, 1792)**
Daugavpils Distr.: Šedere, Straumēni, 23-24.VI.2007., (1, M.Murd leg.); **Jēkabpils Distr.:** Dunava, 56°12'93"N 26°12'17"E, 11-13.VIII.2006.,

(1, A.Barševskis leg.); **Krāslava Distr.:** Ezernieki, Rāzna National Park, „Piļoru ozoli", 24.VII.2008., (1, U.Valainis, R.Cibuļskis leg.). Included in the list of special & indicator species of woodland key habitats. Protected species in Latvia.

***55. Gnorimus nobilis* (Linnaeus, 1758)**
Talsi Distr.: Slītere National Park, Zilie Kalni (hills) and Dāvida Pļavas (meadows), 29.VII.2005., (9, A.Barševskis, A.Bukejs, U.Valainis leg.), 13.IX.2005., (5, A.Barševskis leg.), 16.VII.2008., (10, A.Barševskis leg.). Included in the list of special & indicator species of woodland key habitats. Protected species. In Latvia known only from Slītere National Park.

SCIRTIDAE

***56. Scirtes hemisphaericus* (Linnaeus, 1758)**
Madona Distr.: Mārciena, near the Arona River, 07.VII.2006., (1, A.Pankjāns, A.Barševskis leg.).

LIMNICHIDAE

***57. Limnichus pygmaeus* (Sturm, 1807)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 30.VI.2007., (1, A.Pankjāns leg.).

DASCILLIDAE

***58. Dascillus cervinus* (Linnaeus, 1758)**
Daugavpils Distr.: Naujene, Nature Park "Daugavas Loki", 55°54`15``N 26°48`54``E, 25.VI.2008., (3, K.Aksjuta leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, VI.2003., (1, U.Valainis leg.), 09.VII.2004., (1, A.Barševskis leg.).

BUPRESTIDAE

***59. Chalcophora mariana* (Linnaeus, 1758)**
Aizkraukle Distr.: Taurkalne, 03.VII.2006., (1, J.Donis leg.); **Daugavpils Distr.:** Līksna local municipality, inland dunes between Ļubesti and Križi, 08.VI.2008., (4, A.Barševskis leg.). This species is included on the list of indicator species of natural forest habitats. Protected species in Latvia.

***60. Buprestis haemorrhoidalis* Herbst, 1780**
Daugavpils Distr.: Dviete, forest between Dviete – Tadenava, clearing, 20.VII.2008., (2, A.Barševskis leg.), 10.VIII.2008., (1, A,Barševskis leg.).

***61. Poecilonota variolosa* (Paykull, 1799)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 14.-20.VI.2002., (1, A.Barševskis leg.); **Jēkabpils Distr.:** Tadenava, forest clearing, 01.VI.2002., (3, A.Barševskis leg.), 13.06.2002., (2, A.Barševskis leg.), 01.06.2006., (1, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 09.VII 2004., (1, A.Barševskis leg.). Included in the list of special & indicator species of woodland key habitats.

***62. Chrysobothris chrysostigma* (Linnaeus, 1758)**
Jēkabpils Distr.: Tadenava, forest clearing, 01.VI.2002., (2, A.Barševskis leg.).

***63. Chrysobothris affinis* (Fabricius, 1794)**
Daugavpils Distr.: Dviete, forest between Dviete – Tadenava, clearing, 22.VI.2008., (1, A.Barševskis leg.), 25.VI.2008., (1, A.Barševskis leg.), Ilgas, Silene Nature Park, VI.2005., (1, A.Barševskis leg.); Kurcums, 06.VI.2008., (2, A.Barševskis leg.); **Ventspils Distr.:** Blāzma, pine forest clearing, 22.VII.2008., (1, A.Barševskis, U.Valainis, K.Aksjuta leg.).

BYRRHIDAE

***64. Morychus aeneus* (Fabricius, 1775)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 09.V.1996., (1, A.Barševskis leg.), VI.2002., (10,

U.Valainis leg.); Mežciems env., forest near Rīga-Krāslava beltway, 01-31.VII.2001., (2, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, V.2002., (4, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 03.VIII.2004., (1, A.Barševskis leg.).

***65. Lamprobyrrhylus nitidus* (Schaller, 1783)**
Daugavpils Distr.: Butiški, 26.V.2008., valley of the Daugava River, (1, A.Bukejs leg.); Nature Park "Daugavas Loki", V.2002., valley of the Daugava River, (4, A.Barševskis leg.); Elerne, V.2002., valley of the Daugava River, (33, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, IV.2002., dry meadow, (2, A.Barševskis leg.), V.2002., (4, A.Barševskis leg.), 14.V.2005., (15, A.Barševskis leg.); **Krāslava Distr.:** Izvalta, VI.2002., (1, A.Barševskis leg.).

***66. Cytilus sericeus* (Forster, 1771)**
Aizkraukle Distr.: Taurkalne, 16.VI.2006., (1, J.Donis); **Daugavpils Distr.:** Elerne, VII.2002., valley of the Daugava River, (1, A.Barševskis leg.), VI.2004., (1, A.Barševskis leg.); Ilgas, 09.V.1996., (2, A.Barševskis leg.), IV.2002., (1, A.Barševskis leg.), V.2002., (1, A.Barševskis leg.), VIII.2002., (1, A.Barševskis leg.), 15.IV.2003., (1, U.Valainis leg.); Šedere, Šarlote, 11.V.2008., (1, K.Aksjuta leg.); **Gulbene Distr.:** Lejasciems, V-VI.2003., (1, burning, I.Kampāne, A.Barševskis leg.); Ušurs, 08.VI.2005., (3, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, V.2002., (3, A.Barševskis leg.); Rubene, 28.V.1999., (1, I.Leiskina leg.), 04.IX.1999., (1, I.Leiskina leg.); **Krāslava Distr.:** Izvalta, VI.2002., (1, A.Barševskis leg.); Šķeltova, "Barševski", V.2002., (2, A.Barševskis leg.); Liepāja Distr.: Pape, 06.V.1996., (3, N.Savenkovs leg.); **Rēzekne Distr.:** Rēzekne, Nākotnes Str. 17/19, 18.V.2008., (2, J.Burovs).

***67. Byrrhus fasciatus* Forster, 1771**
Aizkraukle Distr.: Taurkalne, 16.VI.2006., (1, J.Donis leg.), 17.VII.2006., (1, J.Donis leg.), 01.VIII.2006., (2, J.Donis leg.); **Daugavpils Distr.:** Daugavpils, 17.IX.1998., (1, I.Leiskina leg.); Elerne, V.2002., (2, A.Barševskis leg.), VI.2004., (1, A.Barševskis leg.); Ilgas, Silene Nature Park, 09-12.IX.1996., (2, A.Barševskis leg.), VI.2002., (1, A.Barševskis leg.), 05-10.VI.2006., (1, L.Jakubāne leg.); Križi, 24.IX.2006., pine forest, (1, A.Barševskis leg.); Mežciems env., forest near Rīga-Krāslava beltway, 01-31.VI.2001., (1, A.Barševskis leg.), 18.III.2007., (4, A.Barševskis, K.Barševska leg.), 22.III.2007., (1, A.Barševskis, U.Valainis, A.Soldāns leg.); Šedere, Straumēni, 22.IV.2007., (1, M.Murd leg.); **Gulbene Distr.:** Škieneri, 14.VI.2006., (1, A.Ilzēna-Rozentāle leg.); **Jēkabpils Distr.:** Dunava, 21.VII.1996., (2, A.Barševskis leg.), 21.X.2006., (2, A.Barševskis leg.); **Krāslava Distr.:** Piedruja, 11.V.1996., (5, N.Savenkovs leg.).

***68. Byrrhus pustulatus* Forster, 1771**
Daugavpils Distr.: Elerne, V.2002., (1, A.Barševskis leg.), VII.2002., valley of the Daugava River, (1, A.Barševskis leg.); Ilgas, Silene Nature Park, VIII.2002., (1, A.Barševskis leg.); **Jēkabpils Distr.:** Rubene, 06.VI.1999., (1, I.Leiskina leg.).

***69. Byrrhus pilula* (Linnaeus, 1758)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 09.V.1996., (1, A.Barševskis leg.), V.2002., (1, A.Barševskis leg.), VI.2002., (1, A.Barševskis leg.), 06-15.VI.2004., (1, A.Barševskis leg.); Šedere, Straumēni, 01-03.V.2008., (1, M.Janovska leg.), 13.V.2008., (1, M.Janovska leg.); **Gulbene Distr.:** Ušurs, 08.VI.2005., (1, A.Barševskis leg.); **Jēkabpils Distr.:** Asare, 22.VII.1998., (1, I.Leiskina leg.); Dunava, 25-29.VI.2006., (1, K.Barševska leg.); Rubeņi, 18.V.1997., (1, I.Leiskina leg.), 29.V.1997., (1, I.Leiskina leg.); Vandāni, 16.VIII.2008., bank of the Daugava river, (1,

M.Balalaikins leg.); **Krāslava distr:** Šķeltova, "Barševski", VI.2002., (2, A.Barševskis leg.); Ūdrīši, Zapoļniki, Nature Park "Daugavas Loki", 28.IV.2007., (6, M.Murd leg.), 12.VI.2007., (1, M.Murd leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 11.VII.2005., (1, U.Valainis leg.), 26.VI.2006., (2, A.Barševskis leg.).

EUCNEMIDAE

70. Xylophilus corticalis **(Paykull, 1800)**
Talsi Distr.: Slītere, Zilie kalni, Slītere National park, 12.VII.2005., (2, U.Valainis, A.Barševskis, A.Bukejs leg.), 20.VII 2005., (1, U.Valainis leg.), VII 2002., (1, A.Barševskis leg.), 31.VIII 2006., (1), 17.VII 2007., (5, U.Valainis, A.Pankjāns, A.Soldāns, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, VII 2003., (1, U.Valainis leg.), 10.VII 2004., (1, A.Barševskis leg.), 11.VII.2006., (1, U.Valainis leg.), 18.VII 2007., (1, U.Valainis, A.Pankjāns, A.Soldāns, A.Barševskis leg.). Rare species, with five known localities only.

71. Hylis procerulus **(Mannerheim, 1823)**
Ventspils Distr.: Moricsala Island, Moricsala Nature Reserve, 30.VII 2005., (1, U.Valainis leg.). Very rare species in Latvia, with five known localities only.

72. Hylis foveicollis **(Thomson, 1874)**
Daugavpils Distr.: Ilgas, Silene Nature Park, VI 2005., (2, A.Barševskis leg.), VII 2005., near oak, (2, A.Barševskis leg.); **Madona Distr.:** Kalsnava, 19.VII 2002., (1, M.Bičevskis leg.); **Talsi Distr.:** Slītere, Zilie kalni, Slītere National park, 17.VII 2007., (2, U.Valainis, A.Pankjāns, A.Soldāns, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 18.VII 2007., (2, U.Valainis, A.Pankjāns, A.Soldāns, A.Barševskis leg.). Rare species.

73. Microrhagus lepidus **Rosenhauer, 1847**
Talsi Distr.: Slītere, Zilie kalni, Slītere National park, 17.IX 2007., (2, A.Pankjāns, G.Jurševska, K.Aksjuta leg.).

74. Microrhagus pygmaeus **(Fabricius, 1793)**
Daugavpils Distr.: Ilgas, Silene Nature Park, VI 2005., (1, A.Barševskis leg.); **Rīga Distr.:** Jūrmala, Kūdra, 09. VII 2006., (1, A.Titov leg.); **Talsi Distr.:** Slītere, Zilie kalni, Slītere National park, 17.VII 2007., (2, U.Valainis, A.Pankjāns, A.Soldāns, A.Barševskis leg.), 17.IX 2007., (2, A.Pankjāns, G.Jurševska, K.Aksjuta leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 15.07.2008., (1, V.Aleksejev, A.Pavlova leg.).

75. Rhacopus sahlbergi **(Mannerheim, 1823)**
Dobele Distr.: Jaunbērze, „Mežinieki", 12.08.2008., (1, A.Barševskis leg.). Very rare species in Latvia, with five known localities only.

76. Eucnemis capucina **Ahrens, 1812**
Daugavpils Distr.: Ilgas, Silene Nature Park,02.-10.VII 2004., (1, A.Barševskis leg.), VI 2005., (2, A.Barševskis leg.), VII.2005., (1, A.Barševskis leg), 06.IX.2005., (1, U.Valainis leg.); **Talsi Distr.:** Slītere, Zilie kalni, Slītere National park, 17.VII 2007., (1, A.Barševskis leg.).

ELATERIDAE

77. Drapetes mordelloides **(Host, 1789)**
Daugavpils Distr.: Dviete, forest between Dviete – Tadenava, clearing, 20.VII.2008., (1, A,Barševskis leg.). Rare species.

78. Lacon fasciatus **(Linnaeus, 1758)**
Daugavpils Distr.: Dviete, forest between Dviete - Tadenava, clearing, 22.VI.2008., (4, A,Barševskis leg.), 25.VI.2005., (2, A.Barševskis leg.). Rare species.

79. Athous vittatus **(Fabricius, 1792)**
Daugavpils Distr.: Ilgas, Silene Nature Park, VIII.2005., (1, A.Barševskis leg.), Šedere, Nature park „Raudas meži", 11.V.2008., (2, K.Aksjuta leg.); **Jēkabpils Distr.:** Tadenava, forest clearing, 16.VI.2006., (1, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 26.VI.2004., (1, A.Barševskis leg.), VI.2005., (1, A.Barševskis leg.), 04.-29.VI.2006., (4, A.Barševskis leg.).

80. Athous haemorrhoidalis **(Fabricius, 1801)**
Daugavpils Distr.: Vecsaliena, Mārkalne river, „Lejaszemnieki", 21.V.2008., (1, A.Pankjāns leg.); **Jelgava Distr.:** Jelgava, near Riga – Šiauliai road, 15.VI.2008., (1, A.Barševskis, R.Orlovskis leg.).

81. Harminius undulatus **(De Geer, 1774)**
Aizkraukle Distr.: Taurkalne, 11.07.2005., (1, U.Valainis leg.); **Daugavpils Distr.:** Ilgas, Silene Nature Park, VIII.2002., (1, A.Barševskis leg.); **Talsi Distr.:** Slītere, Zilie kalni, Slītere National park, 12.VII.2005., (1, A.Barševskis leg.); **Valka Distr.:** Mežole, Mežole Nature Protection Area, 15.VII.2005., (1, J.Donis leg.), 26.VI.2006., (1, J.Donis leg.); **Ventspils Distr.:** Moricsala Nature Reserve, 11.VII.2005., (1, U.Valainis leg.). Included in the list of special & indicator species of woodland key habitats.

82. Denticollis rubens **Piller & Mitterpacher, 1783**
Ventspils Distr.: Moricsala Nature Reserve, 04.-14.VI.2003., (3, A.Barševskis leg.), VI.2005., (3, A.Barševskis leg.), 11.VII.2005., (1, U.Valainis leg.). Very rare, protected species in Latvia, with five known localities only.

83. Hypnoidus riparius **(Fabricius, 1792) – Jēkabpils Distr.:** Dunava, 1.-15.IV.2002., (9, A.Barševskis leg.), 18.-22.VI.2006., (2, K.Barševska leg.), 13.V.2007., (1, K.Barševska, A.Barševskis leg.); **Krāslava Distr.:** Šķeltova, „Barševski", V.2002., (1, A.Barševskis leg.); **Madona Distr.:** Meirāni, 05.-10.VI.2006., (2, A.Barševskis leg.); **Preiļi Distr.:** 14.IV.2006., (1, A.Barševskis leg.).

84. Anostirus castaneus **(Linnaeus, 1758)**
Ventspils Distr.: Moricsala Island, Moricsala Nature Reserve, 29.VI.2006., 1, A.Barševskis leg.).

85. Selatosomus impressus **(Fabricius, 1792)**
Aizkraukle Distr.: Taurkalne, 18.VII.2005., (1, J.Donis leg.), 02.VIII.2005., (1, J.Donis leg.),16.VI.2006., (1, J.Donis leg.), 05.VII.2006., (4, J.Donis leg.), 17.VII.2006., (6, J.Donis leg.); **Daugavpils Distr.:** Elerne, Nature Park „Daugavas loki", V.2002., (1, A.Barševskis leg.), Ilgas, Silene Nature Park, VI.2002., (1, A.Barševskis leg.), 26.VII.- 13.VIII.2008., (1, A.Bukejs, U.Valainis, K.Aksjuta leg.), Līksna local municipality, inland dunes between Ļubesti and Križi, 06.VI.2004., (1, A.Barševskis leg.), 02.VI.2007., (1, A.Barševskis leg.), Vecsīķeļi, Nature Park „Daugavas loki", 23.V.25.VI.2008., (2, R.Cibuļskis, U.Valainis, K.Aksjuta leg.); **Gulbene Distr.:** Gulbītis, near Lake Ušūrs, V.2005., (1, A.Barševskis, J.Laizāns leg.), VI.2006., (2, A.Barševskis leg.), Lejasciems, pine forest burning, VI.2004., (2, A.Barševskis leg.), V.2005., (1, A.Barševskis leg.); **Preiļi Distr.:** Jersika, „Kurpnieki", 23.-24.VI.2006., (1, A.Barševskis, K.Barševska leg.); **Valka Distr.:** Mežole, Mežole Nature Protection Area, 10.VI.2006., (4, J.Donis leg.), 26.VI.2006., (2, J.Donis leg.), 18.VII.2006., (2, J.Donis leg.).

86. Selatosomus cruciatus **(Linnaeus, 1758**
Aizkraukle Distr.: Rīteri, 14.06.2007., (1, A.Barševskis leg.); Bauska Distr., Iecava, 2002., Ž.Avdeviča, A.Avota, I.Jansone leg.); **Daugavpils Distr.:** Bebrene, Nature Park „Dvietes palienes", 22.04.2006., (1, E.Rudāns leg.), 13.V.2006., (3, E.Rudāns leg.), 23.VI.2006., (1, E.Rudāns leg.), Daugavpils Distr.: Līksna local municipality, inland dunes between Ļubesti and Križi,

11.V.2008., (1, A.Barševskis leg.), Elerne, Daugava river valley, Nature Park „Daugavas loki", V.2002., (3, A.Barševskis leg.), Naujene, Nature Park „Daugavas loki", 23.05.2008., (1, A.Pankjāns leg.), Pilskalne, Nature Park „Pilskalnes Siguldiņa", 05.V.2008., (1, A.Barševskis, K.Barševska leg.), Slutišķi, Daugava river & Putānu strauts river valley, Nature Park „Daugavas loki", 09.V.2008., (1, U.Valainis leg.), Šedere, „Straumēni", 12.-13.V.2007., (1, M.Janovska (Murd) leg.), 10.-11.V.2008., (1, M.Janovska leg.); **Jelgava Distr.:** Nature park „Vilce", 03.V.2008., (1, A.Soldāns, U.Valainis, A.Pankjāns, E.Tamanis leg.); **Krāslava Distr.:** Borovka, „Zapoļniki", 08.IV.2007., (7, M.Janovska (Murd) leg.), 06.V.2007., (1, M.Janovska (Murd) leg.); **Talsi Distr.:** Slītere, Zilie kalni, Slītere National park, VI.2002., (1, U.Valainis, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 09.VII.2004., (1, A.Barševskis leg.), 03.IX.2004., (1, A.Barševskis leg.), 10.VI.2005., (3, A.Barševskis leg.), 30.05.2006., (1, A.Barševskis, E.Rudāns leg.).

***87. Calambus bipustulatus* (Linnaeus, 1767)**

Ventspils Distr.: Moricsala Island, Moricsala Nature reserve, 10.VI.2005., (2, A.Barševskis leg.). Very rare species in Latvia, with five known localities only.

***88. Oedostethus quadripustulatus* (Fabricius, 1792)**

Daugavpils Distr.: Bebrene, 01.VII.2006., (1, E.Rudāns leg.), 18.07.2006., (1, E.Rudāns leg.); **Gulbene Distr.:** Gulbītis, near Lake Ušūrs, 20.VIII.2004., (1, A.Barševskis, U.Valainis leg.); **Ventspils Distr.:** Ziras vill., Venta river bank, 28.VII.2005., (1, A.Barševskis, U.Valainis, A.Bukejs leg.).

***89. Oedostethus tenuicornis* (Germar, 1824)**

Madona Distr.: Ošupe, bank of river Aiviekste, 2,5 km. NE of Lake Lubāns, 06.VII.2008., (2, A.Bukejs, M.Balalaikins leg.).

***90. Sericus brunneus* (Linnaeus, 1758)**

Aizkraukle Distr.: Taurkalne, 11.VII.2005., (1, U.Valainis leg.), 03.VII.2006., (2, J.Donis leg.); **Daugavpils Distr.:** Dviete, forests between Dviete & Tadenava, 20.VII.2008., (1, A.Barševskis leg.), Līksna local municipality, inland dunes between Ļubesti and Križi, 17.V.2007., (1, A.Barševskis, K.Barševska leg.), Līksna local municipality, ~2 km N Daugavpils, edge of pine forest, 17.V.2008., (1, A.Bukejs leg.); **Gulbene Distr.:** Lejasciems, pine forest burning, V.2005., (1, A.Barševskis leg.), VI.2005., (7, A.Barševskis, J.Laizāns leg.), Gulbītis, near lake Ušūrs, 08.VI.2005., (2, A.Barševskis leg.);

***91. Ectinus aterrimus* (Linnaeus, 1761)**

Aizkraukle Distr.: Taurkalne, 11.VI.2005., (1, A.Barševskis leg.), 03.VII.2006., (2, J.Donis leg.), 16.VI.2006., (5, J.Donis leg.), 17.VII.2006., (1, J.Donis leg.); **Jēkabpils Distr.:** Dunava, 06.-09.VI.2007., (1, K.Barševska leg.); **Ogre Distr.:** Birzgale, env. Robežnieki, 30.05.2006., (3, A.Barševskis, E.Rudāns leg.); **Rīga Distr.:** Olaine, 30.VI.2006., (1, J.Donis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 26.VI.2004., (1, A.Barševskis leg.), 25.V.2005., (3, A.Barševskis leg.)., 10.VI.2005., (5, A.Barševskis leg.), 11.VI.2005., (1, U.Valainis leg.), 29.05.2006., (1, A.Barševskis, E.Rudāns leg.), 29.06.2006., (5, A.Barševskis leg.), VII.2007., (1, A.Barševskis leg.), 04.-05.V.2008., (1, A.Pankjāns, U.Valainis, E.Tamanis, A.Soldāns leg.).

***92. Synaptus filiformis* (Fabricius, 1781)**

Aizkraukle Distr.: Skrīveri, Daugava river valley near „Klidziņa", 21.06.2006., (2, A.Barševskis leg.).

***93. Dicronychus equisetoides* Lohse, 1976**
Daugavpils Distr.: Līksna local municipality, inland dunes between Ļubesti and Križi, 24.IV.2004., (1, A.Barševskis). Very rare species in Latvia, with five known localities only.

***94. Cardiophorus ruficollis* (Linnaeus, 1758)**
Aizkraukle Distr.: Alstiķe, 11.VII.2006., (1, A.Barševskis leg.), **Daugavpils Distr.:** Dviete, forests between Dviete & Tadenava, near Kinkausku mire, 25.VI.2008., (2, A.Barševskis leg.), 20.VII.2008., (4, A.Barševskis leg.), 22.VII.2008., (2, A.Barševskis leg.), 23.VII.2008., (1, A.Barševskis leg.), Elerne, Daugava river valley, Nature Park „Daugavas loki", V.2002., (1, A.Barševskis leg.), Līksna local municipality, inland dunes between Ļubesti and Križi, 02.VII.2007., (1, A.Barševskis), Līksna local municipality, ~2 km N Daugavpils, edge of pine forest, 17.V.2008., (1, A.Bukejs leg.), Līksna local municipality, near Mežciems, 15.VI.2006., (1, A.Barševskis leg.); **Krāslava Distr.:** Borovka, „Zapoļniki", 08.IV.2007., (7, M.Janovska (Murd) leg.), 15.IV.2007., (3, M.Janovska (Murd) leg.).

LYCIDAE

***95. Dictyoptera aurora* (Herbst, 1784)**
Aizkraukle Distr.: Skrīveri, 21.VI.2006., (1, A.Barševskis leg.); **Daugavpils Distr.:** Ilgas, Silene Nature Park, 05-10.VI.2006., (1, M.Verdenfelde leg.); Naujene, Nature Park "Daugavas Loki", 21.V.2008., (1, A.Bukejs, M.Nitcis leg.); **Talsi Distr.:** Slītere National Park, Zilie Kalni, VI.2002., (1, U.Valainis, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 05.VIII.2002., (1, U.Valainis leg.), 03-14.VI.2003., (1, A.Barševskis leg.), 29.V.2006., (1, E.Rudāns leg.), 29.VI.2006., (3, A.Barševskis leg.), 29.IX.2005., (6, E.Rudāns, A.Barševskis leg.).

***96. Pyropterus nigroruber* (De Geer, 1774)**
Madona Distr.: Krustkalni Nature Reserve, 17.VII.2007., (1, A.Pankjāns, A.Barševskis, A.Soldāns, U.Valainis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 09.VII.2004., (1, A.Barševskis leg.), 16-25.VII.2004., (1, A.Barševskis leg.).

***97. Platycis minutus* (Fabricius, 1787)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 06.IX.2005., (1, A.Barševskis leg.), 15.XI.2005., (1, U.Valainis, A.Bukejs leg.); Maļinova, 05.VIII.2007., (1, M.Murd leg.); **Jēkabpils Distr.:** Dunava, 29.VIII.2006., (1, A.Barševskis leg.); Jēkabpils, 16-17.VIII.2008., (1, M.Balalaikins leg.); **Limbaži Distr.:** Dunte, 16.VIII.2008., (1, A.Barševskis leg.); **Madona Distr.:** Krustkalni Nature Reserve, 11.VIII.2005., (1, A.Bukejs, A.Barševskis, J.Laizāns leg.); **Preiļi Distr.:** Preiļi, 30.VII.2007., (1, A.Barševskis leg.); **Rīga Distr.:** Krimulda, 57°10'18"N 24°49'85"E, 26.VIII.2006., (1, A.Barševskis leg.); **Talsi Distr.:** Slītere National Park, Zilie Kalni, 28.VII.2001., (1, A.Barševskis leg.), 17.IX.2007., (1, A.Pankjāns, G.Jurševska, K.Aksjuta leg.), 22.VIII.2008., (1, A.Barševskis leg.); **Tukums Distr.:** Tukums, IX.2007., (1, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 17-28.VI.2002., (1, A.Barševskis leg.), VII.2003., (1, U.Valainis leg.), VIII.2003., (2, U.Valainis leg.), 02.IX.2004., (1, A.Barševskis leg.), 14.IX.2005., (1, A.Barševskis leg.), 18.IX.2007., (1, A.Pankjāns, G.Jurševska, K.Aksjuta leg.).

***98* Platycis cosnardi* (Chevrolat, 1829)**
Ventspils Distr.: Moricsala Island, Moricsala Nature Reserve, VI.2003., (4, U.Valainis leg.), 29.VI.2006 (1, A.Barševskis leg.). New species for the fauna of Latvia. In Fennoscandia known from Sweden (Silfverberg 2004).

***99. Lygistopterus sanguineus* (Linnaeus, 1758)**
Daugavpils Distr.: Dviete env., forest between Dviete and Tadenava, 20.VII.2008., (3, clearing,

A.Barševskis leg.); Ilgas, Silene Nature Park, VII.2005., (1, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, 02.VII.2008., (1, A.Barševskis leg.); Tadenava, 01.VI.2002., (1, A.Barševskis leg.); **Jelgava Distr.:** Jelgava, near Rīga-Šiauliai road, 15.VI.2008., (2, R.Orlovskis, A.Barševskis leg.); **Madona Distr.:** Krustkalni Nature Reserve, 56°47'08"N 26°08'34"E, VI.2005., (1, A.Barševskis leg.), 11.VIII.2005., (1, A.Barševskis leg.); **Talsi Distr.:** Slītere National Park, Zilie Kalni, 10.VII.2004., (3, A.Barševskis leg.), 12.VI.2005., (2, A.Barševskis leg.), 29.VII.2006., (4, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 26.VI.2004., (2, A.Barševskis leg.), 09.VII.2004., (2, A.Barševskis leg.); Muižnieki, 57°28'20"N 21°43'19"E, 29.VII.2005., (1, A.Barševskis, A.Bukejs, U.Valainis leg.); Ovīši, 17.VII.2005., (9, A.Barševskis leg.).

LAMPYRIDAE

100. Lampyris noctiluca **(Linnaeus, 1758)**
Aizkraukle Distr.: Taurkalne, 03.VII.2006., (1, J.Donis leg.); **Daugavpils Distr.:** Ilgas, Silene Nature Park, 01-05.VII.2006., (14, A.Barševskis leg.); **Rīga Distr.:** Salaspils, 30.VI.2006., (2, J.Donis leg.); **Valka Distr.:** Mežole, 26.VI.2006., (1, J.Donis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 29.VI.2006., windows traps, (3, A.Barševskis leg.).

101. Phosphaenus hemipterus **(Goeze, 1777)**
Rīga Distr.: Bajāri, 28.VI.2008., clearing, (1, A.Barševskis leg.); **Kuldīga Distr.:** Rudbārži, 10.VI.1998., on light, (1, N.Savenkovs leg.). Rare species.

CANTHARIDAE

102. Cantharis quadripunctata **(Mueller, 1776)**
Talsi Distr.: Slītere, Slītere National Park, 26.06.2002., (2, A.Barševskis leg.). Rare species.

DERMESTIDAE

103. Dermestes murinus **Linnaeus, 1758**
Aizkraukle Distr.: Ērgberģe, 14.VIII.2006., (9, J.Donis leg.), 04.IX.2006., (10, J.Donis leg.); Taurkalne, 14.VIII.2006., (1, J.Donis leg.); **Daugavpils Distr.:** Dviete, 01-15.IV.2002., edge of marsh, (1, A.Barševskis leg.), 20.VII.2008., (1, A.Barševskis leg.); Ilgas, Silene Nature Park, 30.V.1996., (2, A.Barševskis leg.); **Madona Distr.:** Kalsnava, 14.VIII.2006., (5, J.Donis leg.); Krustkalni Nature Reserve, VI.2005., (1, A.Barševskis, J.Laizāns leg.), 11.VIII.2005., (1, A.Bukejs, A.Barševskis, J.Laizāns leg.); **Rīga Distr.:** Olaine, 14.VIII.2006., (2, J.Donis leg.), 05.IX.2006., (11, J.Donis leg.), 02.X.2006., (7, J.Donis leg.), 19.IX.2006., (2, J.Donis leg.); Salaspils, 05.IX.2006., (10, J.Donis leg.), 18.IX.2006., (4, J.Donis leg.).

104. Dermestes lardarius **Linnaeus, 1758**
Daugavpils Distr.: Bebrene, 30.IV.2006., (1, E.Rudāns leg.); Šedere, Straumēni 18-20.V.2007., (1, M.Murd leg.), 19-20.IV.2008., (1, M.Janovska leg.); Svente, 01.IV.2008., (1, K.Aksjuta leg.); Svente env., near bridge, 16.IV.2007., (1, A.Soldāns leg.); Ūdrīši, Zapoļniki, 27.IV.2007., (1, M.Murd leg.), 28.IV.2007., (1, M.Murd leg.), 09.VI.2007., (1, M.Murd leg.); **Preiļi Distr.:** Pelēči, 06.VIII.1997., (1, I.Jurkjāne leg.); **Rēzekne Distr.:** Dricāni, Pūpoli, 01.VI.2008., (1, K.Igaune leg.).

105. Attagenus schaeferi **(Herbst, 1792)**
Daugavpils Distr.: Daugavpils, Mežciems, Parka Str., 19.VII.2007., (1, K.Aksjuta, M.Murd leg.); Ilgas, Silene Nature park, 27-28.VI.2005., (1, A.Barševskis leg.); Mežciems env., clearing near Rīga-Kraslava beltway, 11.V.2008., (1, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, 06-

09.VI.2007., (2, K.Barševska leg.), 01-14.VIII.2008., (1, K.Barševska leg.); **Preiļi Distr.:** Jersika, "Kurpnieki", 05.VI.2007., (1, A.Barševskis leg.), 23-24.VI.2008., (5, A.Barševskis leg.), 01.VIII.2008., (1, A.Barševskis leg.).

***106. Attagenus unicolor* (Brahm, 1791)**
Daugavpils Distr.: Daugavpils, Daugavpils University, 09.X.2007., in room, (1, D.Veigule leg.).

***107. Attagenus smirnovi* Zhantiev, 1973**
Daugavpils Distr.: Bebrene, 13.I.2007., in room, (1, E.Rudāns leg.); Daugavpils, 28.XI.2006., in room, (2, A.Barščevskis leg.), Cietokšņa Str. 66, 05.I.2007., in room, (1, A.Barševskis leg.), 06.VI.2007., in room, (7, A.Barševskis leg.), 28.VII.2007., in room, (4, A.Barševskis leg.), Piekrastes Str., 16.IV.2008., in room, (1, A.Bukejs leg.), A.Pumpura Str. 55, 01.V.2007., in room, (1, M.Murd leg.), Vienības Str. 13, 07.V.2007., in room, (2, A.Barševskis, R.Cibuļskis leg.), 28.V.2008., in room, (1, U.Valainis leg.). For the time being this species have not recorded outside premises in Latvia.

***108. Attagenus pellio* (Linnaeus, 1758)**
Daugavpils Distr.: Daugavpils, A.Pumpura Str. 55, 26.V.2007., (1, M.Murd leg.), City centre, 09.VI.2005., (4, M.Skutele leg.), Cietokšņa Str. 66, 06.VI.2007., (1, A.Barševskis leg.), Cietoksnis, 06.VI.2005., (1, M.Skutele leg.), Vienības Str. 42, 04.IX.2008., (1, K.Aksjuta leg.); Ilgas, Silene Nature Park, 29.IV-10.VII.2000., (1, L.Bogdane leg.); Šedere, Straumēni house, 18-20.V.2007., (1, M.Murd leg.), 22.VII.2007., (2, M.Murd leg.); Šedere, Ciemati, 08.IV.2007., (1, K.Aksjuta leg.); **Krāslava Distr.:** Šķeltova, "Barševski", 25.V.2007., (8, A.Barševskis, K.Barševska leg.); **Preiļi Distr.:** Rušona, Aglona train station, 16.VII.2007., (1, J.Staskeviča leg.); **Rēzekne Distr.:** Dricāni, Pūpoli, 01.V.2008., (1, K.Igaune leg.).

***109. Trogoderma angustum* (Solier, 1849)**
Daugavpils Distr.: Daugavpils, Vienības Str., in room, 13.07.2007., (2, A.Barševskis, R.Cibuļskis leg.), 01.VIII.2007., (23, M.Murd leg.). For the time being this species have not recorded outside premises in Latvia.

***110. Trogoderma glabrum* (Herbst, 1783)**
Preiļi Distr.: Jersika, "Kurpnieki", 22-25.VI.2007., (1, A.Barševskis leg.).

***111. Megatoma undata* (Linnaeus, 1758)**
Daugavpils Distr.: Daugavpils, Vienības 13, 24.V.2007., in room, (1, A.Barševskis leg.); Šedere, Straumēni, 19.IV-02.V.2008., (2, M.Janovska leg.); **Preiļi Distr.:** Jersika, "Kurpnieki", 22-25.VI.2007., (1, A.Barševskis leg.); Sutri, "Znotiņi", 26.V.2007., (1, A.Soldāns leg.); **Talsi Distr.:** Slītere National Park, 11.VI.2005., (1, A.Barševskis leg.).

***112. Ctesias serra* Fabricius, 1792**
Ventspils distr: Moricsala Island, Moricsala Nature Reserve, 17-28.VI.2002., (1, A.Barševskis leg.), 25.VI.2004., (1, A.Barševskis, U.Valainis leg.), 11.VII.2005., (1, U.Valainis leg.).

***113. Anthrenus scrophulariae* (Linnaeus, 1758)**
Daugavpils Distr.: Daugavpils, Cietokšņa Str. 66, 13.V.2007., (5, A.Barševskis, K.Barševska leg.), 24.V.2008., (9, A.Barševskis leg.), Vienības Str. 13, 23.III.2007., in room, (1, A.Barševskis leg.), 09.I.2008., in room, (1, U.Suško leg.); Ilgas, Silene Nature Park, 28.V.1998., on spiraea, (1, A.Barševskis leg.); Šedere, Straumēni house, 22.VII.2007., (6, M.Murd leg.), 10-11.V.2008., (6, M.Janovska leg.); Šedere, Ciemati, 09.IV.2007., (1, K.Aksjuta leg.); **Jēkabpils Distr.:** Dunava, 13.V.2007., (1, K.Barševska, A.Barševskis leg.), 06-09.VI.2007., (1, K.Barševska leg.), 02.VII.2008., (1, A.Barševskis leg.); **Krāslava Distr.:** Šķeltova, "Barševski", 25.V.2007., (5, A.Barševskis, K.Barševska leg.); Ūdrīši, Zapoļniki, 27.IV.2007.,

(1, M.Murd leg.); **Preiļi Distr.:** Jersika, "Kurpnieki", 13.VI.2008., (1, A.Barševskis leg.); **Talsi Distr.:** Slītere National Park, Zilie Kalni, 10.VII.2004., (1, A.Barševskis leg.).

114. Anthrenus museorum **(Linnaeus, 1761)**
Cēsis Distr.: Cēsis, park, 28.VII.2007., (1, A.Barševskis leg.); **Daugavpils Distr.:** Daugavpils, Cietokšņa Str. 66, 06.VI.2007., (1, A.Barševskis leg.), Vienības place, 21.VII.2007., (1, M.Murd leg.); Dviete, 20.VII.2008., (1, A.Barševskis leg.); Ilgas, Silene Nature Park, 29.IV-10.VII.2000., (1, L.Bogdāne leg.), VII.2005., (2, A.Barševskis leg.), 27.VI-03.VII.2007., (1, A.Čukļina, J.Daņilova leg.), 29.VI-04.VII.2007., (2, A.Barševskis leg.); Šedere, Straumēni, 09-10.VI.2007., (9, M.Murd leg.), 22.VII.2007., (7, M.Murd leg.); Šedere, Šarlote, 29.VI.2008., (5, K.Aksjuta leg.);**Gulbene Distr.:** Lejasciems, VI.2004., (1, A.Barševskis leg.), VIII.2004., (1, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, 15.VI.2002., (3, A.Barševskis leg.), 20-31.VII.2006., (1, A.Barševskis leg.), 10-19.VI.2007., (5, K.Barševska leg.), 16-21.VI.2007., (2, K.Barševska leg.), 11-17.VII.2007., (1, A.Barševskis leg.); Zasa, 10.VIII.2008., (3, M.Balalaikins leg.); **Krāslava Distr.:** Krāslava, 21.VII.2008., (1, dry meadow, A.Barševskis leg.); Šķeltova, Barševski house, 17.VII.2008., (1, A.Barševskis leg.); **Madona Distr.:** Jumurda, 19.VII.2008., (1, A.Barševskis leg.); **Preiļi Distr.:** Jersika, Kurpnieki house, 11.VIII.2005., (3, A.Barševskis leg.), 22-25.VI.2007., (1, A.Barševskis leg.), 10.VII.2007., (9, A.Barševskis, K.Barševska leg.), 14.VII.2007., (3, A.Barševskis leg.), 21.VII.2007., (7, A.Barševskis leg.), 24.VII.2007., (2, A.Barševskis leg.), 28.VII.2007., (1, A.Barševskis leg.), 04-05.VIII.2007., (1, A.Barševskis leg.), 02.VI.2008., (1, A.Barševskis leg.), 23-24.VI.2008., (3, A.Barševskis leg.), 01.VIII.2008., (2, A.Barševskis leg.); Pelēči, 19.VII.1997., (1, I.Jurkjāne leg.); **Talsi Distr.:** Slītere National Park, Zilie Kalni, 10.VII.2004., (2, A.Barševskis leg.); **Tukums Distr.:** Lielaisciems, Ķemeri National Park, 16.VII.2008., (2, V.Aleksejev & A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 57°11'39"N 22°08'06"E, 17-28.VI.2002., (2, A.Barševskis leg.), 11.VII.2005., (1, A.Barševskis leg.).

115. Anthrenus fuscus **Olivier, 1789**
Daugavpils Distr.: Daugavpils, centre, 09.VI.2005., (1, M.Skutele leg.), 01.VI.2007., (1, A.Barševskis leg.), Vienības Str. 13, 04.III.2008., in room, (1, A.Bukejs leg.); Ilgas, Silene Nature Park, 55°41'29"N 26°47'00"E, VII.2005., clearing, (1, A.Barševskis leg.).

116. Anthrenus polonicus **Mroczkowski, 1951**
Daugavpils Distr.: Ilgas, Silene Nature Park, 55°41'29"N 26°47'00"E, VII.2005., (2, A.Barševskis leg.), 29.VI-04.VII.2007., clearing, (2, A.Barševskis leg.).

LYMEXYLIDAE

117. Hylecoetus dermestoides **(Linnaeus, 1761)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 09.V.1996., (1, A.Barševskis leg.), 28.V.1999., (1, A.Barševskis leg.), 29-30.IV.2000., (1, A.Barševskis leg.), 01-05.V.2000., (1, A.Barševskis leg.), 18.V.2005., (1, A.Barševskis leg.), VI.2005., (1, A.Barševskis leg.); Mežciems env., clearing near Rīga-Krāslava beltway, 11.V.2008., (2, A.Barševskis leg.); **Jekabpils Distr.:** Dunava, 07.V.2005., (1, A.Barševskis leg.), 13.V.2007., (2, K.Barševska, A.Barševskis leg.), 05.V.2008., (1, A.Barševskis leg.); Rubene, 28.IV.1999., (1, I.Leiskina leg.); Tadenava, 14.V.2005., (2, A.Barševskis leg.); **Krāslava Distr.:** Šķeltova, 01.V.1997., (8, A.Barševskis leg.); **Preiļi Distr.:** Jersika, "Kurpnieki", 22.V.2005., (1, A.Barševskis leg.), 27.IV.2007., (1, A.Barševskis leg.); **Talsis Distr.:** Slītere, Vaide, 17-28.V.1999., (1,

N.Savenkovs leg.); Slītere National Park, Zilie Kalni, 11.VI.2005., (3, A.Barševskis leg.), 12.VII.2005., (3, R.Cibuļskis, A.Barševskis, A.Bukejs leg.), V.2006., (1, A.Barševskis leg.); **Valka Distr.:** Mežole, 10.VI.2006., (5, J.Donis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, V.2003., (1, U.Valainis leg.), 14.V.2004., (1, A.Barševskis, U.Valainis leg.), 25.VI.2004., (1, A.Barševskis, U.Valainis leg.), 30.V.2006., (1, A.Barševskis, E.Rudāns leg.), 29.VI.2006., (15, A.Barševskis leg.).

***118. Hylecoetus flabellicornis* (Schneider, 1791)**
Talsis Distr.: Slītere National Park, Zilie Kalni, V.2006., (1, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 29.IX.2006., (1, E.Rudāns, A.Barševskis leg.).

***119. Lymexylon navale* (Linnaeus, 1758)**
Talsi Distr.: Ances purvi un meži Nature Protection Area, 27.VI.2006., (1, U.Valainis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 09.VII.2004 (1, U.Valainis, A.Barševskis leg.), 30.VII.2005., (1, U.Valainis leg.), 18.VII.2007., (2, A.Barševskis, A.Pankjāns, A.Soldāns, U.Valainis leg.). Included in the list of special & indicator species of woodland key habitats.

TROGOSSITIDAE

***120. Peltis grossa* (Linnaeus, 1758)**
Aizkraukle Distr.: Aizkraukles purvs bog Nature Protected Area, ~6 km N Aizkraukle, 04.V.1995., (5, A.Barševskis leg.); **Daugavpils Distr.:** Daugavsargu loks, Nature Park "Daugavas loki", 17.V.2007., (1, A.Pankjāns leg.); Dviete, 56°12`503``N 26°26`162``E, 22.VI.2008., forest, (1, A.Barševskis leg.), 25.VI.2008., (1, A.Barševskis leg.); Ilgas, Silene Nature Park, 30.V.1996., (2, A.Barševskis leg.), 31.V.1996., (2, A.Barševskis leg.), 14-20.VI.2002., (8, A.Barševskis leg.), 06-15.VI.2004., (2, A.Barševskis leg.), 08.VII.2005., (1, A.Barševskis leg.), 05.VII.2006., (1, A.Barševskis leg.), 11.VI.2007., (1, A.Barševskis leg.), 28-29.VI.2007., (1, A.Barševskis leg.), 09.VI.2008., (2, A.Barševskis, A.Soldāns leg.); Šedere, Šarlote, 09.XI.2008., (1, K.Aksjuta leg.); **Gulbene Distr.:** Lejasciems, VI.2004., (2, A.Barševskis leg.), VI.2005., (1, A.Barševskis, J.Laizāns leg.); **Jēkabpils Distr.:** Dunava, 07.I.2007., (1, A.Barševskis leg.), 08.IV.2007., (2, A.Barševskis leg.); Rubene, 25.III.2000., (1, I.Leiskina leg.), 16.IV.2000., (1, I.Leiskina leg.); Tadenava, 01.VI.2002., (1, A.Barševskis leg.); **Madona Distr.:** Krustkalni Nature Reserve, 07.VII.2006., (1, A.Pankjāns, A.Barševskis, E.Rudāns leg.); **Talsis Distr.:** Slītere National Park, Zilie Kalni, 17.VII.2007., (1, A.Pankjāns leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 25.VI.2004., (1, A.Barševskis, U.Valainis leg.), 10.VI.2005., (1, A.Barševskis leg.), 23.VIII.2008., (1, A.Barševskis leg.). Included in the list of special & indicator species of woodland key habitats.

***121. Ostoma ferruginea* (Linnaeus, 1758)**
Aizkraukle Distr.: Aizkraukles purvs bog Nature Protected Area, ~6 km N Aizkraukle, 04.V.1995., (4, A.Barševskis leg.); **Daugavpils Distr.:** Elerne, Muravki, 13.IX.2007., (1, A.Barševskis leg.); Ilgas, Silene Nature Park, VII.2005., clearing, (1, A.Barševskis leg.); Oborūni, 19.V.2001., (1, G.Lociks leg.); Šedere, Straumēni, 01-03.V.2008., (1, M.Janovska leg.), 18.V.2008., (1, M.Janovska leg.); **Gulbene Distr.:** Lejasciems, 11.VII.2004., (1, A.Barševskis leg.), V.2005., (1, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, 08.IV.2007., (1, A.Barševskis leg.); Rubene, 23.IV.2000., (1, I.Leiskina leg.); **Preiļi Distr.:** Pelēči, 24.VII.1997., (1, I.Jurkjāne leg.); **Rēzekne Distr.:** Andzeļi, Lake Ežezers, Lielā Lāču Island, 24.VII.2008., (6, R.Cibuļskis, U.Valainis leg.); **Talsi Distr.:** Ance, Ances purvi un meži Nature Protected Area,

27.VI.2006., (1, A.Barševskis leg); Slītere National Park, Zilie Kalni, 30.V.2006., (1, A.Barševskis leg.); **Tukums Distr.:** Ķesterciems, 10.VIII.2004., (1, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 14.V.2004., (1, A.Barševskis leg.), 26.VI.2004., (2, A.Barševskis leg.), 09.VII.2004., (1, A.Barševskis leg.), 02.VI.2006., (1, U.Valainis leg.), 04-05.V.2008., (5, A.Pankjāns, U.Valainis, E.Tamanis, A.Soldāns leg.).

122. Thymalus limbatus **(Fabricius, 1787)**
Talsi Distr.: Ance, Ances purvi un meži Nature Protection Area, 27.VI.2006., (1, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, VI.2002., (1, A.Barševskis leg.), VII.2003., (1, U.Valainis leg.), 09.VII.2004., (1, A.Barševskis leg.), 10.VII.2004., (2, A.Barševskis leg.). Included in the list of special & indicator species of woodland key habitats. Rare species.

123. Grynocharis oblonga **(Linnaeus, 1758)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 10.VI.1999., (1, A.Barševskis leg.), 25.VI.1999., (1, A.Barševskis leg.), 19-22.VI.2006., (1, A.Barševskis leg.), 09.VI.2008., (1, A.Barševskis leg.); **Preiļi Distr.:** Jersika, "Kurpnieki", 26.VI.2005., (1, A.Barševskis leg.); Rīga Distr.: Vangaži, 28.VII.1953., (1, M.Stiprais leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 01.V.2003., (1, U.Valainis leg.), 14.V.2004., (1, A.Barševskis leg.).
Included in the list of special & indicator species of woodland key habitats.

CLERIDAE

124. Tillus elongatus **(Linnaeus, 1758)**
Daugavpils Distr.: Daugavpils, Grīva, 16.VI.2005., (1, M.Skutele leg.); **Talsi Distr.:** Slītere, Slītere National Park, 09.IX.1998., (1, N.Savenkovs leg.); Zilie Kalni, Slītere National Park, 57°38'05"N 22°19'03"E, 12.VII.2005., (1, R.Cibuļskis, A.Barševskis, A.Bukejs leg.).

125. Thanasimus femoralis **(Zetterstedt, 1828)**
Aizkraukle Distr.: Taurkalne, 03.VII.2006., (1, J.Donis leg.); **Daugavpils Distr.:** Bebrene, 11.XI.2005., (1, E.Rudāns leg.), 13.XI.2005., (1, E.Rudāns) leg., 19.XI.2005., (3, E.Rudāns leg.), 15-17.XII.2005., (1, E.Rudāns leg.), 25-26.XII.2005., (1, E.Rudāns leg.), 25.II.2006., (1, E.Rudāns leg.); Dviete, 20.VII.2008., clearing, (1, A.Barševskis leg.); Elerne, 16.VI.2002., (1, A.Barševskis leg.); Mežciems env., near Rīga-Krāslava beltway, 11.V.2008., clearing, (1, A.Barševskis leg.); **Gulbene Distr.:** Lejasciems, 03.IX.2004., (2, U.Valainis, A.Barševskis leg.), 02.V.2005., (3, A.Barševskis leg.); **Jēkabpils Distr.:** Tadenava, 11.VII.2002., (1, A.Barševskis leg.); **Valka Distr.:** Launkalne local municipality, Mežole, 30.VIII.2005., (1, J.Donis leg.).

126. Korynetes caeruleus **(De Geer, 1775)**
Daugavpils Distr.: Daugavpils, Grīva, 16.VI.2005., (2, M.Skutele leg.), Ruģeļi, VII.2006., (1, V.Kokina leg.); Šedere, Straumēni , 01-03.V.2008., (1, M.Janovska leg.), 10-11.V.2008., (1, M.Janovska leg.); Šedere, Šarlote, 05.IV.2008., (1, K.Aksjuta leg.), 18.V.2008., (1, K.Aksjuta leg.), 01.VI.2008., (1, K.Aksjuta leg.); **Jēkabpils Distr.:** Dunava, 18.VI.2001., (3, A.Barševskis leg.), VI.2002., (4, A.Barševskis leg.), 15.VI.2002., (4, A.Barševskis leg.), 02-05.VI.2007., (2, K.Barševska leg.), 06-09.VI.2008., (1, K.Barševska leg.), 23-30.VI.2007., (2, K.Barševska leg.); Rubene, 24.VI.1997., (1, I.Leiskina leg.), 03.VIII.2000., (1, I.Leiskina leg.); **Preiļi Distr.:** Aglona train station, 9 km NW Aglona, 02.VII.2008., (1, J.Staskeviča leg.); Jersika, 30.IV.2005., (1, I.Gurčonoks leg.), 27.VII.2005., (1, I.Gurčonoks leg.); Sutri, 03.VI.2007., (1, A.Soldāns leg.).

127. Necrobia violacea **(Linnaeus, 1758)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 30.V.1996., (3, A.Barševskis leg.); **Jēkabpils Distr.:** Rubene, 07.III.1997., (1, leg. I.Leiskina), 25.IV.1999., (1, I.Leiskina leg.); **Liepāja Distr.:** Pape, 21.VI.1996., (4, N.Savenkovs leg.); **Rīga Distr.:** Kangarnieki, Mazie Kangari Nature Protected Area, 29.IV.2006., (1, M.Kalniņš leg.).

MELYRIDAE

128. Aplocnemus impressus **(Marsham, 1802)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 13.VI.1996., (1, A.Barševskis leg.); **Jēkabpils Distr.:** Tadenava, 14.V.2005., (1, A.Barševskis leg.); **Rīga Distr.:** Olaine, 30.VI.2006., (1, J.Donis leg.).
Very rare, recently discovered species in Latvia; known only 3 localities.

129. Dasytes cyaneus **(Fabricius, 1775)**
Talsi Distr.: Mazirbe, Slītere National Park, 17.VII.2005., (1, A.Barševskis leg.); Slītere, Slītere National Park, VI.2002., (2, A.Barševskis leg.); Slītere National Park, Zilie Kalni, 06.VI.2002., (2, A.Barševskis leg.), 11.VI.2005., (1, A.Barševskis leg.).

130. Charopus graminicola **(Dejean, 1833)**
Jūrmala: Kūdra, 22.VI.1998., (1, A.Titovs leg.); **Rīga Distr.:** Carnikava, 13.VI.1990., (1, N.Savenkovs).
Very rare species with few known localities.

131. Ebaeus pedicularius pedicularius **(Linnaeus, 1758)**
Jēkabpils Distr.: Dunava, 02.VII.2008., (1, A.Barševskis leg.); **Krāslava Distr.:** Šķeltova, 28.VI.1996., (1, A.Barševskis leg.), 23.VII.1996., (1, A.Barševskis leg.). After A. Major (2007) this species is distributed in Europe (Austria, Belgium, Bulgaria, Belarus, Czech Republik, Denmar, Finland, France, Greece, Hungary, Italy, the Hetherlands, Poland, Romania, European part of Russia, Slovakia, Spain, Sweden, Switzerland, Serbia and Montenegro) and Central Asia (Turkmenistan).

132. Clanoptilus marginellus **(Olivier, 1790)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 13.VI.1995., (3, A.Barševskis leg.), 16.VI.1995., (4, A.Barševskis leg.), 06-15.VI.2004., (1, A.Barševskis leg.); Svente env., 21.VII.2003., (1, N.Strode leg.); Lake Sasaļu, 4 km NW Svente, 20.VII.2003., (1, N.Strode leg.); **Jēkabpils Distr.:** Dunava, 18.VII.1995., (2, A.Barševskis leg.), 01.VI.2002., (1, A.Barševskis leg.), 15.VI.2002., (6, A.Barševskis leg.), 18-22.VI.2006., (1, K.Barševska leg.), 25-29.VI.2006., (1, K.Barševska leg.); Rubene, 10.VI.1999., (1, I.Leiskina leg.), 04.VI.2001., (1, I.Leiskina leg.).

133. Anthocomus rufus **(Herbst, 1784)**
Daugavpils Distr.: Bebrene, 02.IX.2006., (1, E.Rudāns leg.), 23.IX.2006., (1, E.Rudāns leg.); Ilgas, Silene Nature Park, 02.IX.2002., (1, A.Barševskis leg.); Svente S env., Jaunsventes Park, 19.VIII.2003., (1, N Strode leg.), 21.IX.2003., (1, N.Strode leg.); **Jēkabpils Distr.:** Dunava, 14.IX.1997., (1, I.Leiskina leg.), 14-18.VIII.2006., (2, A.Barševskis, K.Barševska leg.), 29.VIII.2006., (7, A.Barševskis leg.), 29-31.VIII.2006., (75, A.Barševskis leg.), VIII.2008., (1, K.Barševskis leg.); Rubene, 20.VIII.2001., (1, I.Leiskina leg.); **Liepāja Distr.:** Pape, 22-24.VIII.1995., (2, N.Savenkovs leg.), Pāvilosta, Baltic sea dunes, 13.VIII.2008., (1, A.Barševskis leg.).; **Limbaži Distr.:** Salacgrīva, Veczemju rock, 17.VIII.2008., (1, A.Barševskis leg.); **Preiļi Distr.:** Jersika, "Kurpnieki", 01.X.2006., (1, A.Barševskis leg.); Pelēči, 23.VIII.1997., (1, I.Jurkjāne leg.); **Rīga Distr.:** Augšciems, 9 kn SW Ropaži, 15.VIII.1997., (1, A.Titovs leg.); Krimulda, 57°10`18``N 24°49`85``E, 26.VIII.2006., (2, A.Barševskis leg.);

Valmiera Distr.: Mazsalaca env., 57°34`58``N 25°20`15``E, 21.VIII.2006., (2, A.Barševskis leg.); Sprosti, 57°34`58``N 25°20`15``E, 21.VIII.2006., (1, A.Pankjāns leg.).

134. Anthocomus fasciatus **(Linnaeus, 1758)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 13.VI.1996., (1, A.Barševskis leg.), 26.VI.1997., (1, A.Barševskis leg.), 04.VII.2005., (1, A.Barševskis leg.); Svente env., 29.VI.2003., (1, N.Strode leg.); **Jēkabpils Distr.:** Dunava, 15.VI.2002., (13, A.Barševskis leg.), VI.2002., (10, A.Barševskis leg.), 02-05.VI.2007., (1, K.Barševska leg.); Rubene, 14.VI.1997., (1, I.Leiskina leg.); **Preiļi Distr.:** Aglona local municipality, Šnepsti, Šnepsti castle mound, 14.VIII.2008., (1, A.Barševskis leg.), Aglona train station, 9 km NW Aglona, 02.VII.2008., (1, leg. J.Staskeviča); **Talsi Distr.:** Mazirbe, 05.VI.2002., (1, A.Barševskis leg.); Slītere National Park, Zilie Kalni, 10.VII.2004., (4, R.Cibuļskis), 10.VII.2004., (4, A.Barševskis leg.); **Tukums Distr.:** Jaunmoku castle, 4 km NW Tukums, 16.VII.2008., (1, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 09.VII.2004., (1, A.Barševskis leg.).

135. Anthocomus equestris **(Fabricius, 1781)**
Daugavpils Distr.: Daugavpils, Cietokšņa Str. 66, 01.VI.2008., (1, A.Barševskis leg.), A.Pumpura Str. 55, 22.VI.2007., (1, M.Murd leg.); Ilgas, Silene Nature Park, 09.V.1996., (1, A.Barševskis leg.), 04.VII.2001., (1, G.Lociks leg.); **Jekabpils Distr.:** Dunava, 10-18.VI.2006., (1, K.Barševska leg.); **Krāslava Distr.:** Šķeltova, "Barševski", (1, A.Barševskis leg.); **Preiļi Distr.:** Līvāni, 04.V.2006., (1, A.Barševskis leg.).

136. Paratinus femoralis **(Erichson, 1840)**
Liepāja Distr.: Pape, 15.VII.1991., (1, N.Savenkovs leg.), 23-25.VI.1994., (1, N.Savenkovs leg.). Very rare species with few known localities.

NITIDULIDAE

137. Cyllodes ater **(Herbst, 1792)**
Daugavpils Distr.: Ilgas, Silene Nature Park, VII 2005., (1, A.Barševskis leg.), 09.VI.2008., (1, A.Barševskis leg.), Pilskalne, Nature Park „Pilskalnes Siguldiņa", 05.V.2008., (1, A.Barševskis, K.Barševska leg.); **Krāslava Distr.:** Skaista, Grundāni, Nature Park „Dridža ezers", 15.VII.2008., (1, R.Cibuļskis leg.); **Talsi Distr.:** Slītere, Zilie kalni, Slītere National park, 05.VII.2006., (1, A.Barševskis leg.), 17.VII.2007., (1, A.Pankjāns, A.Barševskis, A.Soldāns leg.); **Ventspils Distr.:** Moricsala, Moricsala Nature Reserve, 26.6.2004., (3, A.Barševskis leg.), 09.VII.2004., (1, A.Barševskis leg.), 03.IX.2004., (1, A.Barševskis leg.), V.2005., (1, U.Valainis leg.), 25.05.2005., (1, A.Barševskis leg.), 15.VII.2008., (2, V.Aleksejev leg.).

138. Cryptarcha strigata **(Fabricius, 1787)**
Ogre Distr.: Birzgale, env. Robežnieki, 30.05.2006., (1, A.Barševskis leg.). Rare species.

139. Ipidia binotata **(Reitter, 1875)**
Gulbene Distr.: Lejasciems, pine forest burning, VI.2004., (1, A.Barševskis leg.), 05.VIII.2004., (1, A.Barševskis leg.), VI.2005., (1, J.Laizāns, A.Barševskis leg.); **Kuldīga Distr.:** Rudbārži, 09.VIII.2004., (1, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, VI.2003., (2, U.Valainis leg.), 15.07.2008., (4, V.Aleksejev, A.Pavlova leg.).

SILVANIDAE

140. Uleiota planata **(Linnaeus, 1761)**
Daugavpils Distr.: Daugavpils, Viduspoguļanka, 11.VI.2006., (1, A.Pankjāns leg.), Jaunā Forštate,

30.III.2008., pine forest, (2, U.Valainis leg.); Mežciems env., near Rīga-Krāslava beltway, 18.III.2007., (8, A.Barševskis, K.Barševska leg.); **Gulbene Distr.:** Lejasciems, VI.2005., (1, window trap, A.Barševskis, J.Laizāns leg.); **Talsi Distr.:** Slītere National Park, VII.2004., (1, A.Barševskis leg.).

***141. Dendrophagus crenatus* (Paykull, 1799)**
Daugavpils Distr.: Mežciems env., near Daugavpils beltway, 18.III.2007., (10, A.Barševskis, K.Barševskis leg.), 08.III.2008., (6, K.Barševska, A.Barševskis leg.), 29.V.2008., (1, M.Janovska leg.); **Gulbene Distr.:** Lejasciems, 03.XI.2004., (18, A.Barševskis, U.Valainis leg.), 02.V.2005., (1, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, 01-08.IV.2007., (1, K.Barševska leg.), 08.IV.2007., (2, A.Barševskis leg.); Dviete env., 26.V.2008., (6, A.Barševskis leg.); **Krāslava Distr.:** Ūdrīši, Zapoļniki, Nature Park "Daugavas loki", 06-07.XI.2004., (2, M.Murd leg.). Included in the list of special & indicator species of woodland key habitats.

Cucujidae

***142. Cucujus cinnaberinus* (Scopoli, 1763)**
Ventspils Distr.: Moricsala Island, Moricsala Nature Reserve, 30.V.2006., (2, A.Barševskis, E.Rudāns leg.). Very rare, protected species in Latvia, with five known localities only.

Cryptophagidae

***143. Antherophagus nigricornis* (Fabricius, 1787)**
Aizkraukle Distr.: Taurkalne, 01.VIII.2006., (2, J.Donis leg.), 14.VIII.2006., (4, J.Donis leg.); **Daugavpils Distr.:** Ilgas, Silene Nature Park, forest clearing near birch, VII 2005., (1, A.Barševskis leg.); **Gulbene Distr.:** Lejasciems, pine forest burning, 05.VIII.2004., (1, A.Barševskis leg.); **Ogre Distr.:** Ķegums, left bank of Daugava river, 13.VII.2006., (1,A.Barševskis, K.Barševska leg.); **Talsi Distr.:** Slītere, Zilie kalni, Slītere National park, 17.VII.2007., (1, U.Valainis, A.Pankjāns, A.Soldāns, A.Barševskis leg.), 17.IX.2007., (1, A.Pankjāns, G.Jurševska, K.Aksjuta leg.); **Valka Distr.:** Mežole, Mežole Nature Protection area, 15.VIII.2008., (1, J.Donis leg.).

Erotylidae

***144. Dacne bipustulata* (Thunberg, 1781)**
Gulbene Distr.: Lejasciems, pine forest burning, V.2005., (1, A.Barševskis leg.).

***145. Tritoma bipustulata* Fabricius, 1775**
Ventspils Distr.: Moricsala Island, Moricsala Nature Reserve, 14.V.2004., (1, A.Barševskis leg.), 29.VI.2006., (1, window trap, A.Barševskis leg.).

***146. Tritoma subbasalis* (Reitter, 1896)**
Daugavpils Distr.: Ilgas, Silene Nature Park, VII 2005., (1, A.Barševskis leg.); **Preiļi Distr.:** Kastire, 30.VII.2007., (10, A.Barševskis leg.);**Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, IX.2006., (1, A.Barševskis, U.Valainis, A.Pankjāns, J.Staskeviča leg.).

***147. Triplax aenea* (Schaller, 1783)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 55°41'34"N 26°47'06"E, VII.2005., (2, A.Barševskis leg.); **Rīga Distr.:** Olaine, 14.VIII.2006., (1, J.Donis leg.); **Talsi Distr.:** Slītere National Park, 17.VII.2007., (2, U.Valainis, A.Pankjāns, A.Soldāns, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, VI.2003., (1, U.Valainis leg.), X.2003., (1, U.Valainis leg.), 14.V.2004., (1, A.Barševskis, U.Valainis leg.), 25.VI.2004., (2, A.Barševskis, U.Valainis leg.), 09.VII.2004., (1, A.Barševskis, U.Valainis leg.), 03-04.VIII.2004., (2,

A.Barševskis leg.), 15.VII.2008., (1, V.Aleksejev leg.).

***148. Triplax russica* (Linnaeus, 1758)**
Aizkraukle Distr.: Valle parish, Taurkalne, 02.VIII.2005., (1, J.Donis leg.); **Daugavpils Distr.:** Dviete, 23.VII.2008., clearing, (1, A.Barševskis leg.); Ilgas, Silene Nature Park, VII 2005., (2, A.Barševskis leg.), Ļubesti env., Rīga beltway, near Mežciems, 25.VII.2007., (4, A.Barševskis leg.); Naujene, Nature Park "Daugavas loki", 55°54`15``N 26°48`54``E, 21.V.2008., (2, A.Bukejs, M.Nitcis leg.); Slutiški, Daugavas Loki Nature Park, 04.V.2008., (2, A.Barševskis, K.Barševska leg.); **Gulbene Distr.:** Lejasciems, V-VI.2003., (1, I.Kampāne, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, VI.2002., (2, A.Barševskis leg.); **Jelgava Distr.:** Jelgava, 28.VIII.2002., (1, M.Bičevskis leg.); **Talsi Distr.:** Slītere National Park, Zilie Kalni (hills), 17.IX.2007., (1, A.Pankjāns, G.Jursevska, K.Aksjuta leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, VI.2003., (1, U.Valainis leg.), 09.VII.2004 (2, A.Barševskis, U.Valainis leg.).

***149. Triplax scutellaris* Charpentier, 1825**
Gulbene Distr.: Lejasciems, VI.2004., burning, (1, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, 56°12'93"N 26°12'17"E, 14-18.VIII.2006., (1, A.Barševskis, K.Barševska leg.).

***150. Triplax rufipes* (Fabricius, 1781)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 10.-12.IX.2002., (13, A.Barševskis leg.), 28.-29.VI.2007., (1, A.Barševskis leg.), **Jēkabpils Distr.:** Dunava, 10-19.VI.2007., (1, K.Barševska leg.); **Rēzekne Distr.:** Andzeļi, Lake Ežezers, Lielā lāču Island, 24.VII.2008., (1, R.Cibuļskis, U.Valainis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, VII.2003., (1, U.Valainis leg.), 03-04.VIII.2004., (3, A.Barševskis leg.), 18.VII.2007., (1, A.Pankjāns, A.Soldāns, A.Barševskis, U.Valainis leg.).

ENDOMYCHIDAE

***151. Endomychus coccineus* (Linnaeus, 1758)**
Aizkraukle Distr.: Ērgberģe, 14.VIII.2006., (2, J.Donis leg.); **Daugavpils Distr.:** Bebrene, 23.IX.2006., (1, E.Rudāns leg.), 28.X.2006., (5, E.Rudāns leg.); Dviete env., 56°12'503"N 26°26'162"E, 25.VI.2008., forest, (1, A.Barševskis leg.); Ilgas, Silene Nature Park, VI.2002., (1, A.Barševskis leg.), VII.2005., (2, A.Barševskis leg.); Stropi, 09.X.2005., (2, A.Bukejs leg.); **Gulbene Distr.:** Lejasciems, VII.2005., (1, A.Barševskis, A.Bukejs, R.Cibuļskis leg.); **Jēkabpils Distr.:** Dunava, 10-18.VI.2006., (1, K.Barševska leg.); **Preiļi Distr.:** Jersika, "Kurpnieki", 08.VIII.2007., (2, A.Barševskis leg.); **Rīga Distr.:** Olaine, 19.IX.2006., (1, J.Donis leg.), Salaspils, 14.VIII.2006., (1, J.Donis leg.); **Talsi Distr.:** Sabile, "Abavas Rumba", 56°55'27"N 22°31'37"E, 19.VII.2007., (1, A.Pankjāns, A.Soldāns, U.Valainis, A.Barševskis); Slītere National Park, Zilie Kalni, 29.VII.2005., (1, U.Valainis leg.), 17.VII.2007., (1, U.Valainis, A.Pankjāns, A..Soldāns, A.Barševskis), 17.IX.2007., (4, A.Pankjāns, G.Jurševska, K.Aksjuta leg.), 04.X.2007., (1, A.Pankjāns leg.).

***152. Mycetina cruciata* (Schaller, 1783)**
Jēkabpils Distr.: Dunava, Dviete forest, 18.V.2008., (1, A.Barševskis leg.); **Talsi Distr.:** Slītere National Park, Zilie kalni, 06.VIII.2002., (1, A.Barševskis leg.). Rare species.

COCCINELLIDAE

***153. Scymnus frontalis* (Fabricius, 1787)**
Aizkraukle Distr.: Rīteri, 20.VI.2006., (1, A.Barševskis leg.); **Daugavpils Distr.:** Bebrene,

28.X.2006., (1, E.Rudāns leg.); Slutiški, Nature Park "Daugavas loki", bank of the Putānu River, 55°55`01``N 26°53`19``E, 29.IV.2008., (1, A.Pankjans, U.Valainis leg).

***154. Scymnus suturalis* Thunberg, 1795**
Rīga Distr.: Kalngale, 23.II.2007., (2, E.Rudāns leg.).

***155. Hyperaspis camprestris* (Herbst, 1783)**
Ventspils Distr.: Moricsala Island, Moricsala Nature Reserve, 14.V.2004., (3, A.Barševskis leg.), 09.VII.2004., (1, A.Barševskis leg.).

***156. Chilocorus bipustulatus* (Linnaeus, 1758)**
Daugavpils Distr.: Bebrene, 21.X.2006., (1, E.Rudāns leg.), 28.X.2006., (1, E.Rudāns leg.), 28-29.XI.2006., (1, E.Rudāns leg.), 08-10.XII.2006., (4, E.Rudāns leg.), 23-28.I.2007., (1, E.Rudāns leg.);

***157. Chilocorus renipustulatus* (Scriba, 1790)**
Daugavpils Distr.: Bebrene, Priežu krogs, 13.VII.2006., (1, E.Rudāns leg.); Daugavpils, Vienības plaza, 24.III.2007., (1, A.Barševskis leg.); Dviete, 20.VIII.2006., (1, A.Barševskis leg.); Medumi, bank of Lake Ilgas, 02.VIII.2007., (1, M.Murd leg.), Silene, 12.VI.2007., (1, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, 23.VII.2008., (1, A.Barševskis leg.); **Kuldīga Distr.:** Skrunda, 05.IX.2008., (1, R.Orlovskis, A.Barševskis leg.); **Preiļi Distr.:** Jersika, Kurpnieki, 05-06.V.2007., (1, K.Barševska, A.Barševskis), 20.V.2007., (2, A.Barševskis leg.); **Rīga Distr.:** Spuņciems, 10.VIII.2006., (2, E.Rudāns, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 14.V.2004., (1, A.Barševskis leg.).

***158. Exochomus quadripustulatus* (Linnaeus, 1758)**
Daugavpils Distr.: Daugavpils, Viduspoguļanka, N side of Lake Plotišķu, 55°54'943"N 26°29'789"E, 21.IV.2008., (1, U.Valainis leg.); Ļubesti env., near Svente's bridge, 16.IV.2007., (1, A.Soldāns leg.); Mežciems env., Rīga-Kraslava beltway, 22.III.2007., forest, (2, A.Barševskis, U.Valainis, A.Soldāns leg.), 02.VI.2007., (1, A.Barševskis leg.); Svente, 31.III.2007., clearing, (1, A.Barševskis leg.); **Krāslava Distr.:** Ūdrīši, Zapoļņiki, Nature Park "Daugavas loki", 16.IV.2005., (1, M.Murd leg.), 15.IV.2007., (4, M.Murd leg.), 28.IV.2007., (13, M.Murd leg.); **Talsi Distr.:** Slītere National Park, Zilie Kalni, 05.IX.2002., (1, A.Barševskis leg.).

***159. Sospita vigintiguttata* (Linnaeus, 1758)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 14-20.VI.2002., (1, A.Barševskis leg.); **Rīga Distr.:** Ķemeri, 2002., (1, A.Barševskis leg.); **Talsi Distr.:** Slītere National Park, Zilie kalni, 06.VI.2002., (1, A.Barševskis leg.), 02.V.2006., (1, A.Barševskis leg.).

***160. Myzia oblongoguttata* (Linnaeus, 1758)**
Daugavpils Distr.: Mežciems env., near Rīga-Krāslava beltway, 18.III.2007., (2, forest, A.Barševskis, K.Barševska); **Krāslava Distr.:** Ūdrīši, Zapoļniki, 28.IV.2007., (1, M.Murd leg.); **Madona Distr.:** Krustkalni Nature Reserve, 11.X.2007., (1, A.Pankjāns leg.); **Rēzekne Distr.:** Puša, 26.VI.2002., (1, A.Barševskis leg.); **Rīga Distr.:** Olaine, 14.VIII.2006., (1, J.Donis leg.).

***161. Calvia decemguttata* (Linnaeus, 1767)**
Talsi Distr.: Mazirbe, 04.IX.2002., (1, A.Baršesvkis leg.), 24.VII.2004., (1, A.Barševskis leg.).

***162. Anatis ocellata* (Linnaeus, 1758)**
Aizkraukle Distr.: 6 km N Aizkraukle, Aizkraukles purvs bog Nature Protected Area, 06.VIII.2008., (1, A.Bukejs leg.); **Daugavpils Distr.:** Naujene, Nature Park "Daugavas Loki", 21.V.2008., (1, A.Bukejs, M.Nitcis leg.); **Gulbene Distr.:** Ušūrs,

08.VI.2005., (1, A.Barševskis leg.); **Preiļi Distr.:** Gailīši, 15.VII.2006., (1, A.Pankjāns leg.); Jersika, "Kurpnieki", 06.VI.2008., (1, A.Barševskis leg.); **Rīga Distr.:** Olaine, 02.X.2006., (1, J.Donis leg.).

***163. Aphidecta obliterata* (Linnaeus, 1758)**
Cēsis Distr.: Cīrulīšu klints, 24.III.2007., (1, E.Rudāns leg.); **Daugavpils Distr.:** Bebrene, 21.X.2006., (5, E.Rudāns leg.), 28.X.2006., (8, E.Rudāns leg.), 19.XI.2006., (4, E.Rudāns leg.), 25.XI.2006., (1, E.Rudāns leg.), 15-17.XII.2006., (1, E.Rudāns leg.), 23-24.XII.2006., (1, E.Rudāns leg.), 25-26.XII.2006., (11, E.Rudāns leg.); Kalupe, 16.XII.2006., (1, E.Rudāns leg.); **Jēkabpils Distr.:** 6 km NW Vandāni, Vimbaru forest, 12.VIII.2008., (1, M.Balalaikins leg.); **Preiļi Distr.:** Aglona, 14.VIII.2006., (1, A.Barševskis leg.); **Talsi Distr.:** Slītere National Park, 26.X.2006., (1, E.Rudāns leg.).

***164. Coccinella magnifica* Redtenbacher, 1843**
Daugavpils Distr.: 2 km N Daugavpils, 04.V.2008., inland dunes, edge of pine forest, (2, A.Bukejs leg.); Ilgas, Silene Nature Park, 06-15.VI.2004., (1, A.Barševskis leg.), Dviete, forest between Dviete – Tadenava, clearing, 20.VII.2008., (1, A.Barševskis leg.); **Jēkabpils Distr.:** Birži, 08.VIII.2008., (1, A.Barševskis leg.).

***165. Vibidia duodecimguttata* (Poda, 1761)**
Daugavpils Distr.: Daugavpils, Mežciems, 19.VII.2007., (1, K.Aksjuta, M.Murd leg.).

***166. Halyzia sedecimguttata* (Linnaeus, 1758)**
Talsi Distr.: Mazirbe, 24.VII.2004., (1, A.Barševskis leg.); Slītere National Park, Zilie Kalni hills, 10.VII.2004., (1, A.Barševskis leg.).

Mycetophagidae

***167. Mycetophagus quadripustulatus* (Linnaeus, 1761)**
Aizkraukle Distr.: Valle, 05.XI.2006., (3, E.Rudāns leg.); **Daugavpils Distr.:** Bebrene, 27.VI.2005., (1, E.Rudāns leg.), 02.I.2006., (1, E.Rudāns leg.), 17.II.2006., (1, E.Rudāns leg.), 30.IV-07.V.2006., (1, E.Rudāns leg.), 21.X.2006., (2, E.Rudāns leg.), 28.X.2006., (2, E.Rudans leg.), 11.XI.2006., (1, E.Rudāns leg.), 17.XI.2006., (2, E.Rudāns leg.), 26-27.XI.2006., (1, E.Rudāns leg.), 28-29.XI.2006., (3, E.Rudāns leg.), 02-03.XII.2006., (1, E.Rudāns leg.), 08-10.XII.2006., (1, E.Rudāns leg.), 23-24.XII.2006., (3, E.Rudāns leg.), 25-26.XII.2006., (1, E.Rudāns leg.), 30-31.XII.2006., (1, E.Rudāns leg.), 23-28.I.2007., (2, E.Rudāns leg.); Ilgas, Silene Nature Park, VI.2005., clearing, window trap near maple, (2, A.Barševskis leg.), VII.2005., clearing, window traps near oak and maple, (2, A.Barševskis leg.), VIII.2005., near dead birch, (1, A.Barševskis leg.), 04.VIII.2005., (1, A.Barševskis leg.), 19-22.VI.2006., (2, E.Rudāns leg.), 01-05.VII.2006., (7, A.Barševskis leg.), 27.VI.2007., (1, A.Barševskis leg.); Līksna local municipality, 2 kn N Daugavpils, 17.V.2008., inland dunes, under bark of dry *Betula*, (2, A.Bukejs leg.); **Jēkabpils Distr.:** Dunava, 14-18.VIII.2006., (2, A.Barševskis, K.Barševska leg.); Rubene, 10.XII.2005., (1, E.Rudāns leg.); **Preiļi Distr.:** Sutri, Znotiņi house, 03.VI.2007., (1, A.Soldāns leg.); **Rīga**: Purvciems, A.Deglava Str. 41a, 11.VII.2008., (4, A.Barševskis leg.); **Rīga Distr.:** Turaida, Gauja National Park, 26.VIII.2006., (1, A.Barševskis leg.); **Talsis Distr.:** Slītere National Park, Zilie Kalni hills, VII.2004., (1, A.Barševskis leg.), 11.VI.2005., (2, A.Barševskis leg.), 17.VII.2007., (2, U.Valainis, A.Pankjāns, A.Soldāns, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 17-28.VI.2002., (1, A.Barševskis leg.), 26.VI.2004., (1, A.Barševskis leg.), 09.VII.2004., (1, A.Barševskis leg.), 14.IX.2005., (1, A.Barševskis leg.), 29.V.2006., (1, A.Barševskis, E.Rudāns leg.), 29.VI.2006., (2, A.Barševskis leg.), 15.VII.2008., (1, V.Aleksejev, A.Pavlova leg.). Included in the

list of special & indicator species of woodland key habitats.

168. Mycetophagus piceus **(Fabricius, 1777)**
Cēsis Distr.: Taurene, 57°09'81"N 25°39'86"E, 21.VIII.2006., (1, A.Barševskis leg.); **Daugavpils Distr.:** Šedere, Straumēni, 22.IV.2007., (1, M.Murd); **Gulbene Distr.:** Lejasciems, V.2005., (1, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, 29.VIII.2006., (1, A.Barševskis leg.); Dviete env., 56°12'503"N 26°26'162"E, 25.VI.2008., forest, (1, A.Barševskis leg.); **Madona Distr.:** Krustkalni Nature Reserve, 11.VIII.2005., (1, A.Bukejs, A.Barševskis, J.Laizāns leg.); **Ogre Distr.:** Birzgale local municipality, Robežnieki, 30.V.2006., (3, A.Barševskis leg.); **Tukums Distr.:** 56°56'04"N 23°10'50"E, 19.VII.2007., (1, A.Barševskis, A.Soldāns, A.Pankjāns, U.Valainis leg.).

169. Mycetophagus fulvicollis **Fabricius, 1792**
Preiļi Distr.: Jersika, "Kurpnieki", 01.VIII.2008., (1, A.Barševskis leg.).

MELANDRYIDAE

170. Hallomenus binotatus **(Quensel, 1790)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 08.VII.2005., (2, A.Barševskis leg.). Rare species.

171. Orchesia fasciata **(Illiger, 1798)**
Daugavpils Distr.: Ilgas, Silene Nature Park, VII 2005., (1, A.Barševskis leg.). Rare species.

172. Dircaea quadriguttata **(Paykull, 1798)**
Gulbene Distr.: Lejasciems, pine forest burning, 06.2005., (1, A.Barševskis, J.Laizāns leg.). Rare species.

173. Rushia parreyssii **(Mulsant, 1856)**
Ventspils Distr.: Moricsala Island, Moricsala Nature Reserve, 14.05.2004., (1, A.Barševskis, U.Valainis leg.), 13.05.2006., (1, E.Rudāns leg.). Very rare species in Latvia.

174. Xylita livida **(Sahlberg, 1833)**
Talsi Distr.: Slītere, Zilie kalni, Slītere National park, 30.05.2006., (1, A.Barševskis leg.); **Valka Distr.:** Mežole, Mežole Nature Protection Area, 10.VI.2006., (1, J.Donis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 05.2005., (1, U.Valainis leg.), 29.VI.2006. In Latvia - rare unknown species.

175. Xylita laevigata **(Hellenius, 1786)**
Aizkraukle Distr.: Taurkalne, 19.05.2006., (4, J.Donis leg.), 16.VI.2006., (2, J.Donis leg.); **Gulbene Distr.:** Lejasciems, pine forest burning, 04.2004., (2, A.Barševskis leg.), 05.2004., (1, A.Barševskis leg.), 06.2004., (5, A.Barševskis leg.), 08.2004., (1, A.Barševskis leg.), V.2005., (4, A.Barševskis leg.), Gulbītis, near Lake Ušūrs, 05.2005., (1, A.Barševskis leg.), 06.2005. (1, A.Barševskis leg.), 04.2006., (2, A.Barševskis leg.), 06.2006., (3, A.Barševskis leg.);**Valka Distr.:** Mežole, Mežole Nature Protection Area, 10.VI.2006., (2, J.Donis leg.), 26.06.2006., (1, J.Donis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 05.2005., (1, U.Valainis leg.).

176. Serropalpus barbatus **(Schaller, 1783)**
Aizkraukle Distr.: Taurkalne, 02.VIII.2005., (1, J.Donis leg.), 14.VIII.2006., (1, J.Donis leg.); **Gulbene Distr.:** Gulbītis, near Lake Ušūrs, VIII.2003., burning, (1, O.Koškina, A.Barševskis leg.); **Madona Distr.:** Kalsnava, 19.VIII.2002., (1, M.Bičevskis leg.); Krustkalni Nature Reserve, VI.2005., (2, forest, A.Barševskis, J.Laizāns leg.), 11.VIII.2005., (12, A.Bukejs, A.Barševskis, J.Laizāns leg.), VIII-IX.2006., (1, A.Barševskis leg.), 01.IX.2006., (1, A.Barševskis leg.), 18.IX.2007., (3, A.Pankjāns, G.Jurševska, K.Aksjuta leg.); **Talsi Distr.:** Slītere National Park,

Zilie Kalni (hills), VI.2006., (1, A.Barševskis, E.Rudāns leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, VIII.2003., (7, U.Valainis leg.), 16.VIII.2004., (2, U.Valainis leg.), 30.VII.2006., (5, A.Barševskis leg.), 18.VII.2007., (1, A.Barševskis, A.Pankjāns, A.Soldāns, U.Valainis leg.).

***177. Hypulus quercinus* (Quensel, 1790)**
Ventspils Distr.: Moricsala Island, Moricsala Nature Reserve, 05.2003., (1, U.Valainis leg.), 06.2003., (2, U.Valainis leg.). Rare species.

***178. Melandrya dubia* (Schaller, 1783)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 06-15.VI.2004., (1, A.Barševskis leg.); **Talsi Distr.:** Slītere National Park, V.2004., (1, U.Valainis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, VI.2003., (4, U.Valainis leg.), 25.VI.2004., (2, A.Barševskis, U.Valainis leg.). Included in the list of special & indicator species of woodland key habitats.

Zopheridae

***179. Orthocerus clavicornis* (Linnaeus, 1758)**
Daugavpils Distr.: Elerne, Nature Park "Daugavas Loki", V.2002., valley of the Daugava River, (1, A.Barševskis leg.). Rare species.

Tenebrionidae

***180. Uloma culinaris* (Linnaeus, 1758)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 14-20.VI.2002., (1, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, 09-10.VIII.2008., (1, A.Barševskis leg.); **Preiļi Distr.:** Jersika, 14.VII.2007., (1, A.Barševskis leg.).

***181. Uloma rufa* (Piller & Mitterpacher, 1783)**
Aizkraukle Distr.: Taurkalne, 03.VII.2006., (1, J.Donis leg.); **Daugavpils Distr.:** Mežciems env., forest near Rīga-Krāslava beltway, 25.VII.2005., (2, A.Barševskis leg.), 18.III.2007., (23, A.Barševskis, K.Barševska leg.), 08.III.2008., (1, K.Barševska, A.Barševskis leg.); **Krāslava Distr.:** Ūdrīši, Zapoļņiki, 08.IV.2007., (21, M.Murd leg.), 15.IV.2007., (20, M.Murd leg.).

***182. Allecula morio* (Fabricius, 1787)**
Ventspils Distr.: Moricsala Island, Moricsala Nature Reserve, 11.VII.2005., (1, U.Valainis leg.), 30.VII.2005., (1, U.Valainis leg.), 15.VII.2008., (2, V.Aleksejev, A.Pavlova leg.). Very rare species in Latvia.

***183. Prionychus ater* (Fabricius, 1777)**
Ventspils Distr.: Moricsala Island, Moricsala Nature Reserve, 08.2003., (1, U.Valainis leg.), 10.2003., (1, U.Valainis leg.). Rare species. Included in the list of special & indicator species of woodland key habitats.

***184. Pseudocistela ceramboides* (Linnaeus, 1758)**
Aizkraukle Distr.: Taurkalne, 02.07.2005., (1, J.Donis leg.); **Daugavpils Distr.:** Ilgas, Silene Nature Park, 14.-20.06.2002., (1, A.Barševskis leg.), 06.2002., (1, U.Valainis leg.); **Gulbene Distr.:** Lejasciems, pine forest burning, 06.2004., (1, A.Barševskis leg.), 06.2005. (1, A.Barševskis leg.); **Talsi Distr.:** Mazirbe, Slītere National park, Baltic sea dunes, 26.VI.2006., (1, A.Barševskis, U.Valainis, A.Pankjāns leg.), Slītere, Zilie kalni, Slītere National park, 10.VII.2004., (1, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 07.2003., (1, U.Valainis leg.), 25.06.2004., (2, A.Barševskis, U.Valainis leg.), 09.07.2004., (1, A.Barševskis, U.Valainis leg.), 11.07.2005., (2, U.Valainis leg.). Included in the list of special & indicator species of woodland key habitats.

***185. Isomira murina* (Linnaeus, 1758)**

Aizkraukle Distr.: Rīteri, 20. - 21.06.2006., (2, A.Barševskis leg.); **Talsi Distr.:** Ance, Nature Protection Area „Ances meži un purvi", 27.VI.2006., 91, U.Valainis leg.).

***186. Mycetochara flavipes* (Fabricius, 1793)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 14.-20.06.2002., (2, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, 10.-18. VI 2006., (1, K.Barševska leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 25.06.2004., (1, A.Barševskis, U.Valainis leg.), 11.VII.2005., (1, U.Valainis leg.).

***187. Mycetochara axilaris* (Paykull, 1799)**
Daugavpils Distr.: Ilgas, Silene Nature Park, VI.2005., (2, A.Barševskis leg.).

***188. Omophlus betulae* (Herbst, 1783)**
Daugavpils Distr.: Līksna local municipality, inland dunes between Ļubesti and Križi, 06.06.2004., (8, A.Barševskis leg.), 17.05.2007., (1, A.Barševskis, K.Barševska leg.). Very rare species in Latvia, with five known localities only.

***189. Neomida haemorrhoidalis* (Fabricius,1787)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 09.VI.2008., (4, A.Barševskis, A.Soldāns leg.). Rare species. Included in the list of special & indicator species of woodland key habitats.

Meloidae

***190. Meloe proscarabaeus* Linnaeus, 1758**
Daugavpils Distr.: Daugavpils City, Ruģeļi, 16.05.2006., (1, V.Kokina leg.), Nature Park „Daugavas loki", Naujene, 06.06.2005., (1 E.Rudāns leg.), Nature Park „Daugavas loki", Daugavsargi, 17.05.2007., (1, A.Pankjāns leg.), Nature Park „Daugavas loki", Slutišķi, 29.04.2008, A.Pankjāns, U.Valainis leg.); **Krāslava Distr.:** Nature Park „Daugavas loki", Borovka, „Zapoļniki", 06.07.09.2004., (1, M.Janovska (Murd)); **Rīga Distr.:** Stopiņi local municipality, „Upeslejas", 01.05.2008., (1, V.Krone leg.).

***191. Meloe brevicollis* Panzer, 1793**
Daugavpils Distr: Līksna local municipality, Rīga – Krāslava beltway, 17.05.2007., (1, A.Barševskis & K.Barševska leg.), Šedere, „Straumēni", 01. - 03.05.2008., (3, M.Janovska leg.), 18.05.2008., (1, M.Janovska leg.), **Preiļi Distr.:** Jersika, 30.IV.2005., (2, I.Gurčonoks).

Pythidae

***192. Pytho depressus* (Linnaeus, 1767)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 13-14.X.2006., (4, A.Barševskis leg.); Mežciems env., near Daugavpils beltway, 08.III.2008., (1, K.Barševska, A.Barševskis leg.); **Gulbene Distr.:** Lejasciems, 03.XI.2004., (7, A.Barševskis, U.Valainis leg.); **Jēkabpils Distr.:** Dunava, 08.IV.2007., pine forest, (1, A.Barševskis leg.); **Krāslava Distr.:** Zapoļniki, Nature Park "Daugavas loki", 06-07.XI.2007., (8, M.Murd leg.).

Pyrochroidae

***193. Pyrchora coccinea* (Linnaeus, 1761)**
Daugavpils Distr.: Elerne, 07.VI.2002., (1, A.Barševskis); Ilgas, Silene Nature Park, 02-10.VII.2004., (1, A.Barševskis leg.); Līksna local municipality, between Ļubesti and Križi, 06.VI.2004., inland dunes, (1, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, 10-18.VI.2006., (2, K.Barševska leg.), 02-05.VI.2007., (1, K.Barševska leg.), 06-09.VI.2007., (1, K.Barševska leg.); 10-19.VI.2007., (2, K.Barševska leg.); Tadenava, 01.VI.2002., clearing, (1, A.Barševskis leg.), 11.VII.2002., (1, A.Barševskis leg.); **Talsi Distr.:**

Slītere National Park, Zilie Kalni, 26.VI.2002., (1, A.Barševskis leg.).

194. Schizotus pectinicornis **(Linnaeus, 1758)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 06-15.VI.2004., (1, A.Barševskis leg.); Līksna parish, 2 km N Daugavpils, 17.V.2008., edge of pine forest, (1, A.Bukejs leg.); **Jēkabpils Distr.:** Dunava, Dviete forest, 18.V.2008., (3, A.Barševskis leg.); Tadenava, 01.VI.2002., clearing, (1, A.Barševskis leg.); **Rēzekne Distr.:** Puša, 25.V.2002., (1, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 14.V.2004., (1, A.Barševskis leg.), 29.V.2006., (1, E.Rudāns leg.), 30.V.2006., (1, E.Rudāns leg.).

SALPINGIDAE

195. Salpingus ruficollis **(Linnaeus, 1761)**
Daugavpils Distr.: Ilgas, Silene Nature Park, V.2005, (1, A.Barševskis leg.), VII.2005., (1, A.Barševskis leg.); **Talsi Distr.:** Slītere, Zilie kalni, Slītere National park, VII.2006., (1, A.Barševskis, E.Rudāns leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 18.VII.2007., (1, A.Pankjāns, A.Soldāns, A.Barševskis, U.Valainis leg.).

ANTHICIDAE

196. Omonadus floralis **(Linnaeus, 1758)**
Jēkabpils Distr.: Dunava, 20 VII 2008., (5, A.Barševskis leg.); **Krāslava Distr.:** Skaista, 18.IX.2006., (11, S.Ungurs leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, VIII.2003., (2, U.Valainis leg.), 28.VII.2005., (1, A.Barševskis, A.Bukejs, U.Valainis leg.).

197. Anthicus flavipes **(Panzer, 1797)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 28.-30.IV.2004., (1, A.Barševskis leg.)

198. Anthicus axillaris **Schmidt, 1842**
Liepāja Distr.: Liepāja, 11.-13.VII.2006., Baltic sea coast and dunes, (64, A.Barševskis leg.).

199. Anthicus ater **(Panzer, 1796)**
Daugavpils Distr.: Bebrene, 13.V.2006., (1, E.Rudāns leg.); **Ventspils Distr.:** Blāzma, pine forest clearing, 22.VII.2008., (1, A.Barševskis, U.Valainis leg.).

200. Anthicus antherinus **(Linnaeus, 1761)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 10.-12.IX.2002., (1, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, 20.VII.2008., (1, A.Barševskis leg.).

ADERIDAE

201. Aderus populneus **(Creutzer, 1796)**
Jēkabpils Distr.: Dunava, 09.-10.VIII.2008., (1, A.Barševskis leg.).

CHRYSOMELIDAE

202. Labidostomis tridentata **(Linnaeus, 1758)**
Daugavpils Distr.: Butišķi, Nature Park "Daugavas Loki", 26.V.2008., valley of the Daugava River, xeric meadow, (1, A.Bukejs leg.). Rare species.

203. Labidostomis longimana **(Linnaeus, 1761)**
Daugavpils Distr.: Butišķi, Daugavas Loki Nature Park, 25.VII.2008., (4, valley of the Daugava River, xeric meadow, A.Bukejs leg.); **Krāslava Distr.:** Ezernieki, Garaudži house, Lake Razne National Park, 24.VII.2008., (1, R.Cibuļskis, U.Valainis leg.).

204. Clytra quadripunctata **(Linnaeus, 1758)**
Rīga Distr.: Garupe, 2,5 km SW Carnikava, 13.VI.1976., (1, J.Dmitriev leg.).

205. Smaragdina salicina **(Scopoli, 1763)**
Daugavpils Distr.: Šedere, Šarlote house, 12.VII.2008., (2, K.Aksjuta leg.); **Preiļi Distr.:** Jersika, Kurpnieki house, 23-24.VI.2008., (1, A.Barševskis leg.).

206. Smaragdina flavicollis **(Charpentier, 1825)**
Daugavpils Distr.: Butišķi, Nature Park "Daugavas Loki", 25.VII.2008., valley of the Daugava River, xeric meadow, (1, A.Bukejs leg.); **Rēzekne Distr.:** Andzeļi, Lake Ežezers, Lielā Lačų Island, 24.VII.2008., (2, R.Cibuļskis, U.Valainis leg.).

207. Coptocephala unifasciata **(Scopoli, 1763)**
Daugavpils Distr.: Butišķi, Nature Park "Daugavas Loki", 25.VII.2008., valley of the Daugava River, xeric meadow, (1, A.Bukejs leg.); Mežciems env., near Daugavpils beltway, 22.VII.2008., inland dunes, (6, A.Barševskis leg.); **Krāslava Distr.:** Ezernieki, Garaudži, Lake Razne National Park, 24.VII.2008., (1, R.Cibuļskis, U.Valainis leg.); Krāslava, 21.VII.2008., dry meadow, (12, A.Barševskis leg.).

208. Pachybrachis hieroglyphicus **(Laicharting, 1781)**
Daugavpils Distr.: Butišķi, Daugavas Loki Nature Park, 25.VII.2008., valley of the Daugava River, xeric meadow, (2, A.Bukejs leg.).

209. Cryptocephalus octopunctatus **(Scopoli, 1763)**
Aizkraukle Distr.: Aizkraukles purvs bog Nature Protected Area, 6 km N Aizkraukle, 01.VII.2008., (1, A.Pankjans leg.); **Daugavpils Distr.:** Demene, ~2 km from Kurcums, 06.VI.2008., (1, A.Barševskis leg.); **Jēkabpils Distr.:** Dunava, 18.V.2008., (1, A.Barševskis leg.); **Preiļi Distr.:** Jersika, "Kurpnieki", 29.VI.2008., (1, A.Barševskis leg.).

210. Cryptocephalus biguttatus **(Scopoli, 1763)**
Daugavpils Distr.: Ilgas, Silene Nature Park, 09.VI.2008., (2, A.Barševskis, A.Soldāns leg.); **Liepāja Distr.:** Vērgale, 12.VIII.2008., (1, A.Barševskis leg.).

211. Cryptocephalus aureolus **Suffrian, 1847**
Daugavpils Distr.: Ilgas, Silene Nature Park, 09.VI.2008., (1, A.Barševskis, A.Soldans leg.); Vasarģelišķi, Nature Park "Daugavas Loki", 11.VII.2008., valley of the Daugava River, (1, A.Barševskis, V.Aleksejev leg.); **Krāslava Distr.:** Krāslava, 21.VII.2008., dry meadow, (1, A.Barševskis leg.); **Liepāja Distr.:** Vērgale, 12.VIII.2008., (1, A.Barševskis leg.); **Madona Distr.:** Krustkalni Nature Reserve, 56°47`12``N 26°08`51``E, VII.2006., (1, E.Rudāns, A.Barševskis leg.).

212. Cryptocephalus sericeus **(Linnaeus, 1758)**
Daugavpils Distr.: Butiški, 25.VII.2008., valley of the Daugava River, (1, A.Bukejs leg.); Ilgas, Silene Nature Park, 01-04.VII.2008., (1, R.Cibuļskis leg.); Mežciems env., near Daugavpils beltway, 22.VII.2008., inland dunes, (4, A.Barševskis leg.); **Limbaži Distr.:** Salacgrīva, 16.VIII.2008., (1, A.Barševskis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 15.VII.2008., (1, A.Bukejs leg.).

213. Cryptocephalus hypochoeridis **(Linnaeus, 1758)**
Krāslava Distr.: Ezernieki, Garaudži houses, Lake Rāzna National Park, 24.VII.2008., (2, R.Cibuļskis leg.).

214. Cryptocephalus parvulus **Müller, 1776**
Daugavpils Distr.: Oborūni, 16.VIII.2001., (1, G.Lociks leg.); **Dobele Distr.:** Jaunbērze, Mežinieki house, 12.VIII.2008., (1, A.Barševskis leg.).

215. Cryptocephalus decemmaculatus **(Linnaeus, 1758)**

Aizkraukle Distr.: Aizkraukles purvs bog Nature Protected Area, 6 km N Aizkraukle, 01.VII.2008., on *Salix*, (6, A.Bukejs leg.); **Jēkabpils Distr.:** Birži, 08.VIII.2008., (1, A.Barševskis leg.); **Krāslava Distr.:** Ezernieki, Lake Rāzna National Park, 24.VII.2008., (1, U.Valainis, R.Cibuļskis leg.); **Rēzekne Distr.:** Mākoņkalns, Krepši, 24.VII.2008., (3, R.Cibuļskis leg.).

216. Cryptocephalus moraei **(Linnaeus, 1758)**

Daugavpils Distr.: Naujene, Nature Park "Daugavas Loki", 55°54`15``N 26°48`54``E, 25.VI.2008., clearing, (2, K.Aksjuta leg.); Šedere, Šarlote house, 12.VII.2008., (1, K.Aksjuta leg.); Vasarģelišķi, Daugavas Loki Nature Park, 11.VIII.2008., (1, A.Barševskis, V.Aleksejev leg.); **Jēkabpils Distr.:** Vandāni, 16.VIII.2008., bank of the Daugava River, (1, M.Balalaikins leg.); **Krāslava Distr.:** Krāslava, 21.VII.2008., dry meadow, (2, A.Barševskis leg.); **Rēzekne Distr.:** Andzeļi, Lake Ežezers, Lielā Laču Island, 24.VII.2008., (1, R.Cibuļskis, U.Valainis leg.); **Rīga Distr.:** Mālpils, 16.VIII.2008., (1, A.Barševskis leg.); Olaine, 01.VIII.2006., (1, J.Donis leg.); **Ventspils Distr.:** Moricsala Island, Moricsala Nature Reserve, 15.VII.2008., (1, V.Aleksejev, A.Pavlova leg.), 15.VII.2008., (3, A.Barševskis & A.Bukejs leg.).

217. Cryptocephalus bilineatus **(Linnaeus, 1767)**

Daugavpils Distr.: Butiški, Daugavas Loki Nature Park, 25.VII.2008., valley of the Daugava River, xeric meadow, (3, A.Bukejs leg.); Šedere, Šarlote, 12.VII.2008., (6, K.Aksjuta leg.); **Preiļi Distr.:** Aglona local municipality, Šņepsti, Šņepsti castle mound, 14.VIII.2008., (1, A.Barševskis leg.).

218. Cryptocephalus ocellatus **Drapiez, 1819**

Aizkraukle Distr.: Aizkraukle purvs bog Nature Protected Area, 6 km N Aizkraukle, 01.VII.2008., on *Salix*, (4, A.Bukejs leg.), 06.VIII.2008., (1, A.Bukejs, M.Balalaikins leg.); Mežezers, 18.VII.2008., (1, A.Barševskis leg.); Nereta env., 08.VIII.2008., (5, A.Barševskis leg.); Valle, 12.VIII.2008., (2, A.Barševskis leg.); **Daugavpils Distr.:** Daugavpils, near Cietoksnis, 07.VIII.2008., bank of the Daugava River, (1, A.Bukejs, M.Balalaikins leg.); **Jēkabpils Distr.:** Birži, 08.VIII.2008., (2, A.Barševskis leg.); Dunava, 01-05.VIII.1997., (1, A.Barševskis leg.), 03.VI.2007., (1, A.Barševskis leg.); **Jūrmala:** Kauguri, 30.VI.1998., dunes, on *Salix*, (12, A.Barševskis leg.); **Liepāja Distr.:** Pāvilosta, 13.VIII.2008., dunes, (9, A.Barševskis leg.); **Preiļi Distr.:** Jersika, "Kurpnieki", 23-24.VI.2008., (1, A.Barševskis leg.), 02.VII.2008., (1, A.Barševskis leg.).

219. Cryptocephalus labiatus **(Linnaeus, 1761)**

Krāslava Distr.: Lake Velnezers Nature Reserve, 11.VII.2008., (1, A.Barševskis, V.Aleksejev leg.); **Tukums Distr.:** Lielaisciems, Ķemeri National Park, 16.VII.2008., (5, V.Aleksejev keg.); **Ventspils Distr.:** Blāzma, 57°21'12"N 22°04'47"E, 22.VIII.2008., clearing, (1, A.Barševskis, U.Valainis leg.).

220. Cryptocephalus exiguus **Schneider, 1792**

Madona Distr.: Ošupe, 2,5 km NE Lake Lubāns, 56°50'03"N 26°56'05"E, 06.VII.2008., wet meadow and bank of the Aiviekste River, (2, A.Bukejs, M.Balalaikins leg.); **Rīga Distr.:** Carnikava, 19.VI.1990., (1, N.Savenkovs leg.).

221. Cryptocephalus fulvus **Goeze, 1777**

Aizkraukle Distr.: Nereta env., 08.VIII.2008., (1, A.Barševskis leg.); **Dobele Distr.:** Jaunbērze, Mežinieki, 12.VIII.2008., (1, A.Barševskis leg.); **Daugavpils Distr.:** Butišķi, Nature Park "Daugavas Loki", 25.VII.2008., valley of the

Daugava River, xeric meadow, (1, A.Bukejs leg.); Eglaine, 20.VIII.2008., (3, A.Barševskis leg.); Mežciems env., near Daugavpils beltway, 22.VII.2008., inland dunes, (8, A.Barševskis leg.); Šedere, Šarlote, 12.VII.2008., (2, K.Aksjuta leg.); **Jēkabpils Distr.:** Dunava, 01-05.VIII.1997., (8, A.Barševskis leg.); Vandāni, 16.VIII.2008., bank of the Daugava River, (2, M.Balalaikins leg.); **Krāslava Distr.:** Ezernieki, "Garaudži", Lake Rāzna National Park, 24.VII.2008., (1, U.Valainis, R.Cibuļskis leg.); **Liepāja Distr.:** Pāvilosta, 13.VIII.2008., dunes, (4, A.Barševskis leg.); **Limbaži Distr.:** Salacgrīva, 16.VIII.2008., (3, A.Barševskis leg.); **Ogre Distr.:** Lēdmane, 17.VIII.2008., (1, A.Barševskis leg.); **Tukums Distr.:** near Jaunmoku castle, 4 km NW Tukums, 16.VII.2008., (1, A.Barševskis leg.).

***222. Cryptocephalus pusillus* Fabricius, 1777**
Daugavpils Distr.: Dviete env., 22.VII.2008., clearing, (1, A.Barševskis leg.); **Krāslava Distr.:** Šķeltova, "Barševski", 17.VII.2008., (1, A.Barševskis leg.); **Liepāja Distr.:** Pāvilosta, 13.VIII.2008., dunes, (1, A.Barševskis leg.); **Rīga Distr.:** Mālpils, 16.VII.2008., (2, A.Barševskis leg.); **Talsis Distr.:** Slītere National Park, Zilie Kalni hills, 22.VIII.2008., (2, A.Barševskis leg.).

***223. Calomicrus pinicola* (Duftschmid, 1825)**
Tukums Distr.: Lielaisciems, Kemeri National Park, 26.VI.2006., (1, A.Pankjāns leg.). Insufficiently known species in Latvia.

ANTHRIBIDAE

***224. Tropideres albirostris* (Herbst, 1783)**
Preiļi Distr.: Jersika, „Kurpnieki", on *Alnus*, 13.VI.2008. (2, A.Barševskis leg.), 23.-24.VI.2008., (1, A.Barševskis leg.), 01.VIII.2008., (2, A.Barševskis leg.). Very rare species in Latvia, with five known localities only.

***225. Platystomos albinus* (Linnaeus, 1758)**
Aizkraukle Distr.: Mazzalve, VIII.2007., (1, A.Grenciņa-Grencione leg.); **Krāslava Distr.:** Andzeļi, lake Ežezers, Lielā lāču Island, 24.07.2008., (1, R.Cibuļskis leg.); **Preiļi Distr.:** Jersika, „Kurpnieki", on *Alnus*, 06.06.2008., (1, A.Barševskis leg.), 23.-24.VI.2008. (2, A.Barševskis leg.), 29.06.2008., (1, A.Barševskis leg.).

ATTELABIDAE

***226. Apoderus erythropterus* (Gmelin, 1790)**
Daugavpils Distr.: Šedere, „Straumēni", 01.-03.V.2008., (2, M.Janovska leg.).

CURCULIONIDAE

***227. Otiorhynchus ligustici* (Linnaeus, 1758)**
Jēkabpils Distr.: Birži, 08.VIII.2008., (1, A.Barševskis leg.).

***228. Bothrynoderes affinis* (Schrank, 1781)** *(= Chromoderus affinis* Schrank)
Daugavpils Distr: Līksna local municipality, Rīga – Krāslava beltway, inland dunes between Ļubesti and Križi, pine forest edge, 04.V.2007., (1, A.Bukejs leg.), Šedere, Šarlote, 11.V.2008., (1, K.Aksjuta leg.).

***229. Hylobius piceus* (De Geer, 1775)**
Ventspils Distr.: Moricsala Island, Moricsala Nature Reserve, 03.VIII.2004., (1, U.Valainis leg.).

***230. Dendroctonus micans* (Kugelann, 1794)**
Aizkraukle Distr.: Taurkalne, 11.VII.2005., (1, U.Valainis leg.).

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THE HISTORY OF INVESTIGATIONS OF *CHRYSOMELIDAE* SENSU LATO (COLEOPTERA) IN LATVIAN FAUNA

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Bukejs A. 2008. The history of investigations of *Chrysomelidae* sensu lato (Coleoptera) in Latvian fauna. *Acta Biol. Univ. Daugavp., 8 (2): 259 - 272.*

The history of investigations of leaf-beetles in Latvian fauna is presented in this article. We see the leaf-beetles in a wide sense (Crysomelidae sensu lato), i.e. the families Megalopodidae Latreille, 1802, Orsodacnidae Thomson, 1859 and Chrysomelidae Latreille, 1802 (incl. Bruchinae Latreille, 1802). The history of investigation of leaf-beetles in Latvia is more than 220 years old. The first information about leaf-beetles in Latvia can find in the articles of J. B. Fischer (1778, 1784, 1791). The bibliographical list of more than 120 sources is composed.

Key words: Coleoptera, Megalopodidae, Orsodacnidae, Chrysomelidae, Bruchinae, Latvia, investigations, history.

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The leaf-beetles are one of the biggest beetle family in the world fauna (30000 – 50000 species are known) (Bieńkowski 2004; Brovdij 1985; Jolivet 1988; Mohr 1966) and also in the Latvian fauna. However, the special investigation of the history of leaf-beetles in Latvia was not made till now. The analogous works were made about Scolytidae (Šmits 1960), Elateridae (Spuris 1974, 1981), Cantharidae (Melecis 1975), Carabidae (Spuris 1983; Barševskis 2003), Cerambycidae (Spuris 1984), Coccinellidae (Spuris 1990), Scarabaeidae (Spuris 1991) and Dytisciformia (Spuris 1991a; Barševskis, Kalniņš, Cibuļskis 2005).

In this article we consider the leaf-beetles in a wide sense (Chrysomelidae sensu lato) according to the taxonomy of J. F. Lawrence and A. F. Newton (1995), i.e. the families Megalopodidae Latreille, 1802, Orsodacnidae Thomson, 1859 and Chrysomelidae Latreille, 1802 (incl. Bruchinae Latreille, 1802).

The aim of our work is to summarize and to analyse the bibliographical data about the leaf-beetles of Latvian fauna, to give the short essay about the history of investigation of leaf-beetles and to make up the bibliographical list.

The first information about the leaf-beetles (Chrysomelidae sensu lato) of Latvian fauna was found in the scientific literature in the second half of the 18th century in the articles of J. B. Fischer (1778, 1784, 1791). In the first edition of his monograph (Fischer 1778) about the nature of Livland three species of the leaf-beetles are mentioned. After some additions (Fischer 1784), in the second edition of the monograph (Fischer 1791) 18 species are already mentioned. The

author treats as the leaf-beetles one species – *Chrysomela boleti* L., that in the modern taxonomy is the darkling beetle *Diaperis boleti* L. (Tenebrinoidae) and we don't count this species. To Z. Spuris (1981, 1983) mind, J. B. Fischer has made his investigations in the Riga district.

Johan Groschke, the professor of Jelgava Gymnasium, has started some coleopterological articles in the 19th century. In the review of the Kurzeme (*Curland*) fauna he has made a list of the pested beetles, to his mind, where he has mentioned 8 species of leaf-beetles (Groschke 1805).

In 1818 the first wide catalogue of the beetles of Latvian fauna has been published. There are 725 species mentioned, that were found in the environs of Rīga and Rīga district (in that time it was a large territory including the Rūjiene environs). The author of this catalogue was not mentioned when the catalogue was published, but from other sources (Kawall 1868) is clear that it was the citizen of Rīga K. H. Precht (1818). According to the J. Fabricius system there are 10 genera and 90 species of the leaf-beetles and 1 species of the seed beetles – *Bruchus granarius* (this is the first time that the seed beetles were mentioned in Latvian fauna) Three species (*Crioceris flavipes*, *Clythra quadrimaculata* and *Chrysomela violacea*) in the catalogue are not to determine for certain, but 6 species were mentioned twice with different names (in the modern taxonomy they are synonyms). The material that was in the K. Precht's collection is not remained.

In 1829 the citizen of Jelgava J. G. Fleischer has published a list of beetles of the local fauna (Fleischer 1829). In this list the author has mentioned 640 species, which to his mind were not ascertained in the fauna of the East Baltic. The leaf-beetles are there 55 species, two of them are not determined (*Chrysomela centaurei* F. and *Chrysomela ornata* Ahr.).

In the same year a catalogue of the Livland beetles was published (Gimmerthal 1829), where can find about 800 species of Coleoptera. As B. Gimmerthal lived in Rīga, can suppose, that his observations were made in Rīga district (Spuris 1981, 1983, 1984). Some names of the species are repeated or are difficult to determine. At the Zoological museum of Latvia University the B. Gimmerthal's collection is remained, that gives a possibility to prove and to clarify this information.

In the publications of fenological observations in Kurzeme (*Curland*) J. H. Kawall (1866, 1866a) has mentioned 10 and 9 species of the leaf-beetles.

At the end of the 19th century the G. Seidlitz's monograph about the fauna of Baltic beetles was published. It's important to know that Baltic States in that time were Estonia and Latvia (without Latgale). This monograph was published in two editions (Seidlitz 1872-1875, 1887-1891). In the monograph we can find keys for determination of families, genera and all species (including also potential species). Unfortunately the localities for species are rarely mentioned there. Sometimes there are directions to Kurzeme (*Curland*), Livland and Rīga or it is mentioned, that in Europe the species is distributed till Kurzeme or Estonia. That's why it is not possible to define the number of species for Latvia and Estonia exactly. For majority of species there is evaluation of occurence. In the second edition of the monograph (Seidlitz 1887-1891) 206 species of the leaf-beetles are described, but there are concrete localities (Curland, Rīga and other) only for 22 species in Latvia. Z. Spuris (1973) argue away the importance of the G. Seidlitz monograph as the basic work for the fauna of Latvian beetles.

In 1884 the article about the beetles of Poland Lifland was published (Ulanowsky 1884), Latgale (the eastern part of Latvia) belonged to this territory. Should mention, that these faunal data are very inexact and doubtful (Barsševskis 1993). In the lists of beetles families in Latvia published earlier they didn't take account of this publication (Spuris 1981, 1983, 1984, 1991; Barševskis 2003; Barševskis, Kalniņš, Cibuļskis 2005).

In this period two small faunal articles (Müthel 1886, 1889) were published, where can find data about eight species of the leaf-beetles.

At the beginning of the 20th century a list of Baltic beetles was published (Rathlef 1905), that was written according to the G. Seidlitz's monograph and other fauna publications of that time. In this list and the supplement (Rathlef 1921) 235 species of Chrysomelidae sensu lato are mentioned.

In the first half of the 20th century some faunal publications were published, where can find some data about the leaf-beetles. For Lielvārde L. Heyden (1903) mentions 19 species of the leaf-beetles. J. Mikutowicz and T. Lackschewitz in their series of publications (Mikutowicz 1905, 1911; Lackschewitz 1927, 1942; Lackschewitz, Mikutowicz 1939) reported 3, 2, 1, 1 and 6 new and rare species of the leaf-beetles, altogether 11 species. In his work L. Brammanis (1930) mentions 9 species of the leaf-beetles, but H. Lindberg (1932) mentions 21 species.

In the second half of the 20th century a lot of publications about the leaf-beetles appear in Latvia. You should pay special attention to V. Pūtele's work about Latvian flea beetles (Alticinae). She was occupied with studying of fauna and ecological aspects of flea beetles (Pūtele 1958, 1958a, 1959, 1968a, 1968b, 1970, 1970c, 1970d, 1971). She reviewed some genera of Alticinae of Latvian fauna: *Phylloterta* Foudr. (Pūtele 1960), *Longitarsus* Latr. (Pūtele 1965), *Psylliodes* Latr. (Pūtele 1968), *Chaetocnema* Steph. (Pūtele 1970a), *Aphthona* Chevr. (Pūtele 1970b), *Haltica* Foudr. and *Chalcoides* Steph. (Pūtele 1971a). V. Pūtele has mentioned more than 30 species for Latvia for the first time. However the records of some species mentioned for the local fauna are doubtful (*Aphthona nigriceps* Foudr., *Longitarsus symphyti* Heikertinger, *L. aeruginosus* (Foudr.), *L. echii* (Koch), *Ochrosis ventralis* (Ill.), *Chaetocnema tibialis* Ill., *Ch. breviuscula* (Fald.), *Ch. ībesa* (Boield.) and other). The revision of V. Pūtele's collection should be done.

V. F. Palij (1958) has made a review of flea beetles of Latvian fauna. In his publication 18 genera and 81 species of Alticinae are mentioned, he also gives host plants and general distribution for every species.

There are the information about largest families of the beetles of Latvian fauna in the books "Latvian animals" (*"Latvijas dzīvnieki"*) and "The world of Latvian animals" (*"Latvijas dzīvnieku pasaule"*). You can find also the common information about the leaf-beetles and seed beetles. There are mentioned 257 species of Chrysomelidae and 6 species of Bruchinae (Šmits, Spuris 1966) and about 270 species of Chrysomelidae and 6 species of Bruchinae (Spuris 1974) for the Latvian fauna.

The large number of publications are dedicated to the investigation of the leaf-beetles as pests of cultivated plants. Z. Čudare (1969) has studied the development cycle and has carried out histological investigations of the Colorado beetle *Leptinotarsa decemlineata* Say. There were investigations dedicated to the study how to fight against these dangerous agricultural pests (Pavasaris 1972). A number of monographs and articles were published, where can find some species of the leaf-beetles as pests (Peņģerots-Svešais 1927; Ozols 1948, 1963, 1973; Danka 1950; Eglītis 1954, 1956, 1956a; Smarods, Liepa 1956; Rupais 1959, 1999; Čakstiņa 1962; Priedītis 1971a, 1971b; Dūks 1976; Rupais, Kalniņa 1979; Ozols 1985).

A. Tomson (1939-1940, 1940) has studied the pests of sugar beet and has reported 14 species of the leaf-beetles. V. Pūtele has published data about pested leaf-beetles for tree cultures in the Slītere National Park (Putele 1984), about pested flea beetles for cereals (Pūtele 1975) and review of pested leaf-beetles of Latvian fauna (Pūtele 1982). The pests in the genus *Melasoma* Steph. (=*Chrysomela* L.) are described in the publication (Pūtele 1977).

The development cycles and the biology of some species of the leaf-beetles were described in the

special publications: *Galerucella tanaceti* L. (Ozols 1929), *Galerucella viburni* Pk. (Rupais 1962), *Lochmaea caprea* L. (Pūtele 1976), *Melasoma saliceti* Wse. (Pūtele 1976a), *Agelastica alni* L. (Pūtele 1977a).

While studing the leaf-beetles in the agrocenosis of the apple-tree (Priedītis, Pūtele 1976; Priedītis 1979), there were registered 38 species. V. Pūtele (1974) has established 153 species of the leaf-beetles in the environs of Jelgava, but no concrete localities for collecting these species were mentioned.

The special work about the leaf-beetles in Latvia was published by M. Stiprais (1977). There were mentioned new faunal data about 112 species.

The leaf-beetles are also mentioned in the series of publications about the investigation of beetles of different habitats or Latvian territories. While studing the main habitats of lakes, Z. Spuris (1953) has mentioned the leaf-beetles of genera *Macroplea* Sam. (1 species), *Donacia* F. (12 species), *Donaciella* Rtt. (3 species), *Prasocuris* Latr. (1 species) and *Galarucella* Crotch (3 species). There are faunal data about the leaf-beetles of the Slītere National Park in the 4 publications (Pūtele 1980, 1981, 1981a; Rutenberga 1992), more than 120 species are mentioned there in all.

We can found separate data about the leaf-beetles in some publications (Priedītis 1958; Danka, Stiprais 1972; Cinītis 1975; Stiprais, Varzinska 1985; Barševskis, Savenkovs 1991; Barševskis 1992, 1993a, 1997a; Barševskis, Spuriņš, Oga 1992; Petrova, Čudare, Šteinīte 2000; Barševskis *et al.* 2004; Petrova, Čudare, Cibuļskis 2006).

A. Barševskis (1988) has mentioned 64 species of the leaf-beetles, while studing the beetles of south-eastern Latvia (Daugavpils, Krāslava and Preiļi districts) in different habitats.

The monograph "The Beetles of Eastern Latvia" (Barševskis 1993) was published at the end of the 20st century. The author refers Latgale, Augšzeme and eastern part of Vidzeme to eastern Latvia. Besides the large amount of faunal data, there is also a review of history of investigations of beetles in eastern Latvia, detailed description of different collecting methods, the ecological review of habitats is made, there are morphological and systematical notes for some groups of beetles. There are 1836 species of beetles in the monograph in all and for every species the concrete localities and habitats are mentioned. According to the fauna this monograph is a valuable work. A. Barševskis has mentioned for eastern Latvia 4 species of Megalopodidae, 1 species of Orsodacnidae and 200 species of Chrysomelidae (including 5 species of Bruchinae). Three species, *Batophila fallax* Wse., *Crepidodera lamina* (Bedel) and *Dibolia timida* (Ill.), which were mentioned for Latvian fauna for the first time were made by misidentifications. We have deleted these species from the list of Latvian beetles (Bukejs 2008d).

In 1997 the first catalogue of Latvian Coleoptera was published (Telnov *et al.* 1997), where 334 species of the leaf-beetles Chrysomelidae sensu lato: Orsodacnidae – 1 species, Megalopodidae – 4 species and Chrysomelidae – 329 species (7 species from them are seed beetles Bruchinae).

In the second edition of the catalogue (Telnov 2004) the number of species of the leaf-beetles are larger – 338: Orsodacnidae - 1 species, Megalopodidae – 4 species and Chrysomelidae – 333 species (9 species from them are seed beetles Bruchinae).

There are 4 species of Megalopodidae, 1 species of Orsodacnidae and 150 species of Chrysomelidae (5 species from them are seed beetles Bruchinae) in the list of the beetles of the Silene Nature park (Barševskis *et al.* 2002). Additionally to this list 5 species of Chrysomelidae are mentioned (Barševskis *et al.* 2007).

A. Bukejs has established 2 species of seed beetles Bruchinae (Bukejs 2006), 1 species of Megalopodidae and 87 species of Chrysomelidae (Bukejs, Telnov 2007), while studing the fauna of

beetles of Naujene rural municipality (south-eastern Latvia).

In theses of different conferences can find some information about Latvian leaf-beetles (Princovs 2000; Valainis 2007; Bukejs 2008, 2008c).

A lot of authors mention some rare and/or new species of Latvian leaf-beetles and seed beetles in their publications (Šmits 1962; Barševskis, Savenkovs 1992; Barševskis 1996, 1997, 2001; Telnov 1996, 1997, 2001, 2002; Cinītis 1997; Leiskina 1999, 2000; Telnov, Kalniņš 2002; Telnov et al. 2005, 2006, 2007; Bukejs 2008a, 2008b).

Extensive faunal data about some subfamilies of the leaf-beetles are found in 2 recent publications. The faunal data about 19 species of Donaciinea Kirby are published in the article (Valainis *et al.* 2007). In the publication (Bukejs in press) new faunal data about 14 species from subfamilies Criocerinae Latr. and Clytrinae Kirby are presented.

In the last years a number of articles about review of some taxons of the leaf-beetles of Latvian fauna were published: Cryptocephalinae Gyll. (Bukejs, Barševskis, Valainis 2007), *Chaetocnema* Steph. (Bukejs 2008e), *Phyllotreta* Chevr. (Bukejs 2008f).

The author of this publication is studing the fauna, the taxonomy and the biogeography of the Latvian leaf-beetles at the moment.

In Latvian fauna four species of Megalopodidae, one species of Orsodacnidae and 333 species of Chrysomelidae (10 from them are Bruchinae) are known now. We are going to continue our study of the leaf-beetles.

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FAUNISTICAL RECORDS OF THE AQUATIC ADEPHAGOUS BEETLES (COLEOPTERA: DYTISCIFORMIA) IN LATVIA

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Bukejs A., Balalaikins M. 2008. Faunistical records of the aquatic adephagous beetles (Coleoptera: Dytisciformia) in Latvia. *Acta Biol. Univ. Daugavp., 8(2): 273 - 281.*

In the article the data about adephagous aquatic beetles (Dytisciformia) is presented, that was collected in the eastern part of Latvia (Balvi, Daugavpils, Jēkabpils, Ludza, Preiļi and Rēzekne districts) from 1999 to 2006. Material was collected using hydroentomological net, bottle-type traps and light traps and was collected in place of hibernation. As a result of our research 617 specimens that belong to 62 species and 22 genera of aquatic Adephaga were collected.

Key words: Coleoptera, Adephaga, Gyrinidae, Haliplidae, Noteridae, Dytiscidae, fauna, Latvia.

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INTRODUCTION

In the fauna of Latvia 144 species of aquatic beetle from suborder of Adephaga are known (Barševskis, Kalniņš, Cibuļskis 2005), that belong to four families: Gyrinidae (11 species), Haliplidae (15 species), Noteridae (2 species) and Dytiscidae (116 species).

In this article the data about adephagous aquatic beetles (Dytisciformia) is presented, that was collected in the eastern part of Latvia from 1999 to 2006. In administrative aspect this territory includes Daugavpils, Preiļi, Jēkabpils, Balvi, Rēzekne and Ludza districts. In last two decades the fauna of Coleoptera is learned intensively. Vast fauna data about beetles are published in Barševskis' monograph "The beetles of the Eastern Latvia" (1993). Specific compound of every administrative district is shown in a summarizing publication about beetles Adephaga in Latgale (Barševskis 1993, 1999). Analyzing the data of these publications, uneven distributing of amount of species in the districts is noticeable. Firstly it is linked with biodiversity of every district. In the Eastern part of Latvia the valley of the river Daugava (from the boarder with Byelorussia till Daugavpils) and arrays of bogs near the Lubāns lake are considered as unique and the most biologically variable. Secondly, evenness of studied of concrete territory influences on the established number of species. In the Eastern part of Latvia Ludza, Balvi and Jēkabpils districts are less studied. To these territories in our research is paid the most attention.

STUDY AREA AND METHODS

The material was collected since 1999 till 2006 in eastern part of Latvia: in Balvi, Daugavpils, Jēkabpils, Ludza, Preiļi and Rēzekne districts (Fig. 1). The various reservoirs were investigated.

Balvi district: Tilžas civil parish (lake Tilžas), Baltinavas civil parish (river Kūkovas, river Rītupe, lake Motrines, lake Obeļovas, Obeļovas water-pit, lake Svātūnes), Rugāju civil parish (river Vārniene).

Daugavpils district: Skrundalienas civil parish (lake Sitas, lake Bedušu, lake Silas, lake Riču, ditchs, small ponds and rivulets), Dvietes civil parish (small ponds).

Jēkabpils district: Dignājas civil parish (river Daugava, small ponds, ditchs and rivulets).

Ludza district: Salnava civil parish (Zatišķu water-pit, Salnava pond, river Rītupe, small ponds and ditchs), Kārsava (river Šņitka, school pond and small ponds), Cirsma civil parish (lake Cirsmas), Pušmucova civil parish (small ponds), Pureņu civil parish (lake Dukānu), Nukšu civil parish (lake Pildas), Malnavas civil parish (water-pit), Isnaudas civil parish (small ponds).

Preiļi district: Rušonas civil parish (lake Sekstu, lake Feimaņu, river Rušonīca, river Dubna).

Rēzekne district: Kaunata civil parish (lake Rāznas, lake Kaunatas), Gaigalava civil parish (river Aiviekste, river Rēzekne, lake Lubāns, Kvāpānu ponds), Nagļu civil parish (storage lake Nagļu and small ponds), Bērzgales civil parish (lake Micānu, lake Meiranu, lake Kapineits), Verēmu civil parish (lake Adamovas), Pušas civil parish (lake Rušons), Makoņkalna civil parish (lake Solojs), Rēzekne city (lake Kovšu).

Material was collected mainly using hydroentomological net. Other standard entomological methods also were used: bottle-type traps (volume 5 l), collecting flying beetles to light traps and collecting in place of hibernation.

The given data about aquatic adephagous beetles spreading in the eastern part of Latvia were compared with the published earlier data (Barševskis 1999; Barševskis, Kalniņš, Cibuļskis 2005; Barševskis et al. 2002; Cibuļskis 2002; Kalniņš 1999, 2003).

The systematics of adephagous aquatic beetles (Dytisciformia), which applied in monograph

Fig. 1. Location of research area: B – Balvi district, D – Daugavpils district, J – Jēkabpils district, L – Ludza district, P – Preiļi district, R – Rēzekne district.

(Barševskis, Kalniņš, Cibuļskis 2005), is used in this article.

The majority of the investigated material is stored in the collection of Institute of Systematic Biology Daugavpils University (DUBC). Some single specimens are kept in the private collection of Andris Bukejs (Daugavpils, Latvia).

RESULTS

As a result of our research 617 specimens that belong to 62 species (43,1% from all Dytisciformia known in Latvia) and 22 genera (75,9%)of aquatic Adephaga were collected: Gyrinidae – 7 species (63 specimens), Haliplidae - 5 species (17 specimens), Noteridae – 2 species (21 specimens) and Dytiscidae – 48 species (534 specimens).

In the species list after the species name general number of specimens in brackets [ ], the place where it was found and the collecting date are indicated, in the brackets ( ) are indicated the number of collected specimens, information about habitat and collector's name. When "leg." was not given for the species it means that the species was collected by Maksims Balalaikins.

Further abbreviations used: distr. – district, civ.p. – civil parish, env. – environ.

LIST OF SPECIES

Adephaga Schellenberg, 1806

Gyrinidae Latreille, 1810

1. *Gyrinus opacus* Sahlberg, 1819 – [1 ex.]: Jēkabpils distr., Dignājas civ. p., 12.X.2003 (1, forest, ditch).

2. *Gyrinus aeratus* Stephens, 1835 – [16 exx.]: Preiļi distr., Rušonas civ. p., 14.VIII.2004 (3, river Rušonīca); Ludza distr., Bļaši, 07.VIII.2004 (1, pond), 06.IX.2003 (8, river Rītupe), 06.IX.2003 (1, small pond), 06.IX.2003 (1, ditch); Ludza distr., Zatišķi, 21.IX.2003 (1, water-pit); Balvi distr., Baltinavas civ. p., 21.IX.2003 (1, river Kūkovas).

3. *Gyrinus pullatus* Zaitzev, 1908 – [11 exx.]: Ludza distr., Bļaši, 11.XI.1999 (3, ditch), 04.XI.2000 (1, ditch), 06.VII.2001 (5, river Rītupe); Ludza distr., Zatišķi, 21.IX.2003 (1, water-pit); Ludza distr., Pušmucovas civ. p., 22.VII.2004 (1, pond).

4. *Gyrinus marinus* Gyllenhal, 1808 – [2 exx.]: Ludza distr., Bļaši, 15.VII.1999 (1, pond); Balvi distr., Baltinavas civ. p., 21.IX.2003 (1, lake Obeļovas).

5. *Gyrinus natator* (Linnaeus, 1758) – [16 exx.]: Ludza distr., Kārsava, 15.III.2000 (2, river Šņitka); Ludza distr., Bļaši, 15.VII.1999 (1, ditch), 15.VIII.1999 (1, pond), 20.V.2000 (1, ditch), 04.XI.2000 (1, ditch), 06.VII.2001 (1, river Rītupe), 06.IX.2003 (1, ditch), 27.IX.2003 (1, ditch); Ludza distr., Pušmucovas civ. p., 21.VII.2004 (1, pond); Balvi distr., Rugāju civ. p., 05.IX.2002 (1, river Vārniene); Rēzekne distr., Kaunatas civ. p., 29.VIII.2001 (1, lake Rāznas); Jēkabpils distr., Dignājas civ. p., 22.VI.2000 (1, forest, pool), 12.X.2003 (1, forest, ditch); Daugavpils distr., Silene Nature Park, Ilgas, 16.VI.1999 (2, pond).

6. *Gyrinus substriatus* Stephens, 1828 – [10 exx.]: Ludza distr., Kārsava, 15.III.2000 (2, lake Šņitka); Ludza distr., Bļaši, 11.VIII.2001 (3, pool), 06.IX.2003 (1, river Rītupe); Rēzekne distr., Kaunatas civ. p., 29.VIII.2001 (2, lake Rāznas); Jēkabpils distr., Dignāja 22.VI.2000 (1, forest, pool); Daugavpils distr., Silene Nature Park, Ilgas, 16.VI.1999 (1, pond).

7. *Gyrinus paykulli* Ochs, 1927 – [7 exx.]: Balvi distr., Tilžas civ. p., 05.IX.2003 (1, river Tilžas); Ludza distr., Bļaši, 06.VII.2001 (1, river Rītupe); Rēzekne distr., Kaunatas civ. p., 29.VIII.2001 (1, lake Rāznas); Rēzekne distr., Mākoņkalna civ. p., 10.IX.2004 (2, lake Solojs); Rēzekne distr., Bērzgales civ. p., 10.IX.2003 (1, lake Meirānu); Jēkabpils distr., Dignājas civ. p., 22.VIII.2003 (1, pond).

Haliplidae Aube, 1836

8. *Haliplus fulvus* (Fabricius, 1801) – [8 exx.]: Rēzekne distr., Kaunatas civ. p., 29.VIII.2001 (5, lake Rāznas); Rēzekne distr., Rēzekne city, 13.IX.2003 (1, lake Kovšu); Ludza distr., Zatišķi, 29.VIII.2002 (1, water-pit); Ludza distr., Bļaši, 04.X.1999 (1, pond).

9. *Haliplus variegatus* Sturm, 1834 – [1 ex.]: Ludza distr., Bļaši, 04.X.1999 (1, pond).

10. *Haliplus confinis* Stephens, 1829 – [1 ex.]: Daugavpils distr., Silene Nature Park, 16.VII.2006 (1, lake Riču, sandy bank, leg. A. Bukejs & M. Balalaikins).

11. *Haliplus fulvicollis* Erichson, 1837 – [1 ex.]: Ludza distr., Bļaši, 29.X.2000 (1, pond).

12. *Haliplus lineolatus* Mannerheim, 1844 – [6 exx.]: Ludza distr., Bļaši, 15.VII.1999 (3, pond); Ludza distr., Zatišķi, 29.VIII.2002 (3, water-pit).

Noteridae Aube, 1836

13. *Noterus clavicornis* (De Geer, 1774) – [1 ex.]: Preiļi distr., Rušonas civ. p., 07.VIII.2004 (1, lake Feimaņu).

14. *Noterus crassicornis* (Müller, 1776) – [20 exx.]: Rēzekne distr., Kaunatas civ. p., 29.VIII.2001 (1, lake Rāznas); Rēzeknes distr., Kaunatas civ. p., 28.VIII.2004 (1, lake Kaunatas); Rēzekne distr., Bērzgales civ. p., 10.IX.2003 (1, lake Micānu), 10.IX.2003 (1, lake Meirānu); Ludza distr., Bļaši, 04.X.1999 (1, pond), 11.VIII.2001 (1, puddle), 07.IX.2003 (1, moist meadow); Ludza distr., Kārsava, 25.VIII.2000 (1, school pond); Daugavpils distr., Dviete, 05.IX.2003 (10, pond); Balvi distr., Baltinavas civ. p., 21.IX.2003 (2, lake Motrīnes).

Dytiscidae Leach, 1815

15. *Copelatus haemorrhoidalis* (Fabricius, 1787) – [1 ex.]: Ludza distr., Bļaši, 06.V.2001 (1, pond).

16. *Laccophilus hyalinus* (De Geer, 1774) – [37 exx.]: Rēzekne distr., Kaunatas civ. p., 29.VIII.2001 (4, lake Rāznas); Ludza distr., Kārsava, 19.VIII.2001 (1, school pond); Ludza distr., Salnavas civ. p., 07.X.2000 (1, forest, pond); Ludza distr., Bļaši, 04.X.1999 (2, pond), 23.IV.2000 (2, light trap), 26.VIII.2000 (1, forest, puddle), 06.IX.2003 (1, river Rītupe), 07.IX.2003 (1, moist meadow); Balvi distr., Tilžas civ. p., 05.IX.2002 (1, river Tilžas), 05.IX.2002 (3, river Raicene); Balvi distr., Baltinavas civ. p., 21.IX.2003 (1, lake Motrīnes); Jēkabpils distr., Dignājas civ. p., 06.IX.2003 (10, river Daugava), 11.X.2003 (6, river Daugava); Preiļi distr., Līvāni, 07.IX.2003 (2, river Dubna).

17. *Laccophilus minutus* (Linnaeus, 1758) – [5 exx.]: Balvi distr., Tilžas civ. p., 05.IX.2002 (1, river Raicene); Ludza distr., Bļaši, 15.VII.1999 (2, pond), 07.IX.2003 (1, ditch); Ludza distr., Isnaudas civ. p., 21.VII.2004 (1, pond).

18. *Hydroglyphus geminus* (Fabricius, 1787) =*pusillus* (Fabricius, 1781) – [2 exx.]: Ludza distr., Bļaši, 22.X.2000 (1, ditch), 29.X.2000 (1, pond).

19. *Hygrotus inaequalis* (Fabricius, 1777) – [5 exx.]: Rēzekne distr., Bērzgales civ. p., 10.IX.2003 (1, lake Micānu); Rēzekne distr., Kaunatas civ. p., 28.VIII.2004 (1, lake Kaunatas); Ludza distr., Bļaši, 06.IX.2003 (1, ditch); Ludza distr., Isnaudas civ. p., 21.07.2004 (1, pond); Balvi distr., Baltinavas civ. p., 21.IX.2003 (1, lake Motrīnes).

20. *Hygrotus versicolor* (Schaller, 1783) – [2 exx.]: Balvi distr., Tilžas civ. p., 05.IX.2002 (1, river Tilžas); Jēkabpils distr., Dignājas civ. p., 11.X.2003. (1, river Daugava).

21. *Hygrotus impressopunctatus impressopunctatus* (Schall, 1783) – [16 exx.]: Ludza distr., Bļaši, 15.VII.1999 (1, pond), 15.VII.2001 (2, puddle in forest), 06.IX.2003 (5, ditch), 07.IX.2003. (4, moist meadow), 07.VIII.2004 (3, pond), 07.IX.2004 (1, river Rītupe).

22. *Hyphydrus ovatus* (Linnaeus, 1761) – [16 exx.]: Ludza distr., Bļaši, 15.VII.1999 (1, pond), 15.VIII.1999 (2), 01.IX.2001 (3, ditch), 06.IX.2003 (2, ditch), 06.IX.2003 (3, river Rītupe); Ludza distr., Zatiški, 21.IX.2003 (1, water-pit); Balvi distr., Lūbenka, 29.VIII.2002 (1, pond); Balvi distr., Baltinavas civ. p., 21.IX.2003 (1, lake Motrīnes); Rēzekne distr., Bērzgales civ. p., 10.IX.2003 (1, lake Micānu); Rēzekne city, 13.IX.2003 (1, lake Kovšu).

23. *Hydroporus nigrita* (Fabricius, 1792) – [6 exx.]: Ludzas distr., Bļaši, 26.VIII.2000 (1, puddle in forest), 07.X.2000 (1, pond in fores), 15.VII.2001 (1, puddle on meadow), 07.VIII.2004 (1, pond); Ludza distr., Rogi, 31.VIII.2003 (1, puddle in forest); Ludza distr., Kārsava, 25.VIII.2000 (1, school pond).

24. *Hydroporus planus* (Fabricius, 1781). – [7 exx.]: Ludza distr., Bļaši, 04.X.1999 (1, pond), 26.VIII.2000 (2, puddle in forest), 29.X.2000 (2, pond), 29.IV.2001 (1, moist meadow); Ludza distr., Rogi, 31.VIII.2003 (1, puddle in forest).

25. *Hydroporus obscurus* Sturm, 1835 – [8 exx.]: Ludza distr., Kārsava, 25.VIII.2000 (2, school pond); Ludza distr., Bļaši, 26.VIII.2000 (3, puddle in forest), 07.X.2000 (3, pond in forest).

26. *Hydroporus melanarius* Sturm, 1835 – [6 exx.]: Ludza distr., Bļaši, 04.X.1999 (1, pond), 26.VIII.2000 (3, puddle in forest), 11.VIII.2001 (1, puddle); Jēkabpils distr., Dignāja, 22.VI.2000 (1, puddle in forest).

27. *Hydroporus tristis* (Paykull, 1798) – [1 ex.]: Ludza distr., Bļaši, 06.IX.2003 (1, ditch).

28. *Hydroporus umbrosus* (Gyllenhal, 1808) – [1 ex.]: Ludza distr., Bļaši, 06.IX.2003 (1, ditch).

29. *Hydroporus palustris* (Linnaeus, 1761) – [40 exx.]: Ludza distr., Bļaši, 15.VII.1999 (4, pond), 23.IV.2000 (1, light trap), 20.V.2000 (2, ditch), 26.VIII.2000 (7, puddle in forest), 07.X.2000 (3, pond in forest), 11.VIII.2001 (5, puddle), 29.IV.2001 (1, moist meadow), 06.V.2001 (2, pond), 01.IX.2001 (3, ditch), 07.VIII.2004 (1, pond); Ludza distr., Pureņu civ. p., 08.VII.2004 (1, lake Dūkanu); Ludza distr., Isnaudas civ. p., 21.VII.2004 (1, pond); Ludza distr., Kārsava, 15.III.2000 (2, river Šņitka), 25.VIII.2000 (2, school pond); Jēkabpils distr., Dignāja, 22.VI.2000 (3, puddle in forest); Daugavpils distr., Silene Nature Park, Ilgas, 16.VI.1999 (2, pond).

30. *Porhydrus lineatus* (Fabicius, 1775) – [36 exx.]: Ludza distr., Kārsava, 19.VIII.2001 (2, school pond); Ludza distr., Zatišķi, 29.VIII.2002 (4, water-pit); Ludza distr., Bļaši, 15.VII.1999 (1, pond), 04.X.1999 (1, pond), 11.XI.1999 (1, ditch), 20.V.2000 (3, ditch), 26.VIII.2000 (1, puddle in forest), 29.X.2000 (3, pond), 29.IV.2001 (4, moist meadow), 01.IX.2001 (1, ditch), 06.IX.2003 (10, ditch), 06.IX.2003 (3, river Rītupe); Daugavpils distr., Silene Nature Park, Ilgas, 16.VI.1999 (1, pond); Rēzekne distr., Rēzekne city, 13.IX.2003 (1, lake Kovšu).

31. *Suphrodytes dorsalis* (Fabricius, 1787) – [8 exx.]: Ludza distr., Bļaši, 11.XI.1999 (1, ditch), 20.V.2000 (2, ditch), 15.VII.2001 (3, puddle on meadow), 06.IX.2003 (1, ditch); Jēkabpils distr., Dignājas civ. p., 06.IX.2003 (1, river Daugava).

32. *Scarodytes halensis* (Fabricius, 1787) – [1 ex.]: Ludza distr., Bļaši, 11.VIII.2001 (1, puddle).

33. *Nebrioporus assimilis* (Paykull, 1798) – [1 ex.]: Ludza distr., Bļaši, 15.VII.1999 (1, pond).

34. *Nebrioporus depressus* (Fabricius, 1775) – [1 ex.]: Daugavpils distr., Silene Nature Park, 06.VII.2006 (1, lake Riču, sandy bank, leg. A. Bukejs & M. Balalaikins).

35. *Platambus maculatus* (Linnaeus, 1758) – [19 exx.]: Ludza distr., Bļaši, 15.VII.1999 (3, pond), 22.X.2000 (1, ditch), 29.X.2000 (1, pond), 25.VII.2001 (2, river Rītupe), 07.VIII.2004 (1, pond); Rēzekne distr.,

Kaunatas civ. p., 29.VIII.2001 (6, lake Rāznas); Rēzekne distr., Nagļu civ. p., 31.VIII.2004 (3, storage lake Nagļi); Rēzekne distr., Pušas civ. p., Kirkiliški env., 22.VI.2006 (1, lake Rušons, leg. A. Bukejs & M. Balalaikins); Balvi distr., Tilžas civ. p., 05.IX.2002 (1, river Tilžas); Balvi distr., Baltinavas civ. p., 21.IX.2003 (1, lake Motrīnes).

36. *Agabus paludosus* (Fabricius, 1801) – [23 exx.]: Ludza distr., Kārsava, 15.III.2000 (3, river Šņitka); Ludza distr., Bļaši, 15.VII.1999 (1, pond), 04.X.1999 (6, pond), 22.X.2000 (4, ditch), 04.XI.2000 (1, ditch), 25.VII.2001 (1, river Rītupe), 06.IX.2003 (1, ditch); Ludzas distr., Salnavas civ. p., 07.X.2000 (1, pond in forest); Jēkabpils distr., Dignāja, 22.VI.2000 (2, puddle in forest); Jēkabpils distr., Dignājas civ. p., 06.IX.2004 (3, pond); Rēzekne distr., Nagļi, 31.VIII.2004. (1, storage lake Nagļi).

37. *Agabus bipustulatus* (Linnaeus, 1767) – [5 exx.]: Jēkabpils distr., Dignājas civ. p., 12.X.2003 (1, ditch in forest), 06.IX.2004 (1, pond); Ludza distr., Bļaši, 27.IX.2003 (1,ditch), Ludza distr., Isnaudas civ. p., 21.VII.2004 (1, pond); Rēzekne distr., Nagļu civ. p., 31.VIII.2004 (3, storage lake Nagļi).

38. *Agabus congener* (Thunberg, 1794) – [11 exx.]: Ludza distr., Bļaši, 22.X.2000 (6, ditch), 15.VII.2001 (1, puddle on meadow), 06.IX.2003 (1, ditch); Rēzekne distr., Nagļi, 31.VIII.2004 (1, storage lake Nagļi).

39. *Agabus undulatus* (Schrank, 1776) – [3 exx.]: Jēkabpils distr., Dignāja, 22.VI.2000 (1, puddle in forest); Ludza distr., Bļaši, 15.VIII.1999 (1, pond); Daugavpils distr., Silene Nature park, Ilgas, 16.VI.1999 (1, pond); Balvi distr., Baltinavas civ. p., 21.IX.2003 (1, lake Motrīnes).

40. *Ilybius subaeneus* Erichson, 1837 – [4 exx.]: Ludza distr., Bļaši, 22.X.2000 (1, ditch), 04.XI.2000 (1, ditch), 29.IV.2001 (1, moist meadow); Rēzekne distr., Kaunatas civ. p., 29.VIII.2001 (1, lake Rāznas).

41. *Ilybius ater* (De Geer, 1774) – [25 exx.]: Ludza distr., Bļaši, 15.VII.1999 (3, pond), 29.X.2000 (1, pond), 25.VII.2001 (1, river Rītupe), 11.VIII.2001 (1, puddle), 01.IX.2001 (1, ditch), 06.IX.2003 (3, ditch), 07.09.2003 (2, moist meadow), 07.VIII.2004 (3, pond); Ludza distr., Isnaudas civ. p., 21.VII.2004 (2, pond); Ludza distr., Pureņu civ. p., 08.VII.2004 (1, lake Dūkanu); Ludza distr., Ņukšu civ. p., 08.VII.2004 (1, lake Pildas); Daugavpils distr., Silene Nature Park, Ilgas, 16.VI.1999 (2, pond); Daugavpils distr., Dviete, 05.IX.2003 (2, pond); Jēkabpils distr., Dignājas civ. p., 22.VIII.2003 (1, pond); Preiļi distr., Rušonas civ. p., 07.VIII.2004 (1, lake Feimaņu); Rēzekne distr., Verēmu civ. p., 31.VIII.2004 (1, lake Adamovas).

42. *Ilybius fuliginosus* (Fabricius, 1792) – [32 exx.]: Ludza distr., Bļaši, 15.VII.1999 (7, pond), 04.X.1999 (1, pond), 29.IV.2001 (3, moist meadow), 07.VIII.2004 (1, pond), 07.IX.2004 (2, river Rītupe); Ludza distr., Pureņu civ. p., 08.VII.2004 (1, lake Dūkanu); Rēzekne distr., Pušas civ. p., Kirkiliški env., 22.VI.2006 (1, lake Rušonas, sandy bank, leg. A. Bukejs & M. Balalaikins); Jēkabpils distr., Dignāja, 22.VI.2001 (1, river Daugava), 06.IX.2004 (8, pond); Balvi distr., Tilžas civ. p., 05.IX.2002 (4, river Tilžas), 05.IX.2002 (2, river Raicene); Daugavpils distr., Silene Nature Park, Ilgas, 16.VI.1999 (2, pond).

43. *Ilybius fenestratus* (Fabricius, 1781) – [4 exx.]: Ludza distr., Zatišķi, 29.VIII.2002 (1, water-pit); Ludza distr., Pureņu civ. p., 08.VII.2004 (1, lake Dūkanu); Rēzekne distr., Bērzgales civ. p., 10.IX.2003 (1, lake Micānu), 10.IX.2003 (1, lake Meirānu); Rēzekne distr., Verēmu civ. p., 31.VIII.2004 (1, lake Adamovas).

44. *Rhantus grapii* (Gyllenhal, 1808) – [4 exx.]: Balvi distr., Lūbenka, 29.VIII.2002 (1, pond); Ludza distr., Bļaši, 29.IV.2001 (1, moist meadow), 06.V.2001 (1, pond); Ludza distr., Isnaudas civ. p., 21.07.2004 (1, pond).

45. *Rhantus frontalis* (Marsham, 1802) – [8 exx.]: Ludza distr., Bļaši, 15.VII.1999 (3, pond),

06.VII.2001 (1, river Rītupe), 06.IX.2003 (1, ditch), 07.IX.2003 (3, moist meadow); Ludza distr., Zatišķi, 29.VIII.2002 (2, water-pit).

46. *Rhantus notaticollis* (Aube, 1837) – [7 exx.]: Ludza distr., Bļaši, 29.IV.2001 (1, moist meadow), 01.IX.2001 (2, ditch); Ludza distr., Kārsava, 15.VII.1999 (1, pond), 22.IV.2000 (1, puddle); Jēkabpils distr., Dignājas civ. p., 06.IX.2003 (2, pond).

47. *Rhantus exsoletus* (Forster, 1771) – [14 exx.]: Ludza distr., Bļaši, 15.VII.1999 (1, pond), 20.V.2000 (2, ditch), 06.V.2001 (2, pond), 06.IX.2003 (2, ditch), 07.IX.2003 (1, moist meadow); Daugavpils distr., Silene Nature Park, Ilgas, 16.VI.1999 (1, pond); Jēkabpils distr., Dignājas civ. p., 06.IX.2003 (3, river Daugava); Balvi distr., Baltinavas civ. p., 21.IX.2003 (1, lake Motrīnes).

48. *Rhantus latitans* Scharp, 1882 – [9 exx.]: Ludzas distr., Bļaši, 15.VII.1999 (3, pond), 20.V.2000 (1, ditch), 15.V.2003 (1, pond); Jēkabpils distr., Dignājas civ. p., 06.IX.2003 (3, river Daugava); Rēzekne distr., Bērzgales civ. p., 10.IX.2003 (1, lake Micānu).

49. *Colymbetes fuscus* (Linnaeus, 1758) – [2 exx.]: Ludza distr., Salnava, 29.VIII.2002 (1, pond); Ludza distr., Bļaši, 15.VII.1999 (1, pond); Jēkabpils distr., Dignājas civ. p., 06.IX.2004 (1, pond).

50. *Colymbetes paykulli* Erichson, 1837 – [9 exx.]: Ludza distr., Bļaši, 15.VII.1999 (1, pond), 11.XI.1999 (2, diych), 29.04.2001 (1, moist meadow), 01.IX.2001 (1, ditch), 27.IX.2003 (1, ditch); Ludza distr., Salnavas civ. p., 07.X.2000 (1, pool in forest); Jēkabpils distr., Dignājas civ. p., 20.VII.2003 (1, pond), 06.IX.2004 (1, pond).

51. *Colymbetes striatus* (Linnaeus, 1758) – [10 exx.]: Ludza distr., Kārsava, 25.VIII.2000 (1, school pond); Ludza distr., Bļaši, 15.VIII.1999 (1, pond), 02.IV.2000 (2, pond), 29.X.2000 (2, pond), 27.IX.2003 (2, ditch); Ludza distr., Grebņeva, 29.VIII.2002 (1, water-pit); Balvi distr., Balvi, 05.IX.2002 (1, pond).

52. *Hydaticus seminiger* (De Geer, 1774) – [13 exx.]: Ludza distr., Zatišķi, 29.VIII.2002 (1, water-pit); Ludza distr., Bļaši, 15.VI.1999 (2, pond), 15.VIII.1999 (2, pond), 22.IV.2000 (1, pond), 06.IX.2003 (5, ditch); Jēkabpils distr., Dignājas civ. p., 17.VII.2003 (1, pond), 12.X.2003 (1, pool in forest).

53. *Hydaticus transversalis transversalis* (Pontoppidan, 1763) – [8 exx.]: Ludza distr., Zatišķi, 29.VIII.2002 (2, water-pit); Ludza distr., Bļaši, 06.IX.2003 (5, ditch), 06.IX.2003 (1, river Rītupe).

54. *Hydaticus continentalis* Balfour-Browne, 1944 – [3 exx.]: Daugavpils distr., Silene Nature Park, Ilgas, 16.VI.1999 (3, pond); Ludza distr., Bļaši, 07.IX.2003 (1, wet meadow).

55. *Graphoderus zonatus zonatus* (Hoppe, 1795) – [3 exx.]: Daugavpils distr., Silene Nature Park, Ilgas, 16.VI.1999 (3, pond); Preiļi distr., Rušonas civ. p., 14.VIII.2004 (1, lake Sekstu).

56. *Acilius sulcatus* (Linnaeus, 1758) – [17 exx.]: Ludza distr., Zatišķi, 29.VIII.2002 (1, water-pit); Ludza distr., Bļaši, 15.VII.1999 (4, pond), 07.IX.2003 (1, pond); Daugavpils distr., Silenes Nature Park, Ilgas, VI.1999 (1, leg. A. Bukejs), 16.VI.1999 (4, pond); Daugavpils distr., Dviete, 05.IX.2003 (1, pond); Jēkabpils distr., Dignājas civ. p., 06.IX.2004 (3, pond); Balvi distr., Baltinavas civ. p., 21.IX.2003 (2, lake Svātūnes).

57. *Acilius canaliculatus* (Nicolai, 1822) – [52 exx.]: Ludza distr., Bļaši, 15.VII.1999 (3, pond), 11.XI.1999 (3, ditch), 11.VIII.2001.(2, puddle), 06.IX.2003 (5, river Rītupe), 06.IX.2003 (4, ditch), 07.IX.2003 (1, ditch); Ludza distr., Rogi, 31.VIII.2003 (5, puddle in forest); Ludza distr., Zatišķi, 29.VIII.2002 (1, water-pit), 21.IX.2003 (1, water-pit); Ludza distr., Kārsava, 22.IV.2000 (4, puddle), 25.VIII.2000 (1, school pond); Ludza distr., Isnaudas civ. p., 21.VII.2004 (1, pond); Balvi distr., Balvi, 05.IX.2002 (1, pond); Balvi distr., Lūbenka, 29.VIII.2002 (2, pond); Balvi distr., Baltinavas

civ. p., 21.IX.2003 (3, lake Obeļovas), 21.IX.2003 (1, river Kūkovas), 21.IX.2003 (2, lake Motrīnes); Daugavpils distr., Silene Nature Park, Ilgas, 16.VI.1999 (1, pond); Daugavpils distr., Dviete, 05.IX.2003 (1, pond); Rēzekne distr., Bērzgales civ. p., 10.IX.2003 (2, lake Micānu); Rēzekne distr., Rēzekne, 13.IX.2003 (3, lake Kovšu); Jēkabpils distr., Dignājas civ. p., 22.VIII.2003 (1, pond), 06.IX.2004 (3, pond); Preiļi distr., Rušonas civ. p., 07.VIII.2004 (1, lake Feimaņu).

58. *Dytiscus latissimus* Linnaeus, 1758 – [1 ex.]: Daugavpils distr., Silene Nature Park, Ilgas, 16.VI.1999 (1, lake Bedušu). About this record was informed earlier (Barševskis 2001). Protected species in Latvia.

59. *Dytiscus dimidiatus* Bergsträsser, 1778 – [3 exx.]: Ludza distr., Bļaši, 15.VII.1999 (1, pond), 01.IX.2001 (1, ditch); Rēzekne distr., Nagļi, 31.VIII.2004 (1, storage lake Nagļi).

60. *Dytiscus marginalis marginalis* Linnaeus, 1758 – [21 exx.]: Balvi distr., Rugāju civ. p., 05.IX.2002 (1, river Vārniene); Balvi distr., Baltinavas civ. p., 21.IX.2003 (1, lake Obeļovas), 21.IX.2003 (1, Obeļovas water-pit); Ludza distr., Kārsava, 25.VIII.2000 (1, school pond); Ludza distr., Bļaši, 15.VII.1999 (7, pond), 29.IV.2001 (1, moist meadow), 06.IX.2003 (1, river Rītupe), 06.IX.2003 (2, ditch), 06.IX.2003 (1, pond); Ludza distr., Zatišķi, 29.VIII.2002 (1, water-pit); Ludza distr., Pureņu civ. p., 08.VII.2004 (1, lake Dūkanu); Ludza distr., Isnaudas civ. p., 21.07.2004 (1, pond); Daugavpils distr., Silene Nature Park, Ilgas, 16.VI.1999 (1, pond); Jēkabpils distr., Dignājas civ. p., 06.IX.2003 (1, river Daugava).

61. *Dytiscus circumcintcus* Ahrens, 1811 – [16 exx.]: Daugavpils distr., Silene Nature Park, Ilgas, 16.VI.1999 (3, pond), 16.VI.2000 (1, pond), VI.1999 (1, leg. A. Bukejs); Ludza distr., Bļaši, 15.VII.1999 (5, pond), 29.IV.2001 (2, moist meadow); Ludza distr., Zatišķi, 29.VIII.2002 (1, water-pit); Ludza distr., Isnaudas civ. p., 21.VII.2004 (1, pond); Jēkabpils distr., Dignāja, 29.IV.2003 (1, in flight); Rēzekne distr., Rēzekne, 15.IV.2005 (1, in flight).

62. *Cybister lateralimarginalis* (De Geer, 1774) – [8 exx.]: Ludza distr., Bļaši, 26.VIII.2000 (1, water-pit), 29.IX.2001 (1, water-pit); Ludza distr., Zaltiški, 19.IX.2002 (1, Zatišku water-pit); Daugavpils distr., Silene Nature Park, Ilgas, 16.VI.1999 (2, lake Bedušu); Preiļi distr., Rušonas civ. p., 14.VIII.2004 (1, river Rušonīca); Rēzekne distr., Bērzgales civ. p., 10.IX.2003 (1, lake Meirānu); Balvi distr., Baltinavas civ. p., 21.IX.2003 (1, lake Obeļovas), 21.IX.2003 (1, lake Motrīnes). In Silene Nature Park (Daugavpils distr.) species *Haliplus confinis* Stephens, 1829 was indicated firstly.

63. *Hydroporus palustris* (Linnaeus, 1761), *Ilybius ater* (De Geer, 1774), *Ilybius fuliginosus* (Fabricius, 1792) (the species that are typical as for standing water as for flowing water), *Acilius sulcatus* (Linnaeus, 1758) and *Acilius canaliculatus* (Nicolai, 1822) (typical for standing water) are noticed as the most widespread and often occurred species from Dytisciformia in the Eastern Latvia.

The records published in the article will complete the information on Coleoptera species distribution in Latvia.

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OEDEMERA SUBROBUSTA (NAKANE, 1954) (COLEOPTERA: OEDEMERIDAE) – NEW SPECIES FOR BALTIC FAUNA

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Barševskis A. 2008. *Oedemera subrobusta* (Nakane, 1954) (Coleoptera: Oedemeridae) – new species for Baltic fauna. *Acta Biol. Univ. Daugavp., 8 (2): 283 - 286.*

In the article information about founding of new Oedemeridae species for the fauna of the Baltic States (Latvia, Lithuania, Estonia) – *Oedemera subrobusta* (Nakane, 1954) has been given.The mentioned species is very similar to *Oe. lurida lurida* (Marsham, 1802), which wide-distributed in the Baltic Region. In the article determination key for both species are given.

Key words. Coleoptera, Oedemeridae, *Oedemera subrobusta*, fauna, Baltic.

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INTRODUCTION

Family Oedemeridae (Hexapoda: Coleoptera) is represented by 15 species in the Baltic States, 12 species have been known from Estonia, 13 species – from Latvia and 14 species – from Lithuania. Just a little bit smaller amount of species has been detected also in the Nordic Countries: in Finland – 9 species, in Russian Karelia – 9 species, in Norway – 11 species, in Denmark – 11 species, but in Sweden the biggest number – 18 species (Silfverberg 2004) have been found. According to data of H.Silfverberg (2004) altogether 21 species represent this family in the Baltic States and Northern Europe.

During determination of Oedemeridae material in the collection of Daugavpils University Institute of Systematic Biology (DUBC) new Oedemeridae species for the Baltic States – *Oedemera subrobusta* (Nakane, 1954) was determined. In this article information about distribution of this species in the Baltic States has been gathered and the diagnostic features have been given. The mentioned species is very similar to *Oe. lurida lurida* (Marsham, 1802), which is wide-spread in the Baltic Region. In the article determination keys for both species have been given.

MATERIALS AND METHODS

In the result of researches 58 *Oedemera subrobusta* (Nakane) specimens were detected in the Baltic States, they are kept in the collection of Daugavpils University Institute of Systematic Biology (DUBC).

Every beetle's specimen was determined basically according to the peculiarities of genitalia structure. For the determination of the species determination keys included in the monograph of X.A.Vazquez (2002) were used. Motorized stereo microscope Zeiss Stereo Discovery V12 was used for doing researches. For taking and processing of pictures of the

material photo camera Axiocam and AxioVision Rel. 4.4 software were used.

In provision of data about species findings the labels' data were used, they include information about place of collecting, date, collector's name, but in special cases about habitat. Number of collected males (M) and females (F) was detected separately and in the list of findings it has been indicated in brackets () before the surname of the collector. All findings were grouped for each Baltic State according to administrative districts.

Arc Gis9 software was used for elaboration of the map of species' distribution (Fig. 1).

RESULTS AND DISCUSSION

In the result of researches 58 *Oe. subrobusta* (Nakane) specimens were determined, they have been collected in all three Baltic States: Latvia (55 specimens), Lithuania (2 specimens), Estonia (1 specimen). The number of specimens collected in Latvia is bigger, because the major part of DUBC material has been collected in Latvia. Currently there is not enough information if this species is equally distributed in all three Baltic States or is it less frequent in any of them. In Latvia *Oe. subrobusta* (Nakane) can be found much rarely than the very similar *Oe.lurida lurida* (Marsh.). in the determined material in DUBC 366 specimens of both species were detected, 312 of them were *Oe. lurida lurida* (Marsh.), which is very wide-spread in all Baltic States. The author failed in finding disparities in biology and ecology of both species in Baltic. It has been observed that *Oe. subrobusta* (Nakane) can be found in Latvia in wetter habitats than *Oe. lurida lurida* (Marsh). In several findings in Latvia both species were found together. There are very few data about distribution of the species in Lithuania and Estonia, so it is not sufficient to make conclusions about distribution, and ecology of this species.

In the following researches it is very important to identify precisely both species. *Oe. subrobusta* (Nakane) male is shown in figure 2, but female in figure 3, however *Oe. lurida lurida* (Marsh) male is shown in figure 4, but female – in picture 5.

The following determination key (Vazquez 2002) is offered for determination of the species:

1 (2) Hooks of penis close to rounded apex (fig. 6). Pronotum more transverse (fig. 8). The elytral pubescence shorter 5.5 – 9.5 mm..... ..... *Oe. subrobusta* (Nakane)

2 (1) Hooks of penis remote from knob-like apex (fig. 7). Pronotum slightly longer (fig. 9). The elytral pubescence somewhat longer. 5.0 – 8.0 mm..... *Oe.lurida lurida* (Marsh.)

Oe. subrobusta (Nakane, 1954) has been founded in the following findings in the Baltic States:

Fig. 1. Distribution map of *Oe. subrobusta* (Nakane) in Baltic States.

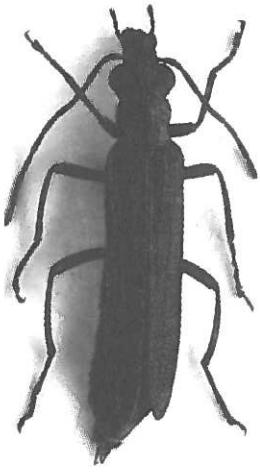

Fig. 2. *Oe. subrobusta* (Nakane) male

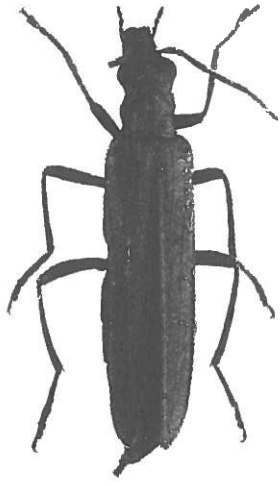

Fig. 3. *Oe. subrobusta* (Nakane) female

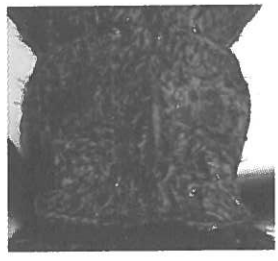

Fig. 8. *Oe. subrobusta* (Nakane) pronotum

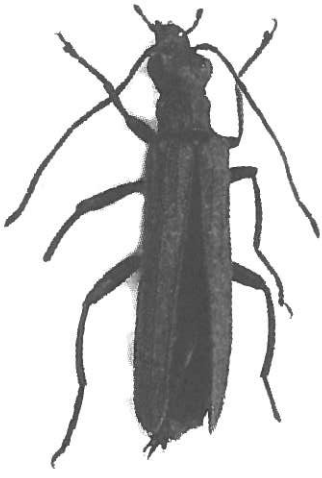

Fig. 4. *Oe. lurida lurida* (Marsh) male

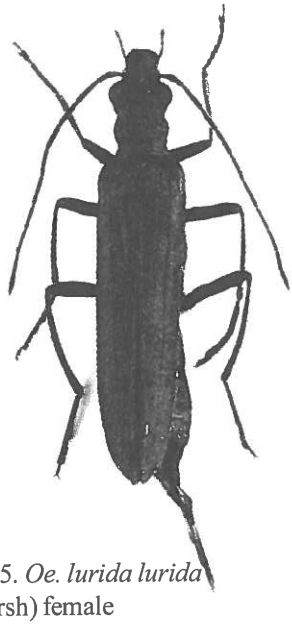

Fig. 5. *Oe. lurida lurida* (Marsh) female

Fig. 9. *Oe. lurida lurida* (Marsh) pronotum

Fig. 6. *Oe. subrobusta* (Nakane) male genitalia (apex of aedeagus & paramera)

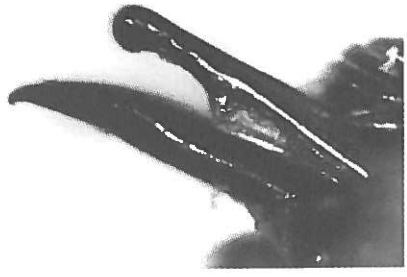

Fig. 7. *Oe. lurida lurida* (Marsh), male genitalia (apex of aedeagus & paramera)

LITHUANIA – Rokišķis Distr.: Obeļai, forest edge, 30.07.2008. (2M, A.Barševskis leg.). **LATVIA** – Aizkraukle Distr.: Aizkraukle bog, Nature protection area „Aizkraukles purvs", 01.07.2008., (2M, A.Pankjāns leg.), Valle, 12.08.2008., (2M,6F, A.Barševskis leg.); Daugavpils Distr.: Dubna, „Lielie Stradišķi", 08.07.2006., (2M, 3F, A.Pankjāns leg.), Šedere, "Straumēni", 29.07.2007., (4M, 6F, M.Murd leg.); Jēkabpils Distr.: Dunava, 03.06.2007., (1M, A.Barševskis leg.), 10.-19.06.2007., (1M, K.Barševska leg.); Kuldīga Distr.: Alsunga, Augšužava Nature protection area, 28.08.2005., (8M, 6F, A.Barševskis, A.Bukejs, U.Valainis leg.) Madona Distr.: Ērgļi, old forest clearing, 19.07.2008., (4M, 5F, A.Barševskis leg.), Sauleskalns, 07.07.2006., (1M, A.Pankjāns, E.Rudāns, A.Barševskis leg.); Preiļi Distr.: Jersika, „Kurpnieki", 23.-24.06.2008. (2M, A.Barševskis leg.); Ventspils Distr.: Muižnieki, 29.07.2005., (1M, 1F, A.Barševskis, A.Bukejs, U.Valainis leg.). **ESTONIA** – Tartu Distr.: Nina, VIII. 1997., (1M, A.Barševskis leg.)

Oe. subrobusta (Nakane) is widely spread in the Eastern Palaearctic from Japan even till some countires of Western Europe. In Europe it has been found already in Armenia, Georgia, European part of Russia, Poland, Czech Republic, Slovakia, Hungary, Romania, Switzerlanbd, France and Sweden (Löbl, Smetana (eds.) 2008, Höjer 2008). This species was not known in the Baltic States up to now (Silfverberg, 2004).

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THE INFLUENCE OF *DENDROLIMUS PINI* L. OUTBREAK ON THE SURROUNDING STANDS AND FOREST LITTER ENTOMOFAUNA

Artūras Gedminas, Algimantas Žiogas

Gedminas A., Žiogas A. 2008. The influence of *Dendrolimus pini* L. outbreak on the surrounding stands and forest litter entomofauna. *Acta Biol. Univ. Daugavp., 8(2): 287 - 296.*

Litter arthropods were trapped by pitfall traps in outbreaks of *Dendrolimus pini* L. in 1998-2000 y. Further from the D. pini outbreak centre, the state of pine trees is better according to crown defoliation, amount of dry branches, fruiting, age of needles, crown discoloration, general sanitary condition. Beetles were the most abundant in the litter of the stand of outbreak, 62% of all collected Arthropods in 1998, 79% in 1999 and 74% in 2000. The dominating species of beetles was *Carabus arcensis* Hbst., which comprised 81,3% (in 2000) of all collected beetles. Forest litter insects (in 1999) included: entomophagous (91%), phytophagous (4%) and coprophagous (4%). Saprophagous, necrophagous and representatives of other groups did not exceed 1% of all collected Arthropods. Increased indices of insect species diversity (D), species evenness (E) and biocoenose diversity (H) as well as reduced domination indices (Ł and d) of insect species show, that in the strongly affected zone biocoenose is changing towards regeneration and stability.

Key words: *Dendrolimus pini*, outbreak, tree condition, entomofauna

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INTRODUCTION

Insect are one of the most threa Hreatling agents in the forest of Lithuania. Insect damage was recorded on 83,4% of all damaged forest area in 1996-2000, while game animal damage made 9,3%, abiotic factors and fires –5,4%, forest diseases – 1,9% (Anonymous 1995, 1996).

Defoliating insects prevail in pine forests, and climate conditions often favors pest outbreaks. Some of recent pests, such as *Panolis flammea* Schiff., *Diprion pini* L., *Lymantria monacha* L. have been recorded earlier, but *Dendrolimus pini* L. infestations in Lithuania for the first time occurred only in 1993. Therefore life history and ecology of this species in Lithuania is known only generally, and the adverse impacts on forest ecosystem and other insects actually has not heen studied. *Dendrolimus pini* L. infested 10800 ha of pine forests in Dzukija National park, Varena and Druskininkai forest enterprises in 1994, outbreak expanded to 28 thou. ha in 1995 and decreased to 3,5 thou. ha in 1996 (Anonymous 1996). Outbreak finally ceased in 1997, after application of chemical and biological pesticides.

Damage of defoliating insects, including *Dendrolimus pini* L. can hardly be evaluated. Decline of photosynthesis in crowns reduce tree growth. In the case of D. pini within 5 years the loss makes about 8m³/ha (Gedminas 2003; Gedminas et al. 2004). Ecological conditions in the forest change, stande-preferring species are substituted by light preferring ones. Sunlight easily gets through a crown (due to the loss of needles), soil and litter worm up more quickly, influencing changes in grass cover. Precipitation, reaching the soil, increases. Needles, consumed by pest fertilizes forest soils. Investigation in the North east Germany of ability of pines to recover after heavy needle loss greater than 80% coused by defoliation leads to heavy pine dieback in the year of the defolation (Moeller et at 1998). Obviously all changes have impact on the abundance and species composition of forest litter insects.

Our earlier studies have shown that entomophagous insects comprise the greatest part (92%) of pine stand litter entomocomplex (Gedminas, Žiogas 1998). They are the main agents controlling insect (including pests) abundance in forest biocenoses.

The study was aimed to investigate forest litter insect complex (species composition and abundance) changes in the *D. pini* L. outbreak area and in the surrounding stands. Secondary objective was to determine impact of management (clearing the deteriorated stand) to insects in adjacent stands.

MATERIAL AND METHODS

To evaluate forest litter insect changes 12 observation plots were established within *Dendrolimus pini* L. outbreak and area and in nearby stands. In 1997 they were placed at a distance of 30 m from each other, gradually moving away from the area of clear sanitary cuttings (1996) in the centre of the outbreak (fig. 1). Two groups, each consisting of 4 pitfall traps, were inserted into the soil in each plot at the distance of 20 m (fig. 1). Barber's traps are 0,2 l capacity plastic containers inserted into the soil in the way, that their upper edge is on the same level as the surface of the litter. Total 96 traps were established. One third of each trap was filled with 15% formaline. Insects from the traps were collected each month since the middle of May (5 surveys every year).

In each observation plot model pine trees (24 in each plot, 288 totally) were selected, and all of them were evaluated using forest monitoring methodicology (Ozolincius, Stakenas 1997). In 1997-1999 the following tree parameters were evaluated: species, diameter, Craft's class, top condition (0-healthy, 1-broken, 2-dry, 3-damaged), amount of dry branches (0-less than 10%, 1-11-30%, 2-31-50%, 3-more than 50%), age of needles, fruiting (0-absent, 1-small, 2-average, 3-great), crown defoliation and additionally – the category of tree sanitary condition (Voroncov, Mozolevskaja, Sokolova 1991).

Collected insects were identified in the laboratory of Lithuanian Forest Research Institute and Plant Protection Department at Lithuanian University of Agriculture using manuals (Chinery 1986; Iljinskij 1962; Plavilscikov 1957) as well as collections of insects.

Observation plots were established in *Pinetum vacciniosum* forest type, black 207 of Marcinkoniai forest district of Dzukija National Park, where in 1994-1996 occurred the outbreak of pine. The total area – 20,9 ha, in site ¹ 17 –0,4 ha, in site ¹ 18 – 2,5 ha of stands. In 1996 an area of 2,9 ha was felled by clear sanitary cuttings.

RESULTS

Observations allowed to divide the stands surrounding the outbreak, into 3 zones: strongly affected stand – 60 m distance from the outbreak edge (cutting area), slightly affected (60-150 m) and undamaged control stand (over 150 m). Assessment of trees in the plots according to a series of indices showed, that moving closer to the centre of *Dendrolimus pini* L. outbreak, sanitary condition becomes worse. The main

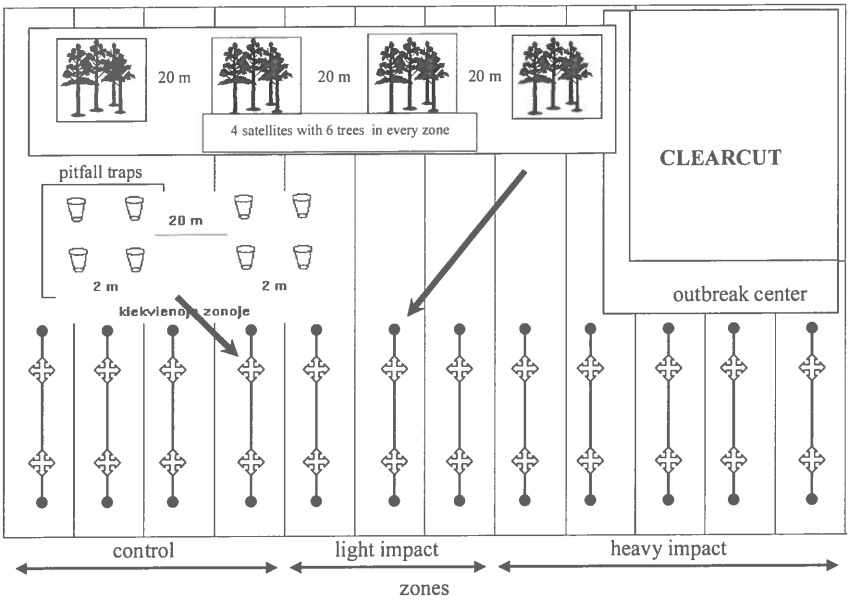

Fig.1. Experiment plot design

parameters, best reflecting changes in the trees state, were as follows: crown defoliation degree, category of sanitary condition, amount of dry branches. These parameters decline approaching the centre of the outbreak (fig. 2).

Approaching, the outbreak crown defoliation degree in 1997 increased by 22%, the amount of dry branches by 18%, while the category of tree sanitary condition became worse by 0,8 points. Other tree parameters became worse as well. Moving closer to the outbreak, average age of pine needles and fruiting decreased, while crown discoloration increased. The state of tops and Craft's class remained unchanged.

In 1998 crown defoliation in the outbreak centre increased by 30%, the amount of dry branches increased by 2 categories, the category of sanitary condition worsened by 2,5 points. In 1999 defoliation degree remained the same, while the category of sanitary condition and the amount of dry branches increased by 1 point (table 1).

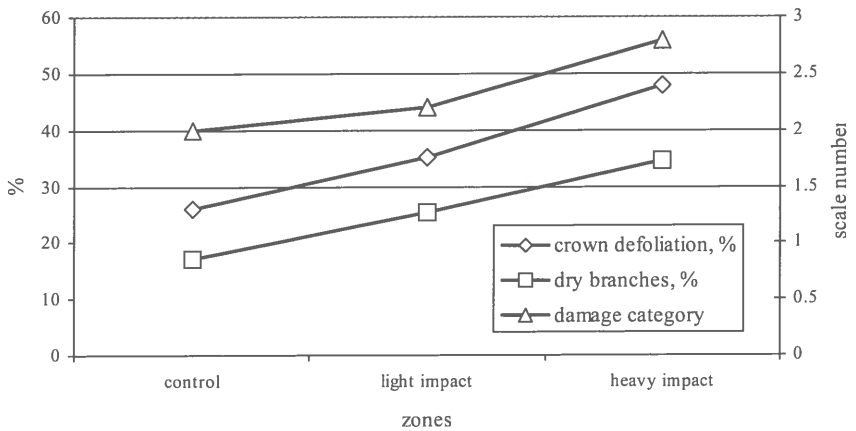

Fig. 2. Pine parameters in different zones (Marcinkonys forestry, 1997)

Table 1. Pine parameters in Dendrolimus pini L. outbreak zones 1998-99 (Marcinkonys forestry)

Tree parameters		Impact zones						Sgnificance of difference [x]
		control		light		heavy		
Sanitary state category	1998	1,9±0,07	*	2,1±0,08	n	2,4±0,07	*	***
	1999	1,7±0,08		2,3±0,15		3,0±0,26		
Defoliation of upper crown, %	1998	23,2±1,19	***	29,2±1,93	n	38,8±2,05	n	***
	1999	19,4±0,99		27,7±1,93		41,4±1,96		
Crown defoliation, %	1998	29,2±1,26	*	33,4±1,71	n	42,7±2,08	*	***
	1999	25,9±1,50		35,3±2,1		47,8±2,03		

x – Sgnificance of difference by Student criterion t: *p>0.90, ** p>0.95, *** p>0.99, n – unreliable

Assessment of tree state in 1998-1999 revealed that the state of pine trees in the control stand has even improved. The category of tree sanitary condition decreased by 0,2 points, crown defoliation decreased by 4% (table 1). At that time the condition of slightly affected stands remained stable, while that of strongly affected became worse. The category of tree sanitary condition increased by 0,6 points, defoliation of the whole crown increased by 5%. The decline of the state of pines was influenced by a slow regeneration of trees in the zone of strong defoliation damage.

Composition of forest litter entomofauna in stands surrounding the outbreak

During the surveys in 1998 – 21 thou. in 1999 over 24 thou. and in 2000- 18 thou. of Arthropod, belonging to *Insecta*, *Arachnida* and *Myriapoda* classes were collected and specified. Among the collected Arthropoda were representatives of 9 orders of insects. 157 species of insects were detected in the litter of pine forest. The most abundant was the class of Insecta. On average 78,4% of collected Arthropoda (in 1998-71,5%, in

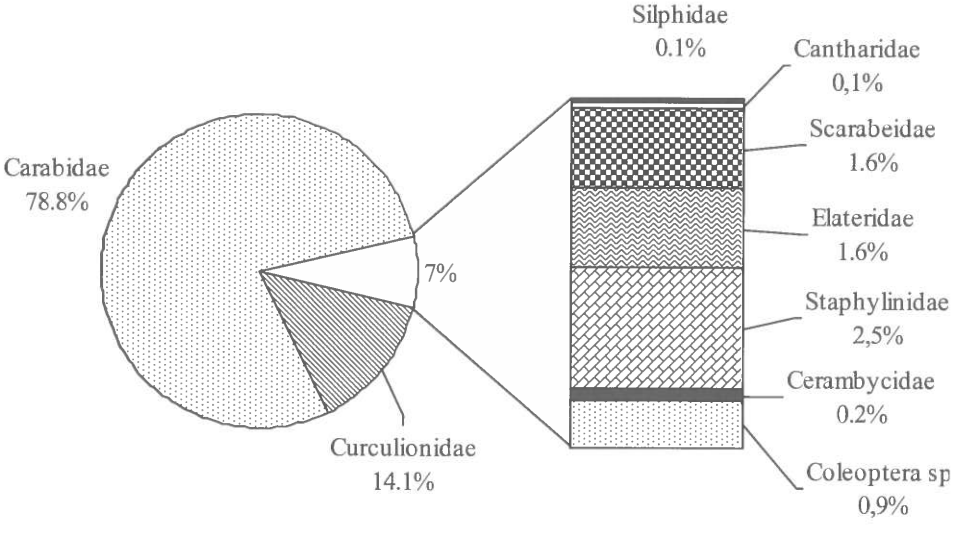

Fig. 3. Distribution of forest litter beetles

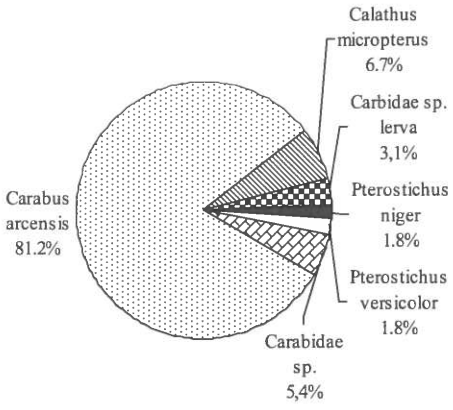

Fig. 4. Dominant species of Carabid beetles

The list of dominating beetles includes representatives of 7 other families, representatives of 3 families, *Elateridae*, *Curculionidae* and *Cerambycidae* preferably are phytophagous.

Entomofauna collected in the outbreak of pine was separated according to tropic dependence. Most of the insects were entomophagous (91%), others were phytophagous (4%) and coprophagous (4%). Saprophagous, necrophagous and representatives of other tropic groups made up to 1% of all collected Arthropoda (fig. 5). This proves once more, that the litter is the host of the great number of entomophagous insects, having a crucial importance on regulatory processes in forest ecosystems.

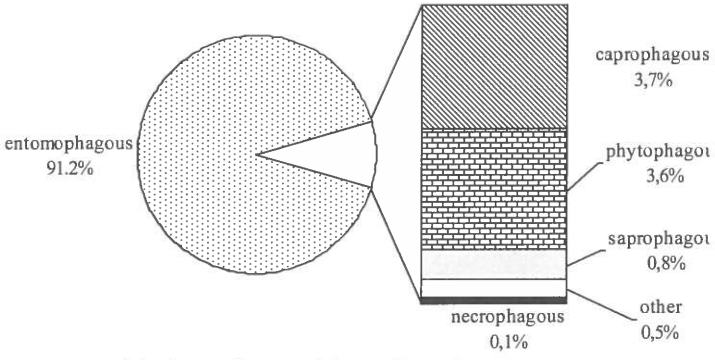

Fig. 5. Trophic dependancy of forest litter insects

Approaching the centre of the outbreak, abundance of entomophagous decreased by 8% (1999), and coprophagous by 23%. Most coprophagous insects are shade-preferring species, therefore they are less

1999-82,7% and in 2000-81,1%) belong to it. In the second place according to abundance was the spiders order, representatives of which comprised respectively 28%, 16% and 19% of collected Arthropod specimen.

Among insects dominating in the forest litter the most numerous was *Coleoptera* order. They comprised 62-79% of all collected insects. *Carabidae* and *Curculionidae* families were the most numerous (fig. 3). Representatives of species belonging to them comprised about 93% of all collected insects. *Carabus arcensis* Hbst. from *Carabidae* family dominated among the insects. It comprised the greater half (even up to 81,3% in 2000) of beetles collected in the surveys (fig. 4).

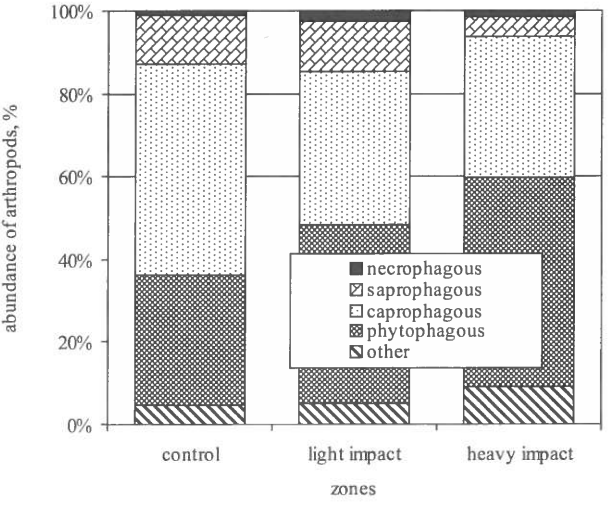

Fig. 6. Distribution of Arthropods by trophic groups in different zones

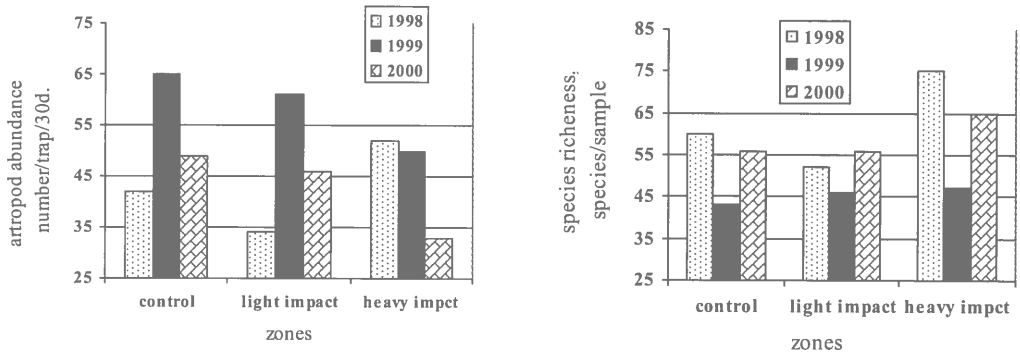

Fig. 7. Dynamics of arthropod abundance and species richeness by zones

Table 3. Comparison of forest insect species and ecosystem indexes

Indexis	1998			1999			2000		
	zones								
	control	light impact	heavy impact	control	light impact	heavy impact	control	light impact	heavy impact
	1	2	3	1	2	3	1	2	3
Number of insects	42,4 ±4,4	34,4 ±4,8	52,4 ±5,8	65,3 ±9,6	60,7 ±9,3	50,2 ±7,7	48,8 ±5,8	46,1 ±5,7	33,4 ±3,6
Significance (1-2, 2-3)	n		***	n		n	n		*
Significance (1-3)		n			n			**	
Number of species in a sample	60	52	75	44	46	47	56	56	65
Dominance index (Λ)	0,2	0,22	0,24	0,32	0,29	0,37	0,35	0,28	0,21
Dominance index (d)	0,36	0,36	0,44	0,53	0,49	0,58	0,55	0,49	0,36
Diversity index (H)	1,04	0,94	0,97	0,86	0,84	0,87	1,06	1,13	1,17
Eveness index (E)	0,52	0,47	0,48	0,43	0,42	0,44	0,53	0,57	0,59
Diversity index (D)	1,81	1,31	2,31	0,68	0,71	0,74	0,87	0,87	1,01

Stjudent criterion **t**: *p>0.90, ** p>0.95, *** p>0.99, n – unreliable

frequent in thinner stands (table 2). Meanwhile, the amount of phytophagous increases by 8%. The litter under thinner crown received more light (in strongly defoliated zone), which led to a better growth of grass cover. This provided favourable conditions for the existence of phytophagous insects. The amount of saprophagous decreased even by 34% approaching the epicentre of the outbreak (fig. 6).

The abundance of *Hylobius abietis* L., most often observed in coniferous plantations, is increasing approaching the outbreak epicentre. Its abundance in the clearcut area was minimal in 2000, because the areas was 4 years old and not attracted this species. In the surveys of 1998 the abundance of *Hylobius abietis* L. in the epicentre outbreak was significantly higher – 183 specimens/survey compared to numbers in 1999 (44 specimens survey).

Comparing the abundance of entomophagous, phytophagous and saprophagous insects during the season (1999), it is obvious, that the abundance was far lower in autumn than in spring. This difference for entomophagous comprised 100 individuals, 3 for phytophagous and 1 for saprophagous per trap over 30 days. The abundance of coprophagous species increased in August-September.

Dynamics of entomofauna abundance and diversity in the litter of outbreak and surrounding stands

Most insects from the litter of the outbreak and surrounding stands were collected (1999) in June. On average 100±2,1 insects were caught per trap over 30 days. Least number of insects was trapped in September (20±2,0). Seasonal curves of the abundance of insects at a varying distance from the outbreak epicentre are of the same shape. This shows, that seasonal dynamic of insect abundance in the litter in pest damaged stand remain the same as in the control. Insects collected in June (110 species) and July (100 species) of 1999 represented the greatest number of species.

Approaching the outbreak centre abundance of Arthropod was reliably decreasing only in the surveys of 2000. In 1999 differences in the abundance of Arthropod in the zones were not significant, while in 1998 in the strongly affected zone their amount was significantly. This was related to the appearance of a new cleared area (in 1997) and new ecological niches. The number of insect species, contrary to their abundance, increases getting closer to the outbreak epicentre. It was best revealed in 1998 and corresponded to the general increment of the number of Arthropoda in that year (fig. 7).

During the 4 years of study a specific (for the zones) variation in the abundance of Arthropods could be observed in each damage zone. In the control and slightly affected zones a significant difference in the amount of Arthropods was recorded between 1998 and 1999 (in 1999 the amount of collected Arthropods was almost twice higher). The number of Arthropoda in 1999, on the contrary, proportionally decreased (fig. 8). The abundance of Arthropods in the strongly affected zone (which was the highest in 1998) in the next year (1999) significantly decreased to 33±3,6 individuals per trap over 30 days. This proves once again, that a new environment, different from other zones, started forming within a forest devastated by insect pest.

DISCUSSION

Dendrolimus pini is expected to couse significant direct environmental effects, such as extensive ecological disruption or large scale reduction on biodiversity.

Biodiversity now it is studied proceeding from three reasons. In the first, it is fashionable, as diversity is an essential theme of discussion on ecology . Well proved models from the last century which discraibed changes of diversity in time and in space are actual and to this day. In the second, biodiversity frequently it is perceived as parameter of well – being ecosystems. And in the third, among scientific workers there are not common opinion what a plenty of indexes, methods and models it is necessary to use at studying diversity various organisms. In studying entomocomplexes most usage Shanon

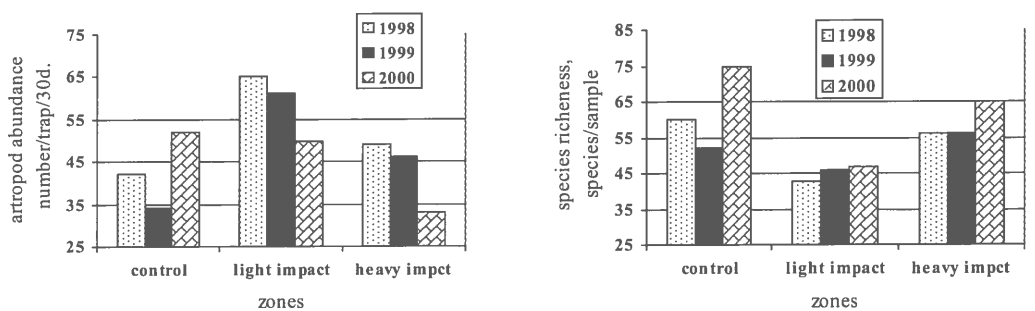

Fig. 8. Dynamics of arthropod abundance and species richeness by years

Table 2. Distribution of litter insects by trophic groups (1997-2000)

Dominant species	Abundance of dominants (%)				Abundance of dominants (%), in different zones			
	control	light impact	heavy impact	general	control	light impact	heavy impact	general
Entomophagous								
Carabus arcensis	58,5	54,2	64,9	58,8	36,6	32,1	31,2	100,0
Arachnida	19,0	17,8	17,0	18,0	38,8	34,5	26,7	100,0
Calathus micropterus	8,5	13,2	3,2	8,6	36,2	53,2	10,6	100,0
Pterostichus versicolor	0,2	1,7	8,1	3,0	2,2	20,3	77,5	100,0
Myrmica rubra	2,8	3,5	1,3	2,6	39,2	46,7	14,1	100,0
Other	11,0	9,7	5,4	9,0	45,2	37,7	17,1	100,0
Total	100,0	100,0	100,0	100,0	36,8	34,9	28,3	100,0
Phytophagous								
Strophosomus capitatus	36,2	72,0	70,5	60,4	18,4	37,0	44,6	100,0
Hylobius abietis	39,5	12,6	11,9	20,6	58,9	19,0	22,1	100,0
Serica brunea	11,2	0,0	0,3	3,6	97,1	0,0	2,9	100,0
Other	12,9	15,4	17,3	15,4	25,8	31,1	43,1	100,0
Total	100,0	100,0	100,0	100,0	30,7	31,0	38,3	100,0
Coprophagous								
Geotrupes stercorosus	94,3	75,4	66,6	82,2	54,5	25,6	19,9	100,0
Geotrupes vernalis	5,7	24,6	33,1	17,7	15,2	38,8	46,0	100,0
Other	0,0	0,0	0,0	0,0	0,0	0,0	0,0	0,0
Total	100,0	100,0	100,0	100,0	47,5	27,9	24,6	100,0
Necrophagous								
Necrophorus vespillo	17,7	42,6	51,7	37,6	13,5	53,8	32,7	100,0
Necrophorus vespilloides	62,1	35,5	17,2	38,7	45,8	43,6	10,6	100,0
Other	17,7	21,3	25,9	21,4	23,7	47,4	28,8	100,0
Total	100,0	100,0	100,0	100,0	28,5	48,4	23,1	100,0
Saprophagous								
Ectobius sylvestris	95,5	86,1	48,5	85,3	54,0	37,9	8,1	100,0
Forficula tomis	0,0	10,1	40,4	9,6	0,0	39,7	60,3	100,0
Other	3,9	3,4	10,8	4,7	40,4	26,9	32,7	100,0
Total	100,0	100,0	100,0	100,0	48,2	37,5	14,3	100,0
Other trophic groups								
Other					24,0	14,0	62,0	100,0
Subtotal					**37,1**	**34,5**	**28,4**	100,0

– Viener's, Simpson's and Berger – Parker's indexes though earlier they were strongly criticized now are. To choose what indexes a common option are not present, as it depends on the available data and natural conditions. As precisely the index corresponds to concrete conditions most easy to check up having calculated few indexes (not one) and having compared them among themselves (Magurran 1988). Indexes of diversity including parameters of number of species and parameters of species evenness refer to non parametric (Southwood 1978) one of such indexes – Shanon – Viener's index H which range from 0 – small diversity of species up to $l_n(S)$ – big diversity.

The ratio of Shanon's and maximal diversity indexes can be considered as the parameter of

species evenness (E). Him limits from 0 up to 1. When numerous of species are the same E =1. Diversity of Arthropods inhabiting forest litter was assessed in the zones of the stand damaged three years in succession. A series of ecological indices were calculated: H – Shanon-Viener's diversity index, E – Pielau's species evenness index, D – species diversity index (according to Mechin), Simpson's (Ł) and Berger-Parker's (d) indices of species domination. In differently affected zones the Shenon-Viener's diversity index (H) shows, that, approaching the outbreak epicentre biocoenose is changing in the run of years. In 1998 the index was higher in the control zone than in the zones damaged by pest. In 1999 the index (H) became almost equal in all zones, while in 2000 the index in zones damage by the pest exceeded biocoenose diversity index of the control zone. Similar results were also received with Pielou's species evenness index (E). The higher is the index (E), the more evenly are distributed the species of Arthropoda in different surveys.

By means of an Shanon's index in the Hungary was established that diversity of ground beetles authentically more on a edge of a forest than in a wood. (Magura et al. 2001). In Mexico the index has shown that the diversity of ants in uninjured woods of pine and oak is more than in damaged (Flores – Mallonado et al. 1999). In Brasil distinction of diversity of Scarabaeidae on the forest (H = 2,44) and in pasture (H = 1,75) was fixe (Medri, Lopes 2001). Howerer, in Spain it is marked that in concrete cases the Shanon's index not quite suitable and by that the critical point of view to this index proves to be true (Gurea et al. 2000).

The higher species diversity index (D), the greater is the stability and resistance of an ecosystem against mass infestations of the pest. The highest D (over all three study years) was in the strongly affected zone, showing that a damaged biocoenose is trying to regenerate as quickly as possible, to avoid a repeated invasion of the pest. Besides, it turned out, that the highest D was in 1998, just after the appearance of a clear cutting area. This proves, that the year was also the onset of the most extensive immigration of new species into the study areas. Diversity index in the strongly affected zone was 3.1 times higher in 1998 than in 1999 and 2.3 times higher than in 2000 (table 3).

It is underlined that there are difficulty with biological interpretation of Shanon – Viener's index (Magurran 1988). Therefore Simpson's index more informative (May 1975; Peetę 1974; Rout ledge 1979). The Berger-Parker index indipends from number of species but it very much influences quantity of samples. This index is one of most suitable (May 1975).

Species domination indices (Ł and d) were similar, however, there is a tendency, that with years these indices will be increasing in the control and in slightly affected zones. In the strongly affected zone the index of species domination (d) increased only in 1999, while in the following year it decreased by 1.6 times. Approaching the outbreak centre, species domination index (d) starts decreasing only in 2000, while in 1998 and 1999 it was similar in all studied zones affected by defoliator *Dendrolimus pini* L.

CONCLUSIONS

Further from the pine lappet outbreak centre, the state of pine trees is better according to crown defoliation, amount of dry branches, fruiting, age of needles, crown discoloration, general sanitary condition.

Beetles were the most abundant in the litter of the stand of pine lappet outbreak, 62% of all collected Arthropods in 1998, 79% in 1999 and 74% in 2000.

The dominating species of beetles was *Carabus arcensis* Hbst., which comprised 81,3% (in 2000) of all collected beetles.

Forest litter insects (in 1999) included: entomophagous (91%), phytophagous (4%) and coprophagous (4%). Saprophagous, necrophagous and representatives of other

groups did not exceed 1% of all collected Arthropods.

Increased indices of insect species diversity (D), species evenness (E) and biocoenose diversity (H) as well as reduced domination indices (Ł and d) of insect species show, that in the strongly affected zone biocoenose is changing towards regeneration and stability.

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