

UDC 595.2:549.892.1 (477)

TOPONYMS AND ETHNONYMS IN THE NAMES OF ROVNO AMBER ANIMALS AND PLANTS

E. E. Perkovsky

Schmalhausen Institute of Zoology, NAS of Ukraine,
vul. B. Khmelnytskogo, 15, Kyiv, 01030 Ukraine
E-mail: perkovsk@gmail.com

Toponyms and Ethnonyms in the Names of Rovno Amber Animals and Plants. Perkovsky E. E. — Out of 49 names of genera described from Rovno amber, 10 names (20.4 %) are related to Ukrainian toponyms. One way or another, 15.7 % of names out of 217 animal species described from Rovno amber and 67 % out of 6 described plant species are related to Ukrainian toponyms and ethnonyms. Today, only 8 out of 217 species described from Rovno amber, are known from Baltic amber. The ratio between Ukrainian and Baltic toponyms in the names of Rovno representatives of any given family directly depends both on the degree of exploration of a family in the corresponding faunas and floras, and on the degree of a family's link with the ecosystem of the amber forest itself. Ant *Formica paleopolonica* Dlussky is recorded for Rovno amber for the first time.

Key words: Rovno amber, Baltic amber, Late Eocene, endemics, arthropods, Bryophyta, inclusion, toponym, ethnonym, Ukraine, Russia, France, Lebanon, New Jersey.

Топонимы и этнонимы в названиях животных и растений из ровенского янтаря Перковский Е. Э. — Из 49 названий таксонов родового ранга, описанных из ровенского янтаря, с украинскими топонимами связано 10 (20,4 %). Так или иначе с украинскими топонимами и этнонимами связаны названия 15,7 % из 217 описанных из ровенского янтаря видов животных и 67 % из 6 описанных видов растений. На сегодняшний день лишь 8 из 217 видов, описанных из ровенского янтаря, известны из балтийского янтаря. Соотношение украинских и балтийских топонимов в названиях ровенских представителей того или иного семейства прямо связано как со степенью изученности семейства в соответствующих фаунах и флорах, так и с тем, насколько семейство связано с экосистемой самого янтарного леса. Муравей *Formica paleopolonica* Dlussky впервые указан для ровенского янтаря.

Ключевые слова: ровенский янтарь, балтийский янтарь, поздний эоцен, эндемики, артроподы, мхи, включения, топонимы, этнонимы, Украина, Россия, Франция, Ливан, Нью-Джерси.

Derivatives from toponyms and ethnonyms are very common in the names of animals and plants from different fossil resins. For example, 36 generic and 24 species names of animals from Early Cretaceous Lebanese amber (Azar et al., 2010; Grimaldi, Engel, 2009), included in 58 (35.6 % out of total 163) binomens (Arnold et al., 2002; Azar et al., 2010; Grimaldi, Engel, 2009) are etymologically derived from Lebanese toponyms or Phoenician theonyms and ethnonyms. Out of 104 names of animals, recorded from Late Cretaceous New Jersey amber (Grimaldi, Nascimbene, 2010), 14, or 13.5 %, are derived from toponyms of New Jersey or America in general (6 generic and 6 species names). Out of 79 names of animals found in the earliest Eocene Oise amber (Nel, Brasero, 2010; Nel et al., 2005), 17 (21.5 %, 4 generic and 13 species names) are based on Gallic toponyms and ethnonyms.

In contrast to the amber faunas referred to above (and other more ancient faunas), those from the Late Eocene succinites all have Priabonian age (Perkovsky et al., 2007, 2010; Dlussky, Rasnitsyn, 2009) and are located only some 200–500 km one from another (Perkovsky, 2011). As a result, they had many dominant species in common (Dlussky, Rasnitsyn, 2009; Perkovsky, 2013). That is why no wonder to encounter in the Baltic amber, for instance, the taxa, named “saxonicus” or “bitterfeldi”, that is, described originally from the Bitterfeldian amber (Sontag, Szadziewski, 2011) or representatives of genus *Rovnodidactylomyia* Fedotova et Perkovsky, 2011 (Fedotova, Perkovsky, 2011).

Similarly to other ambers, the taxa described from the Baltic amber commonly have respective toponyms and ethnonyms. Among the Baltic amber biting midges, they take 17 out of 73 species names (23.2 %), including with toponyms and ethnonyms related with the Baltic region — 16 (21.9 %) (Perkovsky, 2013). The ants show a lower ratio: 9 (9.2 %) and 8 from 98 (8.2 %) (Dlussky, Rasnitsyn, 2009; Dlussky, Radchenko, 2009; Dlussky, 2010; Dubovikoff, 2011; Dlussky, Dubovikoff, 2013; Radchenko, Dlussky, 2013). Recently revised Bethylinae wasps in the Baltic amber have 3 from 11 species names (27.3 %) etymologically connected with Russia and Baltic coast (Ramos et al., 2014).

The degree of exploration of arthropods from various families in Rovno amber is extremely irregular; hardly a tenth of the fauna being explored (Perkovsky et al., 2010), while Ukrainian-based geographic origin of Rovno amber is still actively disputed (Sontag, Szadziewski, 2011; Szwedo, Sontag, 2013; Zakrzewska, Gilka, 2014). It is also interesting to compare representation of toponyms and ethnonyms related to various regions in the names of Rovno’s animals and plants (table 1).

We presented the bibliography on the most animal names related to Ukrainian toponyms earlier (Perkovsky, Vlaskin, 2014), but that bibliography did not include several basically recent publications (Fedotova, Perkovsky, 2008, 2014, 2015; Melnitsky, Ivanov, 2013; Radchenko, Dlussky, 2013; Buffington et al., 2014; Kazantsev, Perkovsky, 2014; Konikiewicz, Mąkol, 2014; Simutnik, Perkovsky, 2015). The present is a good opportunity to fill the gap.

It is worth mentioning that when a taxon has strong relation to amber forest, its composition in the Baltic and Rovno ambers is generally more similar than in the case of taxa of less fidelity to that particular kind of vegetation. Baltic amber having long story of exploration comparing the Rovno amber, no wonder is that the Rovno insect assemblage shows a higher proportion of Baltic toponyms among its underexplored families (Perkovsky, 2013), because its knowledge relies mainly on that of the Baltic fauna. When a taxon is well-studied in both Baltic and Rovno amber, number of Baltic and Ukrainian toponyms is equal (table 2). When a taxon is best known in the Rovno amber, Baltic toponyms are rare. In contrast, the strictly amber forest insects being excluded, hardly a single Baltic toponym can be found among remaining Rovno amber insects (*Riga toni* Evenhuis, 2013 has another etymology: see Evenhuis, 2013).

Table 1. Bryophyta (fig. 1, 1) with toponyme-derived names in Rovno amber (Ignatov, Perkovsky, 2013; Konstantinova et al.; 2012; Mamontov et al., 2013, 2015)

Family (Order)	Scientific name	Source region
Frullaniaceae (Porellales)	<i>Frullania ucrainica</i> Konstant. et Ignatov, 2012	Ukraine
Lejeuneaceae (Porellales)	<i>Acrolejeunea ucrainica</i> Mamontov et al., 2013	Ukraine
Anastrophyllaceae (Jungermanniales)	<i>Anastrophyllum rovnoi</i> Mamontov et al., 2015	Ukraine
Calymperaceae (Dicranales)	<i>Calymperites ucrainicus</i> Ignatov et Perkovsky, 2013	Ukraine
Rhachitechiaceae (Dicranales)	<i>Hypnodontopsis mexicana</i> (Ther.) H. Rob., 1964	Mexico

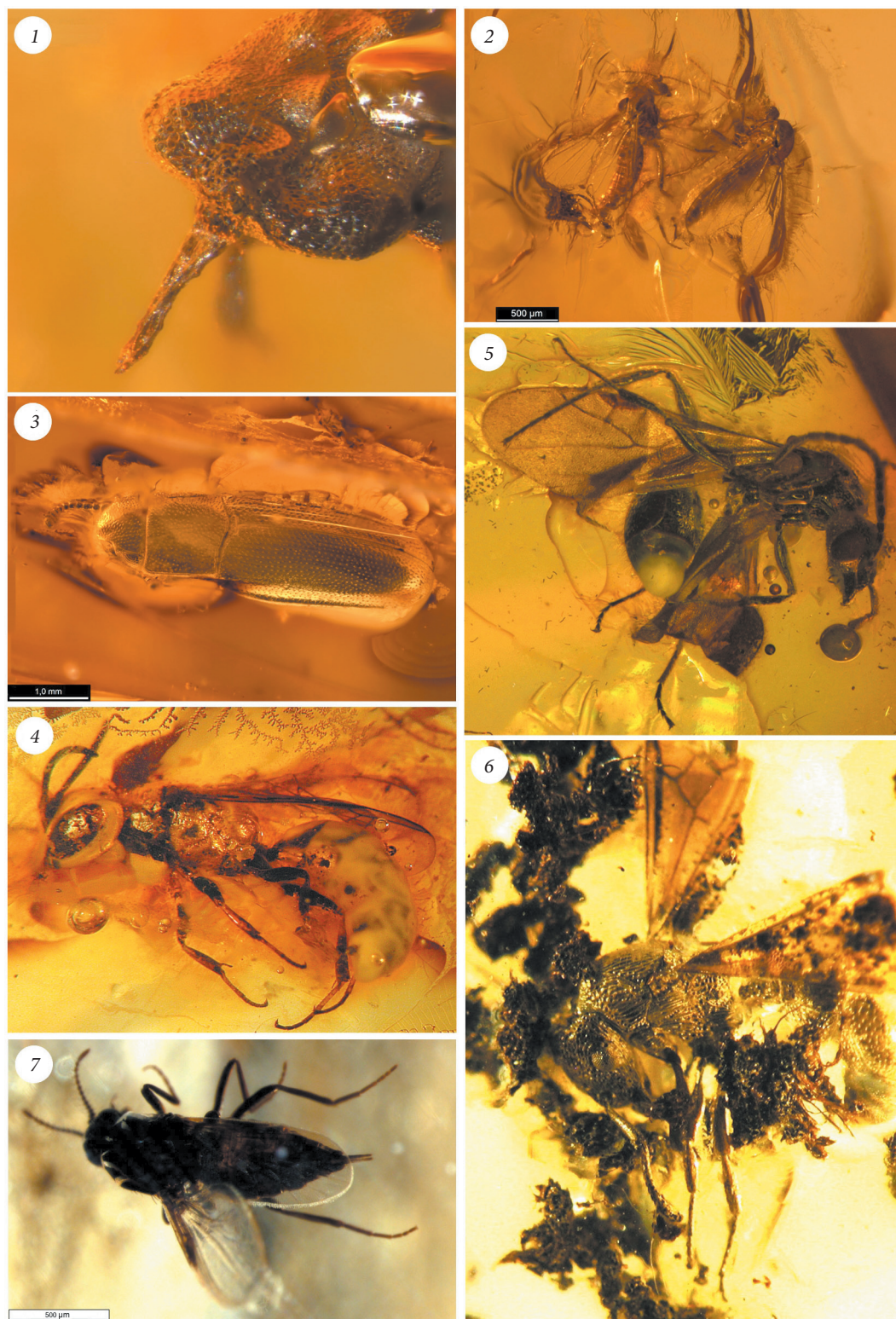


Fig. 1. Liverworts (1) and insects (2-7) from Rovno amber collection of SIZK (table 1, 2): 1— *Frullania ucrainica*, holotype; 2 — *Eohelea gedanica*, male and female; 3 — *Xenohimatium rovnense*, holotype; 4 — *Rovnoecus klesovicus*, holotype; 5 — *Leptoconops rovnensis*, holotype; 6 — *Bilobomyrma ukrainica*, holotype; 7— *Gnamp-togenys europaea*, neotype.

Table 2. Rovno amber arthropods (fig. 1, 2–7) names, derived from toponyms and ethnonyms

Family (Order)	Scientific name	Source region
Trombidiidae (Acari)	<i>Paratrombium rovniense</i> Konikiewicz et Małol, 2014	Ukraine
Mimetidae (Aranei)	<i>Succinero rovnoensis</i> Wunderlich, 2004	Ukraine
Anapidae (Aranei)	<i>Balticonopsis perkovskyi</i> Wunderlich, 2004	Baltic
Buthidae (Scorpiones)	<i>Palaeoananteris ukrainensis</i> Lourenço et Weitschat, 2009	Ukraine
Capniidae (Plecoptera)	<i>Rovnocapnia ambita</i> Sinitshenkova, 2009	Ukraine
Capniidae (Plecoptera)	<i>Rovnocapnia atra</i> Sinitshenkova, 2009	Ukraine
Eriosomatidae (Hemiptera)	<i>Germaraphis baltica</i> Heie, 1967	Baltic
Eriosomatidae (Hemiptera)	<i>Germaraphis (Balticorostrum) oblonga</i> Heie, 1967	Baltic
Ceratopogonidae (Diptera)	<i>Brachypogon balticus</i> Szadziewski, 1988	Baltic
Ceratopogonidae (Diptera)	<i>Ceratopogon bitterfeldi</i> Szadziewski, 1993	Saxony-Anhalt
Ceratopogonidae (Diptera)	<i>Gedanohelea loewi</i> Szadziewski, 1988	Baltic
Ceratopogonidae (Diptera)	<i>Eohelea gedanica</i> Szadziewski, 1988	Baltic
Ceratopogonidae (Diptera)	<i>Leptoconops rovnensis</i> Sontag et Szadziewski, 2011	Ukraine
Psychodidae (Diptera)	<i>Sycorax ukrainensis</i> Azar, Nel et Perkovsky, 2013	Ukraine
Cecidomyiidae (Diptera)	<i>Tutkowskia ukrainica</i> Fedotova et Perkovsky, 2008	Ukraine
Cecidomyiidae (Diptera)	<i>Volnococcopsis korniushini</i> Fedotova et Perkovsky, 2008	Ukraine
Cecidomyiidae (Diptera)	<i>Rovnodidactylomyia zosimovichi</i> Fedotova et Perkovsky, 2011	Ukraine
Cecidomyiidae (Diptera)	<i>Rovnodidactylomyia sidorenkoi</i> Fedotova et Perkovsky, 2011	Ukraine
Cecidomyiidae (Diptera)	<i>Rovnodidactylomyia iconica</i> Fedotova et Perkovsky, 2011	Ukraine
Cecidomyiidae (Diptera)	<i>Rovnodidactylomyia zhitomirensis</i> Fedotova et Perkovsky, 2015	Ukraine
Cecidomyiidae (Diptera)	<i>Gulyankiola nazarenkoi</i> Fedotova et Perkovsky, 2015	Ukraine
Cecidomyiidae (Diptera)	<i>Brachineura polessica</i> Fedotova et Perkovsky, 2013	Ukraine
Cecidomyiidae (Diptera)	<i>Rovnobrachineura kiryejevi</i> Fedotova et Perkovsky, 2013	Ukraine
Ichneumonidae (Hymenoptera)	<i>Rovenosa rasnitsyni</i> Khalaim, 2011	Ukraine
Bethylidae (Hymenoptera)	<i>Laelius rovnensis</i> Barbosa et Azevedo, 2013	Ukraine
Bethylidae (Hymenoptera)	<i>Sierola rovniana</i> Ramos et Azevedo, 2014	Ukraine
Bethylidae (Hymenoptera)	<i>Eupsenella klesoviana</i> Ramos et Azevedo, 2014	Ukraine
Megalyridae (Hymenoptera)	<i>Ukrainosa* prolata</i> Perrichot et Perkovsky, 2009	Ukraine
Encyrtidae (Hymenoptera)	<i>Rovnosoma gracile</i> Simutnik, 2015	Ukraine
Figitidae (Hymenoptera)	<i>Rovnoeucoila tympanomorpha</i> Buffington et Perkovsky, 2014	Ukraine
Crabronidae (Hymenoptera)	<i>Rovnoecus klesovicus</i> Antropov, 2009	Ukraine
Formicidae (Hymenoptera)	<i>Yantaromyrmex samlandicus</i> (Wheeler, 1915)	Baltic
Formicidae (Hymenoptera)	<i>Dolichoderus balticus</i> (Mayr, 1868)	Baltic
Formicidae (Hymenoptera)	<i>Dolichoderus polessus</i> Dlussky, 2002	Ukraine
Formicidae (Hymenoptera)	<i>Asymphyomyrmex balticus</i> Wheeler, 1915	Baltic
Formicidae (Hymenoptera)	<i>Formica paleopolonica</i> Dlussky, 2008 **	Baltic
Formicidae (Hymenoptera)	<i>Tetraoponera europaea</i> Dlussky, 2009	Europe
Formicidae (Hymenoptera)	<i>Gnamptogenys europaea</i> (Mayr, 1868)	Europe
Formicidae (Hymenoptera)	<i>Carebara ucrainica</i> (Dlussky, 2002)	Ukraine
Formicidae (Hymenoptera)	<i>Bilobomyrma ukrainica</i> Radchenko et Dlussky, 2013	Ukraine
Ptiliidae (Coleoptera)	<i>Ptinella rovnoensis</i> Polilov et Perkovsky, 2004	Ukraine
Cantharidae (Coleoptera)	<i>Malthodes rovnoensis</i> Kazantsev et Perkovsky, 2014	Ukraine
Cryptophagidae (Coleoptera)	<i>Micrambe sarnensis</i> Lyubarsky et Perkovsky, 2010	Ukraine
Erotylidae (Coleoptera)	<i>Xenohimatium rovnense</i> Lyubarsky et Perkovsky, 2012	Ukraine
Curculionidae (Coleoptera)	<i>Taphramites rovnoensis</i> Petrov et Perkovsky, 2008	Ukraine
Polycentropodidae (Trichoptera)	<i>Plectrocnemia ukrainica</i> Melnitsky et Ivanov, 2013	Ukraine
Leptoceridae (Trichoptera)	<i>Triplectides palaeoslavicus</i> Melnitsky et Ivanov, 2010	Ukraine

* Synonymized with *Prodinapsis* Brues, 1923 (Vilhelmsen et al., 2010).

** First record for Rovno amber (Dlussky, pers. com., 2013).

Note. The scientific names in the table are given after Heie, 1967; Fedotova, Perkovsky, 2008, 2014, 2015; Dlussky, Rasnitsyn, 2009; Melnitsky, Ivanov, 2010; Perkovsky, 2010; Sontag, Szadziewski, 2011; Perkovsky, Vlaskin, 2014; Simutnik, Perkovsky, 2015 with explanations in the text.

Forty-seven names of Rovno animals and 5 names of plants are derived from the toponyms and ethnonyms, out of which, correspondingly, 34 (72.3 %) and 4 (80 %) are related to Ukraine and only 10 animal names (21.3 %) to the Baltic region. Out of 49 names of genera described from Rovno amber, 10 (20.4 %) come from Ukrainian toponyms; second species of *Bilobomyrma* Radchenko et Dlussky and two species of *Rovnodidactylomyia* are known from Baltic amber, *Fallomyrma* Radchenko et Dlussky — from Scandinavian amber and Bitterfeld, other genera known only from Rovno amber. The names of 15.7 % out of 217 animal species described from Rovno amber, and 67 % out of 6 plant species, are derived, one way or another, from Ukrainian toponyms and ethnonyms. Three binomens connected with Klesov deposit (Perkovsky, Vlaskin, 2014), one — with Dubrovitsa (Volnoje), one — with Gulyanka; the second species from Gulyanka (*Rovnodidactylomyia zhitomirensis* Fedotova et Perkovsky, 2015) combines the names derived from two Polesje regions in one binomen.

As of today, just 8 out of 217 animal species described from Rovno amber are recorded in Baltic amber (Perkovsky, Rasnitsyn, 2013), including *Dolichoderus polessus* Dlussky (Dlussky, Rasnitsyn, 2009) (table 2); while Bryophyta described from Rovno amber are unknown in the well-explored Baltic amber bryoflora. All mentioned Rovno amber material housed in Schmalhausen Institute of Zoology, NAS of Ukraine (SIZK).

The author is thankful to Prof. A. P. Rasnitsyn (Paleontological Institute, Russian Academy of Sciences, Moscow) for photos of biting midges and reading the manuscript, Prof. A. G. Radchenko (SIZK) — for photos of *Bilobomyrma*.

References

- Arnold, E. N., Azar, D., Ineich, I., Nel, A. 2002. The oldest reptile in amber: a 120 million year old lizard from Lebanon. *Journal of Zoology*, **258**, 7–10.
- Azar, D., Gèze, R., Acra, F. 2010. Lebanese amber. In: Penney D., ed. *Biodiversity of fossils in amber from the major world deposits*. Siri Scientific Press, Manchester, 271–298.
- Buffington, M. L., Perkovsky, E. E., Brady, S. G. 2014. The Description of *Rovnoeucoila tympanomorpha* Buffington and Perkovsky, a New Genus and Species of Fossil Eucoilinae, with Observations on the Asynchronous Evolution of Diglyphosematini (Hymenoptera: Figitidae: Eucoilinae). *Proceedings of the Entomological Society of Washington*, **116** (3), 243–254.
- Dlussky, G. M. 2010. Ants of the Genus *Plagiolepis* Mayr (Hymenoptera, Formicidae) from Late Eocene Ambers of Europe. *Paleontological Journal*, **44** (5), 546–555 (original Russian text in: *Paleontologicheskii Zhurnal*, 2010, 5, 64–73).
- Dlussky, G. M., Dubovikoff, D. A. 2013. *Yantaromyrmex* gen. n. — a new ant genus (Hymenoptera: Formicidae) from Late Eocene ambers of Europe. *Caucasian Entomological Bulletin*, **9** (2), 305–314.
- Dlussky, G. M., Radchenko, A. G. 2009. Two new primitive ant genera from the late Eocene European ambers. *Acta Palaeontologica Polonica*, **54** (3), 435–441.
- Dlussky, G. M., Rasnitsyn, A. P. 2009. Ants (Insecta: Vespida: Formicidae) in the Upper Eocene amber of Central and Eastern Europe. *Paleontological Journal*, **43** (9), 1024–1042.
- Dubovikoff, D. A. 2011. The first record of the genus *Pheidole* Westwood, 1839 (Hymenoptera, Formicidae) from the Baltic amber. *Russian Entomol. J.*, **20** (3), 255–257.
- Evenhuis, N. L. 2010. New microbombyliids (Diptera: Mythicomyiidae) from Eocene Baltic and Rovno ambers, with notes on previously described amber species. *Zootaxa*, **3731**, 371–380.
- Fedotova, Z. A., Perkovsky, E. E. 2008. New taxa of gall midges (Diptera, Cecidomyiidae) from Dubrovitsa (Rovno amber). *Vestnik Zoologii*, **42** (5), 27–40 [In Russian].
- Fedotova, Z. A., Perkovsky, E. E. 2011. Gall midges of the supertribe Stomatosematidi (Diptera, Cecidomyiidae) in the Palaearctic Region with description of new taxa from the Late Eocene ambers. 2. The genera *Didactylomyia* and *Rovnodidactylomyia* gen. n. *Zoologicheskii Zhurnal*, **90** (11), 1374–1384 [In Russian].
- Fedotova, Z. A., Perkovsky, E. E. 2014. New Gall Midges (Diptera, Cecidomyiidae, Brachineurini, Ledomyiini) from the Late Eocene Rovno Amber. *Vestnik Zoologii*, **48** (1), 35–50.
- Fedotova, Z. A., Perkovsky, E. E. 2015. New gall midges (Diptera, Cecidomyiidae, Stomatosematidi, Brachineuridi) in the Late Eocene amber from Gulyanka (Ukraine, Zhitomir Oblast'). *Paleontological Journal*, **49** (3), 270–278 (original Russian text in: *Paleontologicheskii Zhurnal*, 2015, 3, 47–55).
- Grimaldi, D., Engel, M. 2009. Diversity and phylogeny of the Mesozoic wasp family Stigmaphronidae (Hymenoptera: Ceraphronoidea). *Denisia*, **26**, 53–68.
- Grimaldi, D., Nascimbene, P. C. 2010. Raritan (New Jersey) Amber. In: Penney, D., ed. *Biodiversity of fossils in amber from the major world deposits*. Siri Scientific Press, Manchester, 167–191.

- Heie, O. E. 1967. Studies on fossil aphids (Homoptera: Aphidoidea), especially in Copenhagen collection of fossil in Baltic amber. *Spolia Zool. Mus. Haunensis*, **26**, 274.
- Ignatov, M. S., Perkovsky, E. E. 2013. Mosses from Rovno amber (Ukraine), 2. *Arctoa*, **22**, 83–92.
- Kazantsev, S. V., Perkovsky, E. E. 2014. A new *Malthodes* and some other interesting soldier beetles (Coleoptera: Cantharidae) from Late Eocene Rovno amber. *Russian Entomol. J.*, **23** (2), 113–116.
- Konikiewicz, M., Małkol, J. 2014. A fossil Paratrombiinae mite (Actinotrichida: Trombidioidea) from the Rovno amber, Ukraine. *Zootaxa*, **3847** (4), 583–589.
- Konstantinova, N. A., Ignatov, M. S., Perkovsky, E. E. 2012. Hepatics from Rovno amber. *Arctoa*, **21**, 265–271.
- Mamontov, Yu. S., Heinrichs, J., Schafer-Verwimp, A., Ignatov, M. S., Perkovsky, E. E. 2013. Hepatics from Rovno amber (Ukraine), 2. *Acrolejeunea ucrainica* sp. nov. *Arctoa*, **22**, 93–96.
- Mamontov, Yu. S., Heinrichs, J., Váňa, J., Ignatov, M. S., Perkovsky, E. E. 2015. Hepatics from Rovno amber (Ukraine), 3. *Anastrophyllum rovnoi* sp. nov. *Arctoa*, **24**, 43–46.
- Melnitsky, S. I., Ivanov, V. D. 2010. New Species of Caddisflies (Insecta: Trichoptera) from the Rovno Amber, Eocene of Ukraine. *Paleontological Journal*, **44** (3), 303–311 (original Russian text in: *Paleontologicheskii Zhurnal*, 2010, 3, 57–64).
- Melnitsky, S. I., Ivanov, V. D. 2013. Seven New Species of Caddisflies (Insecta: Trichoptera) from the Rovno Amber (Eocene of Ukraine). *Paleontological Journal*, **47** (3), 283–291 (original Russian text in: *Paleontologicheskii Zhurnal*, 2013, 3, 49–56).
- Nel, A., Brasero, N. 2010. Oise amber. In: Penney, D., ed. *Biodiversity of fossils in amber from the major world deposits*. Siri Scientific Press, Manchester, 137–148.
- Nel, A., Perrichot, V., Azar, D., Neraudeau, D. 2005. A replacement name for the neuropteran genus *Eorhachiberotha* Nel et al., 2005 (Neuroptera: Rhachiberothidae). *Bulletin de la Societe Entomologique de France*, **110** (2), 128.
- Perkovsky, E. E. 2010. Participation of *Germaraphis* Aphids (Homoptera, Aphidinea) in Weight Fractions of the Rovno Amber and their Syninclusions with Ants. *Vestnik Zoologii*, **44** (1), 55–62 [In Russian].
- Perkovsky, E. E. 2011. Syninclusions of the Eocene winter ant *Prenolepis henshei* (Hymenoptera: Formicidae) and *Germaraphis* aphids (Hemiptera: Eriosomatidae) in Late Eocene Baltic and Rovno amber: some implications. *Russian Entomol. J.*, **20** (3), 303–313.
- Perkovsky, E. E. 2013. *Eohelea sinuosa* (Meunier, 1904) (Diptera, Ceratopogonidae) in Late Eocene Ambers of Europe. *Paleontological Journal*, **47** (5), 503–512 (original Russian text in: *Paleontologicheskii Zhurnal*, 2013, 5, 44–52).
- Perkovsky, E. E., Rasnitsyn, A. P. 2013. First Records of Scolebythidae and Chrysididae (Hymenoptera, Chrysoidea) in Rovno Amber. *Vestnik Zoologii*, **47** (2), 14–19.
- Perkovsky, E. E., Rasnitsyn, A. P., Vlaskin, A. P., Taraschuk, M. V. 2007. A comparative analysis of the Baltic and Rovno amber arthropod faunas: representative samples. *African Invertebrates*, **48** (1), 229–245.
- Perkovsky, E. E., Vlaskin, A. P. 2014. The names of amber Arthropods based on Ukrainian toponyms. *Ukrainian Entomological Journal*, **1** (8), 45–50 [In Russian].
- Perkovsky, E. E., Zosimovich, V. Yu., Vlaskin, A. P. 2010. Rovno Amber. In: Penney, D., ed. *Biodiversity of fossils in amber from the major world deposits*. Siri Scientific Press, Manchester, 116–136.
- Radchenko, A., Dlussky, G. M. 2013. *Bilobomyrma* new genus, a new extinct ant genus (Hymenoptera, Formicidae) from the late Eocene European ambers. *Journal of Paleontology*, **87**, 1060–1066.
- Ramos, M. S., Perkovsky, E. E., Rasnitsyn, A. P., Azevedo, C. O. 2014. Revision of Bethylinae fossils (Hymenoptera: Bethylinidae) from Baltic, Rovno and Oise amber, with comments on the Tertiary fauna of the subfamily. *Neues Jahrbuch für Geologie und Palaontologie-Abhandlungen*, **271** (2), 203–228.
- Simutnik, S. A., Perkovsky, E. E. 2015. *Rovnosoma* gen. nov. (Hymenoptera, Chalcidoidea, Encyrtidae) from the Late Eocene Rovno amber. *Paleontological Journal*, **49** (2), 36–38 (original Russian text in: *Paleontologicheskii Zhurnal*, 2015, 1, 35–36).
- Sontag, E., Szadziewski, R. 2011. Biting midges (Diptera: Ceratopogonidae) in Eocene Baltic amber from the Rovno region (Ukraine). *Pol. Pis. Entomol.*, **80**, 779–800.
- Szwedo, J., Sontag, E. 2013. The flies (Diptera) say that amber from the Gulf of Gdańsk, Bitterfeld and Rovno is the same Baltic amber. *Pol. Pis. Entomol.*, **82**, 379–388.
- Vilhelmsen, L., Perrichot, V., Shaw, S. R. 2010. Past and present diversity and distribution in the parasitic wasp family Megalyridae (Hymenoptera). *Systematic Entomology*, **35**, 658–677.
- Zakrzewska, M., Gilka, W. 2014. The oldest known chironomids of the tribe Tanytarsini (Diptera: Chironomidae) indicate plesiomorphic character states. *Geobios*, **47**, 335–343.

Received 1 July 2015

Accepted 4 August 2015