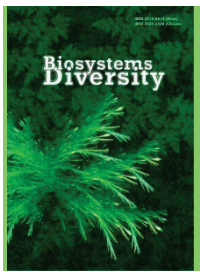

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A review of species of the genus *Mocyta* (Coleoptera, Staphylinidae) in Ukraine

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A review of the genus *Mocyta* Mulsant & Rey, 1874, which is represented in Ukraine; a description of the main morphological features and diagnostic features is made, data on ecological features, seasonal activity of adults, the distribution of representatives of the genus in Ukraine and the world and the keys to identify the species are presented. The information on the distribution of species of the genus *Mocyta* in the territory of Ukraine has been clarified and significantly supplemented by new findings. The results can be used to address a number of theoretical issues of faunistics, zoogeography, and ecology, as well as in compiling the inventory of the fauna of the Ukrainian Carpathians, for comparative faunal research, in the analysis of species distribution, in biogeographic constructions, studies of faunogenesis, ecological monitoring and prediction of consequences of the influence of human activities on natural ecosystems of the region. The genus *Mocyta* is a widespread genus, which in terms of the combination of morphological and biological features belongs to the tribe Athetini Casey, 1910 of the subfamily Aleocharinae Fleming, 1821 of the family Staphylinidae Latreille, 1802. There are 26 known species in the fauna of Palearctic, 5 of which (*Mocyta clientula*, *M. fungi fungi*, *M. fussi*, *M. orbata*, *M. orphana*) are represented in the fauna of Ukraine. However, it is likely that there are two more species (*M. amplicollis* and *M. negligens*), identified for the surrounding areas, for which characteristics and comparative diagnoses have also been provided. This paper is a continuation of the initiated series of reviews of genera and species of the tribe Athetini of the fauna of Ukraine. Taking into account the wide geographical distribution and significant individual variability in size, colour and shape of the spermatheca of representatives of the genus, the identification of the latter presents some significant difficulties.

Keywords: rove beetles; Aleocharinae; Athetini; fauna; morphology; bionomy.

Introduction

The genus *Mocyta* Mulsant & Rey, 1874 is a widespread genus, which in terms of the combination of morphological and biological features belongs to the tribe Athetini Casey, 1910 of the subfamily Aleocharinae Fleming, 1821 of the family Staphylinidae Latreille, 1802.

Until recently, there was certain confusion regarding the taxonomic status of the genus *Mocyta*. Species that are now included in the genus *Mocyta* previously belonged to different genera. For instance, Seevers (1978), in a review of tribes of the subfamily Aleocharinae of North America, referred all species of the genus *Mocyta* known at that time, to the genus *Acrotona*. After all, different researchers assigned species of the genus *Mocyta* to the following genera: *Atheta* Thomson, 1858, *Acrotona* Thomson, 1859, *Colpodota* Mulsant & Rey, 1873, *Dolosota* Casey, 1910, *Eurypronota* Casey, 1894 and *Homalota* Mannerheim, 1830 (Casey, 1894, 1910; Cameron, 1939; Brundin, 1952; Pace et al., 2004a, 2004b). G. Lohse and A. Smetana, while studying the typical material of species from Europe and North America, reestablished *Mocyta* in the status of a subgenus within the genus *Atheta* (Lohse, 1974; Lohse & Smetana, 1985). Later on, Lohse et al. (1990) recognized the independence of the genus *Mocyta* as part of the tribe Athetini, which was accepted in taxonomic revisions of aleocharines of North American by Gusarov (2003) and Klimaszewski et al. (2005, 2007, 2011). Nevertheless, in the Catalogue of Palaearctic (Smetana, 2004) species of the genus *Mocyta* were included in the genus *Acrotona*, and only later (Schülke & Smetana, 2015) were included in the genus *Mocyta* as a subgenus within the genus *Atheta*. Based on the results of molecular phylogenetic studies (Elven et al., 2010, 2012), Klimaszewski et al. (2015, 2018) showed the need to consider *Mocyta* as a distinct genus of the tribe Athetini.

Methods and materials

The paper is based on the collection of the authors which has been formed over many years and is currently deposited in the State Museum of Natural History of the National Academy of Sciences of Ukraine (hereinafter CGL, deposited in SMNH), as well as all materials which are stored in the reserve collections of State Museum of Natural History of the National Academy of Sciences of Ukraine, Lviv (hereinafter SMNH), Zoological Museum of Kyiv National University named after Taras Shevchenko, Kyiv (hereinafter ZMKU), Institute of Zoology named after I. I. Schmalhausen of the National Academy of Sciences of Ukraine, Kyiv (hereinafter referred to as SIZK), Zoological Museum of Donetsk National University, Donetsk (hereinafter ZMDONU), Museum of Nature of Kharkiv National University named after V. N. Karazin, Kharkiv (hereinafter KUMN), National Science and Natural History Museum of the National Academy of Sciences of Ukraine, Kyiv (hereinafter NMNH). In addition, materials from the personal collections of fellow entomologists were processed by Z. L. Berest (deposited in the SIZK), S. V. Bilyakova (deposited in the SMNH), P. L. Voitko (uts Turiysk, hereinafter CVT), O. M. Drogvalenko (deposited in KUMN), V. M. Yermolenko (deposited in the SIZK), N. P. Koval (Uzhansky National Nature Reserve, uts Velykyi Bereznyi, hereinafter CKOV), [of S. V. Konovalov] (depo-

sited in the SMNH; hereinafter CKON), V. O. Chumak (Uzhhorod; hereinafter CCHM), L. I. Faly (Dnipro, hereinafter CFL), V. P. Foroshchuk (Luhansk, hereinafter CFR), P. M. Sheshurak (Nizhyn, hereinafter CSHR).

Collecting and laboratory processing of the material was carried out according to standard methods of entomological research (Kryzhanovsky & Emets, 1972). In total, 436 specimens from 25 administrative regions of Ukraine and the Autonomous Republic of Crimea, as well as from Austria, Azerbaijan, Belarus, Georgia, Germany, Poland and Russia, have been processed. The taxonomic position of species, authors and years of taxon description are given according to the Staphylinidae catalogues for the Palearctic region (Klimaszewski et al., 2015; Schülke & Smetana, 2015). The geographical coordinates of localities and places of collecting are given according to www.google.com/maps/place.

Abbreviations and depositories: province codes of Ukraine: CRI – Crimea, CER – Chernivtsi, CNG – Chernihiv, CRK – Cherkasy, DNI – Dnipro, DON – Donetsk, IFR – Ivano–Frankivsk, KHE – Kherson, KHM – Khmelnytskyi, KHR – Kharkiv, KRO – Kropyvnytskyi, KYI – Kyiv, LUG – Luhansk, LWI – Lviv, MYK – Mykolaiv, ODE – Odesa, POL – Poltava, RIV – Rivne, SUM – Sumy, TER – Ternopil, VIN – Vinnytsia, VOL – Volyn, ZAK – Zakarpatska, ZAP – Zaporizhia, ZIT – Zhytomyr; (NNR) – national nature reserve; (RLP) – regional landscape park; (SFHR) – state forest hunting range; (c) – city; (r) – region; (v) – village; (uts) – urban-type settlement; (d) – district.

Results

The type species of the genus *Mocyta* is *Aleochara fungi* Gravenhorst, 1806 (= *Mocyta fungi fungi*). *Mocyta* is a large genus of the subfamily Aleocharinae, which has more than 50 species in the world fauna. There are 26 known species in the fauna of the Palearctic, 5 of which (*Mocyta clientula*, *M. fungi fungi*, *M. fussi*, *M. orbata*, *M. orphana*) are represented in the fauna of Ukraine. However, it is likely that there are two more species (*M. amplicollis* and *M. negligens*), identified for the surrounding areas, for which characteristics and comparative diagnoses have also been provided.

Diagnosis of the genus Mocyta. Body lengh 1.8–3.5 mm. Colour of the body and certain parts of different species varies greatly from dark brown or reddish-brown to light brown; antennae, maxillary palpi and legs brown or light brown. Entire body uniformly densely punctate and covered with short bristles over the entire surface; cellular microstructure exactly expressed and clearly visible. Body slender or slightly enlarged on the sides and elongate. Head moderately large, transversely expanded, sometimes rounded; eyes small and slightly convex; antennae thin and moderately elongate. Pronotum convex and transversely expanded; density and nature of the location of the bristles on the surface of the disk can vary significantly in different species. Elytra short and convex, slightly shorter and longer than pronotum. Abdomen slender or slightly enlarged in the middle; moderately densely finely punctured over the entire surface, gradually tapering apically; posterior margin of tergite VIII even or has a triangular cutout of different sizes, distinctly tapering posteriorly.

Larvae and adults inhabit forest cover, plant and animal remains, animal excrement, fungi, and can successfully coexist with other animals, living in burrows of mammals, nests of birds and social insects, where they are non-specialized predators that feed on various invertebrates, acting as natural regulators of their numbers.

[*M. amplicollis* (Mulsant & Rey, 1873)] (Fig. 1a)

Invalid combinations. *Atheta amplicollis* (Mulsant & Rey, 1873); *Atheta fungi* var. *amplicollis* (Mulsant & Rey, 1873).

Description. Body length 1.8–2.4 mm. Body entirely black or dark-brown and glossy; antennae, maxillary palpi and legs mainly brown. Body entirely glossy, with minute and rare punctation patterns; body quite densely covered with short bristles over the entire surface; abdomen with long dark bristles; cellular microstructure exactly expressed and clearly visible.

Head moderately large, transversely expanded, significantly narrower and shorter than pronotum, gradually tapering behind the eyes; its posterior corners rounded. Eyes small and convex; temples longer than eyes. Antennae thin and elongate, their segments I–III elongate, but each following slightly smaller than the previous one; segment IV slightly elongate, significantly smaller than the following ones; segments V–X elongate, each following slightly broader and longer than the previous one; segment XI elongate, apically pointed.

Pronotum transversely expanded, its width is 1.5 of its length, anterior and posterior corners of the disk rounded, maximal broad near the posterior margin, posterior margin of the disk slightly convex; bristles moderately dense, located obliquely from the middle to the posterior margin of the disk.

Elytra short, laterally slightly convex, slightly narrower or of the same width as pronotum, posterior external corners of the elytra rounded.

Abdomen slender and elongate, slightly convex in the middle, gradually tapering apically. Posterior margin of tergite VIII and abdominal sternite straight, distinctly tapering posteriorly. Aedeagus as illustrated (Fig. 2a, 2b). Spermatheca as illustrated (Fig. 2c).

Biology. Lives in forest cover, under moist leaves and in plant remains, in moss and in nests of mammal.

Distribution. Europe, Mongolia (Schülke & Smetana, 2015).

Mocyta clientula (Erichson, 1839) (Fig. 1b)

Synonymy. *Homalota pulchra* Kraatz, 1856; *Homalota montivagans* Wollaston, 1857; *Homalota aleocharoides* Wollaston, 1864: 542; *Homalota sharpi* Rye, 1870.

Invalid combinations. Atheta clientula (Erichson, 1839); *Acrotona clientula* (Erichson, 1839); *Homalota clientula* (Erichson, 1839); *Colpodota clientula* (Erichson, 1839); *Atheta fungi* var. *clientula* (Erichson, 1839).

Records. KHE, KHR, LUG, LWI, ZAK (Bogdanov, 1985; Kuthy, 1896; Łomnicki, 1913).

Material examined. 8 spec. KHE: Kakhovka d., Kakhovka, 1 spec., T. Nykulina (ZMDONU). KHR: Zmiiv d., v. Haidary, 49.626952º N, 36.319746º E, 28–29.06.2011, window trap (water+powder), 1 spec., V. Terekhova (KNU); Kupiansk d., Kupiansk, 49.708661º N, 37.619968º E, floodplain of r. Oskol, 20–21.05.2009, 1 spec., (ZMDONU). LUG: Sverdlovsk d., Provalskyi Steppe Nature Reserve, 48.155359º N, 39.865589º E, light trap, 21–22.08.2008, 1 spec., S. Glotov (SMNH). LWI: Ivano-Frankove [Janów], 3 spec.; Lviv [Lwiw], 1 spec (SMNH).

Description. Body length 2.3–3.2 mm. Head black and glossy, pronotum brown, elytra brown, often distinctly darkened basally and on each side of elytra, abdomen black and glossy, apically brown, antennae and maxillary palpi brown, legs yellow. Body entirely with minute and sparse punctation patterns; body quite densely covered with short bristles over the entire surface, on each side of the body with moderately long dark bristles; cellular microstructure exactly expressed and clearly visible.

Head moderately large and transversely expanded, significantly narrower and shorter than pronotum; gradually tapering behind the eyes; its posterior corners rounded. Eyes large and slightly convex; temples of the same length or slightly shorter than eyes. Antennae thin and elongate, their segments I–III elongate, but each following slightly smaller than the previous one; segment IV quadrate or slightly elongate, significantly shorter than the following ones; segments V–X transversely expanded, but each following slightly broader and longer than the previous one; XI segment elongate, apically pointed.

Pronotum transversely expanded, its width is 1.5 of its length, anterior and posterior corners of the disc rounded, maximum width in the middle of the disc, posterior margin of the disc slightly convex; bristles moderately dense, located obliquely from the middle to the posterior margin of the disk. Elytra short, almost parallel lateral, slightly broader or of the same width as pronotum, posterior external corners of the elytra not rounded.

Abdomen slender and elongate, gradually tapering apically. Posterior margin of tergite VIII and abdominal sternite straight, distinctly tapering posteriorly. Aedeagus as illustrated (Fig. 2d, 2e). Spermatheca S-shaped, its shape as illustrated (Fig. 2f).

Biology. Occur in various forest and ecotonic biotopes, where they live in forest cover, along shores of water bodies, under moist leaves and in plant remains, in moss and lichen, fall in window traps. Adults are active from May till August.

Distribution. Europe, North Africa, Asia Minor, Siberia, Syria (Schülke & Smetana, 2015).

Fig. 1. Habitus: *Mocyta amplicollis* (*a*), *M. clientula* (*b*), *M. fungi fungi* (*c*), *M. negligens* (*d*), *M. orbata* (*e*), *M. orphana* (*f*)

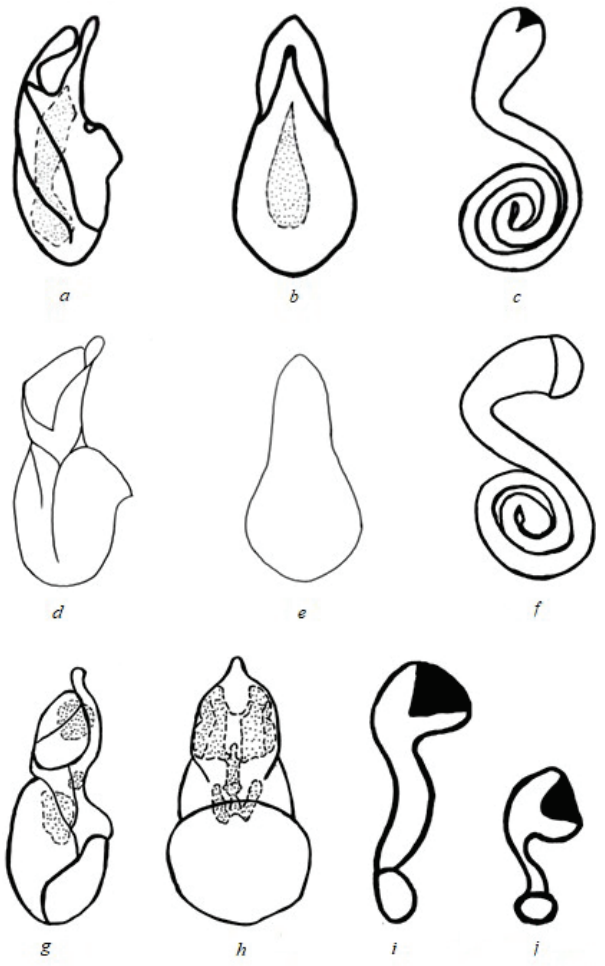

Fig. 2. *Mocyta amplicollis* (*a*, *b*, *c*), *M. clientula* (*d*, *e*, *f*), *M. fussi* (*g*, *h*, *i*, *j*): aedeagus in lateral view (*a*, *d*, *g*); aedeagus, parameral view (*b*, *d*, *f*); spermatheca in lateral view (*g*, *h*, *i*, *j*); *d*–*f* – redrawn from Strand & Vik (1964); *g*, *h*, *j* – redrawn from Nikitsky et al. (1998); *i* – redrawn from Lohse (1974)

***Mocyta fungi fungi* (Gravenhorst, 1806) (Fig. 1c)**

Synonymy. *Bolitochara agaricola* Mannerheim, 1830; *Acrotona beskidica* Paśnik, 1999; *Colpodota ciligera* Mulsant & Rey, 1873; *Homalota cingulata* Heer, 1839; *Homalota dubia* Sharp, 1869; *Acrotona forestica* Paśnik, 1999; *Homalota hygrophila* Hardy, 1851; *Aleochara infuscata* Stephens, 1832; *Colpodota laeticornis* Mulsant & Rey, 1873; *Oxypoda modesta* Motschulsky, 1860; *Oxypoda myrmecobia* Mannerheim, 1843; *Aleochara obfuscata* Stephens, 1832; *Acrotona otrytica* Paśnik, 1999; *Oxypoda praecox* Hochhuth, 1862; *Homalota rhyssoptera* Kraatz, 1859; *Colpodota simulans* Mulsant & Rey, 1873; *Aleochara xanthopa* Stephens, 1832.

Invalid combinations. *Atheta fungi* (Gravenhorst, 1806); *Acrotona fungi* (Gravenhorst, 1806); *Homalota fungi* (Gravenhorst, 1806).

Records. CRI, CER, CNG, CRK, DNI, DON, IFR, KHE, KHR, KRO, KYI, LUG, LWI, MYK, ODE, POL, SUM, TER, VOL, ZAK, ZAP, ZIT (Cherkunov, 1889; Fleischer et al., 1922; Glotov, 2010, 2012, 2019, 2021; Hormuzaki, 1888; Jacobson, 1910, Kashcheev, 1984; Nowicki, 1873; Łomnicki, 1875, 1890, 1886, 1913; Petrenko, 1974; Pliginskyi, 1928).

Material examined. 369 spec. CER: Chernivtsi [Bukowina, Cernowitz], 48.295066º N, 25.933917º E, date not specified, 4 spec., (ZMKU). CNG: Nizhyn, 51.039696º N, 31.877454º E, 11.05.1996, 4 spec., P. Sheshurak (CSHR). CRI: Radianskyi d., Zavitne, 45.133977º N, 36.423837º E, 10.08.2003, light trap, 4 spec., S. Glotov; at the same place, lake shore, in rotten plant remains, 12.08.2003, light trap, 1 spec., S. Glotov (all – CGL); mount Chatyrdah, 44.734179º N, 34.281192º E, 26.08.1978, 1 spec., A. Petrenko (SIZK). CRK: Kaniv d., Kaniv Nature Reserve, 49.722612º N, 31.534495º E, 20.07.2008, 1 spec., S. Beliakova (CGL). DNI: Novomoskovsk d., Andriivka, 47.900262º N, 36.196158º E, 10.06.2009, 1 spec., L. Faly (CFL). DON: Volodarsk d., Kamiani Mohyly Nature Reserve, 47.303517º N, 37.078031º E, light trap, 25–27.06.2010, 2 spec. (CGL); c. Debaltseve, 48.315566º N, 38.418985º E, ravine forest, in forest cover, 1.05.2012, 2 spec., S. Glotov (CGL); Donetsk, 48.008245º N, 37.870352º E, 27.08.1999, 1 spec., T. Trykhleb (SIZK); Leninskyi Komsomol Park, 48.020778º N, 37.812720º E, forest cover, 26.05.2001, 1 spec., V. Martynov; at the same place, 28.07–4.08.2001, 4 spec., V. Martynov; at the same place, 3.10.2004, 3 spec., V. Martynov; at the same place, 4.10.2003, 7 spec., V. Martynov; at the same place, Putylovskyi Park, 48.0678º N, 37.7827º E, forest cover, 26.05.2000, 1 spec., V. Martynov; at the same place, 27.05.2000, 7 spec., V. Martynov; at the same place, 26.07–2.08.2003, 2 spec., V. Martynov; at the same place, 19–26.07.2004, 1 spec., V. Martynov; at the same place, 29.09.2001, 1 spec., V. Martynov; at the same place, 2.10.1999, 2 spec., V. Martynov; at the same place, 4.10.2003, 1 spec., V. Martynov; Shcherbakova Park, 47.995334º N, 37.789991º E, forest cover, 19–26.07.2004, 1 spec., V. Martynov; at the same place, 19–26.08.2004, 5 spec., V. Martynov; at the same place, gully Rakovka, 47.9387º N, 37.6896º E, forest cover, 05.1999, 1 spec., V. Martynov; at the same place, 28.05.1999, 1 spec., V. Martynov; at the same place, 27.07–03.08.2003, 3 spec., V. Martynov; at the same place, 5.10.2003, 4 spec., V. Martynov (all – ZMDONU); Kostiantynivka d., Kleban-Byk Regional Landscape Park, 48.430430º N, 37.672796º E, 1–2.07.2010, 30 spec., S. Glotov; Sloviansk d., c. Sloviansk, 48.853864º N, 37.625427º E, 4.07.2010, 1 spec., S. Glotov (all – CGL); Yasynuvata d., c. Yasynuvata, 48.113153º N, 37.865096º E, 25.07.1999, 11 spec., V. Martynov (all – ZMDONU). IFR: Ivano-Frankivsk d., Uhornyky [U], 48.919879º N, 24.762125º E, 11.7., 1 spec.; Yaremche d., Vorokhta [Worochta], 48.284073º N, 24.559030º E, 0.5.[1]925, 14 spec.; at the same place, date not specified, 2 spec., (all – SMNH). KHE: Chaplynka d., Askania Nova Nature Reserve, 46.469618º N, 33.982326º E, virgin steppe, 28.05.1974, 1 spec., V. Ermolenko (SIZK). KHR: Zmiiv d., Haidary, 49.628933º N, 36.315894º E, deciduous forest, moist ravine, on fallen trees, in carpophore of *Ganoderma lipsiense*, 11.06.1992, 1 spec., O. Drohvalenko; at the same place, highland oak forest, in carpophore of *Xerocomus badius*, 16.07.1992, 1 spec., O. Drohvalenko; at the same place, light trap, 30.07.2009, 5 spec., V. Terekhova (all – KUMN). KRO: Svitlovodsk d., Biletskivka, 12.08.1982, 8 spec., A. Petrenko (SIZK). KYI: Kyiv [K.], 50.438449º N, 30.534035º E, date not specified, 3 spec., J. Hochhuth (NMNH); Hydropark, 4 spec., 14.06.2006 A. Petrenko; Holosiivskyi d., 09.09.2008, 5 spec.; Sviatoshynskyi d., Novobilychi, 9 spec., 12.08.1984 A. Petrenko; Myronivka d., Lukovitse, 04.06.1999, 1 spec., A. Kotenko (all – SIZK). LUG: Antratsyt d., Ivanivka, 48.231811º N, 38.970087º E, 17.04–05.05.2011, 1 spec., V. Landyk; Rovenky, Dubova Balka, 48.065493º N, 39.381823º E, ravine forest, in forest cover, 15.06.2010, 1 spec., S. Glotov (CGL); 29–30.04.2012, 1 spec., S. Glotov; Bilokurakine d., Rozdolne, Rozdolanski Prudy Nature Reserve, 49.683333º N, 38.540278º E, 5.06.2005, 1 spec. S. Glotov; Bilovodsk d., uts Bilovodsk, bank of r. Aidar, light trap, 16.07.2009, S. Glotov (all – SMNH); Horodyshche, Botanical Reserve named after Kostiantyn Yunytskyi, 49.049823º N, 39.650706º E, 10–11.06.2009, 1 spec.; at the same place, 13.06.2009, 1 spec. S. Glotov; Horodyshche, natural landmark Svynarska Balka, 7.06.2005, 1 spec. S. Glotov; v. Stepove, 49.123299º N, 39.378480º E, Yevsuh-Stepove Nature Reserve, in animal remains, 5.06.2005, 1 spec. S. Glotov; Kreminna d., Kudriashovka, 49.031578º N, 38.445590º E, 30.06.2009, 4 spec., S. Glotov; Lutuhine d., Piatyhorivka, 48.351032º N, 39.375127º E, 17.06.2009, 4 spec., S. Glotov; Markivka d., Heraskivka, 49.609300º N, 39.536374º E, Heraskivka Nature Reserve, 3–4.06.2005, 1 spec. S. Glotov; Prosiane, in plant remains, 49.585935º N, 39.665463º E, 3–4.06.2005, 1 spec. S. Glotov; Lymarivka, 49.585903º N, 39.732499º E, 3–4.06.2005, 1 spec. S. Glotov; Lypove, 49.563501º N, 39.778590º E, 3–4.06.2005, 1 spec. S. Glotov; Milove d., Striltsivskyi Steppe Nature Reserve, 49.299734º N, 40.083419º E, 17–25.05.2002, 1 spec., V. Foroshchuk; at the same place, 24.07.1999, 1 spec., V. Foroshchuk; at the same place, 24–28.07.1999, 4 spec., V. Foroshchuk; at the same place, 26.07.1999, 2 spec., V. Foroshchuk; at the same place, 27.07.1999, 1 spec., V. Foroshchuk; at the same place, 29.07.1999, 3 spec., V. Foroshchuk; at the same place, 18.05.2000, 2 spec., V. Foroshchuk; at the same

place, 21.05.2000, 1 spec., V. Foroshchuk; at the same place, 23.05.2000, 1 spec., V. Foroshchuk; at the same place, 24.05.2000, 1 spec., V. Foroshchuk; at the same place, 25–28.05.2000, 3 spec., V. Foroshchuk (all – CFR); at the same place, 26.07.2010, 3 spec., S. Glotov (CGL); at the same place, 7–30.05.2009, 3 spec., N. Polchaninova (CGL); Novopskov d., Bilolutsk, Bilolutsk Nature Reserve, 49.706872º N, 38.969464º E, 21.05.2004, 2 spec., S. Glotov; natural landmark Novobila, 49.776596º N, 39.176686º E, 20.05.2004, 2 spec., S. Glotov; Zaaidarivka, 49.560779º N, 39.113539º E, in animal remains, 1 spec., S. Glotov; Ikove, 49.530929º N, 39.088820º E, 29.05.2004, 1 spec., S. Glotov; 29.05.2004, 1 spec., S. Glotov; Kuban, 49.650281º N, 39.025967º E, 22.05.2004, 2 spec., S. Glotov; Novobila, 20.05.2004, 2 spec., S. Glotov; Novopskov, 49.538950º N, 39.128989º E, 29.05.2004, 1 spec., S. Glotov; Osynove, Osynove Nature Reserve, 49.596175º N, 39.034747º E, bank of r. Aidar, 21.05.2004, 2 spec., S. Glotov; Pysarivka, 49.489019º N, 39.086760º E, 29–30.05.2004, 1 spec., S. Glotov; Rohove, 49.628047º N, 39.031117º E, 27.05.2004, 2 spec., S. Glotov; Taniushchivka, 49.761961º N, 38.938420º E, 25.05.2004, 1 spec., S. Glotov; Teviasheve, 49.609585º N, 39.035237º E, 21.05.2004, 2 spec., S. Glotov; at the same place, 21.05.2004, 2 spec., S. Glotov; Popasna d., Shypilivka, 48.964121º N, 38.285153º E, 7.07.2010, 3 spec., S. Glotov; Sverdlovsk d., Provalskyi Steppe Nature Reserve, 48.155359º N, 39.865589º E, 26.05.2010, 4 spec., S. Glotov; 27.05.2010, 1 spec., S. Glotov; 31.05.2010, at the same place, 2 spec., S. Glotov; at the same place, 4.06.2010, 2 spec., S. Glotov; at the same place, 10.06.2010, 8 spec.; at the same place, 21.07.2009, 1 spec., S. Glotov; at the same place, 22.07.2009, 14 spec., S. Glotov (all – CGL); Slovianoserbsk d., Trokhizbenka, 48.746367º N, 38.979854º E, 29.05.2010, 1 spec.; at the same place, 9.06.2010, 4 spec.; at the same place, 22–25.08.2010, 3 spec.; at the same place, 28.08–01.09.2010, 4 spec., S. Konovalov; at the same place, 16–20.09.2010, 3 spec., S. Konovalov (all – CGL, CKON); Stanytsia Luhanska d., Stanytsia Luhanska Nature Reserve, 48.756519º N, 39.357874º E, 28.05.2009, 1 spec., S. Glotov (CGL); Derkul Ichthyological Nature Reserve, bank of the r. Derkul, light trap, 10.07.2010, 1 spec., S. Glotov; at the same place, river bank, in animal remains, light trap, 11.07.2010, 1 spec., S. Glotov; Stanytsia-Luhanska, 2.05.2013, light trap, 1 spec., S. Glotov; Kindrashivka Nature Reserve, in animal remains, 2.06.2013, 1 spec., S. Glotov; Troitske d., Demyno-Oleksandrivske, 50.039549º N, 38.256418º E, lake shore, in animal remains, 1 spec., 28.07.2009 spec., S. Glotov. LWI: Horodok d., Bartativ [Bar], 49.798905º N, 23.820259º E, 3.8. [year not specified], 1 spec., Lviv, 49.839337º N, 24.030204º E, [Lwów, "L", Okolica Lwowa, H, K, Kryvchytsi, Pasieki], 22.3., 3 spec.; at the same place, 1.5., 1 spec.; at the same place, Bohdanivka [Bg], 49.851623º N, 24.436497º E, 26.10., 1 spec., at the same place, 19.10., 1 spec., at the same place, at the same place, Pasiky Zubrytskykh [Pasieki], 6.5.[1]917, 5 spec., Briukhovychi [Brzuchowice], 49.901268º N, 23.967150º E, 6.4.[1]926, 2 spec., at the same place, 30.9., 1 spec., at the same place, 11.1., 1 spec., at the same place, 14.7., 1 spec.; at the same place, Zubra [Zubra], 49.764882º N, 24.053371º E, date not specified, 2 spec. (all – SMNH); Yavoriv d., Roztochchia Nature Reserve, 49.947253º N, 23.655512º E, 24.08.1988, 2 spec., A. Petrenko (SIZK). MYK: Berezanka d., Tashyno, 46.906371º N, 31.120910 E, 18.09.2011, 1 spec., L. Faly (CFL). ODE: Odesa d., Dachne [state farm "Dachne"], 46.563684º N, 30.550458º E, 25.06.1977, 1 spec., Z. Berest (SIZK). POL: Kremenchuk, 49.084123º N, 33.409319º E, 22.06.1984, 1 spec., A. Petrenko (SIZK). SUM: Seredyna-Buda d., Desniansko-Starohutskyi National Park, Starohutska Area, 52.333800º N, 33.696230º E, 21.06.2006, 4 spec., A. Petrenko (SIZK). TER: Butsyki [B], 49.319994º N, 26.025245º E, 6.8., 1 spec., at the same place, 4.8., 2 spec.; at the same place, 9.8, 1 spec.; at the same place, 10.8.[year not specified], 1 spec.; at the same place, 6.8, 1 spec. (all – SMNH). VOL: "Volyn" [Vol.], 50.438449º N, 30.534035º E, date not specified, 1 spec., J. Hochhuth (NMNH); Kovel d., Zelena, 51.172405º N, 24.687869º E, 12.08.1988, 1 spec., A. Petrenko (SIZK); Turiisk d., Turiisk, 51.088980º N, 24.518209º E, light trap, 13.07.2010, 1 spec., P. Voitko (all – CVT). ZAK: Velyke Berezne d., Kniahynia, ridge Stinka, 961 м, 48.999267º N, 22.506984º E, 21.06.2018, forest, ecotone, 18.05.2019, ecotone, 1 spec., N. Koval; Mochar, ridge Yavirnyk, 1010 м, 48.911741º N, 22.556342º E, 05.06.2018, forest, 2 spec., N. Koval; (all – CKOV); Tiachiv d., Mala Uholka, 48.193230º N, 23.629006º E, 05.05.2017, 8 spec., V. Chumak; at the same place, 02.06.2017, 25 spec., V. Chumak; at the same place, 20.06.2017, 4 spec., V. Chumak (all – CCHM). ZAP: Vasylivka d., Skelky, Velyki Luky National Nature Reserve, 47.430388º N, 35.070558º E, 5.06.2011, 4 spec., L. Faly (CFL). ZIT: Zhytomyr, 50.256578º N, 28.658954º E, date not specified, 1 spec. (SIZK).

Description. Body length 2.4–3.0 mm. Body mostly black, and certain parts varies from black or dark-brown to light-brown, abdomen apically light-brown, legs, antennae and maxillary palpi yellow. Body entirely with minute and rare punctation patterns; body quite densely covered with short dark bristles over the entire surface; cellular microstructure exactly expressed and clearly visible.

Head moderately large and transversely expanded, significantly narrower and shorter than pronotum; distinctly tapering behind the eyes; its posterior corners rounded. Eyes large and not convex; temples slightly longer than eyes. Antennae thin and short, their segments I–III elongate, but each following slightly smaller than the previous one; segment IV – slightly elongate, significantly shorter than the following ones; segments V–X quadrate or slightly transversely expanded, but each following slightly broader and longer than the previous one; segment XI elongate, apically pointed.

Pronotum slightly transversely expanded, its width is 1.3–1.4 of its length, anterior and posterior corners of the disc rounded, maximum width is in the middle of the disc, posterior margin of the disc slightly convex and oblique; bristles moderately dense, located obliquely from the middle to the posterior margin of the disk.

Elytra short, almost parallel lateral, slightly broader or of the same width as pronotum, posterior external corners of the elytra not rounded.

Abdomen slender and elongate, gradually tapering apically. Posterior margin of tergite VIII and abdominal sternite straight, distinctly tapering posteriorly. Aedeagus as illustrated (Fig. 3a, 3b). Spermatheca S-shaped as illustrated (Fig. 3c–h), its shape varies greatly (Glotov, 2021).

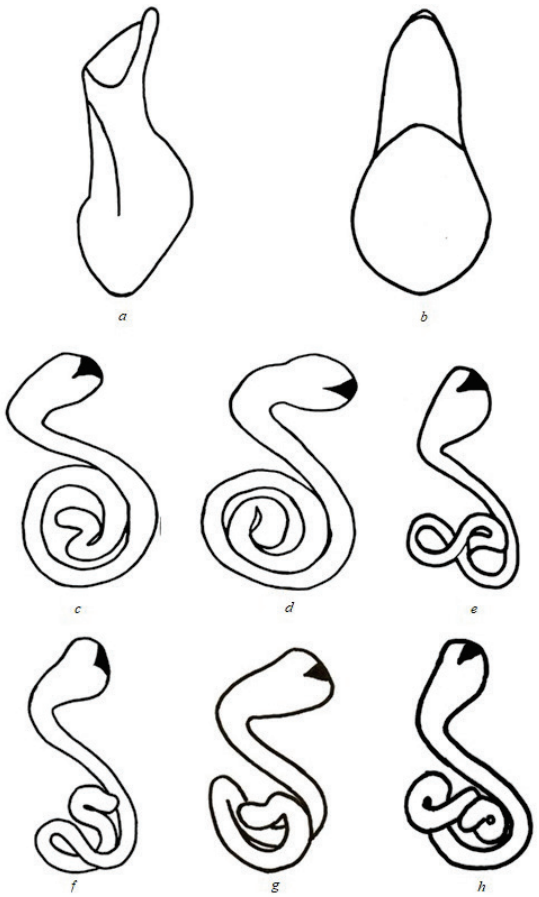

Fig. 3. *Mocyta fungi fungi* (*a–h*): aedeagus in lateral view (*a*); aedeagus, parameral view (*b*); spermatheca in lateral view (*d–h*); *a*, *b* – redrawn from Brundin (1940); *e* – redrawn from Korge (1975); *f* – redrawn from Klimaszewski et al. (2018); redrawn from *g* – Topp (1975a); redrawn from *h* – Pasnik (1999)

Biology. Occurs in various forest and ecotonic biotopes, in particular in ravine and floodplain forests and artificial forests. In the Carpathians, they extend high up into the mountains. Lives in forest cover, along shores of reservoirs, under moist leaves and in plant remains, in moss, rotten fungi etc. Adults are actively attracted to artificial light sources at dusk.

Distribution. The holarctic range of the species covers Eurasia, North Africa and North America (Schülke & Smetana, 2015; Klimaszewski et al., 2015, 2018).

***Mocyta fussi* Bernhauer, 1908**

Synonymy. *Homalota nitens* Fuss, 1868.

Invalid combinations. *Atheta fussi* Bernhauer, 1908; *Acrotona fussi* (Bernhauer, 1908); *Homalota fussi* (Bernhauer, 1908); *Colpodota fussi* (Bernhauer, 1908).

Records. CRI (Winkler, 1925; Schülke & Smetana, 2015).

Material examined. Literature data only.

Description. Body length 1.5–2.0 mm. Head black and glossy, pronotum dark-brown, elytra light-brown, abdomen black and glossy, antennae and maxillary palpi black or dark-brown, legs yellow. Body entirely with minute and rare punctation patterns, punctation patterns at the elytra distinctly denser than at the pronotum; body quite densely covered with short bristles over the entire surface, abdomen apically with moderately long dark bristles; cellular microstructure exactly expressed and clearly visible. Body slightly flattened.

Head moderately large and transversely expanded, significantly narrower and shorter than pronotum; distinctly tapering behind the eyes; its posterior corners rounded. Eyes large and convex; temples 1.5 times longer than eyes. Antennae short, their segments I–III elongate, but each following slightly smaller than the previous one, segment III thin and significantly shorter than segment II; segment IV quadrate or slightly transverse, significantly shorter than the following ones; segments V–X transversely expanded, but each following slightly broader and longer than the previous one; segment XI elongate, apically pointed.

Pronotum transversely expanded, its width is 1.5 of its length, anterior and posterior corners of the disc rounded, maximum width is near posterior margin, posterior margin of the disc slightly convex; bristles moderately dense, located obliquely from the middle to the posterior margin of the disk.

Elytra short, slightly broader than pronotum, length of the elytra, along the inner seam, almost the same as of pronotum, posterior external corners of the elytra rounded.

Abdomen slender and elongate, gradually tapering apically. Posterior margin of tergite VIII and abdominal sternite straight, distinctly tapering posteriorly. Aedeagus as illustrated (Fig. 2g, 3h). Spermatheca as illustrated (Fig. 2i, 2j).

Biology. Biology and distribution has not been studied; at dusk, they are attracted to artificial light sources; during daylight, they fall into window traps. Adults are active from May till August.

Distribution. Balkans, Central and Southern Europe, Ukraine, Caucasus, Turkey (Winkler, 1925; Schülke & Smetana, 2015).

[*Mocyta negligens* (Mulsant & Rey, 1873)] (Fig. 1d)

Invalid combinations. *Acrotona negligens* (Mulsant & Rey, 1873); *Atheta negligens* (Mulsant & Rey, 1873).

Description. Body length 1.8–2.4 mm. Head dark-brown and glossy, pronotum and elytra mostly black, sometimes brown, abdomen basally brown and glossy, apically black, sometimes totally black, antennae mostly brown, segments I–III yellow, maxillary palpi and legs light-brown or yellow. Entire body glossy with minute and rare punctation patterns; body quite densely covered with short bristles over the entire surface, abdomen covered with long dark bristles; cellular microstructure exactly expressed and clearly visible.

Head moderately large and transversely expanded, significantly narrower and shorter than pronotum; gradually tapering behind the eyes; its posterior corners rounded. Eyes large and slightly convex, almost of the same length as temples. Antennae thin and elongate, their segments I–III elongate, but each following slightly smaller than the previous one; segment IV slightly elongate, significantly smaller than the following ones; segments V–IX slightly elongate, each following slightly broader and longer than the previous one; segment X quadrate or slightly transverse; segment XI elongate, apically pointed.

Pronotum transversely expanded, its width is 1.5 of its length, anterior and posterior corners of the disc rounded, maximum width is near the posterior margin, posterior margin of the disc slightly convex; bristles moderately dense, located obliquely from the middle to the posterior margin of the disk.

Elytra short, convex on each side, almost of the same width as pronotum, posterior external corners of the elytra exactly expressed.

Abdomen slender and elongate, in the middle slightly convex, gradually tapering apically. Posterior margin of tergite VIII and abdominal sternite straight, distinctly tapering posteriorly. Aedeagus as illustrated (Fig. 4a, 4b). Spermatheca as illustrated (Fig. 4c, 4d).

Biology. Occur in various forest biotopes, where they live in forest cover, under moist leaves and in plant remains. During daylight, they fall into window traps. Adults are active in April and May.

Distribution. Europe, Mongolia (Schülke & Smetana, 2015).

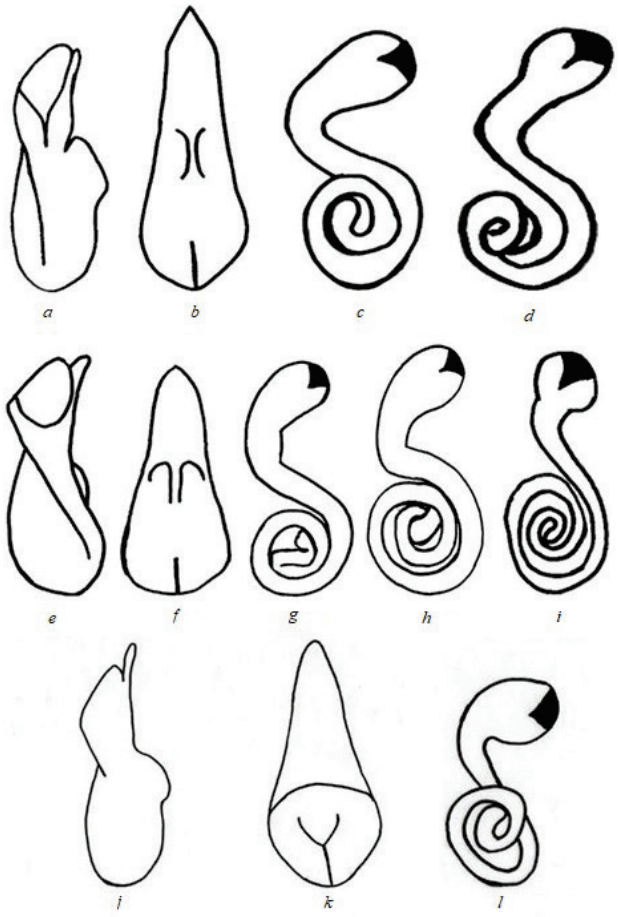

Fig. 4. *Mocyta negligens* (*a*, *b*, *c*, *d*), *M. orbata* (*e*, *f*, *g*, *h*, *i*), *M. orphana* (*j*, *k*, *l*): aedeagus in lateral view (*a*, *e*, *j*); aedeagus, parameral view (*b*, *f*, *k*); spermatheca in lateral view (*c*, *d*, *g*, *h*, *i*, *l*); *a*, *b*, *d*–*f*, *i* – redrawn from Lohse (1974); *j*–*l* – redrawn from Strand & Vik (1964)

***Mocyta orbata* (Erichson, 1837) (Fig. 1e)**

Invalid combinations: *Atheta orbata* (Erichson, 1837); *Atheta fungi* var. *orbata* (Erichson, 1837); *Acrotona orbata* (Erichson, 1837); *Homalota orbata* Erichson, 1837.

Records. CRI, DNI, DON, IFR, KHE, KYI LWI, LUG, ODE, VOL ZAK (Nowicki, 1873; Łomnicki, 1884, 1913; Cherkunov, 1889; Semenov & Blinstein, 1989; Zelinovskaya & Petrenko, 1992; Schülke & Smetana, 2015).

Material examined. 27 spec. CRI: Radianskyi d., Zavitne, 45.133977º N, 36.423837º E, 10.08.2003, light trap, 1 spec., S. Glotov; at the same place, lake shore, in rotten plant remains, 12.08.2003, light trap, 1 spec., S. Glotov (all – CGL); mount Chatyrdah, 44.734179º N, 34.281192º E, 26.08.1978, 1 spec., A. Petrenko (SIZK). DNI: Novo-

moskovsk d., Andriivka, 47.900262º N, 36.196158º E, 10.06.2009, 1 spec., L. Faly (CFL). DON: Debaltseve, 48.315566º N, 38.418985º E, ravine forest, in forest cover, 1.05.2012, 1 spec., S. Glotov (CGL); Donetsk, 48.008245º N, 37.870352º E, 27.08.1999, 2 spec., T. Trykhleb (SIZK). LUG: Milove d., Striltsivskyi Steppe Nature Reserve, 49.299734º N, 40.083419º E, near entrance of burrow of Marmota bobak, 16–17.04.2009, 1 spec., S. Glotov; Slovianoserbsk d., Trokhizbenka, 48.746367º N, 38.979854º E, 25.02.2010, 1 spec., S. Konovalov (CGL); 30.03.2010, 1 spec., S. Konovalov (CGL); 30.09.2010, 1 spec., S. Konovalov (CGL); Stanytsia Luhanska d., Stanytsia Luhanska Nature Reserve, 48.756519º N, 39.357874º E, 28.05.2009, 1 spec., S. Glotov (CGL). LWI: Lviv [Lwiw], date not specified, 3 spec.; same locality but, [L], 1.11., 1 spec., same locality but, [ok. Lwowa], 22.5, 1 spec., same locality but, Pohulanka, 6.4.1917, 2 spec.; locality not specified, 7.6.[1]917, 2 spec. VOL: Kovel d., Zelena, 51.172405º N, 24.687869º E, 12.08.1988, 1 spec., A. Petrenko (SIZK); Turiisk d., Turiisk, 51.088980º N, 24.518209º E, light trap, 13.07.2010, 1 spec., P. Voitko (CVT). ZAK: Tiachiv d., Velyka Uholka, 48.221016º N, 23,650969º E, 01.06.2021, 2 spec., V. Chumak; at the same place, 15.06.2021, 2 spec. V. Chumak (all – CCHM).

Description. Body length 2.5–3.0 mm. Head dark-brown or black and glossy, pronotum often light-brown, often lighter than the rest of the body, elytra light-brown, abdomen basally black and glossy, apically brown, antennae and maxillary palpi brown, legs brown or yellow. Entire body glossy with minute and rare punctation patterns; body quite densely covered with short bristles over the entire surface, abdomen apically covered with long dark bristles; cellular microstructure exactly expressed and clearly visible.

Head moderately large and transversely expanded, significantly narrower and shorter than pronotum; gradually tapering behind the eyes; its pasterior corners rounded. Eyes large and slightly convex; temples of the same length or slightly shorter than eyes. Antennae thin and elongate, their segments I–III elongate, but each following slightly smaller than the previous one; segment IV slightly elongate, significantly shorter than the following ones; segments V–X slightly elongate or quadrate, but each following slightly broader and longer than the previous one; segment XI elongate, apically pointed.

Pronotum transversely expanded, its width is 1.3 of its length, anterior and posterior corners of the disc rounded, maximum width is near posterior margin, posterior margin of the disc slightly convex; bristles moderately dense, located obliquely from the middle to the posterior margin of the disk.

Elytra short, slightly convex on each side, almost of the same width as pronotum, posterior external corners of the elytra rounded.

Abdomen slender and elongate, gradually tapering apically. Posterior margin of tergite VIII and abdominal sternite straight, distinctly tapering posteriorly. Aedeagus as illustrated (Fig. 4e, 4f). Spermatheca S-shaped, its shape as illustrated (Fig. 4g–i).

Biology. Occur in various forest and steppe biotopes, where they live in forest cover, under moist leaves and in plant remains; in the open steppe areas the species is registered near entrance of burrow of *Marmota bobak*. At dusk, adults are attracted to artificial light sources; during daylight, they fall into window traps. Adults are active from April till August.

Distribution. Europe, North Africa (Schülke & Smetana, 2015).

***Mocyta orphana* (Erichson, 1837) (Fig. 1f)**

Synonyms. *Colpodota nigricolor* Mulsant & Rey, 1874.

Invalid combinations: *Acrotona orphana* (Erichson, 1837); *Atheta orphana* (Erichson, 1837); *Homalota orphana* (Erichson, 1837).

Records. CER, KYI, LWI, LUG (Łomnicki, 1884, 1890, 1913; Cherkunov, 1889; Marcu, 1935; Schülke & Smetana, 2015).

Material examined. 32 spec. CER: Chernivtsi [Bukowina, Cernowitz], 48.295066º N, 25.933917º E, date not specified, 4 spec., (ZM UTSHK). IFR: Vorokhta [Worochta], date not specified, 5 spec. KYI: Kyiv [K.], 50.438449º N, 30.534035º E, date not specified, 5 spec., J. Hochhuth (NSNHM); Hydropark, 1 spec., 14.06.2006, A. Petrenko; Holosiivskyi d., 09.09.2008, 5 spec.; Sviatoshynskyi d., Novobilychi, 1 spec., 12.08.1984 A. Petrenko. LUG: Antratsyt d., v. Ivanivka, 48.231811º N, 38.970087º E, 17.04–05.05.2011, 1 spec., V. Landyk; Rovenky, Dubova Balka, 48.065493º N, 39.381823º E, ravine forest, in forest cover, 15.06.2010, 1 spec., S. Glotov (CGL); Sverdlovsk d., Provalskyi Steppe Nature Reserve, 26.05.2010, 1 spec., S. Glotov; same locality but, 31.05.2010, 2 spec., S. Glotov (CGL); same locality but, 4.06.2010, 1 spec., S. Glotov (CGL). LWI: Ivano-Frankove [Janów], data not specified, 2 spec.; Lviv, Pasiky [Pasieki], 6.5.1917, 2 spec., same locality but, Pohulanka, 6.4.1917, 6 spec., same locality but, Snopkiv [Sp], 25.4., 1 spec.

Description. Body length 1.6–2.0 mm. Body black and glossy, antennae, maxillary palpi and legs brown. Body rather densely covered with minute punctation pattern; body quite densely covered with short bristles over the entire surface, abdomen apically covered with long dark bristles; cellular microstructure exactly expressed and clearly visible.

Head moderately large and transversely expanded, significantly narrower and shorter than pronotum; gradually tapering behind the eyes; its posterior corners rounded. Eyes large and slightly convex; temples of the same length or slightly shorter than the eyes. Antennae thin and elongate, their segments I–III elongate, but each following slightly smaller than the previous one; segment IV slightly elongate or quadrate, significantly smaller than the following ones; segments V–X transversely expanded, but each following slightly broader and longer than the previous one; XI segment elongate, apically pointed.

Pronotum transversely expanded, its width is 1.5 of its length, anterior and posterior corners of the disc rounded, maximum width is near posterior margin, posterior margin of the disc slightly convex; bristles moderately dense, located obliquely from the middle to the posterior margin of the disk.

Elytra short, convex on each side, almost of the same width as pronotum, posterior external corners of the elytra sharp.

Abdomen slender and elongate, slightly convex in the middle, gradually tapering apically. Posterior margin tergite VIII and abdominal sternite straight, distinctly tapering posteriorly. Aedeagus as illustrated (Fig. 4j, 4k). Spermatheca S-shaped, its shape as illustrated (Fig. 4l).

Biology. Occur in various forest biotopes, in steppe as well as in ravine forests, where they live in forest cover, under moist leaves and in plant remains. At dusk, adults are attracted to artificial light sources; during daylight, they fall into window traps. Adults are active from April till August.

Distribution. Europe, Siberia, Far East (Schülke & Smetana, 2015).

Discussion

Diagnostic features of the genus *Mocyta*, as well as tables for identifying species of the genus *Mocyta*, and information on the distribution of the genus are presented in revisions and reviews of fauna of Central Europe (Ganglbauer, 1895; Scheerpeltz, 1931; Lohse et al., 1974), as well as in the identification guide to fauna of Great Britain (Thomson, 1861; Kevan, 1965), Denmark (Johansen, 1914), Germany (Kraatz, 1856; Reitter, 1909); Norway (Münster, 1925; Strand & Vick, 1964), Sweden (Brundin, 1954a–c; Palm, 1970) and Canada (Klimaszewski et al., 2015, 2018). Issues of bionomy, ecology and phenology of individual members of the genus *Mocyta* are covered in publications (Ganglbauer, 1895; Glotov, 2021a–b; Korge, 1975; Topp, 1975a; Nikitskyi et al., 1996). Peculiarities of morphology of larvae of certain species are considered in Topp (1975b).

Difficulties in diagnosing the genus *Mocyta* and other genera of the tribe Athetini have led to the fact that data on the distribution of species of this genus are rarely included in faunal reports. In particular, information on the findings of the genus *Mocyta* in Ukraine is presented only in a few faunal reports from Crimea (Pliginskyi, 1928), Donetsk (Glotov, 2021), Ivano-Frankivsk (Łomnicki, 1875), Kyiv (Cherkunov, 1889; Jacobson, 1910), Luhansk (Glotov, 2010, 2019), Lviv (Łomnicki, 1884) and Poltava regions (Petrenko, 1974; Kashcheev, 1984).

This paper is a continuation of the initiated series of reviews of genera and species of the tribe Athetini of the fauna of Ukraine (Glotov, 2020; Glotov et al., 2020, 2022). Taking into account the wide geographical distribution and significant individual variability in size, colour and shape of the spermatheca of representatives of the genus, the identification of the latter presents some significant difficulties. In order to facilitate the identification of species of the genus *Mocyta*, based on the analysis of literature and collection material from different regions of Ukraine, as well as com-

parative material from Austria, Azerbaijan, Georgia, Denmark, Germany, Poland and Russia, the wide variability of the diagnostic features in *M. fungi fungi* is illustrated (Glotov, 2021). There are 5 of which (*Mocyta clientula*, *M. fungi fungi*, *M. fussi*, *M. orbata*, *M. orphana*) are represented in the fauna of Ukraine. However, it is likely that there are two more species (*M. amplicollis* and *M. negligens*), identified for the surrounding areas, for which characteristics and comparative diagnoses have also been provided.

Table 1

Key to Ukranian species of the genus *Mocyta*

1	Body flattened; head and abdomen black and glossy, pronotum dark-brown, elytra light-brown, antennae and maxillary palpi black or dark-brown, legs yellow; segments V–X of the antennae transverse; width of pronotum is 1.5 of its length; elytra slightly broader than pronotum, along the inner seam, almost of the same length as pronotum, posterior external corners of elytra rounded; aedeagus (Fig. 2g, 2h), spermatheca (Fig. 2i, 2j). Biology has not been studied. In Ukraine, it is known from Crimea. [Balkans, Central and Southern Europe, Caucasus, Turkey].	*M. fussi* Bernhauer, 1908
–	Body convex	2
2	Elytra on each side almost parallel lateral or parallel lateral	3
–	Elytra convex on each side	4
3	Body bicoloured, head and abdomen to almost black, and rest of the body from reddish-brown to brown, pronotum in most specimens light-brown, in some specimens elytra mottled with small and irregular in shape darker spots; abdomen black and glossy, apically brown, antennae and maxillary palpi brown, legs yellow; segments V–X of antennae transversely expanded; pronotum's width is 1.5 of its length; elytra almost parallel lateral, slightly broader or of the same width as pronotum; aedeagus (Fig. 2d, 2e), spermatheca (Fig. 2f). Live in forest cover, along shores of water bodies, under moist leaves and in plant remains, moss and lichen. In Ukraine, it is known in the south, the south-east and in the Carpathians. [Europe, North Africa, Asia Minor, Siberia, Syria].	*M. clientula* (Erichson, 1839)
–	Entire body mostly black, or dark-brown, sometimes light-brown, abdomen apically light-brown; legs, antennae and maxillary palpi yellow; eyes large and not convex; temples slightly longer than eyes; segments V–X of antennae quadrate or slightly transversely expanded; width of pronotum is 1.3–1.4 of its length; elytra parallel lateral, almost of the same width as pronotum; aedeagus (Fig. 3a, 3b), spermatheca (Fig. 3c–h); body length 2.4–3.0 mm. In Ukraine, it is ubiquitous in all natural zones, including Crimea and the Carpathians. [Holarctic].	*M. fungi fungi* (Gravenhorst, 1806)
4	Pronotum as broad as elytra; body black or dark-brown; antennae, maxillary palpi and legs mostly brown; eyes large and convex; temples longer than eyes; segments V–X of antennae elongate; width of pronotum is 1.5 of its length; elytra, on each side of slightly convex, posterior external corners of elytra not rounded; aedeagus (Fig. 2a, 2b), spermatheca (Fig. 2c); body length 1.8–2.4 mm. Live in forest cover, under moist leaves and in plant remains, in moss and in burrows and nests of mammals. Not found in Ukraine. [Europe, Mongolia].	*M. amplicollis* (Mulsant & Rey, 1873)
–	Pronotum in many specimens broader than elytra	5
5	Body black and glossy, antennae, maxillary palpi and legs brown; eyes large and slightly convex; temples of the same length or slightly shorter than eyes; antennae thin and elongate, segments V–X transverse; width of pronotum is 1.5 of its length; elytra almost of the same width as pronotum, posterior external corners of elytra sharp; aedeagus (Fig. 4j, 4k), spermatheca (Fig. 4l); body length 1.6–2.0 mm. Lives in forest cover, under moist leaves and in plant remains, in moss. In Ukraine, it occurs rarely, mainly in steppe, forest-steppe and forest zones. [Europe, Siberia, Far East].	*M. orphana* (Erichson, 1837)
–	Body brown to darker-brown	6
6	Abdomen basally black and glossy, apically brown; antennae and maxillary palpi totally brown, legs light-brown or yellow; eyes large and slightly convex; temples of the same length or slightly shorter than eyes; segments V–X of antennae slightly elongate or quadrate; width of pronotum is 1.3 of its length; elytra short, slightly convex on each side, posterior external corners of elytra rounded; aedeagus (Fig. 4e, 4f), spermatheca (Fig. 4g–i); body length 2.5–3.0 mm. Lives in forest cover, under moist leaves and in plant remains, in moss and near entrance of burrow of mammals. The species is ubiquitous in Ukraine. [Europe, North Africa]	*M. orbata* (Erichson, 1837)
–	Abdomen basally brown, apically black sometimes totally black; antennae brown, segments I-III yellow, maxillary palpi and legs light-brown or yellow; eyes large and slightly convex, almost of the same length as temples; segments V–IX slightly elongate; width of pronotum is 1.5 of its length; elytra almost of the same width as pronotum, posterior external corners of elytra exactly expressed; aedeagus (Fig. 4a, 4b), spermatheca (Fig. 4c, 4d); body length 1.8–2.4 mm. Live in forest cover, under moist leaves and in plant remains. Not found in Ukraine. [Europe, Mongolia].	*M. negligens* (Mulsant & Rey, 1873)

Conclusion

We have made a detailed faunistic and taxonomic study of the genus *Mocyta*, using material from 25 administrative regions of Ukraine and the Autonomous Republic of Crimea. There are 5 species which (*Mocyta clientula*, *M. fungi fungi*, *M. fussi*, *M. orbata*, *M. orphana*) are represented in the fauna of Ukraine. However, it is likely that there are two more species (*M. amplicollis* and *M. negligens*), identified for the surrounding areas, for which characteristics and comparative diagnoses have also been provided. Comprehensive keys to species of the genus *Mocyta* occurring in Ukraine are provided presenting new data on morphology of some genital characters along with an annotated list and compilation of all the published data. The obtained results can be used in compiling the fauna cadaster of Ukraine, for comparative faunal studies, in analyzing the distribution of species, as well as in biogeographical modelling, in conducting ecological monitoring and forecasting the effects of anthropogenic factors on natural ecosystems.

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