

To the knowledge of the genus *Lagria* Fabricius, 1755 (Coleoptera: Tenebrionidae) of south and east of the Central Russian Upland

К познанию рода *Lagria* Fabricius, 1755 (Coleoptera: Tenebrionidae) юга и востока Среднерусской возвышенности

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Key words: Coleoptera, Tenebrionidae, *Lagria*, European part of Russia, Ukraine, distribution, identification key.

Ключевые слова: Coleoptera, Tenebrionidae, *Lagria*, европейская часть России, Украина, распространение, определительная таблица.

Abstract. New data about distribution of 3 species of the genus *Lagria* Fabricius, 1755 (*L. hirta* (Linnaeus, 1758), *L. atripes* Mulsant et Guillebeau, 1855 and *L. laticollis* Motschulsky, 1860) in the European part of Russia (Belgorod and Lipetsk Regions) and adjacent territory of Ukraine (Lugansk Region) are given. A key to these species is given. Images of *L. laticollis* are published for the first time.

Резюме. Приводятся новые данные по распространению трех видов рода *Lagria* Fabricius, 1755 (*L. hirta* (Linnaeus, 1758), *L. atripes* Mulsant et Guillebeau, 1855 и *L. laticollis* Motschulsky, 1860) в европейской части России (Белгородская и Липецкая области) и сопредельных территорий Украины (Луганская область). Приводится новая детальная определительная таблица для всех трех видов. Впервые даны изображения *L. laticollis*.

Introduction

Two species of the genus *Lagria* Fabricius, 1755 were previously known in the European part of the Commonwealth of Independent States (CIS): *L. hirta* (Linnaeus, 1758) and *L. atripes* Mulsant et Guillebeau, 1855. The first species is widespread on the whole area [Medvedev, 1965; Merkl, 2008; Abdurakhmanov, Nabozhenko, 2011].

The second species was listed for the south of the European part of USSR and Russia without exact localities [Jakobson, 1931; Merkl, 2008]. Abdurakhmanov and Nabozhenko [2011] have not discussed the distribution of *L. atripes* in Russia because of absence of material. Prisniy et al. [2013] recorded occurrence of the species in the European part of Russia (Belgorod Region) and in the adjacent territory of Ukraine (Lugansk Region), and added *Lagria laticollis* Motschulsky, 1860 to the fauna of Belgorod Region. Until recently *L. laticollis* was known from Siberia, the Far East (Primorsky and Khabarovsk Regions) and Mongolia [Jakobson, 1905; Merkl, 2008]. New records of the two latter species in the European part of Russia and in Ukraine suggest their wider distribution. New localities and an identification key to the three species of *Lagria* are given.

Material

The study is based on the examination of adult beetles from the following collections (name of the curators in parentheses): GG – collection of Galichya Gora Natural Reserve (M.N. Tsurikov); HNHM – Hungarian Natural History Museum, Budapest (O. Merkl); BSRU – Belgorod State National Research University (A.V. Prisniy). Bibliography for each species is given only for the region.

Localities are presented as numbers for each species:

Belgorod Region. 1 – Belgorod environs (50°38'46"N / 36°34'06"E); 2 – Belgorod: Sosnovka Natural Boundary (50°32'56"N / 36°37'46"E); 3 – WSW Dolbino (50°30'14"N /

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36°22'58"E); 4 – Borisovka environs (50°35'53"N / 35°58'31"E); 5 – Nizhnie Melnitsy (50°02'20"N / 37°57'17"E); 6 – Volokonovka environs (50°30'24"N / 37°47'30"E); 7 – “Belogor'e” State Natural Reserve, “Yamskaya Step” area, gully “Sury” (51°12'02.97"N / 37°38'18.85"E); 8 – Dubravka environs, “Mikherevo” Natural Boundary (51°10'11.29"N / 37°36'00.51"E); 9 – Dubravka environs, “Brazilovo” Natural Boundary (51°10'50.57"N / 37°35'12.11"E); 10 – Sergievka environs, “Sennoe” Natural Boundary (51°12'27.77"N / 37°30'25.36"E); 11 – Sergievka environs, “Romanovo” Natural Boundary (51°12'40.19"N / 37°28'17.38"E); 12 – Pugachi environs, “Galichi” Natural Boundary (51°11'11.14"N / 37°28'25.46"E); 13 – Sergievka environs, “Lysye Gory” Natural Boundary (51°13'59.69"N / 37°27'57.99"E); 14 – Saprykino environs (51°07'21.20"N / 37°39'54.38"E); 15 – Lebedinsky mining factory, recultivated dump (51°16'00"N / 37°35'33"E); 16 – Khvorostyanka and Bogoslovka environs, “Panskoe” Natural Boundary (51°06'50.55"N / 37°32'59.86"E); 17 – Konshino environs (51°00'57.55"N / 37°28'14.46"E); 18 – Dalnyaya Livenka environs, “Vodyanoe” Natural Boundary (51°04'54.83"N / 37°31'21.68"E); 19 – Krasnoplotava environs, “Plotava” Natural Boundary (51°04'19.61"N / 37°24'30.86"E); 20 – Zhilin Kolodez' environs, “Repnoe” Natural Boundary (50°59'50.72"N / 37°24'30.86"E); 21 – Melovoe environs, “Khmelevatoo” Natural Boundary (51°08'04.75"N / 37°24'50.72"E); 22 – Ogibnoe environs, “Albiny” Natural Boundary (51°02'05.57"N / 37°33'28.55"E); 23 – Kochegury environs (50°59'59.47"N / 37°33'51.57"E); 24 – Starokhmelevoe and Orlik environs (51°03'28.50"N / 37°42'56.69"E); 25 – Koptsevo environs, “Barskoe” Natural Boundary, (51°06'40.70"N / 37°35'57.41"E); 26 – Korocha environs (50°49'20"N / 37°12'16"E); 27 – Bol'shaya Khalan' and Yablonovo environs, “Bakshevo” Natural Boundary (50°53'27.15"N / 37°24'32.08"E); 28 – Gnezdilovka (50°54'20"N / 36°52'41"E); 29 – Roven'ki environs (49°54'48"N / 38°51'60"E); 30 – W of Arkhangelskoe (50°21'37"N / 36°46'18"E); 31 – Malaya Mikhailovka, “Bekaryukovsky Bor” Natural Boundary (50°26'17"N / 37°04'16"E); 32 – Stoylensky mining factory, dump (51°13'25"N / 37°42'36"E); 33 – Orlik environs, “Prostoe” Natural Boundary (51°05'15.02"N / 37°41'57.17"E).

Lipetsk Region. 34 – Galichya Gora Natural Reserve, “Morozova Gora” Natural Boundary (52°35'60"N / 38°54'50"E); 35 – Galichya Gora Natural Reserve, Galichya Gora environs (52°35'N / 38°54'E); 36 – Galichya Gora Natural Reserve, “Bykova Sheya” Natural Boundary (52°46'01.2"N / 39°04'10.1"E); 37 – Galichya Gora Natural Reserve, “Plyushchan” Natural Boundary (52°49'59"N / 38°58'11"E); 38 – Galichya Gora Natural Reserve, “Vorgolskoye” Natural Boundary (52°35'N / 38°21'E); 39 – Lamskaya environs (52°57'58"N / 38°02'12"E); 40 – Meshcherka environs (52°59'04"N / 37°45'31"E); 41 – Tolstaya Dubrava environs (52°58'40"N / 38°08'51"E); 42 – Bryantsevo environs (52°56'37"N / 38°46'49"E); 43 – Savitskoye environs (52°09'N / 39°24'E); 44 – Turchanovo environs (52°05'N / 37°49'E); 45 – Bolshoy Samovets (52°32'N / 39°57'E); 46 – Gryazi environs (52°28'N / 39°59'E); 47 – “Dubrava” Natural Boundary (52°28'N / 39°50'E); 48 – Balovnevo (53°12'N / 39°01'E); 49 – Knyazhnaya Baygora (52°23'N / 40°02'E); 50 – Yamanskoe

forestry (52°25'N / 39°30'E); 51 – Karamyshevo environs (52°22'N / 39°28'E); 52 – Nizhnyaya Matryonka (52°15'N / 40°06'E); 53 – Zamartyn'ye environs, Martynchik River (52°50'N / 39°42'E); 54 – Gudovo environs (52°58'N / 39°49'E); 55 – Trubetchino environs, “Zapoved” Natural Boundary (52°52'N / 39°34'E); 56 – Kalikino environs (52°56'N / 39°50'E); 57 – Krivets environs (52°53'N / 40°02'E); 58 – Bolshoy Khomutets environs (52°46'N / 39°52'E); 59 – Preobrazhenovka (52°57'N / 40°01'E); 60 – “Voronets” Natural Boundary (52°32'N / 38°28'E); 61 – Alekseevka environs (52°22'N / 38°46'E); 62 – “Krutoye” Natural Boundary (52°45'N / 38°57'E); 63 – Zadonsk environs (52°22'N / 38°55'E); 64 – Verkhniy Studenets environs, “Kazyonnyy Les” Natural Boundary (52°34'N / 39°02'E); 65 – Donskoe environs (52°36'N / 39°00'E); 66 – Lipovka environs, “Lipovskaya Gora” Natural Boundary (52°31'N / 38°51'E); 67 – Leski environs (52°52'N / 39°00'E); 68 – Novochemodanovo environs (53°14'N / 39°43'E); 69 – Troekurovo (52°57'N / 38°57'E); 70 – Bibikovo environs, Chapishche gully (53°07'N / 38°42'E); 71 – Kul'tura environs (53°02'N / 39°30'E); 72 – Skvirnya River (53°02'N / 39°13'E); 73 – Leninskiy forestry (52°31'N / 39°40'E); 74 – Kurganka River springhead (52°13'N / 38°17'E); 75 – Borki environs, “Borok” Natural Boundary (52°08'N / 38°05'E); 76 – Lipetsk southern environs; 77 – Ust' Yurskoe environs (52°10'N / 38°03'E); 78 – Yakovlevo (52°06'N / 38°35'E); 79 – Nikol'skoye (52°20'N / 39°13'E); 80 – Dubovskoye forestry (53°04'N / 40°07'E); 81 – Pervomayskiy forestry (52°13'N / 39°23'E); 82 – Yeletskaia Lovovka (52°16'N / 39°10'E); 83 – Ryazanka environs, Bol'shoy Losk gully (53°30'N / 39°35'E); 84 – Oktyabr'skoye (52°18'N / 39°43'E).

Ukraine. 85 – Lugansk Region, Novoposkovsk District, Novobelaya (49°47'23"N / 39°11'42"E).

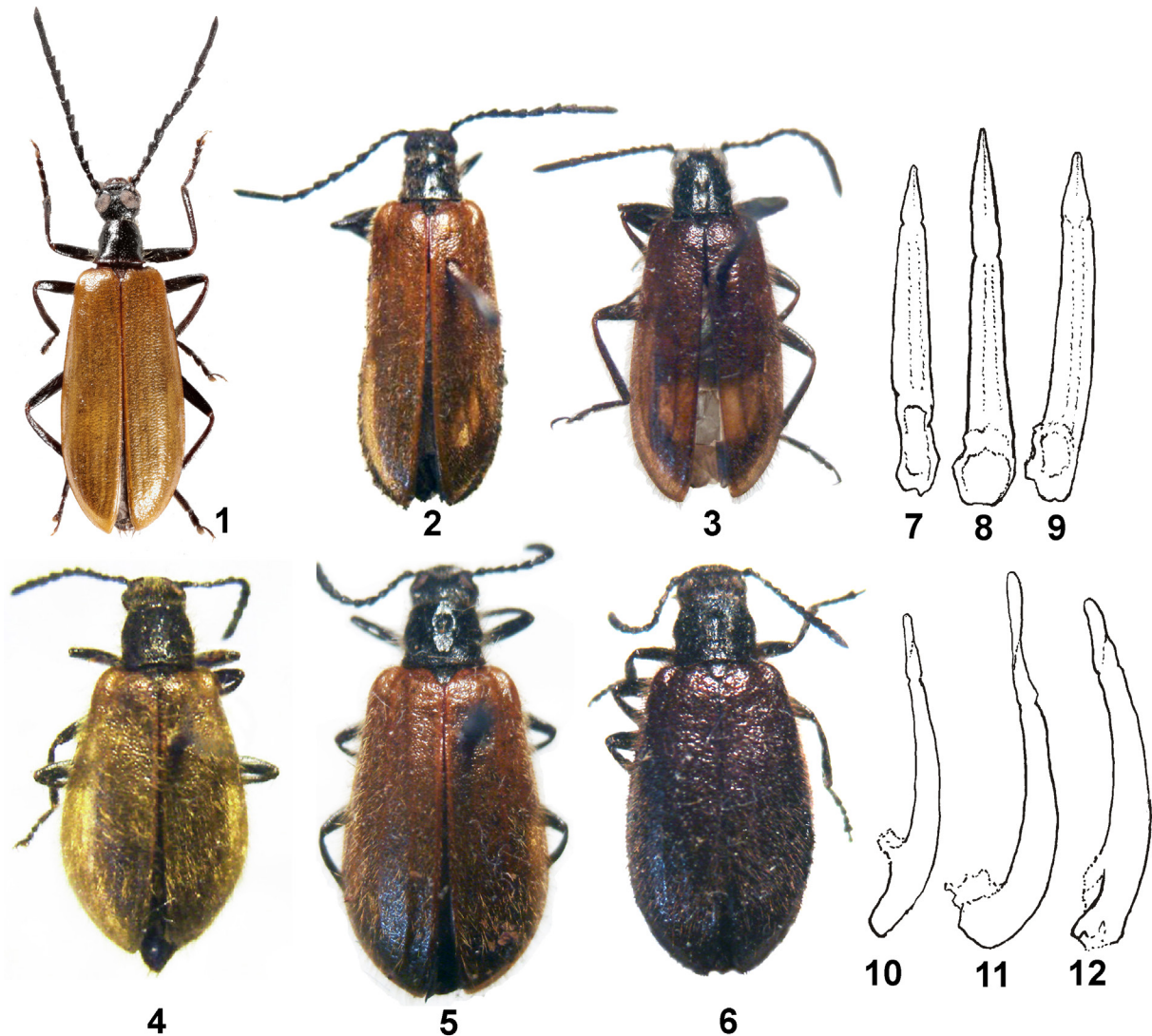
Lagria hirta (Linnaeus, 1758)

(Figs 1, 4, 7, 10, 14, 17)

An almost complete reference list about this widespread species in the European part of Southern Russia was given in Abdurakhmanov and Nabozhenko [2011]. More detailed information about distribution of this species in Lipetsk and Voronezh Regions are given in Negrobov et al. [2005] and Tsurikov [2009]. Data about 130 specimens of *L. hirta* based on the collection of GG were given by M.N. Tsurikov.

Material (more than 400 specimens). Belgorod Region (A.V. Prisniy and A.A. Sychev are main collectors): 1 – 6.07.1989, 30.06.1977 (BSRU); 2 – 22.07.2003 (BSRU); 3 – 15.07.1996 (BSRU); 5 – 24.06.1974 (BSRU); 6 – 24.06.1974 (BSRU); 7 – 20.08–8.10.2010, 15.06–23.07.2012, 31.05–18.07.2014, 18.07–18.08.2014, 18.08–20.09.2014, 16.06–21.07.2015, 21.07–6.09.2015 (GG); 10 – 8.06–18.07.2013 (GG); 11 – 16.07–17.08.2014, 23.07–6.09.2015 (GG); 12 – 21.07–6.09.2015 (GG); 13 – 27.06.1996 (BSRU); 14 – 25.07.2006 (BSRU), 7.06–20.07.2011, 7.06–16.07.2014 (GG); 15 – 10.07.2007, 9.08.2007, 13.07.2011 (BSRU); 17 – 15.08.2005 (BSRU), 9.06–22.07.2015, 22.07–5.09.2015 (GG); 18 – 7.06–17.08.2011, 17.06–28.07.2012, 16.07–16.08.2014, 9.06–23.07.2015, 23.07–6.09.2015 (GG); 20 – 9.06–22.07.2015, 22.07–5.09.2015 (GG); 22 – 9.06–23.07.2015 (GG); 23 – 11.06–22.07.2015, 22.07–5.09.2015 (GG); 24 – 22.07–6.09.2015 (GG); 25 – 17.06–24.07.2012, 7.06–16.07.2014 (GG); 26 – 23.08.1993 (BSRU); 28 – 25.07.1992 (BSRU); 30 – 15.07.2006 (BSRU); 31 – 17.07.2004, 16.07.2007 (BSRU).

Lipetsk Region (more than 200 specimens are deposited in GG; M.N. Tsurikov is main collector). 34 – 17.07.1977 (N. Panteleva leg.), 1.07.1977 (N. Panteleva leg.), 10.07.1978 (V. Kuznetsova leg.), 21.06.1984 (V. Kuznetsova leg.), 5.07.1980 (V. Kuznetsova leg.), 14.06.1995, 19.06.1995, 20.06.1995, 23.06.1996, 26.06.1995, 4.07.1996, 7.07.1996, 8.07.1996, 9.07.1996, 10.07.1996, 12.07.1996, 26.06.1997, 27.06.1997, 28.06.1997,



Figs 1–12. *Lagria*, dorsal habitus and male aedeagus (1 (dorsal pubescence abraded), 4, 7, 10 – *L. hirta*; 2, 5, 8, 11 – *L. atripes*; 3, 6, 9, 12 – *L. laticollis*). 1, 2, 3 – dorsal habitus, males; 4, 5, 6 – dorsal habitus, females; 7, 8, 9 – aedeagus, ventral view; 10, 11, 12 – aedeagus, lateral view.
 Рис. 1–12. *Lagria*, габитус дорсально и эдеагус самца (1, 4, 7, 10 – *L. hirta*; 2, 5, 8, 11 – *L. atripes*; 3, 6, 9, 12 – *L. laticollis*).
 1, 2, 3 – общий вид, самцы; 4, 5, 6 – общий вид, самки; 7, 8, 9 – эдеагус вентрально; 10, 11, 12 – эдеагус, латерально.

29.06.1997, 30.06.1997, 1.07.1997, 8.07.1997, 10.07.1997, 12.07.1997, 23.07.1997, 13.06.1999, 18.06.1999, 23.06.1999, 2.07.1999, 5.07.1999, 7.07.1999, 8.07.1999, 14.07.1999, 16.07.1999, 18.07.1999, 8.08.1999, 17.07.2001, 5.06.2000, 6.06.2000, 14.06.2000, 18.06.2000, 17.07.2000, 21.07.2000, 30.06.2002, 5–6.07.2002, 7.07.2002, 8.07.2002, 13.07.2002, 2.07.2003, 5.07.2003, 20.07.2003, 23.07.2003, 24.07.2003, 25.07.2003, 29.07.2003, 1.08.2003, 4.08.2003, 5.08.2003, 13.06.2004, 4.07.2004, 5.07.2004, 7.07.2004, 8.07.2004, 9.07.2004, 10.07.2004, 11.07.2004, 12.07.2004, 14.07.2004, 15.07.2004, 17.07.2004, 25.07.2004, 28.07.2004, 15.06.2005, 7.07.2005, 13.07.2005, 16.07.2005, 18.07.2005, 21.07.2005, 22.07.2005, 24.07.2005, 25.07.2005, 27.07.2005, 29.07.2005, 4.08.2005, 3.09.2005, 20.06.2006, 1.07.2006, 3.07.2006, 7.07.2006, 9.07.2006, 11.07.2006, 13.07.2006, 18.07.2006, 20.07.2006, 21.07.2006, 14.08.2006, 19.06.2007, 21.06.2007, 25.06.2007, 13.07.2007, 14.07.2007, 16.07.2007, 21.06.2008, 9.07.2008, 13.07.2008, 15.07.2008, 16.07.2008, 18.07.2008, 20.07.2008, 21.07.2008, 27.07.2008, 19.08.2008, 17.06.2009, 23.06.2009, 24.06.2009, 25.06.2009, 28.06.2009, 30.06.2009, 9.07.2009, 10.07.2009, 11.07.2009, 12.07.2009, 14.07.2009, 15.07.2009, 16.07.2009, 17.07.2009, 22.07.2009, 13.06.2010, 16.06.2010, 23.06.2010, 24.06.2010, 25.06.2010, 1.07.2010, 3.07.2010, 4.07.2010, 17.09.2010, 30.06.2010, 24.05–24.06.2011, 4.06.2011, 19.06.2011, 20.06.2011, 24.06–29.07.2011, 27.06.2011, 30.06.2011, 1.07.2011, 4.07.2011, 10.07.2011, 11.07.2011, 13.07.2011, 14.07.2011, 15.07.2011, 17.07.2011, 19.07.2011, 26.04–28.05.2012, 28.05–26.06.2012, 6.06.2012, 8.06.2012, 13.06.2012, 22.06.2012, 26.06–4.08.2012, 4.07.2012, 7.07.2012,

8.07.2012, 10–11.07.2012, 29.06.2013, 4.07.2013, 5.07.2013, 6.07.2013, 8.07.2013, 12.07.2013, 1.07.2014, 2.07.2014, 4.07.2014, 5.07.2014, 8.07.2014, 9.07.2014, 14.07.2014, 15.07.2014, 25.07.2014, 23.06.2015, 24.06.2015, 25.06.2015, 26.06.2015, 27.06.2015, 28.06.2015, 2.07.2015, 5.07.2015, 6.07.2015, 8.07.2015, 9.07.2015, 10.07.2015, 11.07.2015, 20.07.2015, 21.07.2015, 27.07.2015; 35 – 20.07.2006, 24.06.2007, 27.06.2015; 36 – 8.07.2008; 37 – 7.07.1978 (N. Panteleeva leg.), 29.07.1988 (V. Kuznetsova leg.); 38 – 2.07.1980 (N. Panteleeva leg.); 39 – 25–27.06.2010; 40 – 27.06.2010; 41 – 28.06.2010; 42 – 10.06.2013, 13.06.2013, 21.06.2013, 1.07.2013, 14.07.2013, 22.08.2013; 43 – 1.07.2009; 44 – 1.07.1996; 45 – 1.07.1999 (Ya. Urbanus leg.); 46 – 16.03.2003 (L. Fursova leg.); 47 – 1.07.2004; 48 – 23–24.06.2007 (D. Pereversev); 49 – 1.07.2004; 50 – 8.07.1984 (N. Panteleeva leg.); 51 – (N. Panteleeva leg.); 52 – 15.06.2000; 53 – 30.06.1997; 54 – 1.07.1997, 15.07.2005; 55 – 30.06.1997; 56 – 18.07.2003; 57 – 18.07.2003; 58 – 26.06.2000 (Ya. Urbanus leg.); 59 – 18.07.2003; 60 – 19.6.2009; 61 – 8.08.1996; 62 – 28.06.1983 (N. Panteleeva leg.), 30.06.1983 (N. Panteleeva leg.), 26.07.1984 (Podlipaeva leg.), 7.07.1996; 63 – 28.06.2000; 64 – 22.06.1996; 65 – 3.07.2004; 66 – 11.07.1996; 67 – 24.6.2007; 68 – 3.07.1997; 69 – 3.07.1997; 70 – 3.07.2004, 6.07.2004; 71 – 3.07.1997; 72 – 3.07.1997; 73 – 1.07.2004; 74 – 30.06.1996; 75 – 1.07.1996; 76 – 28.07.1996, 12.07.1999, 27.07.2000, 25.06.2001, 9.07.2005 (Ya. Urbanus leg., for all dates); 77 – 9.07.2006; 78 – 30.06.1996; 79 – 6.07.1997; 80 – 2.07.1997; 81 – 13.06.1981 (V. Kuznetsova leg.); 82 – 30.06.1982 (N. Panteleeva leg.); 83 – 27.06.2000; 84 – 1.07.1996 (L. Aksenenko leg.), 6.07.1996 (L. Aksenenko leg.).

Lagria atripes Mulsant et Guillebeau, 1855
(Figs 2, 5, 8, 11, 15, 18)

Jakobson, 1931: 179; Merkl, 2008: 115; Prisniy et al., 2013: 115.

Material (21 specimens). Belgorod Region (A.V. Prisniy and A.A. Sychev are main collectors): 7 – 10.06.2008 (BSRU), 12.06–22.07.2015 (GG); 8 – 12.06–23.07.2015 (GG); 14 – 12.06.2007 (BSRU), 9.06–21.07.2013 (GG); 23 – 11.06–22.07.2015 (GG); 24 – 7.06–17.07.2014 (GG); 27 – 11.06–22.07.2015 (GG); 29 – 17.07–12.08.2014, 6.06–24.07.2015 (GG); 30 – 23.06.2005, 8.07.2013 (BSRU).

Lipetsk Region (GG): 34 – 2.06.1977 (V. Kuznetsova leg.), 30.05.2010, 26.06–4.08.2012, 26.06–4.08.2012 (M. Tsurikov leg.).

Distribution. Europe (north to Germany and Poland), Turkey, Transcaucasia, Iran, Turkmenistan [Merkl, 2006, 2008], Russia: south of the European part, Belgorod Region [Prisniy et al., 2013].

Lagria laticollis Motschulsky, 1860
(Figs 3, 6, 9, 12, 16, 18)

Merkl, 2004: 292 (lectotype designation); Prisniy et al., 2013: 115.

Material (133 specimens). Belgorod Region (A.V. Prisniy and A.A. Sychev are main collectors): 3 – 10.07.2014 (BSRU); 14 – 25.06.2006 (BSRU); 15 – 27.06.2006 (BSRU), 10.07.2007 (A.V. Musina leg.) (BSRU, HNHM), 09.08.2007 (BSRU); 25 – 25.07.2006 (BSRU), 9.06–19.07.2013, 9.06–21.07.2015 (GG); 7 – 18.08.2006 (BSRU), 6.06–19.07.2013, 8.06–20.07.2013, 19.07–15.08.2013, 21.07–1.09.2015 (GG); 22 – 8.06–22.07.2011, 9.06–19.07.2013 (GG); 17 – 20.07–13.08.2011, 17.06–28.07.2012 (GG); 10 – 7.06–20.07.2011 (GG); 16 – 7.06–21.07.2011 (GG); 23 – 8.06–22.07.2011, 16.06–28.07.2012, 9.06–20.07.2013, 22.07–5.09.2015 (GG); 32 – 20.06.2008 (BSRU); 19 – 8.06–20.07.2013 (GG); 21 – 21.07–5.09.2015 (GG); 24 – 12.06–21.07.2013, (GG); 9 – 23.07–31.08.2015; 33 – 12.06–20.07.2013, 7.06–17.07.2014 (GG); 13 – 8.06–23.07.2013, 16.08–8.10.2013 (GG).

Lipetsk Region (GG, M.N. Tsurikov is main collector): 34 – 22.06.1996, 29.07.2009, 5.08.2009, 29.08.2009, 28.05.2010, 18.06.2010, 21.06.2010, 23.06.2010, 24.06.2010, 29.06.2010, 28.05–26.06.2012, 16.06.2012, 18.06.2012, 19.06.2012, 22.06.2012, 26.06–4.08.2012, 17.06.2013, 24.06.2013, 27.06.2013, 28.06.2013, 1.07.2013, 6–9.07.2014, 27.06.2015, 28.06.2015, 35 – 18.06.2012, 27.06.2015; 36 – 27.05–29.06.2012, 30.06–5.08.2012, 4.07–14.08.2013; 39 – 25–26.06.2010; 42 – 10.06.2013, 13.06.2013, 14.07.2013, 1.08.2013, 22.08.2013; 62 – 19.07.1987 (V. Kuznetsova leg.); 67 – 11.07.2011, 9.06.2013.

Ukraine: 85 – 22.07.2005 (A.V. Prisniy leg.) (BSRU).

Distribution. Mongolia; Russia: Far East, Eastern Siberia (the type locality: Sib. or. Amur), Western Siberia, Lipetsk and Belgorod Regions; NE Ukraine.

Bionomics. The species inhabits oak forests and their edges.

Notes. Egorov [1992] noted that he had not studied types of *L. laticollis* and that the genus *Lagria* needs a revision.

**Key to species of the genus *Lagria*
of the European part of CIS**

1(2). Male: pronotum widest at base, strongly narrowing anteriorly; disc of pronotum finely punctate to impunctate; relative width of horizontal eye diameter and interocular distance 1 : 0.3; dorsal part of eye (i.e. in dorsal view, part between deepest point of genal enchroachment and inner margin of eye) slightly wider than long; temple (i.e. distance between posterior margin of eye and “neck” of the head) shorter than 0.3× longitudinal eye diameter; relative length of apicale and basale of aedeagus 1 : 2–2.5. Female: elytra nearly parallel-sided. Body larger: length of male 8.5–9,

female 10–10.5 mm. – (Other important characters: elytra straw-yellow to light brown; elytra with simple punctation, punctural interspaces not raised, surface not rugose; antennomere 7 of female subquadrate to slightly longer than wide; female vertex without impression; midlongitudinal depression of female pronotum well-developed, bordered by prominent frame) *Lagria atripes*

2(1). Male: width of pronotum at base and at apex nearly equal, sides virtually not narrowing anteriorly, with slight lateral sinuation before base; disc of pronotum clearly punctate; relative width of horizontal eye diameter and interocular distance 1 : 0.4–0.7; dorsal part of eye (i.e. in dorsal view, part between deepest point of genal enchroachment and inner margin of eye) as long as or slightly longer than wide; temple (i.e. distance between posterior margin of eye and “neck” of the head) about 0.5× longitudinal eye diameter; relative length of apicale and basale of aedeagus 1 : 4–4.5. Female: elytra widening posteriorly, widest in posterior one-third. Body smaller: length of male 7–7.5, female 8–8.5 mm.

3(4). Elytra straw yellow to light brown, with more regular punctation, punctural interspaces not raised, surface not rugose. Male: relative width of horizontal eye diameter and interocular distance 1 : 0.4–0.5; pronotum slightly longer than wide, with coarser and deeper punctures. Female: vertex (not frons!) without impression; antennomere 7 nearly 2× longer than wide; pronotum subquadrate; midlongitudinal depression of pronotum shallow, relative width of horizontal eye diameter and interocular distance 1 : 2 *Lagria hirta*

4(3). Elytra dark brown, with more irregular punctation, punctural interspaces partly raised, making surface rugose. Male: relative width of horizontal eye diameter and interocular distance 1 : 0.6–0.7; pronotum subquadrate, with finer punctures. Female: vertex (not frons!) with shallow elongate impression; antennomere 7 as long as or barely longer than wide; pronotum slightly wider than long; midlongitudinal depression of pronotum deep, relative width of horizontal eye diameter and interocular distance 1 : 3 *Lagria laticollis*

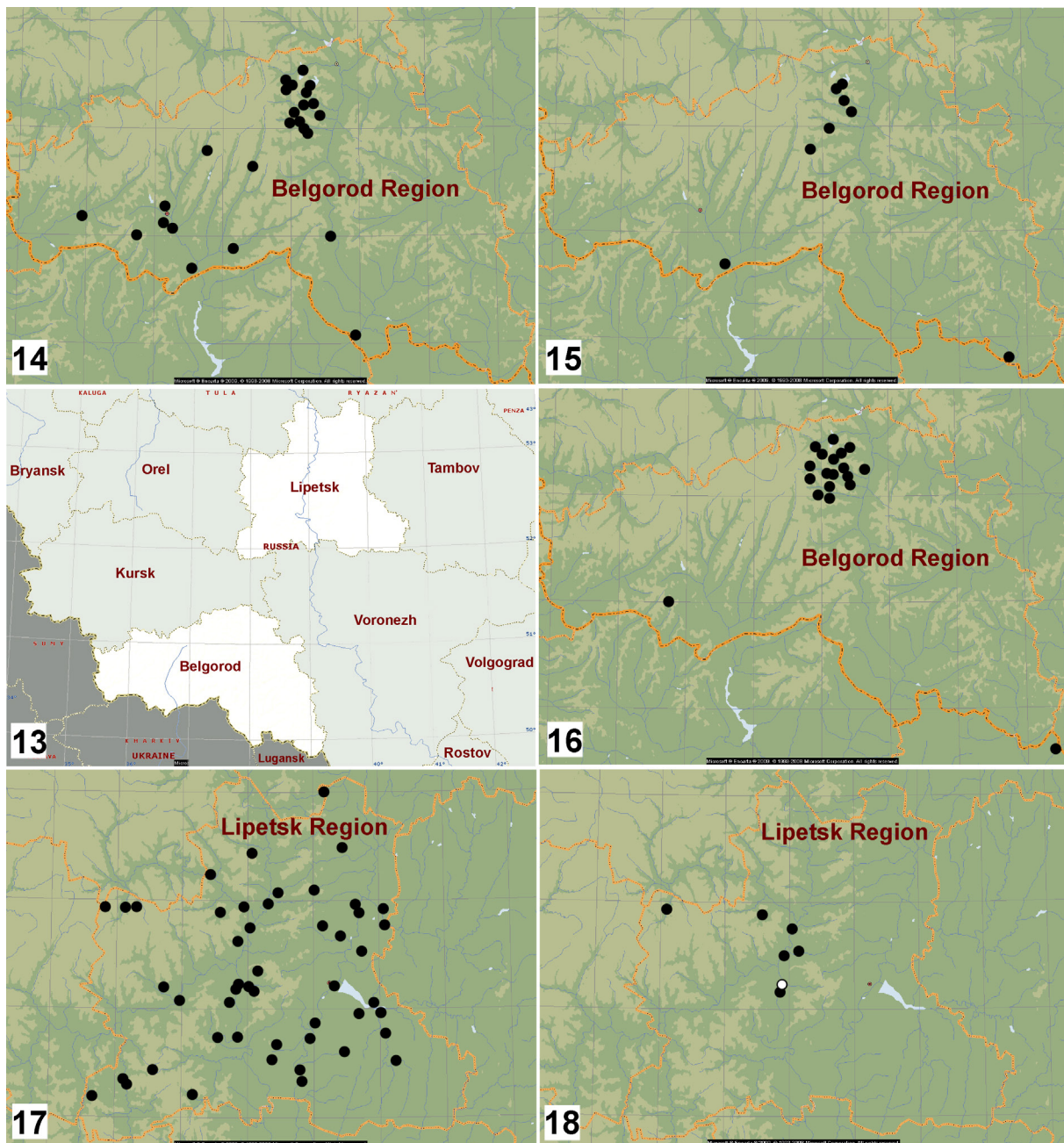
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Figs 13–18. *Lagria*, localities for three species in Belgorod and Lipetsk Regions.

13 – location of Belgorod and Lipetsk Regions in Russia; 14, 17 – *Lagria hirta*; 15, 18 (white circle) – *L. atripes*; 16, 18 – *L. laticollis*. White circle – *L. atripes* and *L. laticollis* together.

Рис. 13–18. *Lagria*, местонахождения трех видов в Белгородской и Липецкой областях.

13 – расположение Белгородской и Липецкой областей в России; 14, 17 – *Lagria hirta*; 15, 18 (белый кружок) – *L. atripes*; 16, 18 – *L. laticollis*. Белый кружок – *L. atripes* и *L. laticollis* вместе.

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