

Contribution to the aphid fauna (Hemiptera: Aphidoidea) of Imereti Region (Western Georgia)

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Thirty one species of aphids found in Imereti Region in 2004-2007 are recorded in the annotated list. 15 species and one subspecies of them are new record for Imereti Region, while *Aphis salsolae* are recorded for the first time from Transcaucasia.

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A survey of aphid fauna of Imereti Region began at the beginning of 1950s. Until our investigation 29 species of aphids – *Aphis galiiscabri* Schrank, *a. gossypii* Glover, *a. nasturtii* Kaltenbach, *a. urticata* Gmelin, *Brachycaudus cardui* (L.), *B. cerasicola* (Mordvilko ex Nevsky), *Brachyunguis tamaricophilus* (Nevsky), *Brevicoryne brassicae* (L.), *Byrsocryptoides zekovae* Dzhibladze, *B. zekovaeicola* Dzhibladze, *Diuraphis noxia* (Kurdjumov), *Forda marginata* Koch, *F. pawlowae* Koch, *Lachnus roboris* (L.), *Macrosiphum rosae* (L.), *Myzus persicae* (Sulzer), *Paracletus bykovi* (Mordvilko), *Phorodon humuli* (Schrank), *Pterocallis maculatus* (von Heyden), *Rhopalosiphum maidis* (Fitch), *Rh. padi* (L.), *Sipha maydis* Passerini, *Tetraneura caerulescens* (Passerini), *T. ulmi* (L.), *Thelaxes dryophila* (Schrank), *Tuberculatus querceus* (Kaltenbach), *Sitobion avenae* (Fabricius), *S. fragariae* (Walker), *Zelkovaphis caucasica* (Dzhibladze) were registered on the

above mentioned territory (Abashidze, 1951; Dzhibladze, 1960, 1965, 1975; Tsintsadze, 1969; Shavliashvili *et al.* 1980; Porchkhidze, 2006).

Thirty one species of aphids were recorded in Imereti Region during our investigation in 2004-2007, which belonged to 17 genera. Our collected species are given in the annotated list. Of the aphids collected 15 species and one subspecies were first record for Imereti Region. *Aphis salsolae* is recorded for the first time from Transcaucasia.

Abbreviations: ap. – apterous viviparous female, al. – alatae viviparous female, Region – Reg., District – Distr., mountain – Mt.; river – R.

Remarks. In the annotated list newly recorded species for Imereti Region are indicated by one asterisk and new records for Transcaucasia by two. Map of Imereti Region is given in 1 fig. Aphid sampling sites are marked by black circles.

(Authors); Baghdati Distr.: Ajameti reserve, apt., 42°09'N 42°44'E, altitude 108 m, 26 June 2007, *Rumex conglomeratus* Murr., on leaves and inflorescence (Authors).

Distribution in the world. Africa, South America, widespread temperate regions of northern hemisphere (Blackman & Eastop, 2006).

4. A. (*Aphis*) *gossypii* Glover, 1877

Distribution. Khoni Distr.: village Nogha, apt. and al., 42°26'N 42°34'E, altitude 209 m, 19 June 2007, *Punica granatum* L., on shoots, leaves and inflorescence (Authors); Tskaltubo Distr.: village Joneti – Mamatsminda, apt. and al., 42°23'N 42°42'E, altitude 217 m, 23 June 2007, *Punica granatum* L., on shoots, leaves and inflorescence (Authors); Baghdati Distr.: Ajameti reserve, apt. and al., 42°09'N 42°44'E, altitude 108, 26 June 2007, *Lamium album* L., on undersides of leaves (authors).

Distribution in the world. Almost world-wide (Blackman & Eastop, 2006).

5. A. (*Aphis*) *hederae* Kaltenbach, 1843*

Distribution. Khoni Distr.: village Kontuati, apt. and al., 42°22'N 42°25'E, altitude 155 m, 22 June 2007, *Hedera helix* L., on shoots and leaves (authors); Tskaltubo Distr.: village Joneti – Mamatsminda, apt., 42°23'N 42°42'E, altitude 217 m, 23 June 2007, *Hedera helix* L., on shoots and leaves (authors).

Distribution in the world. Caucasus, Europe, New Zealand, North America, South Africa, South-west Asia, temperate South America (Blackman & Eastop, 2006).

6. A. (*Aphis*) *pomi* de Geer, 1773

Distribution. Khoni Distr.: village Nogha, apt. and al., 42°26'N 42°34'E, altitude 209 m, 19 June 2007, *Malus domestica* Borkh., on undersides of leaves (authors); Tskaltubo Distr.: Sataplia reserve, apt. and al., 42°19'N 42° 41'E, altitude 392 m, 20 June 2007, *Crataegus* sp., *Malus orientalis* (Uglitz.) Juz., on undersides of leaves (authors); Khoni Distr.: village Gordi – Dadiani Palace, apt. and al., 42°27'N 42°32'E, altitude 654 m, 24 June 2007, *Malus domestica* Borkh., on undersides of leaves (authors); Khoni Distr.: South slopes of Mt. Askhi – meadow along the broadleaved forest, apt. and al., 42°33'N 42°34'E, altitude 1255 m, 29 June 2007, *Malus orientalis* (Uglitz.) Juz., on undersides of leaves (authors).

Distribution in the world. Caucasus, eastward to India and Pakistan, Europe, North Africa, North America, South-western and Central Asia (Blackman & Eastop, 1994, 2006).

7. A. (*Aphis*) *ruborum* (Börner, 1932) *

Distribution. Khoni Distr.: village Nogha, apt. and al., 42°26'N 42°33'E, altitude 209 m,

19 June 2007, *Rubus* sp., on stem (Authors); Khoni Distr.: village Kontuati, apt. and al., 42°22'N 42°25'E, altitude 155 m, 22 June 2007, *Rubus* sp., on stem (Authors); Baghdati Distr.: Ajameti reserve, apt. and al., 42°09'N 42°44'E, altitude 108 m, 26 June 2007, *Rubus* sp., on stem (Authors).

Distribution in the world. Caucasus, Chile (introduced), eastward to India and Pakistan, Europe, North Africa, South-western and Central Asia (Blackman & Eastop, 2006).

8. A. (*Aphis*) *salsolae* (Börner, 1940)**

Distribution. Tskaltubo Distr.: village Joneti – Mamatsminda, apt. and al., 42°23'N 42°42'E, altitude 217 m, 23 June 2007, *Kochia prostrata* (L.) Schrad., on stem (Authors).

Distribution in the world. Bulgaria, Caucasus, Crimea, France, Germany, Israel, Italy, Rumania, Turkey (Blackman & Eastop, 2006)

9. A. (*Aphis*) *sambuci* L., 1758 *

Distribution. Tskaltubo Distr.: Sataplia reserve, apt. and al., 42°19'N 42°41'E, altitude 392 m, 20 June 2007, *Sambucus nigra* L., on stem – at the basis of leaves (authors).

Distribution in the world. Holarctic, South America (introduced) (Blackman & Eastop, 2006).

10. A. (*Aphis*) *solanella* Theobald, 1914*

Distribution. Khoni Distr.: Mt. Askhi, al., 42°35'N 42°35'E, altitude 2141 m, 28 June 2007, *Centaurea cheiranthifolia* Willd., on stem (Authors); Khoni Distr.: village Kinchkha, apt., 42°32'N 42°34'E, altitude 1158 m, 29 June 2007, *Leucanthemum vulgare* Lam., on stem (Authors).

Distribution in the world. Africa, asia, Caucasus, Europe, South America (Blackman & Eastop, 2006).

11. A. (*Aphis*) *spiraecola* Patch, 1914*

Distribution. Khoni Distr.: village Kinchkha-at the bottom of Mt. Turchu, apt., 42°28'N, 42°32'E, altitude 737 m, 27 June 2007, *Erigeron podolicus* Bess., on inflorescence (Authors).

Distribution in the world. Almost world-wide (Blackman & Eastop, 2006).

12. A. (*Aphis*) *urticata* J.F. Gmelin, 1790

Distribution. Tskaltubo Distr.: Sataplia reserve, apt. and al., 42°19'N 42°41'E, altitude 392 m, 20 June 2007, *Urtica dioica* L., undersides of leaves (authors); Tskaltubo Distr.: village Joneti – Mamatsminda, apt. and al., 42°23'N 42°42'E, altitude 217 m, 23 June 2007, *Urtica* sp., on undersides of leaves (authors); Khoni Distr.: village Gordi – Dadiani Palace, apt. and al., 42°27'N 42°32'E, altitude 654 m, 24 June 2007, *Urtica* sp., on undersides of leaves (authors).

Distribution in the world. Caucasus, Central Asia, Europe, Middle East, North America (Blackman & Eastop, 2006).

Tribe **Macrosiphini**

Genus ***Brachycaudus*** van der Goot, 1913

13. *B. (Acaudus) cardui* (L., 1758)

Distribution. Khoni Distr.: village Nogha, apt. and al., 42°26'N 42°34'E, altitude 209 m, 19 June 2007, *Cirsium rhizocephalum* C.A. Mey., on stems and leaves (authors); Baghdati Distr.: Ajameti reserve, apt., 42°09'N 42°44'E, altitude: 108 m, 26 June 2007, *Cirsium* sp., *Senecio erraticus* Bertol., on stems and leaves (authors); Khoni Distr.: South slopes of Mt. Askhi – meadow along the broadleaved forest, apt. and al., 42°33'N 42°34'E, altitude 1511 m, 28 June 2007, *Tephrosia cladobotrys* (Ledeb.) Griseb., on stems and leaves (authors).

Distribution in the world. Asia, Caucasus, Europe, North Africa, North America (Andreev, 1999; Blackman & Eastop, 2006).

14. *B. (Appelia) prunicola* (Kaltenbach, 1843)

Distribution. Khoni Distr.: village Kontuati, apt., 42°22'N 42°25'E, altitude 155 m, 22 June 2007, *Prunus divaricata* Ledeb., on leaves (authors); Khoni Distr.: village Kinchkha – at the bottom of Mt. Turchu, apt., 42°28'N 42°32'E, altitude 737 m, 27 June 2007, *Prunus divaricata* Ledeb., on leaves (authors).

Distribution in the world. Caucasus, Europe (Blackman & Eastop, 1994).

Genus ***Brevicoryne*** van der Goot, 1915

15. *B. brassicae* (L., 1758)

Distribution. Chiatura Distr.: village Khreiti; apt. and al., 42°21'N 43°11'E, altitude 860 m, 17.VII.2004, *Brassica oleracea* var. *capitata* L., on leaves (Sh. Barjadze).

Distribution in the world. All temperate and warm temperate parts of the world (Blackman & Eastop, 2006).

Genus ***Cavalliera*** del Guercio, 1911

16. *C. pastinacae* (L., 1758)*

Distribution. Khoni Distr.: village Kinchkha – Canyon Okatse, apt., 42°28'N 42°32'E, altitude 737 m, 27 June 2007, *Heracleum antasiaticum* Manden., on inflorescence and leaves (authors).

Distribution in the world. Argentina, Caucasus, Europe, North America (Blackman & Eastop, 2006).

Genus ***Illinoia*** Wilson, 1910

17. *I. (Illinoia) dzhibladzeae* (Shaposhnikov, 1964)*

Distribution. Tskaltubo Distr.: village Joneti, Mamatsminda – at the bank of Rioni R., apt. and al., 42°23'N 42°42'E, altitude 217 m, 23 June 2007, *Rhododendron flavum* G. Don, on undersides of leaves and young shoots, flowers and fruits (Authors); Khoni Distr.: village Gordi – Dadiani Palace, apt. and al., 42°27'N 42°32'E, altitude 654 m, 24 June 2007, *Rhododendron flavum* G. Don, on undersides of leaves and young shoots, flowers and fruits (Authors); Near City Kutaisi-Saghoria forest, apt. and al., 42°13'N 42°42'E, altitude 145 m, 26 June 2007, *Rhododendron flavum* G. Don, on undersides of leaves and young shoots, flowers and fruits (Authors).

Distribution in the world. Georgia, Turkey, Ukraine (Blackman & Eastop, 2006).

Genus ***Macrosiphum*** Passerini, 1860

18. *M. (Macrosiphum) funestum* (Macchiati, 1885)*

Distribution. Tskaltubo Distr.: Sataplia reserve, apt. and al., 42°19'N 42°41'E, altitude 392 m, 20 June 2007, *Rubus* sp., on shoots and leaves (authors).

Distribution in the world. Eastward to Moldova, Canada, Caucasus, Throughout Europe, Turkey (Blackman & Eastop, 2006).

Genus ***Sitobion*** Mordvilko, 1914

19. *S. (Sitobion) avenae* (Fabricius, 1775)

Distribution. Khoni Distr.: village Kinchkha – at the bottom of Mt. Turchu, apt. and al., 42°28'N 42°32'E, altitude 737 m, 27 June 2007, *Melica transsilvanica* Schur., on leaves (authors).

Distribution in the world. Africa, Caucasus, Central Asia, Europe, India, Nepal, the Mediterranean, the Middle East, North, Central and South America, Pakistan (Blackman & Eastop, 2006).

20. *S. (Sitobion) fragariae* (Walker, 1848)

Distribution. Khoni Distr.: village Kinchkha – at the bottom of Mt. Turchu, apt. and al., 42°28'N 42°32'E, altitude 737 m, 27 June 2007, *Cynosurus cristatus* L., on leaves (authors).

Distribution in the world. Asia, Caucasus, Europe, North and South America, South Africa (introduced) (Blackman & Eastop, 2006).

Genus ***Uroleucon*** Mordvilko, 1914

21. *U. (Uroleucon) sonchi* (L., 1767)*

Distribution. Khoni Distr.: village Kinchkha – Canyon Okatse, apt. and al., 42°28'N 42°32'E,

altitude 737 m, 27 June 2007, *Lactuca* sp., on stems (Authors).

Distribution in the world. Almost world-wide (Blackman & Eastop, 2006).

Subfamily DREPANOSIPHINAE

Genus *Eucallipterus* Schouteden, 1906

22. *E. tiliae* (L., 1758)*

Distribution. Khoni Distr.: village Gordi – Dadiani Palace, al., 42°27'N 42°32'E, altitude 654 m, 24 June 2007, *Tilia begoniifolia* Chun & Wong, on undersides of leaves (authors).

Distribution in the world. Caucasus, Europe, New Zealand, North Africa, North America (introduced), southwest and Central Asia (Blackman & Eastop, 1994).

Genus *Myzocallis* Passerini, 1860

23. *M. (Myzocallis) carpini* (Koch, 1855)*

Distribution. Khoni Distr.: village Gordi – Dadiani Palace, al., 42°27'N 42°32'E, altitude 654 m, 24 June 2007, *Carpinus caucasica* A. Grossh., on undersides of leaves (authors); Khoni Distr.: South slopes of Mt. Askhi – meadow along the broadleaved forest, al., 42°33'N 42°34'E, altitude 1255 m, 29 June 2007, *Carpinus caucasica* A. Grossh., on undersides of leaves (authors).

Distribution in the world. Caucasus, Europe, Mediterranean area, Middle East, New Zealand (introduced), North America (Blackman & Eastop, 1994).

24. *M. (Myzocallis) coryli* (Goeze, 1778)*

Distribution. Khoni Distr.: village Nogha, al., 42°26'N 42°34'E, altitude 209 m, 19 June 2007, *Corylus avellana* L., on undersides of leaves (authors); Tskaltubo Distr.: Sataplia reserve, al., 42°19'N 42°41'E, altitude 392 m, 20 June 2007, *Corylus avellana* L., on undersides of leaves (authors); Tskaltubo Distr.: village Joneti, Mamatsminda – at the bank of Rioni R., al., 42°23'N 42°42'E, altitude 217 m, 23 June 2007, *Corylus avellana* L., on undersides of leaves (authors).

Distribution in the world. Africa, Argentina, Caucasus, Chile, Europe, Japan, New Zealand, southwest Asia, Tasmania, western North America (Blackman & Eastop, 1994)

Genus *Phyllaphis* Koch, 1856

25. *Ph. fagi* (L., 1767)*

Distribution. Khoni Distr.: South slopes of Mt. Askhi, al., 42°33'N 42°34'E, altitude: 1401 m, 29 June 2007, *Fagus orientalis* Lipsky, on undersides of leaves (authors).

Distribution in the world. Australia (introduced), Caucasus, east to Turkey, New Zealand,

North America, Throughout Europe (Blackman & Eastop, 1994).

Genus *Pterocallis* Passerini, 1860

26. *P. maculatus* (von Heyden, 1837)

Distribution. Tskaltubo Distr.: Sataplia reserve, al., 42°19'N 42°41'E, altitude 392 m, 20 June 2007, *alnus* sp., on undersides of leaves (authors).

Distribution in the world. Caucasus, east to Turkey, Iran, throughout Europe (Blackman & Eastop, 1994).

Genus *Tinocallis* Matsumura, 1919

27. *T. (Tinocallis) zerkovae* Dzhibladze, 1957*

Distribution. Tskaltubo Distr.: Sataplia reserve, al., 42°19'N 42°41'E, altitude 392 m, 18 June 2006, *Zelkova carpinifolia* (Pall.) Dipp., on trunks and undersides of leaves (Sh. Barjadze).

Distribution in the world. Georgia, Iran (Blackman & Eastop, 1994).

Subfamily LACHNINAE

Genus *Lachnus* Burmeister, 1835

28. *L. roboris* (L., 1758)

Distribution. Khoni Distr.: village Kinchkha – at the bottom of Mt. Turchu, al., 42°28'N 42°32'E, altitude 737 m, 27 June 2007, *Castanea sativa* Mil., on trunks and leaves (authors).

Distribution in the world. Caucasus, Europe east to Ukraine, Lebanon, the Mediterranean region (Blackman & Eastop, 1994).

Subfamily PEMPHIGINAE

Genus *Byrsocryptoides* Dzhibladze, 1960

29. *B. zerkovaeicola* Dzhibladze, 1965

Distribution. Near City Kutaisi-Saghoria forest, al., 42°13'N 42°42'E, altitude 145 m, 16 June 2006, *Zelkova carpinifolia* (Pall.) Dipp., on leaves (Sh. Barjadze).

Distribution in the world. Georgia (Dzhibladze, 1965; Blackman & Eastop, 1994).

Genus *Eriosoma* Leach, 1818

30. *E. lanigerum* (Hausmann, 1802)

Distribution. Chiatura Distr.: village Khreiti; apt. and al., 42°21'N 43°11'E, altitude 860 m, 15.VII.2004, *Malus domestica* Borkh., on trunks and branches (Sh. Barjadze).

Distribution in the world. Throughout the world (Blackman & Eastop, 1994).

Genus *Forda* von Heyden, 1837

31. *F. marginata* Koch, 1857

Distribution. Baghdati Distr.: Ajameti reserve, apt., 42°09'N 42°44' E, altitude: 108 m, 26 June 2007, *Bromus japonicus* Thunb., on roots (Authors).

Distribution in the world. Caucasus, China, India, Mediterranean region, North America, North and Central Europe, Siberia, South-Western Asia (Blackman & Eastop, 2006).

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