

Contribution to the aphid fauna (Hemiptera: Aphidoidea) of Racha-Lechkhumi floristic region (Western Georgia)

SH.Z. BARJADZE, N.G. BAKHTADZE, G.I. BAKHTADZE,
N.T. KINTSURASHVILI, N.L. CHAKVETADZE & N.A. ZHUKOVSKAYA

Sh.Z. Barjadze, N.G. Bakhtadze, G.I. Bakhtadze, N.T. Kintsurashvili, N.L. Chakvetadze & N.A. Zhukovskaya, Laboratory of Entomology and Laboratory of Karyosystematics and Biochemistry, Institute of Zoology of Ilia Chavchavadze State University, Chavchavadze av. 31, 0179 Tbilisi, Georgia. E-mail: shalva1980@yahoo.com

Twenty two species are given in an annotated faunal list of Aphidoidea of the Racha-Lechkhumi floristic region. Of the species reported, 10 are new to the fauna of this region, while *Aphis vitalbae* Ferrari, 1872 and *Macrosiphum hellebori* Theobald & Walton, 1923 are recorded for the first time from Transcaucasia.

Key words: Aphids, new record, Racha-Lechkhumi floristic region, Western Georgia

INTRODUCTION

A survey of the aphid fauna of the Racha-Lechkhumi floristic region began at the beginning of 1950s. Until our research 62 species of aphids were registered on the above mentioned territory (Dzhibladze, 1960).

Twenty two species of aphids from 12 genera were found on this territory in 2008. Of the aphids collected, ten species were first recorded for this region, while *Aphis vitalbae* Ferrari, 1872 and *Macrosiphum hellebori* Theobald & Walton, 1923 are recorded for the first time from Transcaucasia.

Abbreviations: apt. – apterous viviparous female, al. – alatae viviparous female.

Remarks. In the annotated list newly recorded species for Transcaucasia are indicated by one asterisk, while new records for the of Racha-Lechkhumi floristic region by two asterisks. Routes of the Aphidological expedition to the Racha-Lechkhumi floristic region a given in Fig. 1. Aphid sampling sites are marked by black ovals. The routs of the expedition are marked by grey lines.

ANNOTATED LIST OF APHIDS OF THE RACHA-LECHKHUMI FLORISTIC REGION

Superfamily APHIDOIDEA

Family ADELGIDAE

1. *Pineus orientalis* (Dreyfus, 1889)

Material. *Oni Distr.:* vill. Ghurshevi, al., 42°41'05.2''N 43°42'17.6''E, altitude: 1780 m.; 26 July 2008; leg. Barjadze.

Distribution in the world. From Western Europe across Asia to Japan (Blackman & Eastop, 1994).

Bionomics. On *Picea orientalis* (L.), on cones.

Family APHIDIDAE

Subfamily APHIDINAE

Tribe Aphidini

2. *Aphis fabae* Scopoli, 1763

Material. *Ambrolauri Distr.:* Ritseula Gorge, vill. Kldisubani, apt. and al., 42°33'21.8''N 43°06''36.8''E, altitude: 578 m.; 22 July 2008;

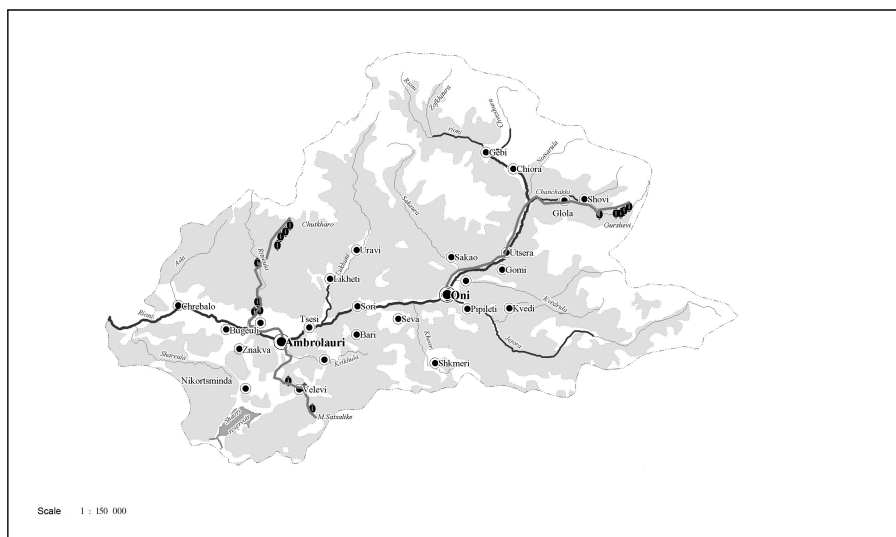


Fig 1. Routs of the Aphidological Expedition in the Racha-Lechkhumi floristic region.

leg. N.T. Kintsurashvili; Mt. Chutkhara, apt. and al., $42^{\circ}40'02.2''N$ $43^{\circ}09'54.6''E$, altitude: 2215 m.; 23 July 2008; leg. Sh.Z. Barjadze; Mt. Chutkhara-the right bank of the spring, apt., $42^{\circ}39'44.7''N$ $43^{\circ}09'74.7''$, altitude: 2042 m.; 23 July 2008; leg. SH.Z. Barjadze; Ritseula Gorge, apt., $42^{\circ}34'18.0''N$ $43^{\circ}06'37.9''E$, altitude: 697 m.; 23 July 2008; leg. N.A. Zhukovskaya) *Oni* Distr.: vill. Ghurshevi, apt. and al., $42^{\circ}41'10.3''N$ $43^{\circ}44'09.1''E$, altitude: 2102 m.; 26 July 2008; leg. N.A. Zhukovskaya; vill. Ghurshevi, apt., $42^{\circ}41'71.7''N$ $43^{\circ}43'36.2''E$, altitude: 1957 m.; leg. Sh.Z. Barjadze.

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

Bionomics. On *Cichorium intybus* L. on inflorescences, *Heracleum* sp. on inflorescences, *Gadellia lactiflora* (Bieb.) Schulkinna, *Rumex alpinus* L. on inflorescences and leaves, *Rumex* sp. on shoots, *Pyrethrum parthenifolium* Willd. on shoots, and *Valeriana cardamines* Bieb. on inflorescences.

3. *Aphis* sp. *prope frangulae* Kaltenbach, 1845

Distribution. *Oni* Distr.: near Chanchakhi glacier-near little lake, apt., $42^{\circ}41'18.6''N$

$43^{\circ}44'53.3''E$, altitude: 2348 m.; 26 July 2008; leg. N.G. Bakhtadze.

Distribution in the world. Cosmopolitan (Blackman & Eastop, 2006).

Bionomics. On *Chamerion angustifolium* (L.) Holub., on shoots.

4. *Aphis hederæ* Kaltenbach, 1843**

Material. *Ambrolauri* Distr.: Ritseula Gorge, vill. Kldisubani, apt. and al., $42^{\circ}33'21.8''N$ $43^{\circ}06'36.8''E$, altitude: 578 m.; 22 July 2008; leg. N.L. Chakvetadze.

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

Bionomics. On *Hedera helix* L., on shoots.

5. *Aphis ruborum* (Börner, 1932)**

Material. *Ambrolauri* Distr.: Ritseula gorge-before Ritseula Hydroelectric Power Station, apt., $42^{\circ}33'21.8''N$ $43^{\circ}06'36.8''E$, altitude: 578 m.; 22 July 2008; leg. G.I. Bakhtadze.

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

Bionomics. On *Rubus* sp., on shoots.

6. *Aphis solanella* Theobald, 1914**

Material. Ambrolauri Distr.: Ritseula Gorge, apt., 42°34'18.0''N 43°06'37.9''E, altitude: 697 m.; 23 July 2008; leg. N.L. Chakvetadze.

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

Bionomics. On *Campanula latifolia* L., on shoots.

7. *Aphis vitalbae* Ferrari, 1872*

Material. Ambrolauri Distr.: Ritseula Gorge, vill. Kldisubani, apt. and al., 42°33'21.8''N 43°06'36.8''E, altitude: 578 m.; 22 July 2008; leg. Sh.Z. Barjadze.

Distribution in the world. Europe (Blackman & Eastop, 2006).

Bionomics. On *Clematis vitalba* L., on shoots and leaves.

8. *Rhopalosiphum padi* (Linnaeus, 1758)**

Material. Ambrolauri Distr.: Ritseula gorge-before Ritseula hesi, apt., 42°33'21.8''E 43°06'36.8''E, altitude: 578 m.; 22 July 2008; leg. N.A. Zhukovskaya.

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

Bionomics. On *Juncus* sp., on leaves.

Tribe Macrosiphini**9. *Brachycaudus cardui* (Linnaeus, 1758)**

Material. Ambrolauri Distr.: Mt. Chutkharo, apt., 42°39'23.4''N 43°08'59.4''E, altitude: 1990 m.; 23 July 2008; leg. Sh.Z. Barjadze; Ritseula Gorge, apt., 42°34'18.0''N 43°06'37.9''E, altitude: 697 m.; leg. SH.Z. Barjadze. *Oni Distr.:* near Chanchakhi glacier-near little lake, apt., 42°41'06.8''N 43°44'22.1''E, altitude: 2201 m.; leg. N.T. Kintsurashvili; near Chanchakhi glacier-near little lake, apt., 42°41'18.6''N 43°44'53.3''E, altitude: 2348 m.; 26 July 2008; leg. N.G. Bakhtadze.

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

Bionomics. On *Anthemis diemeteorum* Sosn on shoots, *Cirsium obvallatum* (Bieb.) Fisch. on shoots and *Rumex alpinus* L. on shoots.

10. *Cavariella pastinacae* (Linnaeus, 1758)**

Material. Ambrolauri Distr.: Mt. Chutkharo of the forest, apt. and al., 42°38'39.8''N 43°08'43.5''E, altitude: 1946 m.; 23 July 2008; leg. Sh.Z. Barjadze.

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

Bionomics. On *Anthriscus sylvestris* (L.) Hoffm., on inflorescences.

11. *Hyadaphis foeniculi* (Passerini, 1860)

Material. Ambrolauri Distr.: Ritseula Gorge, apt. and al., 42°34'18.0''N 43°06'37.9''E, altitude: 697 m.; 23 July 2008; leg. N.L. Chakvetadze.

Distribution in the world. Europe, eastward to Turkey and Iraq, North America (Blackman & Eastop, 2006).

Bionomics. On *Anthriscus sylvestris* (L.) Hoffm., on inflorescences.

12. *Illinoia dzhibladzae* (Shaposhnikov, 1964)**

Material. Ambrolauri Distr.: Mt. Chutkharo, apt., 42°40'14.1''N 43°10'02.9''E, altitude: 2303 m.; 23 July 2008; leg. N.L. Chakvetadze.

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

Bionomics. On *Rhododendron caucasicum* Pall., on leaves.

13. *Macrosiphoniella millefolii* (de Geer, 1773)**

Material. Oni Distr.: Shovi resort, apt., 42°41'05.2''N 43°42'17.6''E, altitude: 1780 m.; 26 July 2008; leg. G.I. Bakhtadze.

Distribution in the world. Europe, Western Siberia, introduced to North America (Blackman & Eastop, 2006).

Bionomics. On *Achillea millefolium* L., on inflorescences.

14. *Macrosiphum funestum* (Macchiati, 1885)**

Material. Ambrolauri Distr.: Ritseula gorge-before Ritseula Hydroelectric Power Station,

apt., 42°33'21.8''N 43°06'36.8''E, altitude: 578 m.; 22 July 2008; leg. N.G. Bakhtadze.

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

Bionomics. On *Rubus* sp., on shoots and leaves.

15. *Macrosiphum hellebori* Theobald & Walton, 1923*

Material. Ambrolauri Distr.: vill. Velevi, apt., 42°27'10.7''N 43°10'55.2''E, altitude: 1147 m.; 25 July 2008; leg. Sh.Z. Barjadze.

Distribution in the world. Europe, introduced to New Zealand (Blackman & Eastop, 2006).

Bionomics. On *Helleborus caucasicus* A. Br., on leaves.

16. *Macrosiphum rosae* (Linnaeus, 1758)

Material. Oni Distr.: vill. Ghurshevi, apt., 42°41'10.3''N 43°44'09.1''E, altitude: 2102 m.; 26 July 2008; leg. N.A. Zhukovskaya.

Distribution in the world. world-wide, except for Eastern and South-east Asia (Blackman & Eastop, 2006).

Bionomics. On *Valeriana tiliifolia* N. Troitzky, on shoots.

17. *Macrosiphum symphyti* Barjadze & Chakvetadze, 2008

Material. Ambrolauri Distr.: Mt. Satsalike, apt. and al., 42°26'04.2''N 43°12'19.19''E, altitude: 1747 m.; 25 July 2008; leg. SH.Z. Barjadze.

Distribution in the world. Georgia (Barjadze & Chakvetadze, 2008).

Bionomics. On *Symphytum asperum* Lep., on leaves.

18. *Uroleucon cichorii* (Koch, 1855)

Material. Oni Distr.: Shovi resort, apt., 42°41'05.2''N 43°42'17.6''E, altitude: 1780 m.; 26 July 2008; leg. SH.Z. Barjadze.

Distribution in the world. Eritrea, Eastern Siberia, Europe, Korea, Mongolia, South-West and Central Asia, (Blackman & Eastop, 2006).

Bionomics. On *Leontodon danubialis* Jocq., on shoots.

19. *Uroleucon jaceae* (Linnaeus, 1758)

Material. Ambrolauri Distr.: Ritseula Gorge, apt., 42°34'18.0''N 43°06'37.9''E, altitude: 697 m.; 23 July 2008; leg. N.L. Chakvetadze.

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

Bionomics. On *Centaurea salicifolia* Bieb., on shoots.

20. *Uroleucon sonchi* (Linnaeus, 1767)**

Material. Oni Distr.: near Chanchakhi glacier-near little lake, apt., 42°41'32.6''N 43°45'20.4''E, altitude: 239 m.; 26 July 2008; leg. G.I. Bakhtadze.

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

Bionomics. On *Cicerbita racemosa* (Willd.) Beauverd., on shoots.

Subfamily DREPANOSIPHINAE

21. *Eucallipterus tiliae* (Linnaeus, 1758)**

Material. Ambrolauri Distr.: Ritseula Gorge, al., 42°34'18.0''N 43°06'37.9''E, altitude: 697 m.; 22 July 2008; leg. N.A. Zhukovskaya.

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

Bionomics. On *Tilia begoniifolia* Stev., on leaves.

22. *Myzocallis coryli* (Goeze, 1778)

Material. Ambrolauri Distr.: Ritseula Gorge, al., 42°34'18.0''N 43°06'37.9''E, altitude: 697 m.; 22 July 2008; leg. N.G. Bakhtadze; Ambrolauri Distr.: vill. Velevi, al., 42°28'12.5''N 43°09'49.8''E, altitude: 1046m.; 25 July 2008; leg. Sh.Z. Barjadze.

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

Bionomics. On *Corylus avellana* L., on leaves.

ACKNOWLEDGEMENTS

The designated project has been fulfilled by financial support of Georgian National Science Foundation (Grant No. GNSF/ST 06/6-086). We are grateful to the colleagues who helped us during the preparation of this paper and gave valuable comments on the manuscript: V.F. Eastop and R.L. Blackman (The Natural History Museum, London) and A. Jensen (Moses Lake, Washington, U.S.A.).

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Received 20 December 2008 / Revised 20 April 2009 / Accepted 12 May 2009