

Recent additions to the aphid (Homoptera: Aphidoidea) fauna of Byelorussia

Дополнения к фауне тлей (Homoptera: Aphidoidea) Белоруссии

A.V. STEKOLSHCHIKOV, N.V. LESHCHINSKAYA, S.V. BUGA & N.V. VORONOVA

А.В. СТЕКОЛЬЩИКОВ, Н.В. ЛЕЩИНСКАЯ, С.В. БУГА, Н.В. ВОРОНОВА

A.V. Stekolshchikov, Zoological Institute, Russian Academy of Sciences, 1 Universitetskaya Emb., St. Petersburg, 199034, Russia. E-mail: aphids@zin.ru

S.V. Buga, N.V. Leshchinskaya, N.V. Voronova, Zoological Department, Byelorussian State University, 4 Nezavisimosti Pr, Minsk, 220030, Republic of Belarus. E-mail: zoo@bsu.by

For the first time, *Theroaphis brachytricha*, *Theroaphis rhiemi*, *Aphis brohmeri*, *Aphis coffeata*, *Aphis korshunovi*, *Aphis lambersi*, *Aphis leontodontis*, *Aphis pilosellae*, *Aphis rumicivora*, *Anuraphis catonii*, *Brachycaudus mordvilkoi*, *Brachycaudus populi*, *Aspidaphis adjuvans*, *Myzus langei*, *Myzus certus*, *Acyrtosiphon malvae potha*, *Acyrtosiphon boreale*, *Macrosiphum albifrons*, *Macrosiphoniella dimidiata*, *Nasonovia pilosellae*, *Pleotrichophorus deviatus*, *Titanosiphon artemisiae*, *Uroleucon hypochoeridis*, *Uroleucon pilosellae*, *Uroleucon pseudobscurum*, *Uroleucon aeneum*, and *Uroleucon simile* are recorded from Byelorussia.

Для фауны Беларуси впервые отмечены *Theroaphis brachytricha*, *Theroaphis rhiemi*, *Aphis brohmeri*, *Aphis coffeata*, *Aphis korshunovi*, *Aphis lambersi*, *Aphis leontodontis*, *Aphis pilosellae*, *Aphis rumicivora*, *Anuraphis catonii*, *Brachycaudus mordvilkoi*, *Brachycaudus populi*, *Aspidaphis adjuvans*, *Myzus langei*, *Myzus certus*, *Acyrtosiphon malvae potha*, *Acyrtosiphon boreale*, *Macrosiphum albifrons*, *Macrosiphoniella dimidiata*, *Nasonovia pilosellae*, *Pleotrichophorus deviatus*, *Titanosiphon artemisiae*, *Uroleucon hypochoeridis*, *Uroleucon pilosellae*, *Uroleucon pseudobscurum*, *Uroleucon aeneum* и *Uroleucon simile*.

Key words: fauna, Byelorussia, Eastern Europe, aphids, Insecta, Homoptera, Aphidoidea, new records

Ключевые слова: фауна, Белоруссия, Восточная Европа, тли, Insecta, Homoptera, Aphidoidea, новые регистрации

At present the aphid fauna of Central Europe is relatively well known (Holman, 2009), which is not the case for that of Byelorussia. Until now aphidological research in Byelorussia was focused on dendrocolous aphids (Buga, 2001), species composition of herbaceous aphids however remains little known. Therefore any registrations may add information about the aphid fauna of this region of Eastern Europe and verify geographic distribution of some species in the whole of Europe. This article is based on the material collected in 2004–2008 by S.V. Buga and N.V. Leshchinskaya in all geographic regions of Byelorussia. Micro-

scope slides are stored in collections of the Zoological Institute of RAS (St. Petersburg) and Byelorussian State University (Minsk).

Abbreviations: al. – alate viviparous female, apt. – apterous viviparous female, em. – emigrant, fund. – fundatrix, RWS – railway station, vill. – village.

Superfamily APHIDOIDEA

Family DREPANOSIPHIDAE

Theroaphis(Rhizoberlesia)brachytricha Hille Ris Lambers & van den Bosch, 1964. *Minsk Prov.:* al., Minsk, ruderal veg-

eration, 18 July 2007, *Lotus corniculatus* Linnaeus, on lower side of leaves (leg. N.V. Leshchinskaya).

Therioaphis (Rhizoberlesia) rhiemi (Börner, 1949). *Gomel Prov.*: al., Chechersk Distr., near Krasnyj Bereg, dry meadow, 28 Aug. 2005, *Melilotus alba Medicus*, on lower side of leaves (leg. S.V. Buga); *Minsk Prov.*: al., Minsk, ruderal vegetation, 18 Aug. 2007, *M. alba*, on lower side of leaves (leg. N.V. Leshchinskaya); *Minsk Prov.*: apt., Molodechno Distr., near vill. Udranka, ruderal vegetation, 17 Aug. 2007, *Erigeron* sp. (accidentally), on lower side of leaves (leg. N.V. Leshchinskaya).

Family APHIDIDAE

Tribe Aphidini

Subtribe Aphidina

Aphis brohmeri Börner, 1952. *Vitebsk Prov.*: apt., Miory Distr., near Vazha Lake, mixed forest, 3 July 2007, *Anthriscus sylvestris* (L.) Hoffm., on petioles (leg. S.V. Buga).

Aphis coffeata Mamontova, 1979. *Minsk Prov.*: apt., Volozhin Distr., near Rakov, mixed forest, 26 June 2006, *Melampyrum pratense* L., on stem (leg. N.V. Leshchinskaya); *Minsk Prov.*: al., Mjadel Distr., near Naroch, pine forest, 22 July 2007, *Melampyrum nemorosum* L., on stem (leg. N.V. Leshchinskaya); *Vitebsk Prov.*: apt., Liozno Distr., near Liozno, pine forest, 20 June 2008, *M. nemorosum*, on stem (leg. S.V. Buga).

Aphis korshunovi Ivanovskaya, 1971. *Grodno Prov.*: apt., Korelichi Distr., near Korelichi, dry meadow, 27 Apr. 2008, *Veronica* sp., on stem (leg. N.V. Leshchinskaya).

Aphis lambersi (Börner, 1940). *Brest Prov.*: apt., Baranovichi Distr., near Baranovichi, ruderal vegetation, 14 Aug. 2007, *Daucus carota* L., on basal part of stem (leg. N.V. Leshchinskaya).

Aphis leontodontis (Börner, 1950). *Mogilev Prov.*: apt., Gorki Distr., near Zubry RWS, dry meadow, 20 June 2008, *Leontodon autumnalis* L., on petioles (leg. S.V. Buga).

Aphis pilosellae (Börner, 1952). *Minsk Prov.*: fund., apt., Molodechno Distr., near vill. Udranka, dry meadow, 22 May 2008, *Pilosella officinarum* F.W. Schultz & Sch. Bip., on lower side of leaves (leg. S.V. Buga); *Grodno Prov.*: apt., Korelichi Distr., near Korelichi, dry meadow, 27 Apr. 2008, *P. officinarum*, on lower side of leaves (leg. N.V. Leshchinskaya); *Grodno Prov.*: apt., Korelichi Distr., near Korelichi, dry meadow, 10 May 2008, *P. officinarum*, on lower side of leaves (leg. N.V. Leshchinskaya).

Aphis rumicivora Heie, 1986. *Minsk Prov.*: apt., Volozhin Distr., near Rakov, dry mixed forest, 26 June 2006, *Rumex acetosa* L., on stem (leg. N.V. Leshchinskaya).

Tribe Macrosiphini

Subtribe Anuraphidina

Anuraphis catonii Hille Ris Lambers, 1935. *Minsk Prov.*: em., Molodechno Distr., near Radoshkovichi RWS, dry meadow, 30 May 2008, *Pimpinella saxifraga* L., on basal part of stem (leg. N.V. Leshchinskaya); *Minsk Prov.*: em., Molodechno Distr., near Radoshkovichi RWS, dry meadow, 30 May 2008, *P. saxifraga*, on basal part of stem (leg. N.V. Leshchinskaya).

Brachycaudus (Acaudus) mordvilkoi Hille Ris Lambers, 1931. *Minsk Prov.*: apt., Molodechno Distr., near vill. Udranka, ruderal vegetation, 29 June 2006, *Elymus repens* L. (accidentally), on lower side of leaves (leg. N.V. Leshchinskaya); *Grodno Prov.*: al., Smorgon Distr., near Soly RWS, ruderal vegetation, 15 June 2008, *Echinum vulgare* L., on basal part of stem (leg. N.V. Leshchinskaya).

Brachycaudus (Acaudus) populi (del Guercio, 1911). *Minsk Prov.*: al., apt., Smolevichi Distr., near Berezovaja Gora, dry meadow, 21 June 2008, *Silene* sp., on stems and lower side of leaves (leg. S.V. Buga); *Minsk Prov.*: apt., Molodechno Distr., near vill. Udranka, ruderal vegetation, 17 Aug. 2007, *Silene vulgaris* (Moench) Garcke, on stem (leg. N.V. Leshchinskaya).

Subtribe Liosomaphidina

Aspidaphis adjuvans (Walker, 1848). *Grodno Prov.*: al., Grodno, ruderal vegetation, 17 July 2004, *Polygonum sp.*, on lower side of leaves (leg. S.V. Buga).

Myzus (Galiobium) langei (Börner, 1933). *Minsk Prov.*: fund., apt., Molodechno Distr., near vill. Udranka, dry meadow, 22 May 2008, *Galium mollugo* L., on stem (leg. S.V. Buga).

Myzus (Nectarosiphon) certus (Walker, 1849). *Brest Prov.*: al., apt., Bereza Distr., near town Bereza, dry mixed forest, 10 June 2008, *Dianthus arenarius* L., on apical part of stem (leg. N.V. Leshchinskaya).

Subtribe Macrosiphina

Acyrtosiphon malvae potha Börner, (1943) 1950. *Minsk Prov.*: apt., near Minsk, dry meadow, 16 May 2007, *Potentilla argentea* L., on lower side of leaves (leg. N.V. Leshchinskaya).

Acyrtosiphon boreale Hille Ris Lambers, 1952. *Minsk Prov.*: apt., Molodechno Distr., near vill. Udranka, dry meadow, 22 May 2008, *P. argentea*, on lower side of leaves (leg. N.V. Leshchinskaya).

Macrosiphoniella (Macrosiphoniella) dimidiata Börner, 1942. *Minsk Prov.*: apt., Smolevichi Distr., near Berezovaja Gora, dry meadow, 21 June 2008, *Artemisia vulgaris* L., on lower side of leaves (leg. S.V. Buga); *Gomel Prov.*: apt., Zhlobin Distr., near Zhlobin, dry meadow, 27 June 2008, *Artemisia campestris* L., on apical part of stem (leg. N.V. Leshchinskaya).

Macrosiphum albifrons Essig, 1911. *Mogilev Prov.*: al., Osipovichi Distr., near Verkhi RWS, mixed forest, 1 July 2008, *Lupinus polyphyllus* L., on lower side of leaves (leg. N.V. Leshchinskaya).

Nasonovia (Nasonovia) pilosellae (Börner, 1933). *Brest Prov.*: apt., Bereza Distr., near town Bereza, dry meadow, 10 June 2008, *P. officinarum*, on apical part of stem (leg. N.V. Leshchinskaya).

Pleotrichophorus deviatus F.P. Müller, 1972. *Minsk Prov.*: ovip., Starye Dorogi Distr., near Paseka RWS, pine forest, 7 Oct. 2005, *P. officinarum*, on upper side of leaves (leg. S.V. Buga).

Titanosiphon artemisiae (Koch, 1855). *Grodno Prov.*: apt., Korelichi Distr., near Korelichi, dry meadow, 4 Aug. 2008, *A. campestris*, on lower side of leaves (leg. N.V. Leshchinskaya).

Uroleucon (Uroleucon) hypochoeridis (Fabricius, 1779). *Vitebsk Prov.*: apt., Tolochin Distr., near Staraya Budovka, 21 June 2008, *Crepis biennis* L., on steam near inflorescences (leg. S.V. Buga).

Uroleucon (Uroleucon) pilosellae (Börner, 1933). *Brest Prov.*: al., apt., Bereza Distr., near town Bereza, dry meadow, 10 June 2008, *P. officinarum*, on apical part of stem (leg. N.V. Leshchinskaya).

Uroleucon (Uroleucon) pseudobsculum (Hille Ris Lambers, 1967). *Mogilev Prov.*: apt., Osipovichi Distr., near Verkhi RWS, mixed forest, 1 July 2008, *Hieracium umbellatum* L., on stem (leg. N.V. Leshchinskaya); *Brest Prov.*: apt., Bereza Distr., near town Bereza, dry meadow, 10 June 2008, *Hieracium sp.*, on apical part of stem (leg. N.V. Leshchinskaya).

Uroleucon (Uromelan) aeneum (Hille Ris Lambers, 1939). *Minsk Prov.*: apt., Minsk Distr., near Zabolot'e, ruderal vegetation, 26 July 2006, *Cirsium arvense* (L.) Scop., on stem (leg. N.V. Leshchinskaya).

Uroleucon (Uromelan) simile (Hille Ris Lambers, 1935). *Grodno Prov.*: apt., Korelichi Distr., near Korelichi, dry meadow, 4 Aug. 2008, *Conyza canadensis* (L.) Cronq., on stem (leg. N.V. Leshchinskaya).

ACKNOWLEDGEMENTS

The authors are grateful to T.A. Sautkina (Byelorussian State University, Minsk) for her help in identification of host plants. This study was supported by the Byelorussian Republic Foundation for Basic Research (grant No. B09MC-036).

REFERENCES

- Buga, S.V.** 2001. *Dendrofil'nyye tli Belarusi* [Dendrocolous aphids of Byelorussia]. Byelorus. Univ. Publ., Minsk. 98 p. (In Russian).
- Holman, J.** 2009. *Host plant catalog of aphids. Palaearctic region*. Springer Verlag. 1216 p.

Received 4 May 2010 / Accepted 10 June 2010