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Taxonomic notes on some species and subspecies of aphids (Hemiptera: Aphididae)

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Abstract

Subspecies *Dysaphis pavlovskiana indica* Chakrabarti & Medda, 1993 is given species status (*Dysaphis indica* Chakrabarti & Medda, 1993, new status). *Aphis plantaginis asiatica* Daniyarova, 1979 is a synonym of *Aphis taraxacicola* (Börner, 1940). The nomen nudum *Uroleucon (Uromelan) lehri* Zaitzev, Lelej, Storozhenko & Kurzenko, 2006 is recognized as referring to *Uroleucon (Uromelan) campanulae* (Kaltenbach, 1843).

Key words: species status, *Dysaphis pavlovskiana indica*, *Aphis plantaginis asiatica*, *Uroleucon lehri*, nomen nudum, synonyms, Hemiptera, Aphididae

This article considers the taxonomic status of one species and two subspecies of aphids. In the paper, all measurements (always in micrometres), number of setae, rhinaria, etc., and indices are presented by extreme variants with the arithmetical mean in parentheses. In cases where there are large differences between samples, the minimum and maximum value of the arithmetical mean of different samples are given in parentheses, for example 213–297 (236–281).

All specimens examined are deposited at the Zoological Institute, the Russian Academy of Science, (St. Petersburg, Russia), Institute of Biology and Soil Science, Far East Branch of Russian Academy of Sciences (Vladivostok, Russia) and Muséum national d'Histoire naturelle (Paris, France).

Dysaphis indica Chakrabarti & Medda, 1993, new status

This aphid has previously been treated as a subspecies of *Dysaphis pavlovskiana* Narzikulov, 1957. Chakrabarti and Medda (1993) described 53 apterous viviparous females collected from *Sorbus* in India (Uttar Pradesh, Garhwal Hills) as specimens of new subspecies—*Dysaphis pavlovskiana indica*. They noted that the new subspecies differs from the nominative taxon mainly in the lack of spines on the head, the greater length of the ultimate segment of rostrum, the slightly longer siphunculus and the fact that all the setae on the antennae were thin and pointed unlike those of the nominotypical subspecies, which has most of the setae on the antennae blunt or slightly capitate. Actually there is no description of the apterous vivipara in their paper, which only gives the differences listed above and measurements of several characters of the holotype. The authors also suggested that the seven alate and two apterous viviparous females and 30 nymphs which they collected on 16 September 1982 from *Saussurea piptathera* Edgew. (cited as *Saussurea pipethera* in their paper) in Uttar Pradesh (Garhwal Hills), as well as one alate female which they caught on 17 September 1982 on *Rhamnus dahurica* Pall. in Garhwal Hills refer to this subspecies. According to the authors the aphid was accidentally on *Rhamnus dahurica*. They also suggested that the alatae collected on *Saussurea* are gynoparae which should migrate to *Sorbus*. Indeed, judging by the description of alatae and apterous viviparous females from *Saussurea piptathera* given in the article and by the comparison of aphids from *Sorbus* and aphids from *Saussurea* made by the authors, these individuals all belong to one taxon.

Hitherto *Dysaphis pavlovskiana*, sensu stricto was known from Eastern and Western Siberia, Kazakhstan, Uzbekistan, Kyrgyzstan, Tajikistan and Pakistan (Narzikulov 1957; Ivanovskaya, 1977; Gabrid, 1989;

I have examined all slides from the collection of the Institute of Biology and Soil Science FEB RAS and collection of Muséum national d'Histoire naturelle that contain individuals designated by Pashtshenko as holotype and paratypes of *U. lehri*. Samples Nr 4091 and 4163, on the basis of which Pashtshenko was going to describe *U. lehri*, were collected respectively on 14 and 24 June 1981 to the southeast of the peak Aborigen in the Tenkinskiy district of Magadan region, on *Astrocodon kruhseanus* Fed. (= *Campanula expansa* Rudolph). In the first case, the dark brown aphids were located in the upper part of the plant, and in the second case the aphids were brown-black and black and fed on the stem. There are only 5 apterous viviparous females on the slides; 3 in sample Nr 4091 and 2 in sample Nr 4163.

As can be seen from a comparison of morphometric data (Tabl. 5) specimens labelled by Pashtshenko with the name “*lehri*” are practically indistinguishable from *Uroleucon (Uromelan) campanulae* (Kaltenbach, 1843) and therefore should be attributed to this species.

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