Scale insects of the Volga Area (Homoptera: Coccinea). II. Scale insects from Nizhniy Novgorod Province, Chuvashia and Mari-El

I.A. Gavrilov & N.V. Smirnova

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Eight species collected in the upper Volga Area are listed. Six species, Orthezia urticae (Linnaeus), Trionymus perrisii (Signoret), Acanthococcus baldonensis Rasina, Greenisca brachypodii Borchsenius & Danzig, Eriopeltis lichtensteini Signoret, and Chionaspis salicis (Linnaeus) are recorded from the Volga Area for the first time. Variability of Trionymus perrisii (Signoret) is discussed and illustrated.

I.A. Gavrilov, Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, St.Petersburg 199034, Russia. E-mail: coccids@zin.ru

N.V. Smirnova, Russian State Social University, branch in Cheboksary, Khuzangaya ul. 20, Cheboksary 428027, Russia. E-mail: vpodsh@newmail.ru

Recently (Gavrilov, 2004), 45 species of scale insects have been reported from the Volga Area, mainly from the arid region adjacent to lower and middle course of the river. In this article, 8 species collected in the previously unstudied upper Volga Area are listed. Six species, *Orthezia urticae* (Linnaeus), *Trionymus perrisii* (Signoret), *Acanthococcus baldonensis* Rasina, *Greenisca brachypodii* Borchsenius & Danzig, *Eriopeltis lichtensteini* Signoret, and *Chionaspis salicis* (Linnaeus) are recorded from the Volga Area for the first time.

All the material was collected by N.V. Smirnova.

Family ORTHEZIIDAE

Orthezia urticae (Linnaeus, 1758)

Nizhniy Novgorod Prov., Kerzhenskiy Nature Reserve, 15.VII.2004.

Family PSEUDOCOCCIDAE

Trionymus perrisii (Signoret, 1875) (Figs 1-2)

Mari-El, Bol'shaya Kokshaga Nature Reserve, on Calamagrostis sp., 21.VII.2003.

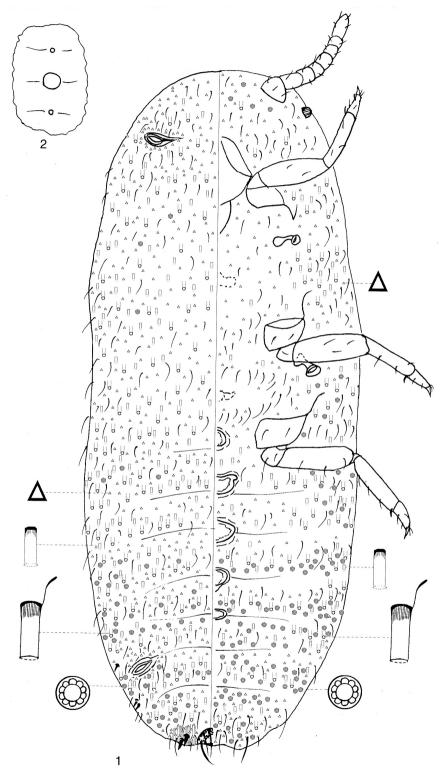
T. perrisii is a very polymorphous species. Specimens of this species from different regions of

Russia and neighbouring countries kept in the extensive collection of Zoological Institute RAS, have distinct or not clearly visible sclerotized plate of C_{18} , 2 or 3 pairs of cerarii, different numbers (and diferent sizes) of micropores on hind coxae, and 1-5 circuli. Often, these characters vary within the same population. By and large a range of this variability is much wider than in Western Europe (Williams, 1962). The variation of the number of circuli is of most interest, because this character is rather stable in mealybugs. Most of the available specimens of T. perrisii have only one small oval circulus; many specimens from over the species range have 1-2 additional minute circuli; some specimens from Leningrad Province and alpine North Caucasus have 3-5 large circuli, and all 6 females collected in Mari-El have 5 large circuli (Fig. 1). Two larvae from the same series have one large and two minute circuli (Fig. 2). Besides, specimens from Mari-El have very small and badly visible micropores on hind coxae in contrast to large and numerous pores in most other specimens.

Family ERIOCOCCIDAE

Acanthococcus agropyri (Borchsenius, 1949)

Nizhniy Novgorod Prov., Kerzhenskiy Nature Reserve, on leaves of grass, 14.VII.2004.



Figs 1-2. Trionymus perrisii (Signoret), Mari-El, Russia. 1, adult female; 2, circuli of larva.

Acanthococcus baldonensis Rasina, 1966

Nizhniy Novgorod Prov., Kerzhenskiy Nature Reserve, 28.VIII.2004.

Greenisca brachypodii Borchsenius & Danzig, 1966

Chuvashia, Cheboksary Distr., vill. Sosnovka, on leaves of grass, VIII.2002, 7.IX.2002.

Family COCCIDAE

Eriopeltis festucae (Fonscolombe, 1834)

Nizhniy Novgorod Prov., Kerzhenskiy Nature Reserve, on leaves of grass, 14.VII.2004. Mari-El, Bol'shaya Kokshaga Reserve, on leaves of grass, 28.VIII. 2003.

Eriopeltis lichtensteini Signoret, 1877

Mari-El, Bol'shaya Kokshaga Nature Reserve, on leaves of *Calamagrostis* sp., 26-29.VIII. 2003.

Parthenolecanium corni (Bouché, 1844)

Chuvashia, Cheboksary Distr., vill. Sosnovka, on Ramishia sp., 7.IX.2002.

Family **DIASPIDIDAE**

Chionaspis salicis (Linnaeus, 1758)

Nizhniy Novgorod Prov., Kerzhenskiy Nature Reserve, on Vaccinium spp., 26.VIII.2004. Mari-El, Bol'shaya Kokshaga Nature Reserve, on Vaccinium spp., 12.VI.2003.

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References

- Gavrilov, I.A. 2004. The scale insects of the Volga Area (Homoptera: Coccinea). *Entomol. Obozr.*, 83(3): 523-529. (In Russian).
- Williams, D.J. 1962. The British Pseudococcidae (Homoptera: Coccoidea). Bull. Brit. Mus. (natur. Hist), Entomol., 12(1): 1-79.

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