Kiritshenkella and related genera of mealybugs from Russia and neighbouring countries (Homoptera: Coccinea: Pseudococcidae)

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The taxonomy of the genera *Kiritshenkella* Borchs., *Balanococcus* Will., *Neotrionymus* Borchs., *Miscanthicoccus* Tak. and *Adelosoma* Borchs. is discussed and a key to them is proposed. An annotated list of 12 species of these genera and keys to species of *Balanococcus* and *Neotrionymus* are presented. *N. cynodontis* (Kir.) is redescribed and illustrated for the first time. Lectotypes are designated for 3 nominal species. The following new synonymies are established: *Balanococcus scirpi* (Green) = *darvasicus* (Nurmamatov), *Kiritshenkella sacchari* (Green) = *stataria* Borchs., = *shirakensis* Hadž., *Neotrionymus cynodontis* (Kir.) = *mediterraneus* (Kozár), *Trionymus placatus* (Borchs.) = *Dysmicoccus balticus* Koteja & Łagowska. In addition, 3 species of the genus *Trionymus* Berg not included in the recent revision of this genus (Danzig, 1997) are considered, one of them, *T. dagestanicus* sp. n. described as new.

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Introduction

This is a taxonomic account of the grass-infesting mealybugs close to the genus *Trionymus* Berg, but differing in the possession of small antennae and legs, hind coxae with the proximal margins indistinct and with the translucent pores extending on to the surrounding areas of the integument. Many species of this group are also characterized by numerous multilocular pores evenly distributed over the body and by partial or entire reduction of trilocular pores. Tubular ducts in most species are short and have well developed flange-shaped collars that often occupy up to the half of the length of the ducts. All species are living under the leaf sheaths of Poaceae and at base of stems and leaves of Cyperaceae. Several genera have been described in this group, but boundaries between them are not ever clear.

A key for determination of 5 Palaearctic genera of this group is given below. To this group belong also the genera *Cannococcus* Borchs., *Liucoccus* Borchs., *Neoripersia* Kanda and *Tibetococcus* Tang, distributed in South-East Asia; we do not discuss them in this work. Most of the genera are monotypic, only *Balanococcus* and *Neotrionymus* contain several species. *Balanococcus* is most generalized and closest to *Trionymus*, other genera are more specialized morphologically.

We consider in this article also 3 species of *Trionymus* not included in the recently published revision of this genus (Danzig, 1997). These species resemble *Balanococcus* in the short tubular ducts with flange-shaped collar; two of them were included in *Balanococcus* (Cox, 1987; Tang, 1992), one is described as new. We consider them to belong in *Trionymus* because they have normal legs and antennae.

All specimens examined, including lectotypes and holotypes, are kept in the Zoological Institute, St.Petersburg.

Key to the genera close to *Kiritshenkella*

1(2). Cerarii absent. Body margin with groups of slender conical setae. Circulus large, deeply constricted ..... **Adelosoma** Borchs.

2(1). Cerarii present, sometimes represented by setae only, without surrounding trilocular pores. Body margin without conical setae. Circulus,

when present, not large and without constriction; sometimes 2-4 circuli present.
3(4). Multilocular pores arranged in transverse rows on abdomen, sparse on prosoma, often forming zone around entire body .... **Balanococcus** Will.
4(3). Multilocular pores scattered over the body, as exception numerous on ventrum, a few on dorsum.
5(8). Cerarii with conical setae often surrounded by trilocular pores.
6(7). Spiracles barrel-shaped, havily sclerotized. Cerarii without trilocular pores ..... **Miscanthicoccus** Tak.
7(6). Spiracles cup-like, weakly sclerotized. Cerarii usually with trilocular pores ..... **Neotrionymus** Borchs.
8(5). Cerarii with flagellate setae without trilocular pores ..... **Kiritshenkella** Borchs.

Genus **Balanococcus** Williams, 1962

Williams, 1962: 13; Danzig, 1980: 186; Cox, 1987: 19; Koteja, 1988: 119; Kosztarab & Kozár, 1988: 75; Tang, 1992: 127.

Comments. The genus is close to *Kiritshenkella* Borchs. possessing similar tubular ducts, but differs in the construction of anal ring and cerarii.

Balanococcus is also close to *Trionymus* Berg, but has special tubular ducts, short antennae, large hind coxae, and poorly developed ostioles. Although there are difficulties in differentiation of these genera and doubts about the validity of the genus *Balanococcus*, we still keep this genus, including in it, in addition to the type species, 4 species described in this genus and 2 species described in other genera: *B. lianae* (Koteja), **comb. n.** described in *Kiritshenkella* and *B. singularis* (Schmutt.), **comb. n.** described in *Trionymus*. All 7 species are distributed in the Palaearctic Region. *B. borchsenii* Danzig described in *Balanococcus* (Danzig, 1983) is transferred to the genus *Neotrionymus*: *N. borchsenii* Danzig, **comb. n.** *B. mediterraneus* Kozár also belongs to *Neotrionymus* being a junior synonym (syn. n.) of *N. cynodontis* (Kir.). Numerous New Zealand species included recently in *Balanococcus* (Cox, 1987; Ben-Dov, 1994) do not belong to this genus.

Key to the species of *Balanococcus*

1(10). Multilocular pores arranged in a band along body margin.
2(7). Circuli present, 1-3 in number.
3(4). 2 pairs of cerarii present. Tubular ducts distributed over medial dorsum. Palaearctic ..... 1. **B. boratynskii** Will.
4(3). 1 pair of cerarii present. Tubular ducts either entirely absent from medial dorsum or limited to 3-4 posterior segments.
5(6). Tubular ducts numerous on VIII tergite. Cerarian setae short, surrounded by several trilocular pores. Europe .....2. **B. singularis** (Schmutt.)
6(5). Tubular ducts on VIII tergite on margin only. Cerarian setae elongate, without trilocular pores. Japan, Korea..... **B. takahashii** Mck.
7(2). Circuli absent.
8(9). Multilocular pores either entirely absent from medial dorsum or they are few. Trilocular pores evenly distributed over the body, not numerous. Palaearctic ..... 3. **B. scirpi** (Green)
9(8). Multilocular pores numerous on medial dorsum. Trilocular pores concentrated on the midline of both surfaces, numerous. Poland ..... **B. lianae** (Koteja)
10(1). Multilocular pores entirely absent from body margin or single pores may be present.
11(12). Tubular ducts numerous over VIII tergite. East Siberia and Far East ..... 4. **B. orientalis** Danzig & Ivanova
12(11). Tubular ducts on VIII tergite on body margin only. N Caucasus ... 5. **B. caucasicus** Danzig

1. **Balanococcus boratynskii** Williams, 1962

Williams, 1962: 15 (England); Danzig, 1980: 186; Kosztarab & Kozár, 1988: 75; Koteja, 1988: 135.

Material. More than 10 series from the Russian localities mentioned below, 1 ♀ from England, 6 ♀ from Poland.

Comments. Insects from Russia differ from types in following characters: shorter and stouter antennae and legs, 6-7-segmented antennae (6-segmented in types), tubular ducts of 2 sizes, cerarian setae stouter, C_{17} always with 2 (not 1!) setae, number of circuli varies from 1 to 3.

The synonymy of *Trionymus boratynskii* Danzig, 1983 with *B. boratynskii* (Tang, 1992) is erroneous, the species differ definitely in the number of dorsal multilocular pores and size of circuli. As to the generic assignement of *T. boratynskii*, it is a controversial subject; as was mentioned above in "Comments" to the genus, the border between *Balanococcus* and *Trionymus* is not definite.

Distribution. Russia: Leningrad and Irkutsk Prov., N Karelia, N Caucasus (Teberda), southern Primorsk Terr. England, Hungary, Poland, Sweden.

Host plants. The insects were collected from *Carex*, *Festuca*, *Deshampsia caespitosa* and *Elymus arenarius* on well insolated places.

2. **Balanococcus singularis** (Schmutterer, 1952), comb. n.

Schmutterer, 1952: 560 (*Trionymus*; Germany); Kosztarab & Kozár, 1988: 168 (*Trionymus*).

Material. 1 series from Karelia, 1 ♀ from Poland.

Distribution. Russia: N Karelia, N Caucasus, Moscow Prov. (Kosztarab & Kozár, 1988); Czech Republ., Germany, Poland.

Host plants. On grasses and in ant nests. In Karelia it was collected from *Festuca ovina* on sea rocks.

3. **Balanococcus scirpi** (Green, 1921)

Green, 1921: 192 (*Ripersia*; England); Williams, 1962: 17; Koteja, 1988: 134. – *darvasicus* Nurmamatov, 1986: 89 (*Kiritshenkella*; Tajikistan: Darvaz Range, near Kalai-Chussin), **syn. n.**

Material. In addition to the holotype of *B. darvasicus*, females from all localities of Russia and neighbouring countries mentioned below.

Comments. The holotype of *B. darvasicus* differs from *B. scirpi* in 7-segmented antennae. But there is individual variation in this character, and in some specimens one antenna is 6-segmented and the other 7-segmented. We consider *B. darvasicus* as a junior synonym of *B. scirpi.*

Distribution. Russia: Leningrad, Volgograd and Irkutsk Prov.; Ukraine: S Crimea near Alushta; Kazakhstan: Zailiysk Alatau, Talgar Nature Reserve, 1200 m; Tajikistan: Darvaz Range, Kalai-Chussin, 2100-2300 m.

Host plants. Carex, Trichophorum, grasses.

4. **Balanococcus orientalis** Danzig & Ivanova, 1976

Danzig & Ivanova, 1976: 76 (Russsia: Sakhalin, Kholmsk Distr., near Sadovniki); Danzig, 1980: 186.

Material. In addition to the type series, two series from Irkutsk Prov. and one from Corea.

Distribution. Russia: Irkutsk Prov., Sakhalin. Korea.

Host plants. Known from *Carex.*

5. **Balanococcus caucasicus** Danzig, 1985

Danzig, 1985: 116 (Russia: N Caucasus, Teberda Nature Reserve, Gonachkhir Valley near Klukhor Lake, 2500 m).

Material. Type series.

Distribution. Known from the type series only.

Host plants. Collected on undetermined grass in subalpine zone.

Genus **Kiritshenkella** Borchsenius, 1948

Borchsenius, 1948: 583; 1949: 166; 1960: 931; Koteja, 1988: 119; 1989: 299; Tang, 1992: 100.

Comments. This genus comes closest to *Balanococcus.* The similarity of these two genera was discussed by some authors (Williams, 1962; Koteja, 1988, 1989) but till now definite differences between them were not proposed. Yet the type species of *Kiritshenkella* can be easily separated from *Balanococcus* by the wide anal ring with three rows of pores and cerarii represented by 2 flagellate setae without surrounding trilocular pores. These striking features differentiate *Kiritshenkella* from *Neotrionymus* and *Miscanthicoccus* having similar number and distribution of multilocular pores. In addition to the type species, Borchsenius (1960) included in *Kiritshenkella* also *Pseudoantonina lingnani* Ferris from America and 4 Chinese species. The American species does not belong to *Kiritshenkella* having unique trilocular pores. *K. fushanensis* (Borchs.) is identical with the type species of *Kiritshenkella* (Williams, 1970), *K. ostiolata* (Borchs.) is identical (syn. n.) with *Miscanthicoccus miscanthi* Tak., the other 2 Chinese species are transferred here to *Neotrionymus.* 2 species described in *Kiritshenkella* later belong actually to *Balanococcus.* These are *B. darvasicus* Nurm. [= *B. scirpi* (Green)] and *B. lianae* (Koteja) (see above). So, the genus *Kiritshenkella* is monotypic.

Kiritshenkella sacchari (Green, 1900)

Green, 1900: 37 (*Ripersia*; India: Gorakhopur); Williams, 1970: 145 (= *cellulosa* Hall, = *fushanensis* Borchs.); Avasthi & Shafee, 1987: 22; Tang, 1992: 100. – *cellulosa* Hall, 1923: 7 (*Ripersia*; Egypt: "Armant, Nag Hamadi", Cairo, Giza); Ezzat, 1962: 151. – *stataria* Borchsenius, 1948: 583 (S Tajikistan: Shaartuz, Pyandzh, Parkhar, Chubek; l e c t o t y p e, designated here: ♀, "*Kiritshenkella stataria* Borchs., Tajikistan, Pyandzh River, 15 km of Kirovabad [now Pyandzh], in leaf sheaths of *Phragmites*, 30.V.1944, N. Borchsenius, No. 129", slide No. 19-45; paralectotypes: 12 ♀ with similar label and 7 ♀ from Parkhar Distr.), **syn. n.**; 1949: 167; Koteja, 1988: 130. – *fushanensis* Borchsenius, 1958: 158 (*Pseudantonina*; China: Kwangtung Prov., Fushan; l e c t o t y p e, designated here: ♀, "*Pseudantonina fushanensis* Borchs., China, Fushan, on grass, 12.XI.1954, N. Shutova", slide No. 386-56). – *shirakensis* Hadžibejli, 1960: 57 (E Georgia: Shiraki), **syn. n.**

Material. Types of *K. stataria, K. shirakensis* and *K. fushanensis*, 1 ♀ from Turkmenistan, 2 series from Tajikistan, 1 from Afghanistan, 7 from China.

Variation. Specimens from East Asia possess a small circulus whereas specimens from the western part of the range have none. Williams (1970) had shown the specimens with and without a circulus may occur in one series.

Comments. The new synonymy is established by comparison of the types of *K. stataria* and *K. shirakensis* with the types of *K. fushanensis*, which was synonymized with *K. sacchari* by Williams (1970). We used also the redescription and drawing of *K. sacchari* given by Williams in the same work.

Distribution. E Georgia (Shiraki), Turkmenistan (Kara-Kala), S Tajikistan. Egypt, Israel, Afghanistan, Bangladesh, Burma, China, India, Pakistan.

Host plants. This species occurs not only under leaf sheaths and on nodes, but also on underground stems and roots of *Phragmites australis*, *Erianthus ravennae*, *Calamagrostis*, *Saccharum* spp., *Sorghum*, *Imperate* and other grasses, it was also recorded from *Cyperus*. According to Williams (1970), the species is widespead on *Saccharum officinarum* in India but is not a serious pest.

Genus **Neotrionymus** Borchsenius, 1948

Borchsenius, 1948: 581; 1949: 162; Ter-Grigorian, 1973: 75; Danzig, 1980: 189.

Comments. We include in the genus *Neotrionymus* 5 South Palaearctic species recorded from Russia and neighbouring countries, and also *N. yunannensis* (Borchs.), **comb. n.** (from *Kiritshenkella*), *N. guanduensis* (Borchs.), **comb. n.** (from *Cannococcus* Borchs.) and *N. caudatus* (Borchs.), **comb. n.** (from *Kiritshenkella*). *N. monstatus periolanus* Goux described from Italy (Goux, 1953) is apparently a separate species not belonging to *Neotrionymus*.

Key to the species of *Neotrionymus*

1(4). Trilocular pores numerous over the body.
2(3). Multilocular pores numerous over the body. Circuli 3-4 in number . . . 1. **N. monstatus** Borchs.
3(2). Multilocular pores numerous on ventrum only, few on dorsum. Circuli absent . . . . . 4. **N. borchsenii** (Danzig)
4(1). Trilocular pores near spiracles, ostioles and in cerarii only.
5(8). Circulus 1 only.
6(7). Multilocular pores numerous. Tubular ducts of usual type, slender . . . . 2. **N. kerzhneri** Danzig
7(6). Multilocular pores not numerous. Tubular ducts short . . . . . 5. **N. swetlanae** Bazarov
8(5). Circuli 2 in number . . . 3. **N. cynodontis** (Kir.)

1. **Neotrionymus monstatus** Borchsenius, 1948

Borchsenius, 1948: 582 [Tajikistan: near Kirovabad (now Pyandzh)]; 1949: 162; Ter-Grigorian, 1973: 76; Danzig, 1980: 189 (lectotype designation; = *ibericus*, = *maritimus*); Tang & Li, 1988: 26; Tang, 1992: 144. – *ibericus* Hadžibejli, 1960: 302 (E Georgia: Shiraki). – *maritimus* Borchsenius & Kozarzhevskaya, 1966: 40 (Russia: southern Primorsk Terr., Sergeevka).

Material. Types of *N. monstatus*, *N. maritimus* and *N. ibericus*, more than 20 series from Russia, republics of the former USSR and Mongolia.

Distribution. Russia (Irkutsk Prov., southern Primorsk Terr.); Ukraine (Odessa Prov.), E Georgia, Armenia, Turkmenistan, SE Kazakhstan, Uzbekistan, Tajikistan. Mongolia, China (Inner Mongolia).

Host plants. Usually lives on *Phragmites australis*, only in Georgia mentined from *Digraphis arundinacea*.

2. **Neotrionymus kerzhneri** Danzig, 1972

Danzig, 1972: 327 (Mongolia: Gobi-Altai Aimak).

Material. Types and 2 ♀ from Kazakhstan.

Distribution. Kazakhstan: Kzyl-Orda and Alma-Ata Prov. Mongolia: Gobi-Altai and South Gobi Aimaks.

Host plant. Achnatherum splendens.

3. **Neotrionymus cynodontis** (Kiritshenko, 1932) (Fig. 1)

Kiritshenko, 1932: 139 (*Ripersia*; Uzbekistan: Samarkand; l e c t o t y p e, designated here: ♀, "*Ripersia cynodontis* sp. n., Turkmenistan", slide without No., specimen in black circle; paralectotype: 1 ♀ on the same slide. On the same slide is also 1 ♀, determined as "*Ripersia erianthi* sp. n." by Kiritshenko). – *mediterraneus* Kozár, 1983: 140 (*Balanococcus*; Jugoslavia: Portoros), **syn. n.**

Material. Types of *N. cynodontis* and *N. mediterraneus*, 10 ♀ from Turkmenistan (Kara-Kala), 3 ♀ from Uzbekistan (Andizhan, Deynau), 10 series from different localities in Tajikistan, 3 ♀ and 5 larvae from Egypt.

Description. Female. Body elongate oval, pinkish, 3 mm. Antennae 7-segmented. Hind coxae slightly larger than other, with translucent pores sometimes extending on to the surrounding areas of the integument, in such cases proximal margins indistinct. Circulus 2 in number, nearly round. Multilocular pores scattered on both sides of the body, more numerous on posterior part. Tubular ducts short, with flange-shaped collar occupying less than half of the length of the duct. They are of 2 sizes. The larger concentrate more around the body margins, scattered on the whole dorsum and on abdomen ventrum. Trilocular pores near spiracles, ostioles and sometimes in cerarii. One pair of cerarii

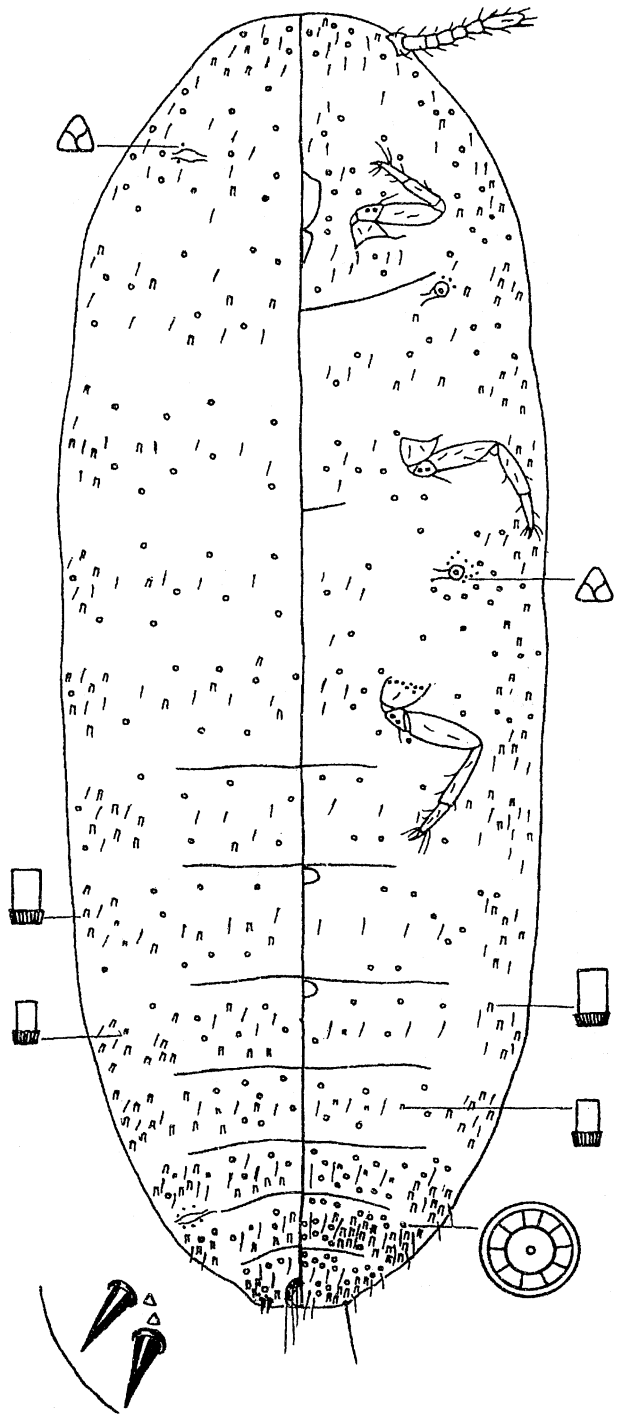

Fig. 1. *Neotrionymus cynodontis* (Kir.), female, Tajikistan.

only, C_{18}, with 2 stout conical setae and seldom with 1-2 trilocular pores.

Comments. The new synonymy is established by comparison of types.

Distribution. Turkmenistan, Uzbekistan, Tajikistan. Greece, Jugoslavia, Egypt.

Host plants. The species lives on *Cynodon dactylon. N. mediterraneus* was described from *Poa pratensis*, but it must be a mislabelling: the species was described from one series, and the paratypes of this species deposited in the collection of the Zoological Institute, St.Petersburg have a label "*Cynodon dactylon*".

4. **Neotrionymus borchsenii** (Danzig, 1983), comb. n.

Danzig, 1983: 516 (*Balanococcus*; Russia: southern Primorsk Terr., Lazo Nature Reserve).

Material. Type series.

Comments. N. borchsenii differs from other species of *Neotrionymus* in the almost complete absence of multilocular pores on dorsum.

Distribution. Known from the type series only.

Host plant. Collected from *Koeleria gracilis* on sea rocks.

5. **Neotrionymus swetlanae** Bazarov, 1981

Bazarov, 1981: 262 (Kirghizia: Terskey Alatau, Tugry-Su Nature Reserve).

Material. The types are deposited in the collection of the Institute of Zoology and Parasitology of Tajikistan, Dushanbe and were not examined by the author.

Distribution. Known from the type locality only.

Host plant. Collected from *Calamagrostis* sp. on rocks at elevation of 2000 m.

Genus **Miscanthicoccus** Takahashi, 1957

Takahashi, 1957: 6; Danzig, 1980: 189; Tang, 1992: 139.

Monotypic genus.

Miscanthicoccus miscanthi Takahashi, 1928

Takahashi, 1928: 333 (*Trionymus*; Taiwan); Borchsenius, 1960: 929; Danzig, 1980: 191; Qin, 1991: 53; Tang, 1992: 140. – *ostiolata* Borchsenius, 1958: 160 (*Pseudantonina*; China: Zhejiang Prov., Hangchow, type not found), **syn. n.**

Material. 2 series from Primorsk Terr., 2 from Japan, 1 ♀ determined by Borchsenius as *Pseudantonina ostiolata*, with the label: "Kwanshien, Szechwan, on *Phragmites* sp., 5.XII.1954"; slide No. 391-56.

Comments. The new synonymy is established by comparison of the female from China determined by Borchsenius as *Pseudantonina ostiolata* with females from Japan.

Distribution. Russia: southern Primorsk Terr. (Khasan Distr.). China (Zhejiang Prov.), Taiwan, Japan, Australia.

Host plants. Miscanthus, Phragmites australis, Bambusa.

Genus **Adelosoma** Borchsenius, 1948

Borchsenius, 1948: 583; 1949: 197; Tang, 1992: 320.

Monotypic genus.

Adelosoma phragmitidis Borchsenius, 1948

Borchsenius, 1948: 584 (Tajikistan; l e c t o t y p e, designated here: ♀, "*Adelosoma phragmitidis* Borchs., Tajikistan, Mikoyanabad (now Shaartuz) Distr., collective farm "Subtropiki", on a stem of cane, 13.VI.1944, N. Borchsenius", slide No. 180, specimen in black circle; paralectotypes: 13 ♀ from the same series); 1949: 198; Williams, 1970: 116; Tang, 1992: 321.

Material. Types and 2 additional series from Tajikistan, 1 ♀ from Turkmenistan, 2 series from Afghanistan.

Distribution. Turkmenistan, Tajikistan. Afghanistan, India, Pakistan.

Host plants. Arundo donax, Phragmites australis, Saccharum bengalense.

Genus **Trionymus** Berg, 1899

Trionymus radicum (Newstead, 1895)

Newstead, 1895: 235 (*Dactylopius*; England); Williams, 1962: 69 (= *donisthorpei*); Kosztarab & Kozár, 1988: 167; Tang, 1992: 134 (*Balanococcus*). – *donisthorpei* Newstead, 1907: 5 (England).

Material. 3 ♀ from N Caucasus, 1 ♀ from England, 6 ♀ from Switzerland.

Host plants. The species lives at the bases of stems and at roots of grasses; in England, it was recorded also in ant nests. In Switzerland, it was collected from altitude about 2000 m.

Trionymus dagestanicus sp. n. (Fig. 2)

Holotype. ♀, **Russia**, N Caucasus, S Dagestan, near Kurush, 1700 m, on leaf sheaths of *Phleum* sp., 19.VII.1983 (E. Danzig), slide No. 136-83, specimen in black circle.

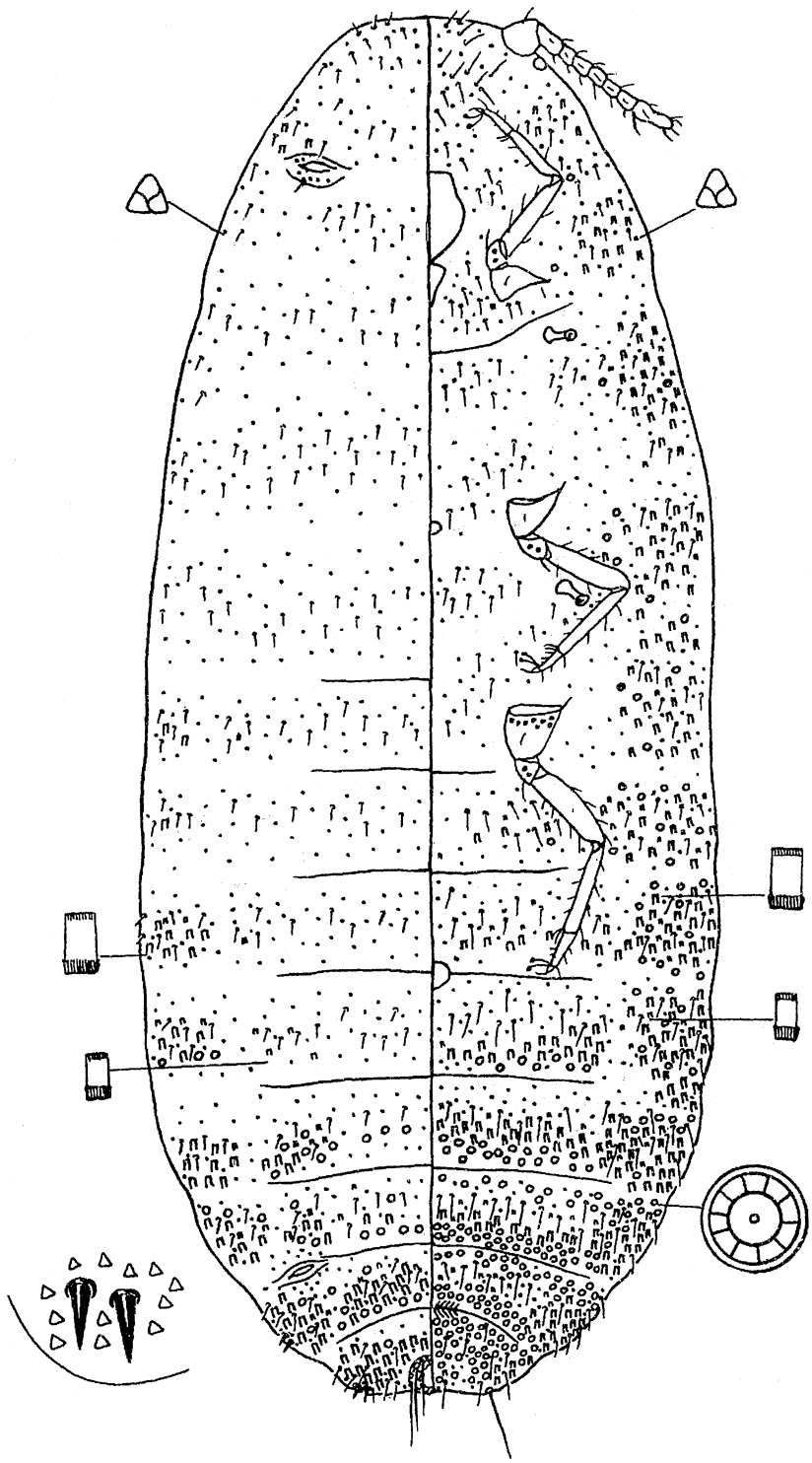

Fig. 2. *Trionymus dagestanicus* sp. n., female, holotype.

Paratypes: 6 ♀, as holotype.

Description. Female. Body elongate; 3.5 mm. Antennae 7-8-segmented. Legs normal, slender; hind coxae with few translucent pores. Circulus of middle size, oval. Multilocular pores on dorsum distributed on posterior segments only, on ventrum scattered around the body margin and form transverse rows and bands on V-VIII segments. Tubular ducts of 2 sizes, present on both surfaces of the body (Fig. 2), each duct with a small flange-shaped collar. Cerarii numbering 2 pairs only. C_{18} with 2 stout conical setae and large compact group of trilocular pores. C_{17} with 2 setae and few pores.

Comparison. This species comes closest to *T. radicum*. It differs in the almost complete absence of tubular ducts from dorsal thorax and anterior part of abdomen, presence of small tubular ducts on dorsum and also in the stout cerarian setae. *T. dagestanicus* resembles *Balanococcus singularis* (Schmutt.), but can be distinguished by well-developed ostioles, larger circulus and legs, few translucent pores on hind coxae and presence of multilocular pores on dorsum.

Trionymus diminutus (Leonardi, 1918)

Leonardi, 1918: 198 (*Pseudococcus*; Italy); Morrison, 1925: 495; Borchsenius, 1936: 102; 1937a: 165; 1937b: 46; Gogiberidze, 1938: 21; Bykova, 1939: 67; Borchsenius, 1949: 150 (*Pseudococcus*); Ferris, 1950: 261; Saakjan-Baranova, 1954: 21 (*Pseudococcus*); McKenzie, 1967: 465; Cox, 1987: 28 (*Balanococcus*).

Material. 2 ♀ from L'vov, 2 series from Odessa and Georgia.

Distribution. Russia: Moscow (greenhouse of Botanical Garden of Acad. Sci. of the USSR); Ukraine (Odessa, L'vov), Georgia (Adzharia, Zelenyy Mys). Italy, California, native from Australia and New Zealand.

Host plants. Agavaceae: *Phormium tenax*, *Phormium* spp. At Zelenyy Mys and in greenhouses of Moscow, this species has 3 generations.

Trionymus placatus (Borchsenius, 1949)

= *Dysmicoccus balticus* Koteja & Łagowska, 1986: 381, **syn. n.**

The synonymy is established by examination of the original description of *D. balticus*.

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