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A NEW SPECIES OF THE FEATHER MITE GENUS *DOLICHODECTES* (ACARIFORMES: PROCTOPHYLLODIDAE) FROM THE DARK-SIDED FLYCATCHER *MUSCICAPA SIBIRICA* (PASSERIFORMES: MUSCICAPIDAE) FROM BURYATIA

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ABSTRACT: A new feather mite species, *Dolichodectes sibiricus* sp. n. (Pterodectinae), is described from the Dark-sided Flycatcher, *Muscicapa sibirica* Gmelin, JF, captured on the southern coast of Lake Baikal, Buryatia, Russia. The new species is closest to *D. allocaulus* (Gaud and Mouchet 1957) and *D. platynocercus* (Gaud and Mouchet, 1957) from Africa and is distinguished from them in the following features. In males of *D. sibiricus*, the lateral enlargements of opisthosomal lobes are of a complicated form and consist of distinct angular projections bearing setae *f2* and rounded ledges at level of setae *h2*, and the aedeagus extends to the level of setae *ps3*; in females, the prodorsal and hysteronotal shields lack ornamentation, the terminal appendages at their bases are 2–2.5 times thicker that setae *h2*, and setae *e2* are situated closer to the level of setae *e1* than to the posterior margin of the hysteronotal shield. Brief comments on the systematics of the genus *Dolichodectes*, a key to the known species, an updated checklist of the world fauna, as well as host associations are provided.

KEY WORDS: feather mites, Analgoidea, *Dolichodectes*, systematics, fauna, Baikal, Russia

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INTRODUCTION

The feather mite genus *Dolichodectes* Park and Atyeo, 1971 (Analgoidea: Proctophyllodidae) is a non-specious genus of the subfamily Pterodectinae and has included to date ten species (Park and Atyeo 1971; Mironov and Fain 2003; Mironov *et al.* 2010, 2012, 2015; Constantinescu *et al.* 2018). In the subfamily Pterodectinae, this genus and four more genera—*Alaudicola* Mironov, 1996, *Anisodiscus* Gaud and Mouchet, 1957, *Montesauria* Oudemans, 1905 and *Pedanodectes* Park and Atyeo, 1971—constitute the *Montesauria* generic complex, which is also referred to as derived pterodectines associated with passerines of the Old World (Mironov 2009).

Within this complex, the genus *Dolichodectes* is unmistakable in its general appearance and is readily distinguishable in having, in both sexes, a greatly elongated body (three or more times longer than wide), and in males, strongly elongated opisthosomal lobes, setae *ps3* situated posterior to the adanal suckers and bases of setae *g* and *ps3* arranged in a longitudinal rectangle (Park and Atyeo 1971; Mironov 2009). As for most pterodectine genera—excluding several specialized genera associated with hummingbirds—the mites of this genus inhabit vanes of the primary and secondary feathers of the wings and tail, where they are located in the corridors on the ventral side. Representatives of the genus are erratically distributed on oscine passerines of the Old World; five of ten previously known species are known from hosts of the family of Old-World flycatchers (Passeroidea: Muscicapidae) (Mironov *et al.* 2015; Constantinescu *et al.* 2018).

The present paper provides the description of a new *Dolichodectes* species found in southern Buryatia, Russia, on the Dark-sided Flycatcher, also referred to as the Siberian Flycatcher, *Muscicapa sibirica* (Muscicapidae). This finding represents the second *Dolichodectes* species recorded for the feather mite fauna of Russia. Additionally, a new key to the species, an updated checklist of the world fauna, as well as host associations are provided.

MATERIALS AND METHODS

The material used in the present study was collected at the Baikal Bird Ringing Station, situated on the southern coast of Lake Baikal (Buryatia, Russia), in the Spring of 2022. Birds, captured with a large Rybachy trap and mist nets, were identified, banded and examined for the presence of feather mites with a stereomicroscope. Feather mites were picked up from live birds with a preparation needle and fixed in 96% ethanol. In the laboratory, the feather mites were mounted on microslide glasses in Hoyer's medium according to the standard technique (Krantz and Walter 2009). The investigation of the mite specimens and primary pencil drawings were made using a Leica DM 2500 microscope,

equipped with a differential interference contrast and a camera lucida. Materials, deposited in the feather mite collections in the Zoological Institute of the Russian Academy of Sciences (Saint Petersburg, Russia), including four species described by Gaud and Mouchet (1957), were examined for comparison and construction of the identification key.

The description of the new species is provided according to the standards for pterodectine mites, elaborated in the past two decades (Valim and Hernandes 2010; Mironov *et al.* 2010, 2012; Hernandes 2022, 2023). General morphological terms follow Gaud and Atyeo (1996); the idiosomal chaetotaxy also follows the above authors with minor corrections to coxal setation by Norton (1998); leg chaetotaxy is that of Grandjean (1939). All measurements are in micrometres (μm). Measuring techniques used for particular structures were described in extensive taxonomic papers on pterodectines (Mironov and González-Acuña 2011; Mironov and Chandler 2017; Mironov and Galloway 2021).

The taxonomic system and the scientific names of birds follow Gill *et al.* (2023). All type specimens are deposited in the Zoological institute of the Russian Academy of Sciences (Saint Petersburg, Russia). Abbreviations used in collection numbers: ZISP—accession collection numbers of specimens in slides, SVM—field collection numbers of mite samples in tubes.

SYSTEMATICS

Family **Proctophyllodidae** Trouessart and Mégnin, 1884

Subfamily **Pterodectinae** Park and Atyeo, 1971

Genus ***Dolichodectes*** Park and Atyeo, 1971

Type species: *Proctophyllodes (Pterocolus) edwardsi* Trouessart, 1885, by original designation.

The feather mite genus *Dolichodectes* was established during a generic revision of the subfamily Pterodectinae (Park and Atyeo 1971) and originally included five species. Of them, only the type species, *D. edwardsi*, was known from passerines of Eurasia (Mironov 1996), while the other species were recorded in Africa (Gaud and Mouchet 1957). In the past two decades, one new *Dolichodectes* species was found in Europe (Mironov *et al.* 2015), two species were described from Africa (Mironov and Fain 2003; Mironov *et al.* 2010), and two species—from the Indo-Malayan Realm (Mironov *et al.* 2012; Constantinescu *et al.* 2018) (Table 1). Hernandes and Valim (2006) described *D. neotropicus* Hernandes and Valim, 2006 from a cotinga host (Passeriformes: Cotingidae) in Brazil, but shortly after, these authors (Valim and Hernandes 2009) have moved this mite to a separate genus *Berladectes* Valim and Hernandes, 2009. Although relationships within the *Montesauria* generic complex are not clear enough, the genus *Dolichodectes* is certainly the most derived lineage in this grouping, because of strong modifications of the body, opisthosomal lobes and structures associated with a genital apparatus in males (Mironov 2009).

Dolichodectes species occur on the oscine passerines of the Old World, and, to date, they have been recorded from the hosts of six families: Acrocephalidae, Muscicapidae, Phylloscopidae, Platysteiridae, Ploceidae and Turdidae (Table 1) (Gaud and Mouchet 1957; Gaud and Till 1961; Park and Atyeo 1971; Atyeo 1973; Mironov 1996; Mironov and Fain 2003; Mironov *et al.* 2010, 2012, 2015; Constantinescu *et al.* 2018). Since many other hosts of these avian families of the Old World are occupied by the species of the genus *Montesauria* Oudemans, 1905—the most specious pterodectine genus (Park and Atyeo 1971; Mironov 2006)—the erratic distribution of *Dolichodectes* species can be explained by the horizontal transfers (host shift events) of some representatives of this genus in the process of its diversification. Although the currently known distribution of *Dolichodectes* species is a wide field for speculation, taking into account the fact that a half of currently known species are restricted to hosts from the family Muscicapidae, it is most reasonable to hypothesize that this genus originated on the ancestors of this family (Table 1).

Dolichodectes sibiricus **sp. n.**

(Figs. 1–4)

Type material. Holotype male (ZISP 22424), 6 male and 19 female paratypes (ZISP 22425–22449) from *Muscicapa sibirica* Gmelin JF, 1789 (Passeriformes, Muscicapidae), SVM 22-0608-7, Russia, Buryatia, 4.5 km W from Mishikha, 51°38′36.2″N 105°31′20.6″E, 8 June 2022, coll. S. V. Mironov.

Description. *Male* (holotype, range for 6 paratypes in parentheses) (Figs. 1, 3). Idiosoma, length × width, 570 (535–585) × 175 (170–185), length of hysterosoma 370 (350–375). Prodorsal shield: entire, anterior margin with triangular rostral pro-

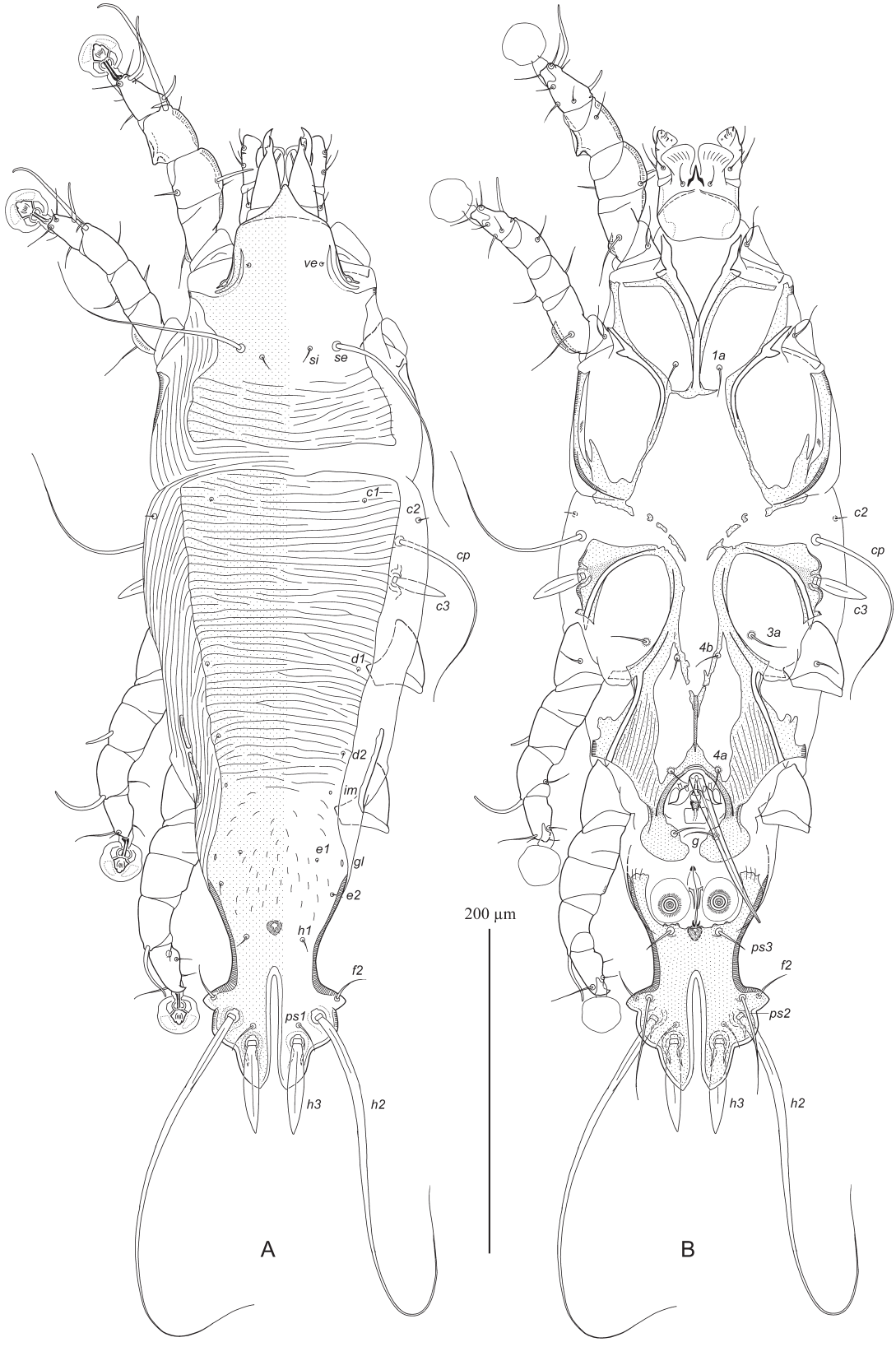

Fig. 1. *Dolichodectes sibiricus* sp.n., male. A—dorsal view, B—ventral view.

cess, anterolateral extensions connected to epimerites Ia, lateral margins shallowly concave, posterior margins almost straight, with wide and short convexity in median part, surface of posterior 1/3

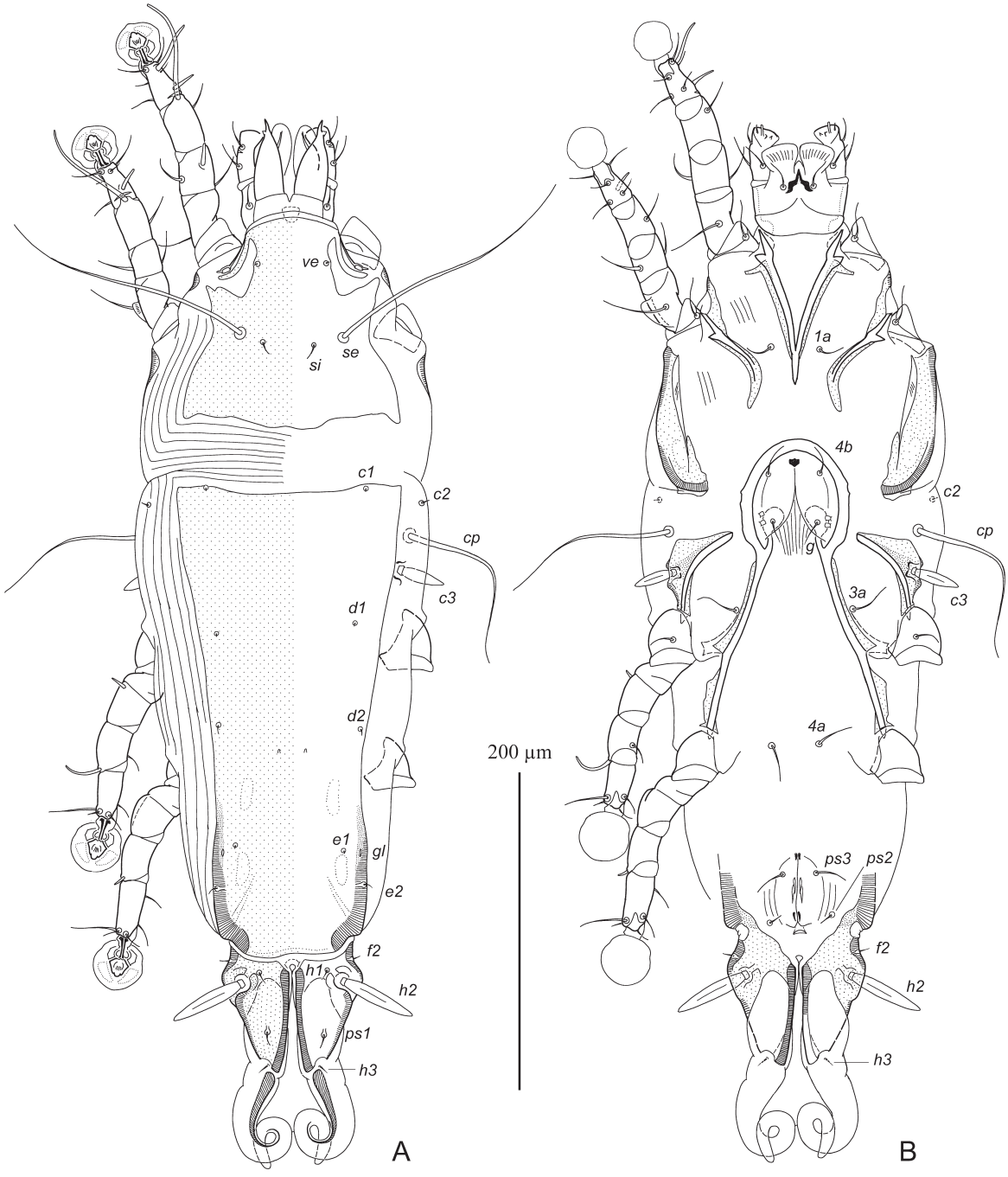

Fig. 2. *Dolichodectes sibiricus* sp.n., female. A—dorsal view, B—ventral view.

with sparsely disposed transverse striae, length along midline from rostral apex 175 (170–185), length excluding rostrum 145 (145–160), width at posterior margin 130 (130–140) (Fig. 1A). Setae *ve* represented by miscrosetae. Bases of scapular setae *se* separated by 70 (58–62). Scapular shields narrow, barely developed dorsally. Humeral shields absent. Setae *cp* and *c2* situated on soft tegument. Setae *c3* lanceolate, 32 (29–32) × 6.5 (6.5–7.5). Distance between prodorsal and hysteronotal shields 15 (12–20). Hysteronotal shield: length from anterior margin to lobar apices 385 (355–390), width at anterior margin 140 (135–145), anterior margin shallowly convex, anterior corners rounded, area from anterior margin to level of trochanters IV with sparse transverse striae, area from level of trochanters IV to bases of opisthosomal lobes with dash-like longitudinal striae. Metapodosomal scler-

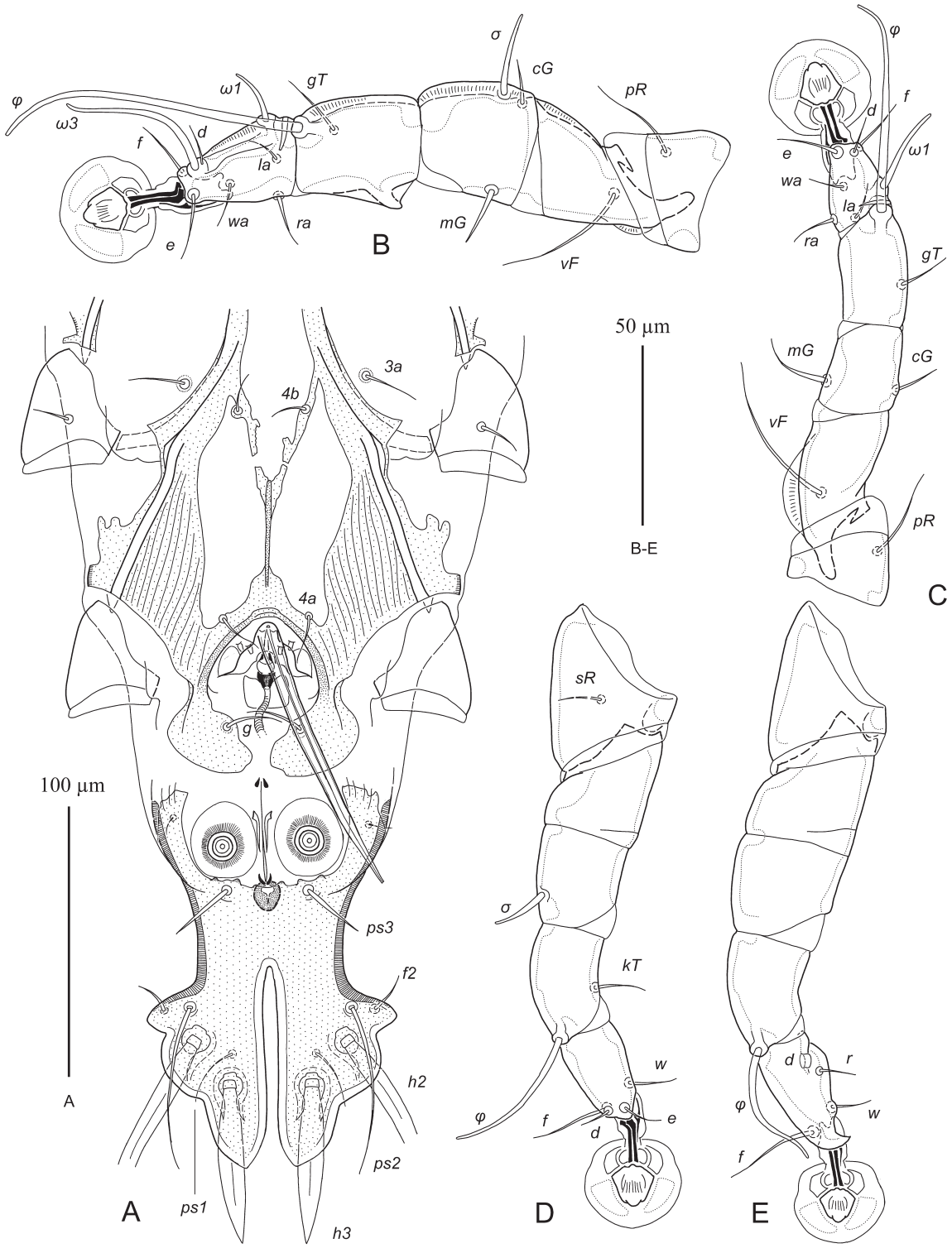

Fig. 3. *Dolichodectes sibiricus* sp.n., details of male. A—opisthosoma, ventral view, B–E—legs I–IV, dorsal view.

ites narrow stick-like, situated at level of trochanters IV and anterior to them. Opisthosoma strongly attenuate from level of setae *e2* to bases or opisthosomal lobes. Opisthosomal lobes nearly 3 times longer than wide at base, with large lateral extensions of complicated (stepped) form and bearing bases of setae *f2*, *ps2* and *h2*, greatest width of opisthosoma at level of extensions 90 (88–92), posterior end of lobes roughly semi-ovate (Fig. 1, 3A). Setae *h3* large lanceolate, 58 (56–65) long and

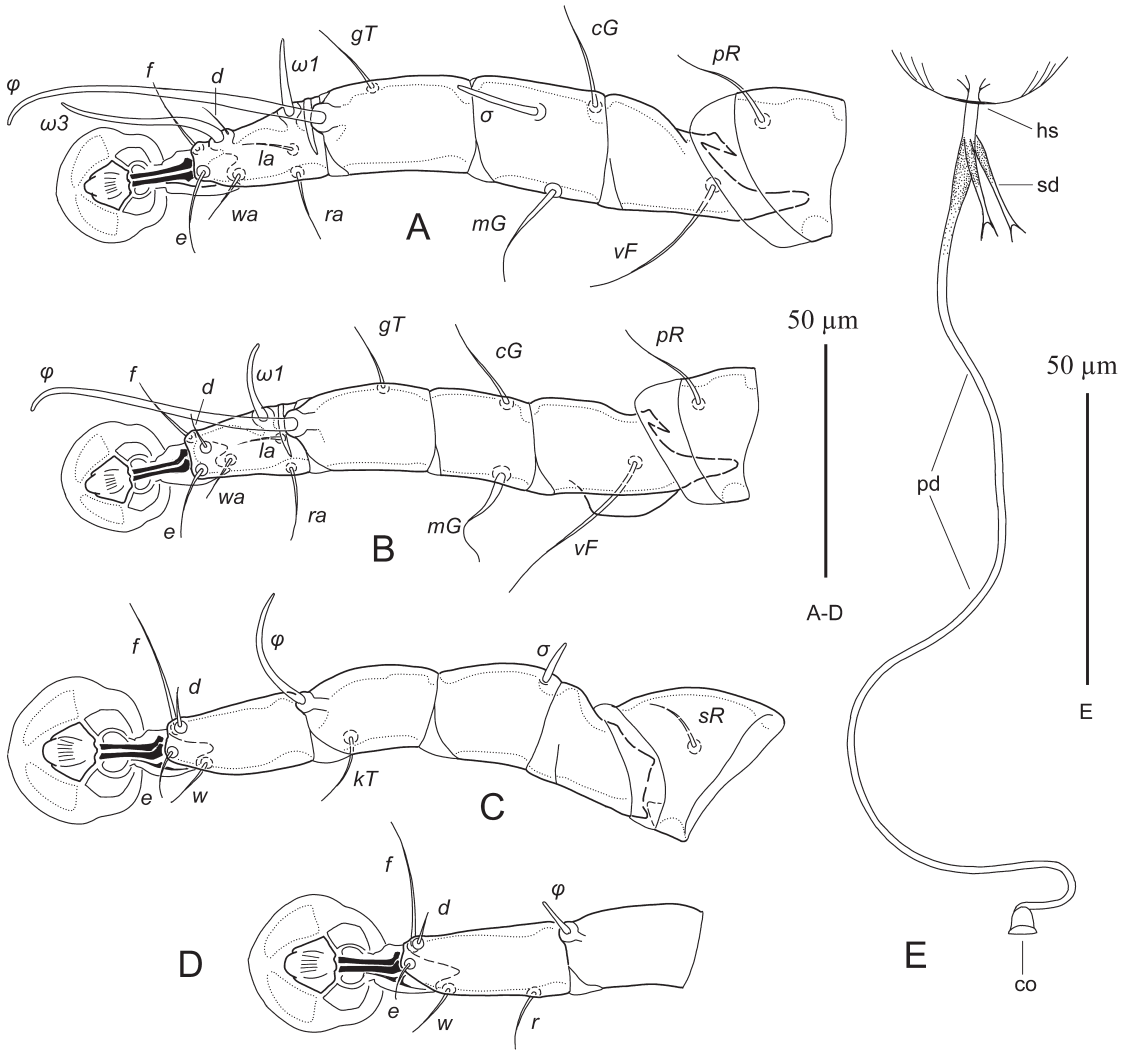

Fig. 4. *Dolichodectes sibiricus* sp.n., details of female. A–C—legs I–III, respectively; D—tibia and tarsis IV, dorsal view; E—spermatheca and spermaducts. Abbreviations: co—copulatory opening, hs—head of spermathecal, pd—primary spermaduct, sd—secondary spermaducts.

10 (8–10) wide, situated at level of posterior 1/3 of opisthosomal lobes, slightly closer to level of macrosetae *h2* than to lobar apices. Terminal cleft a narrow parallel-sided slit, length 73 (68–75), greatest width 5 (3–5). Supranal concavity cordiform, heavily sclerotized, distant from anterior end of terminal cleft. Setae *f2* near apices of lateral extensions of opisthosomal lobes; setae *ps2* situated at same transverse level and mesal from them. Setae *h1* situated at level of supranal concavity or slightly posterior. Setae *ps1* filiform, about 20 long, situated between levels of setae *h2* and *h3*. Setae *ps2* 70 (68–90) long, slightly extending beyond lobar apices; distance between bases of dorsal setae: *c2:d2* 145 (120–145), *d2:e2* 90 (90–95), *e2:h2* 78 (73–85), *h2:h3* 18 (17–20), *d1:d2* 52 (40–60), *e1:e2* 25 (22–27), *h1:h2* 45 (45–55), *ps1:h3* 13 (8–13), *h2:h2* 55 (50–58), *h3:h3* 30 (22–30), *f2:f2* 78 (75–80), *ps2:ps2* 60 (66).

Epimerites I fused into a Y, sternum about 1/2 of total length of epimerites, posterior end of sternum with transverse extensions connected to medial part of epimerites II or free from them (Fig. 1B). Epimerites II long and fused with corresponding epimerites IIa. Rudimentary sclerites rEpIIa represented by oblique rows of small irregular sclerites. Coxal fields I closed or open, coxal fields II, III closed, coxal fields IV usually closed. Coxal fields I, II without large sclerotized areas. Coxal fields IV with large sclerotized areas

connecting epimetites IV and IVa. Genital arch of moderate size, 22 (20–24) long, 37 (32–37) wide; basal sclerite of genital apparatus rectangular. Aedeagus 105 (102–107) long, extending to level of setae *ps3*. Genital papillae well distinct, situated at midlevel of genital arch. Paragenital apodemes (derivatives of epimerites IVa) fused to each other at anterior ends into arch and continue anterior as a long median pregenital sclerite shaped as a Y; anterior branches of this sclerite entire and connected with inner margins of epimerites IIIa or can be split into separate fragments. Genital shields shaped as large ovate sclerites fused with bases of corresponding epimerites IVa. Genital shields, epimerites IVa, and posterior branches of paragenital apodemes almost completely surround genital apparatus. Setae *4b* on anterior branches of paragenital apodemes, posterior to setae *3a;* setae *4a* on posterior branches of paragenital apodemes; setae *g* on genital shields. Opisthoventral shields fused in entire shield covering ventral side of opisthosoma up to posterior end of anal opening; anal field flanked posteriorly and laterally by opisthoventral shields; anterior margin of this shield with 3 pairs of rounded sclerotized denticles. Adanal suckers 12 (12–13) in diameter, corolla without denticles, surrounding membrane with radial striae. Setae *ps3* situated on anterior margin of opisthoventral shields. Setae *4b* slightly posterior to level of setae *3a*. Distance between ventral setae: *3a:4b* 12 (8–13), *4b:4a* 72 (70–74), *4a:g* 43(40–43), *g:ps3* 60 (55–62), *ps3:h3* 70 (60–78), *ps3:ps3* 70 (65–78).

Legs I longer and thicker than legs II, tibia I with blunt-angular ventral extension, tibia and genu I with narrow dorsal crest, femur I with small ventral crest; femur II with long ventral crest, other segments of this legs without processes (Fig. 3A, B). Solenidion σ of genu I situated in proximal part of segment; genual setae *cG*I and *mG*I spiculiform, seta *cG*II filiform, seta *mG*II thickened in basal part and with filiform apex. Setae *sR* of trochanters III present. Solenidion ω1 of tarsus II elongate, extending to proximal margin of ambulacral disc; seta *d* of tarsus II half as long as corresponding seta *f*. Seta *d* of tarsus III much shorter than corresponding seta *f*. Tarsus IV 33 (30–35) long, with apical claw-like process and convex basiventral margin; seta *d* button-like, situated in proximal part of this segment; seta *e* absent. Solenidion φ of tibia IV extending to proximal margin of ambulacral disc. Length of solenidia: ω1I 15 (13–15), ω1II 24 (20–28), σI 22 (21–25), σIII 16 (13–18), φIV 30 (30–40).

Female (range for 10 paratypes) (Figs. 2, 3E–G). Idiosoma, length × width, 510–555 × 190–200, length of hysterosoma 350–395. Prodorsal shield: anterolateral extensions angular and free from epimerites Ia, lateral margins shallowly concave at level of scapular setae, posterior corners angular, posterior margin slightly convex, length along midline 125–140, width at posterior margin 125–135, surface without ornamentation (Fig. 2A). Setae *ve* represented by microsetae. Bases of setae *se* separated by 65–70. Scapular shields barely developed dorsally. Humeral shields absent. Setae *cp* and *c2* situated on soft tegument. Setae *c3* lanceolate, 25–28 × 6.5–7.5. Anterior and lobar parts of hysteronotal shield completely separated dorsally from each other by narrow transverse band of soft tegument, and connected ventro-laterally. Anterior hysteronotal shield slightly enlarged in anterior part, anterior margin concave, posterior margin shaped as recurved bow, greatest length 275–305, width at anterior margin 135–145; surface without ornamentation. Length of lobar region 78–85, greatest width 88–93. Lobar shield split longitudinally into two pieces covering opisthosomal lobes. Terminal cleft narrowly triangular, with lateral margins slightly divergent, 68–70 long, about 10 wide at level of lobar apices. Supranal concavity absent. Setae *f2* present. Setae *h1* distant from anterior margin of lobar shields. Setae *h2* spindle-like, 48–52 long, 8–9 wide. Setae *ps1* slightly closer to level of setae *h3* than to *h2*, equidistant from margins of opisthosomal lobes. Setae *h3* minute filiform, about 5 long, much shorter than length of terminal appendages. Distance between dorsal setae: *c2:d2* 130–135, *d2:e2* 95–115, *e2:h2* 58–65, *h2:h3* 47–50, *d1:d2* 50–65, *e1:e2* 25–40, *h1:h2* 5–8, *h2:ps1* 30–32, *h1:h1* 42–45, *h2:h2* 65–70.

Epimerites I fused into a Y, sternum about 1/4 the total length of epimerites (Fig. 2B). Lateral parts of coxal fields I without sclerotized areas, lateral parts of coxal fields II with narrow sclerotized areas. Epimerites IVa absent. Translobar apodemes of opisthosomal lobes wide, not fused to each other anterior to terminal cleft. Copulatory opening situated immediately posterior to anal opening. Primary spermaduct with short enlargement near head of spermatheca, secondary spermaducts 16–20 long (Fig. 4E). Distances between pseudanal setae: *ps2:ps2* 38–42, *ps3:ps3* 20–25, *ps2:ps3* 28–35.

Legs I, II subequal, femur II with long ventral crest, other segments of these legs without pro-

cesses. Solenidion σ of genu I 15–17 long, situated closer to anterior margin of segment. Genual setae *cG*I, II filiform, setae *mG*I, II with thickened basal part. Genu IV with small dorsal ridge. Setae *sR* of trochanters III present. Setae *d* of tarsi II–IV much shorter than corresponding setae *f*. Solenidion φIV about 1/4 of corresponding tarsus (Fig. 4D). Lengths of solenidia: ω1I 15–19, ω1II 12–13, σI 14–16, σIII 6–9, φIII 25–28, φIV 7–8.

Differential diagnosis. The new species *Dolichodectes sibiricus* sp.n. is most similar to *D. allocaulus* (Gaud and Mouchet, 1957) from *Platysteira cyanea* (Müller, PLS) (Platysteiridae) and *D. platynocercus* (Gaud and Mouchet, 1957) from *Elminia longicauda* (Swainson) in having, in males, the opisthosomal lobes with wide lateral enlargements. This feature is in strong contrast to most of other *Dolichodectes* species, which have almost parallel-sided opisthosomal lobes. Males of *D. sibiricus* differs from the above two species in the following features: the lateral enlargements of opisthosomal lobes are complicated in form, they have distinct angular projections bearing setae *f2* and rounded ledges at the level of setae *h2* (Figs. 1, 3A), and the aedeagus extends to the level of setae *ps3*. In males of the two aforementioned similar species, the lateral enlargements of opisthosomal lobes are simple, smoothly rounded, while the aedeagus extends to the level of setae *h3* (in *D. allocaulus*), or only slightly beyond the adanal suckers (in *D. platynocercus*). Females of *D. allocaulus* are unknown; therefore, females of *D. sibiricus* can be compared only with those of *D. platynocercus* and differ from them in the following features: the prodorsal and hysteronotal shields lack distinct ornamentation, the terminal appendages at their bases are 2–2.5 times thicker that setae *h2*, setae *e2* are situated closer to the level of setae *e1* than to the posterior margin of the hysteronotal shield. In females of *D. platynocercus*, the entire surfaces of the prodorsal and hysteronotal shields are covered with minute ovate and dash-like lacunae, the terminal appendages at their bases are slightly thicker that setae *h2*, and setae *e2* are situated much closer to the posterior margin of the hysteronotal shield than to the level of setae *e1*.

Etymology. The specific epithet is taken from the species name of the type host.

Key to *Dolichodectes* species

(Adults)

1. In males, lateral margins of opisthosomal lobes at level of setae *f2* and *ps2* with strong extension, simply rounded or with angular projection; greatest width of opisthosomal lobe at level of extensions 1.5–2 times wider than in distal part at level of setae *h3* 2
— In males, lateral margins of opisthosomal lobes straight or slightly convex at level of setae *f2* and *ps2*, greatest width of opisthosomal lobe at level extensions exceeds its width in distal part less than 1.3 times 4
2. In males, lateral extension of opisthosomal lobes with small angular projection bearing seta *f2* near its apex and with rounded ledge posterior to projection, setae *ps2* situated distinctly mesal from setae *f2* (Figs. 1B, 3A) ..... *D. sibiricus* sp.n.
— In males, lateral extensions of opisthosomal lobes simply rounded, both setae *f2* and *ps2* situated on lateral margins of lobes 3
3. In males, aedeagus extends slightly beyond adanal suckers, lateral margins of prodorsal shield shallowly concave, anterior part of hysteronotal shield with numerous transverse striae. In females, lateral margins of prodorsal shields with incisions extending to setae *se*, enlargement of primary spermaduct spindle-shaped, 20–25 long .... *D. platynocercus* (Gaud and Mouchet, 1957)
— In males, aedeagus extends to distal 1/3 of terminal cleft, lateral margins of prodorsal shield with narrow incisions extending to setae *se.* (Females unknown) .... *D. allocaulus* (Gaud and Mouchet, 1957)
4. In males, distal part of opisthosomal lobe with two acute projections. In females, enlargement of proximal part of primary spermaduct begins from head of spermatheca and uniformly thickened along its length 5
— In males, distal part of opisthosomal lobe rounded or with acute apex. In females, enlargement of primary spermaduct ovate, spindle-shaped or ampuliform and distant from head of spermatheca 6
5. In males, posterior end of opisthosomal lobe with two spine-like projections directed posterior and separated from each other by narrow incision; aedeagus extends to anterior margin of adanal suckers; opisthoventral shields narrow, connected to each other by narrow transverse bridge. In females, length of idiosoma 485–415 ..... *D. furcilobus* Mironov, Literak, Nguen and Capek, 2012
— In males, posterior end of opisthosomal lobe with two large angular projections, one directed posterior and another directed posterolaterally; aedeagus extends to midlength between setae *g* and

adanal suckers; opisthoventral shields completely fused to each other and cover entire surface of opisthosomal lobes. In females, length of idiosoma 415–435 ..... *D. latilobus* Constantinescu, 2018
6. In males, posterior end of opisthosomal lobe with cuneiform apex or with smallt acute denticle 7
— In males, posterior end of opisthosomal lobe widely rounded or almost truncate 9
7. In males, aedeagus extends to anterior end of anal opening, posterior part of prodorsal shield and anterior half of hysteronotal shield with narrow ovate lacunae arranged transversely, stem formed by epimeruites I not connected with epimerites II. In females, anterior and lobar parts of hysteronotal shield not split from each other, lateral margins of prodorsal shield at level of setae *se* shallowly concave, anterior part of this shield with small ovate lacunae .... *D. myrmecocichlae* Mironov and Fain, 2003
— In males, aedeagus extends to or slightly beyond level of adanal suckers, posterior part of prodorsal shield and anterior half of hysteronotal shield crossed with long transverse striae, stem formed by epimerites I connected with epimerites II. In females, anterior and lobar parts of hysteronotal shield separated from each other, lateral margins of prodorsal shield with deep and narrow incisions extending at least to bases of setae *se*, anterior part of this shield without ornamentation 8
8. In males, the aedeagus 95–100 long and extends slightly beyond posterior margin of adanal suckers, terminal cleft 100–110 long. In females, anterior hysteronotal shield 285–315 long, ratio of length to greatest width 2.0–2.2; length of idiosoma 560–610 ..... *D. edwardsi* (Trouessart, 1885)
— In males, aedeagus 78–85 long and extends to midlevel of adanal suckers, terminal cleft 80–85 long. In females, anterior hysteronotal shield 265–280 long, ratio of length to greatest width 1.7–1.8; length of idiosoma 520–550 .... *D. hispanicus* Mironov, Doña and Jovani, 2015
9. In males, opisthosomal lobes approximately 1.5 times longer than wide, with almost truncate distal end; aedeagus extends to anterior margin of adanal suckers; setae *h3* widely lanceolate, 12–15 wide. In females, posterior margin of prodorsal shield with blunt-angular median extension, anterior hysteronotal shield with numerous dash-like striae ..... *D. gymnoris* Mironov, Literak, Capek and Koubek, 2010
— In males, opisthosomal lobes 2.5–3.5 times longer than wide, with rounded distal end; aedeagus extends a least to midlevel of adanal suckers; setae *h3* narrowly lanceolate, about 10 wide. In females, posterior margin of prodorsal shield straight, anterior hysteronotal shield with numerous minute circular lacunae 10
10. In males, aedeagus extends to anterior end of terminal cleft or slightly protrudes into it; hysteronotal shield with numerous large circular lacunae up to 10 in diameter; setae *h3* 65–70 long, situated closer to level of setae *h2* than to lobar apices. In females, enlargement of primary spermaduct narrow spindle-shaped .... *D. glyphonotus* (Gaud and Mouchet, 1957)
— In males, aedeagus extends to adanal suckers; hysteronotal shield crossed with long transverse striae; setae *h3* about 55 long, situated closer to lobar apices than to level of setae *h2*. In females, enlargement of primary spermaduct shortly ovate ..... *D. diplocercus* (Gaud and Mouchet, 1957)

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Table 1
Host associations and the distribution of *Dolichodectes* species.

Mite species	**Host species**	**Host family**	**Locality**	**Reference**
D. allocaulus (Gaud and Mouchet, 1957)	*Platysteira cyanea* (Müller, PLS, 1776)	Platysteiridae	Cameroon	Gaud and Mouchet 1957
D. diplocercus (Gaud and Mouchet, 1957)	*Stizorhina fraseri* (Strickland)	Turdidae	Cameroon	Gaud and Mouchet 1957
D. edwardsi (Trouessart, 1885)	*Acrocephalus arundinaceus* (Linnaeus)*	Acrocephalidae	Europe	Trouessart 1885; Park and Atyeo 1971; Mironov 1996
"	*A. agricola* (Jerdon)	Acrocephalidae	Russia: Primorsky Krai	Present study
"	*A. bistrigiceps* Swinhoe	Acrocephalidae	Russia: Primorsky Krai	Present study
"	*A. dumetorum* Blyth	Acrocephalidae	Russia: Tomskaya Oblast	Present study
"	*A. orientalis* (Temminck and Schlegel)	Acrocephalidae	Russia: Primorsky Krai	Present study
"	*A. schoenobaenus* (Linnaeus)	Acrocephalidae	Russia: Kaliningradskaya Oblast	Mironov 1996
"	*Phylloscopus trochilus* (Linnaeus)	Phylloscopidae	Russia: Kaliningradskaya Oblast	Mironov 1996
D. furcilobus Mironov, Literak, Nguen and Capek, 2012	*Copsychus malabaricus* (Scopoli)	Muscicapidae	Vietnam	Mironov *et al.* 2012
D. glyphonotus (Gaud and Mouchet, 1957)	*Muscicapa cassini* Heine*	Muscicapidae	Cameroon	Gaud and Mouchet 1957
"	*Bradornis comitatus* (Cassin)	Muscicapidae	Cameroon	Gaud and Mouchet 1957
D. gymnoris Mironov, Literak, Capek and Koubek, 2010	*Gymnoris dentata* (Sundevall)	Passeridae	Senegal	Mironov *et al.* 2010
D. hispanicus Mironov, Doña and Jovani, 2015	*Hippolais polyglotta* (Vieillot)	Acrocephalidae	Spain	Mironov *et al.* 2015
D. latilobus Constantinescu, 2018	*Copsychus saularis* (Linnaeus)	Muscicapidae	Indonesia: Kalimantan Is.	Constantinescu *et al.* 2018
D. myrmecocichlae Mironov and Fain, 2003	*Myrmecocichla nigra* (Vieillot)	Muscicapidae	Rwanda	Mironov and Fain 2003
D. platynocercus (Gaud and Mouchet, 1957)	*Elminia longicauda* (Swainson)	Stenostiridae	Cameroon	Gaud and Mouchet 1957
D. sibiricus sp.n.	*Muscicapa sibirica* Gmelin, JF	Muscicapidae	Russia: Buryatia	Present study

Remark. *—type host, if mite species was recorded from more than one host species.