

A NEW FEATHER MITE GENUS OF THE FAMILY PTEROLICHIDAE (ACARIFORMES) FROM THE COMMON PHEASANT, *PHASIANUS COLCHICUS*, WITH A CHECKLIST OF PTEROLICHINES ASSOCIATED WITH GALLIFORM BIRDS (AVES: GALLIFORMES)

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ABSTRACT: A new monobasic feather mite genus *Phasianolichus* gen. n. (Pterolichinae) is established, and its type species, *Phasianolichus phasiani* (Mironov, 1997) comb. n., is redescribed. The type species of this genus was originally described in the content of the genus *Pseudolichus* Atyeo and Gaud, 1992 from the common pheasant, *Phasianus colchicus* (Galliformes: Phasianidae). The genus *Phasianolichus* belongs to the grouping of pterolichine genera—*Contolichus*, *Pterolichus*, *Pseudolichus* and *Tetraolichus*—characterized by the short and rounded opisthosomal lobes in males and generally setiform idiosomal setae in both sexes. *Phasianolichus* is distinguished from these genera in the following combination of characters: in both sexes, setae *h1* are absent; in males, coxal setae *4b* are situated posterior to setae *3a*, and the adanal apodemes are absent; in females, the hysteronotal shield is complete, roughly rectangular and extends to the posterior end of opisthosoma, idiosomal setae *d2* and *e1* are situated on the hysteronotal shield, and the bases of setae *e1* and *e2* are arranged in a tall trapezoid. Additionally, a world checklist of pterolichine feather mites, associated with galliform birds, is provided and briefly commented on.

KEY WORDS: feather mites, Pterolichinae, *Phasianolichus*, systematics, checklist, Galliformes

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INTRODUCTION

The feather mite family Pterolichidae (Astigmata: Pterolichoidea), with nearly 370 species distributed across 122 genera, is the most speciose and diverse family of feather mites (Gaud and Atyeo 1982, 1996; Proctor 2003). The mites of this family typically inhabit the flight feathers (remiges and rectrices), where they occupy corridors on the ventral sides of the vanes (Mironov 1987; Dabert and Mironov 1999). The representatives of the family Pterolichidae are currently known from the birds belonging to 12 non-passerine orders. Among Pterolichidae, the most taxonomic diversity is observed on galliform birds (Galliformes). Over one-fourth of the known pterolichid species and over one-third of the genera (namely, 95 species and 37 genera) are associated with galliforms (Gaud and Atyeo 1996).

Although a few pterolichid mites assigned to the genus *Pterolichus* Robin, 1877 were known from galliforms by the second half of the 19th c. (Robin and Mégnin 1877; Trouessart 1884, 1885, 1887), extensive investigations of the pterolichid fauna from this host group and the analysis of their taxonomy have started only at the end of the 1950s. These taxonomic investigations were focused mainly on pterolichids associated with galliforms in Africa (Gaud and Mouchet 1959; Gaud 1960, 1965), as well as on pterolichids associated with megapodes (Galliformes: Megapodidae), which are the most archaic branch of galliforms distributed in the Indo-Malayan and Australian realms (Aty eo

1990, 1992; Pérez and Atyeo 1990; Atyeo and Pérez 1991a, b). The latest major improvements in the taxonomy of pterolichids associated with galliforms were made by Gaud and Atyeo (1996) in their review of the supraspecific feather mite taxa of the world. These studies have expanded the fauna of pterolichids on galliforms by nearly tenfold and clarified their supraspecific taxonomy.

It is worth noting that a serious obstacle to the taxonomic studies of these mites was the uncertain identity of *Pterolichus obtusus* Robin, 1877, the type species of the genus *Pterolichus*. This species was described by Robin (Robin and Mégnin 1877) based on the material from several galliforms without the designation of the type host species. The set of hosts included the domestic chicken, *Gallus gallus* (Linnaeus), partridges *Alectoris rufa* (Linnaeus) (= *Perdix rubra*) and *Perdix perdix* (Linnaeus) (= *Starna cinerea*) and some unnamed species of pheasants. Until the last decade of the 20th c., acarologists had different concepts regarding the type hosts, either the domestic chicken or partridges, and considered that this species is highly polyxenous. Thus, Dubinin (1956: 82) has identified many different pterolichid mites from various galliform species of the tribes Phasianini and Tetraonini (Phasianinae), distributed in northern Eurasia, as *P. obtusus*.

Only in the early 1990s, Atyeo and Gaud (1992) have finally resolved the problem of *Pterolichus*

obtusus' identity. These authors have examined a number of galliforms, previously considered as hosts of *P. obtusus*, including domestic chickens from various world regions, wild subspecies of *Gallus gallus*, as well as the Guinea fowl, turkey and various wild galliforms of the subfamily Phasianinae, mainly from Europe. The authors have discovered that mites from these galliforms, treated by previous researchers as *P. obtusus*, indeed, have superficially similar general appearance. In particular, the males of these mites have a very wide and short body, the opisthosoma with short and widely rounded lobes, and all idiosomal setae generally filiform. In fact, these species actually represent different genera. Atyeo and Gaud (1992) have arranged them in four genera, three of which were new to science: *Contolichus* Atyeo and Gaud, 1992, *Pseudolichus* Atyeo and Gaud 1992, *Pterolichus* Robin, 1877 and *Tetraolichus* Atyeo and Gaud 1992. Each of these mite genera are specific to a particular genus or several related genera of the galliform hosts. *Pterolichus obtusus* is naturally specific to the *Gallus gallus* (Atyeo and Gaud 1992; Lacerda *et al.* 2023), although capable of colonizing many other species of domestic fowl when kept together.

The present study establishes a new pterolichid mite genus *Phasianolichus* gen. n. and presents a redescription of its type species, *Phasianolichus phasiani* (Mironov, 1997) comb. n., from the common pheasant *Phasianus colchicus* Linnaeus. The new genus belongs to the grouping of closely related pterolichid genera, recognized by Atyeo and Gaud (1992) in the course of revising *Pterolichus*-like mites associated with galliforms. Additionally, this study provides a world checklist of the genera and the species of the subfamily Pterolichinae, associated with Galliformes. The study also provides brief taxonomic comments on the species composition of some genera.

MATERIALS AND METHODS

The feather mite material used in the present study (i. e., permanent microscope slides of mites) belong to the zoological collection fund of the Zoological Institute of the Russian Academy of Sciences (St. Petersburg, Russia). The investigated feather mites were mounted on microscope slides in Hoyer's medium, according to the standard

technique for small mites (Krantz and Walter 2009). The study of mite specimens was made using Leica DM 2500 and DM 5000B microscopes (Leica Microsystems, Inc.), equipped with differential interference contrast illumination (DIC) and a *camera lucida*. Primary sketch drawings were made using the *camera lucida*, and final digital drawings were prepared using a Wacom Cintiq 22 graphics tablet (Wacom Co., Ltd).

The diagnosis of the new genus, the species description and the measuring techniques follow modern formats used for the taxa of the family Pterolichidae and other Pterolichoidea taxa (e. g., Dabert *et al.* 2002, 2008; Dabert and Labrzycka 2009; Mironov and Dabert 2010; Mironov *et al.* 2010, 2014). General morphological terms and idiosomal chaetotaxy follow the definitions by Gaud and Atyeo (1996), with minor corrections for chaetotaxy by Norton (1998); leg chaetotaxy is that of Grandjean (1939). All measurements are in micrometers (μm). The redescription of the type species, *Pseudolichus phasiani* Mironov, 1997, is based on the most abundant series of slides from the type host collected in the south of European Russia (Stavropolsky Krai). All examined materials are deposited in the Zoological Institute of the Russian Academy of Sciences (the abbreviation used in accession collection numbers is ZISP). Systematics and the scientific names of the avian taxa follow the IOC World Bird List, v. 14.2 (Gill *et al.* 2024).

SYSTEMATICS

Family **Pterolichidae** Trouessart and Mégnin, 1884

Subfamily **Pterolichinae** Trouessart and Mégnin, 1884

Genus ***Phasianolichus*** gen. n.

Type species: *Pseudolichus phasiani* Mironov, 1997.

Diagnosis. *Both sexes.* Small-sized pterolichines, idiosoma noticeably widened. Subcapitulum nearly rectangular, slightly enlarged posteriorly; pseudolrutellar projections short and rounded, without lateral extensions. Prodorsal shield entire, occupying most area of prodorsum, with transversely directed and strongly elongated posterior corners, lateral margins with deep incisions. Vertical setae *vi* paired, filiform, with bases widely separated, setae *ve* absent. Scapular setae *se* repre-

sented by macrosetae, setae *si* small filiform. Scapular shields rudimentary. Hysteronotal shield covering most part of hysterosoma. Lateral hysteronotal bands well developed. Humeral shields not connected with epimerites III and not encompassing bases of setae *cp* and *c3*. Cupules *ia* and *im* well distinct. Lateral hysteronotal setae *c2*, *d2*, *e2*, *f2* and *ps2* filiform. Setae *c2* and *c3* shorter than 50. Setae *d1* anterior to level of setae *d2*, and setae *e1* anterior to setae *e2*. Setae *h1* absent. Hysteronotal gland openings *gl* situated at level of trochanters IV. Supranal concavity present.

Epimerites I–IV simple, shaped as slightly curved sticks. Epimerites I free, with slightly converging posterior ends. Bases of epimerites I, II simple, not inflated. Coxal fields I–IV without extensive sclerotized areas. All segments of legs I, II without strong ventral expansions and processes. All setae of tarsi, tibiae and genua I, II filiform. Genu I with one solenidion σ . Solenidia σ on genua II, III present. Trochanteral setae *sRIII* short filiform, not extending to distal margins of femora III. Distal margin of ambulacral discs concave, with barely distinct minute spines, or spines indistinct.

Male. Idiosoma short and wide, about 1.5 times longer than wide. Hysteronotal shield covering most dorsal surface of hysterosoma. Opisthosomal lobes represented by short and widely rounded convexities on posterior margin of opisthosoma. Terminal membranes or some membranous projections on lobes absent. Terminal cleft shaped as shallow concavity. Supranal concavity close to posterior margin of opisthosoma. Bases of setae *f2* and *ps2* close to each other and situated laterally on posterolateral margins of opisthosoma. Macrosetae *h2* and *h3* similar in length. Setae *ps1* short filiform.

Genital apparatus small, situated between levels of trochanters III and IV. Genital papillae at level of genital arch. Setae *4b* posterior to level of setae *3a*. Setae *g* lateral to genital arch. Epiandrum and paragenital apodemes absent. Adanal shields and apodemes absent. Adanal suckers surrounded by wide membrane with radial striation, corolla of suckers without denticles. Setae *ps3* filiform.

Legs IV thicker and shorter than legs III, with tarsus extending beyond level of opisthosomal lobes. Tarsus IV cylindrical, similar in length to tibia IV or shorter, with subapical spine-like projection on paraxial surface; modified seta *dIV* button-like, seta *eIV* absent.

Female. Posterior end of opisthosoma widely rounded. Hysteronotal shield entire, wide, covering most area of hysterosoma and extending to posterior margin of opisthosoma; anterior end of this shield extending to level of humeral shields; pygidial area sclerotized strongly than remaining part of the shield and delimited from it by several transverse striae or pinctured lines. Setae *d1*, *d2*, *e1* and *e2* on hysteronotal shield. Setae *e2* anterior and distant from setae *f2* and *ps2*. Setae *f2* on pygidial area of hysteronotal shield, anteromesal but relatively close to setae *ps2*. Epigynum horseshoe-shaped, situated at level of sejugal area and humeral shields.

Differential diagnosis. Among pterolichines associated with galliform birds, *Phasianolichus* gen.n. belongs to the grouping of genera associated with some phasianids in the northern Palearctic and Nearctic. This grouping, incorporating the genera *Contolichus* Atyeo and Gaud, 1992, *Tetraolichus* Atyeo and Gaud, 1992, *Pseudolichus* Atyeo and Gaud, 1992 and *Pterolichus* Robin, 1877 (Table 1), is characterized by the following features. In both sexes, the prodorsal shield has long transversely directed posterior corners, all idiosomal setae are filiform, epimerites I are free, all epimerites and coxal fields lack extensive sclerotized areas; segments of legs I, II without large ventral expansions or other modifications. In males, the idiosoma is short and wide, the opisthosomal lobes are represented by short and widely rounded convexities, tarsus IV is cylindrical, with or without apical spine like process. In females, the hysteronotal shield covers median area of hysterosoma, and may be entire or split into the main body and pygidial shield. The new genus *Phasianolichus* differs from the aforementioned genera in having the following combination of features. In both sexes, setae are absent. In males, coxal setae *4b* are situated posterior to setae *3a*, the adanal apodemes are absent, and the subapical spine-like process on tarsus IV is present. In females, the hysteronotal shield is entire, wide, roughly rectangular in shape and extends to the posterior end of opisthosoma, idiosomal setae *d2* and *e1* are situated on the hysteronotal shield, and the bases of setae *e1* and *e2* are arranged in a tall trapezoid.

Included species. *Phasianolichus phasiani* (Mironov, 1997) comb.n., which was originally described in the genus *Pseudolichus*.

Remark. Table 1 provides the main diagnostic features of *Phasianolichus* and four closely related

genera. It is necessary to note that the setal designations, used in the present work for the genus *Tetraolichus*, differ from those applied by Atyeo and Gaud (1992) to this genus. The above authors suggested that setae *f2* are present and setae *h1* are absent in both sexes of *Tetraolichus*. However, they did not illustrate the disposition of the idiosomal setae in the males of *Tetraolichus cupido* Atyeo and Gaud, 1992. In pterolichid males, setae *f2*, when present, are commonly situated very close to setae *ps2*; in females, the position of setae *f2* can be more variable, although commonly they are also close to corresponding setae *ps2*. The disposition of idiosomal setae in the male and female of *Tetraolichus lagopi* Mironov *et al.*, 2010, as illustrated in Mironov *et al.* (2010: Figs. 1, 2), clearly shows that namely setae *h1* are present in *Tetraolichus*, while setae *f2* are lost in this genus.

***Phasianolichus phasiani*
(Mironov, 1997) comb. n.**

(Figs. 1–6)

Pseudolichus phasiani Mironov, 1997: 464, Figs. 18–22.

Material examined. 2 male and 2 female paratypes (NHMB № 3756) ex the common pheasant, *Phasianus colchicus* Linnaeus, 1758 (Galliformes: Phasianidae), Germany, Königsdorf, 9 November 1972, coll. unknown; 15 males and 12 females (ZISP 22424–22452), same host species, Russia, Stavropolsky Krai, Kirovsky District, 20 December 2021, bird coll. A. V. Matiukhin, (SVM-24-1016-14); 8 males, 8 females (ZISP 22453–22478), same host species, Russia, Jewish Autonomous Oblast, Leninsky District, 3 km NE of the village Bidzhan, 48°00'44"N, 131°57'36"E, 9 September 2024, coll. S. V. Mironov, (SVM 24-0909-1); 1 male (ZISP 13071) ex *Ph. c. pallasi* Rothschild, 1903, Russia, Amurskiy Zaliv, 27 September 1884, G. Dorries; 1 male (ZISP 13072), same host subspecies, China, Manchuria, Harbin, 28 March 1893, coll. unknown; 3 males, 4 females (ZISP 13063–13066) ex *Ph. c. torquatus* Gmelin, JF, 1789, China, Fukien Province, no date, coll. E. Basha; 8 males, 2 female (ZISP 13062, 13067–13069), same host subspecies, China, Fukien Prov., March 1903, coll. Rickett.

Description. *Male* (range for 10 specimens) (Figs. 1, 2, 5A–E, 6A, B). Idiosoma widely ovoid, length 265–295, width 185–215. Length of hysterosoma 175–190. Prodorsal shield: lateral margins

with deep incisions extending to or encircling scapular setae *si* and *se*, posterior corners long and acute, posterior margin slightly convex medially or with wide blunt extension, length along midline 70–80, width at posterior margin 140–150. Distance between setae *se* 65–70. Setae *vi* filiform, 45–50 long, extending slightly beyond the tips of chelicerae. Scapular shields strongly reduced, barely distinct. Setae *c2* filiform, 20–25 long, situated on humeral shields. Subhumeral setae *c3* filiform, 20–23 long. Setae *c3* and *cp* situated on soft tegument between humeral shields and epimerites III. Distance between prodorsal and hysteronotal shields along midline 25–35. Hysteronotal shield strongly enlarged anteriorly, almost trapezoidal in form; anterior margin straight or slightly concave, lateral margins almost straight in anterior part and shallowly concave at level of setae *e2*, greatest length 165–175, width at anterior margin 150–165. Supranal concavity roughly semi-ovate. Lateral sclerotized bands well developed, with anterior ends extending to level of setae *c2*, separated from the main body of hysteronotal shield by narrow stripes of striated tegument. Setae *c1* on striated tegument near anterior margin of hysteronotal shields, setae *d2* on its lateral margins at level of trochanters III; setae *e2* approximately at level of supranal concavity; setae *e1* anterior to level of setae *e2*. Setae *h1* absent. Hysteronotal glands openings *gl* on striated tegument between main body of hysteronotal shield and lateral bands. Cupules *ia* minute, situated on striated tegument between hysteronotal shield corners and corresponding tips of lateral bands. Cupules *im* large, situated on lateral bands slightly anterior to level of gland openings *gl*. Opisthosomal lobes shaped as short and wide convexities, terminal cleft shaped as shallow concavity 6–7.5 long. Setae *h2*, *h3* and *ps1* situated on posterior margin of opisthosomal lobes. Setae *f2* and *ps2* short filiform, 20–27 long, situated on lateral margins of opisthosoma; setae *ps1* 18–23 long. Distances between setae: *c2*–*d2* 75–87, *d2*–*e2* 68–73, *e2*–*h3* 20–27, *d1*–*d2* 20–30, *e1*–*e2* 35–38, *d2*–*gl* 22–25, *h2*–*h2* 63–65, *h3*–*h3* 45–50, *ps1*–*ps1* 35–38.

Subcapitulum almost rectangular, 50–53 × 52–55. Genital apparatus small, with apex at midlevel of trochanters III; genital arch 20–23 × 23–25. Genital papillae widely separated from each other, situated at midlevel of genital arch. Setae *4b* slightly posterior to setae *3a*; bases of setae *g* close to each other and flanking anterior part of genital arch; setae *4a* widely separated from each other

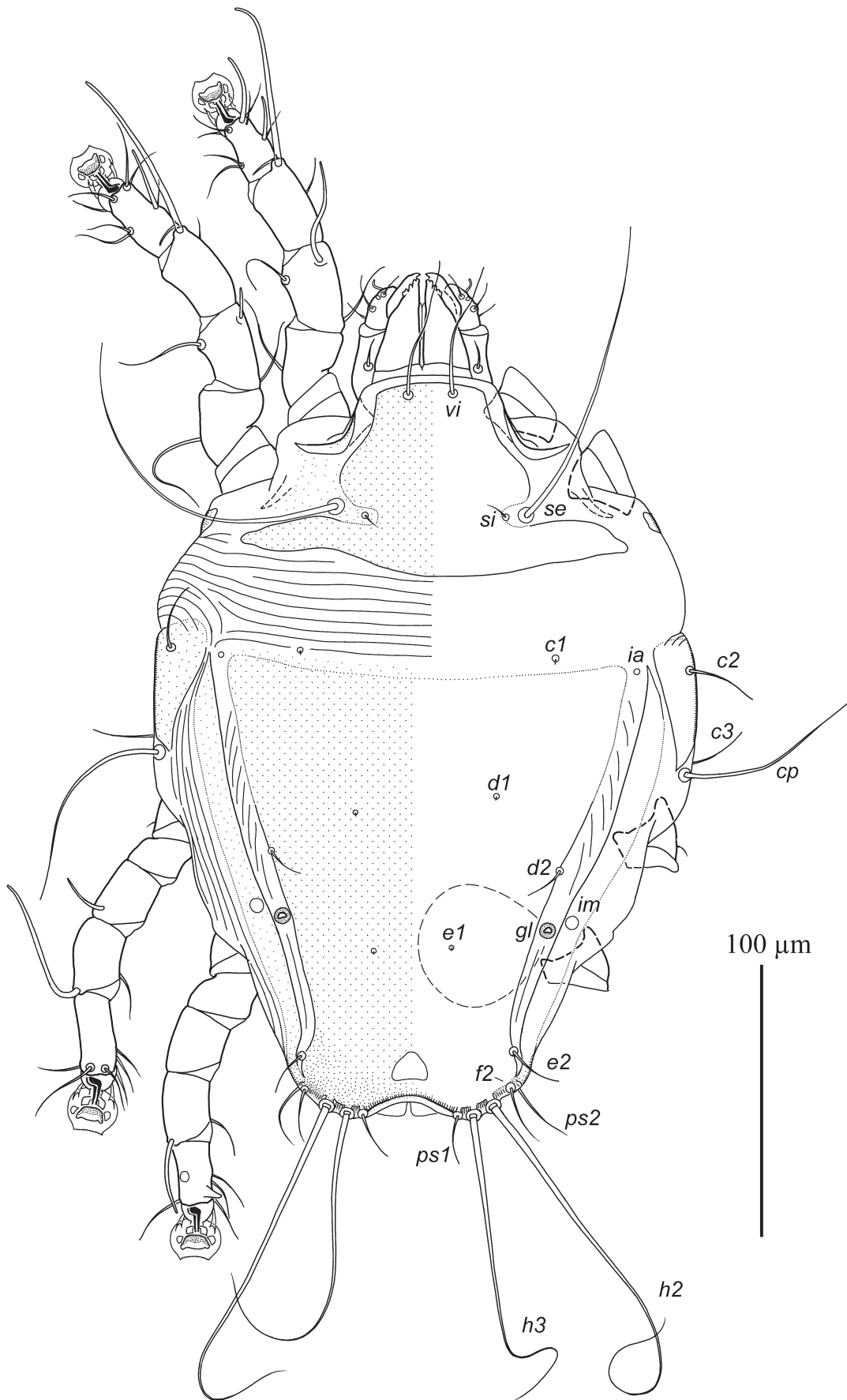


Fig. 1. *Phasianolichus phasiani* (Mironov, 1997), male, dorsal view.

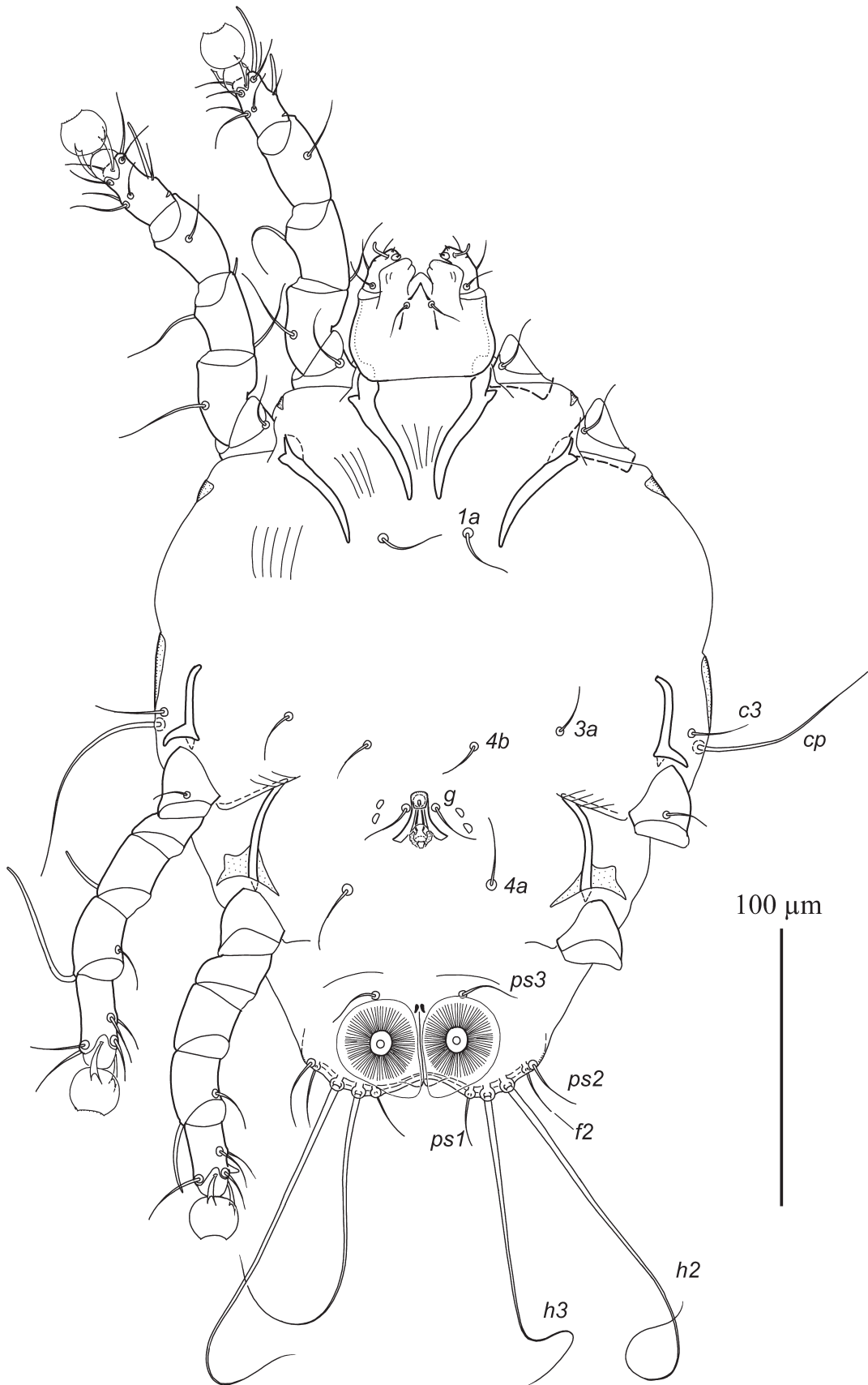


Fig. 2. *Phasianolichus phasiani* (Mironov, 1997), male, ventral view.

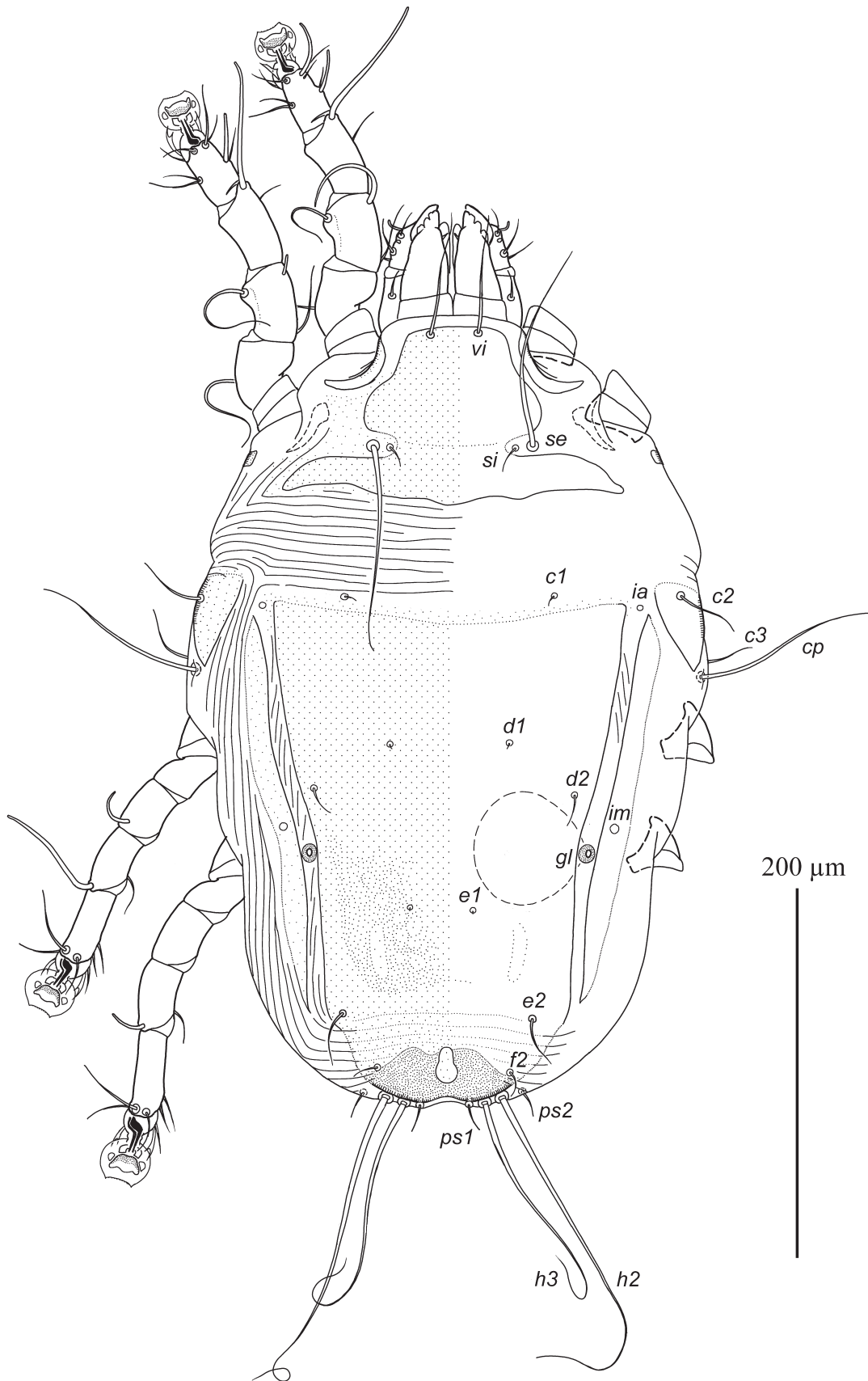


Fig. 3. *Phasianolichus phasiani* (Mironov, 1997), female, dorsal view.

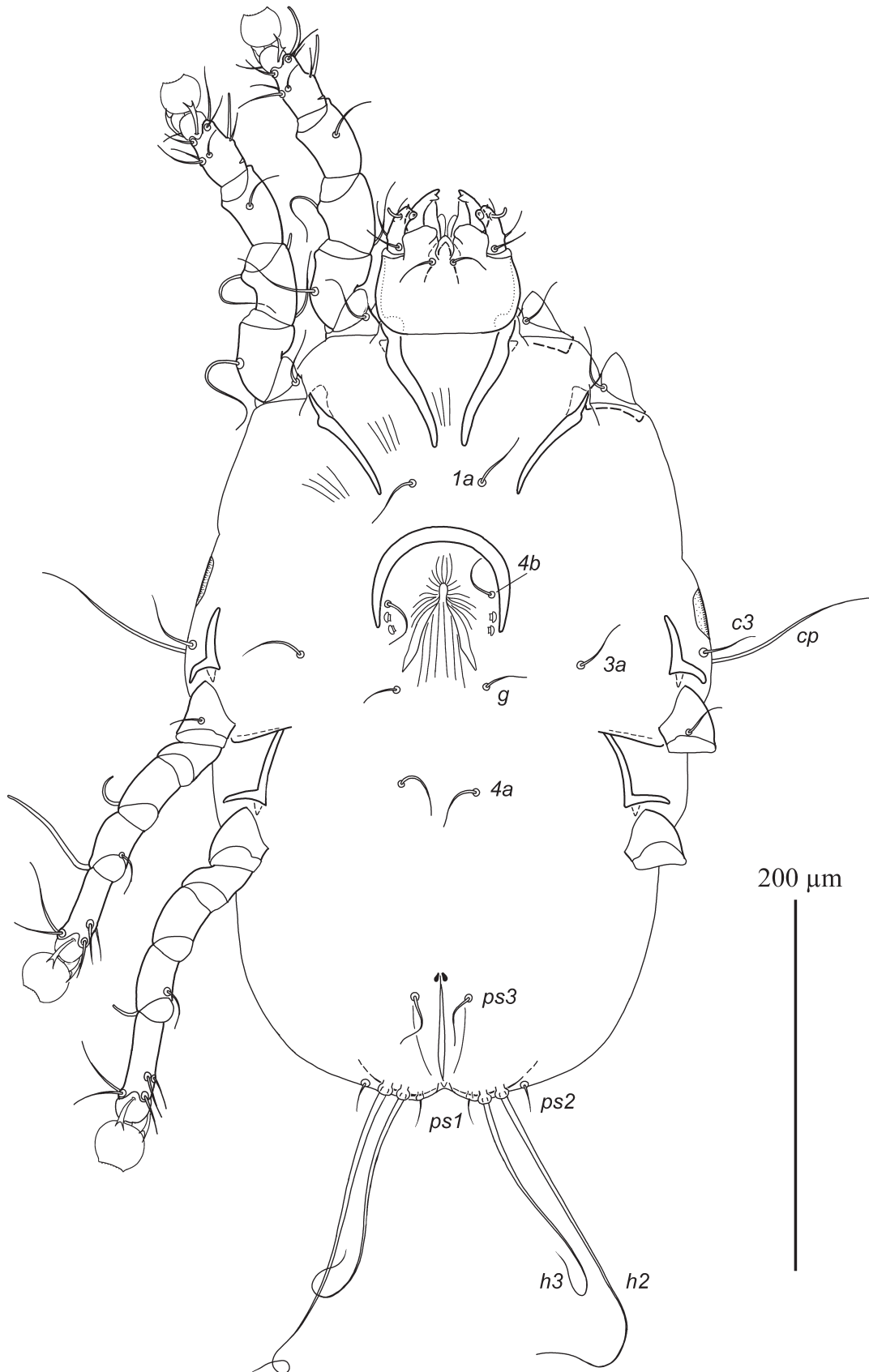


Fig. 4. *Phasianolichus phasiani* (Mironov, 1997), female, dorsal view.

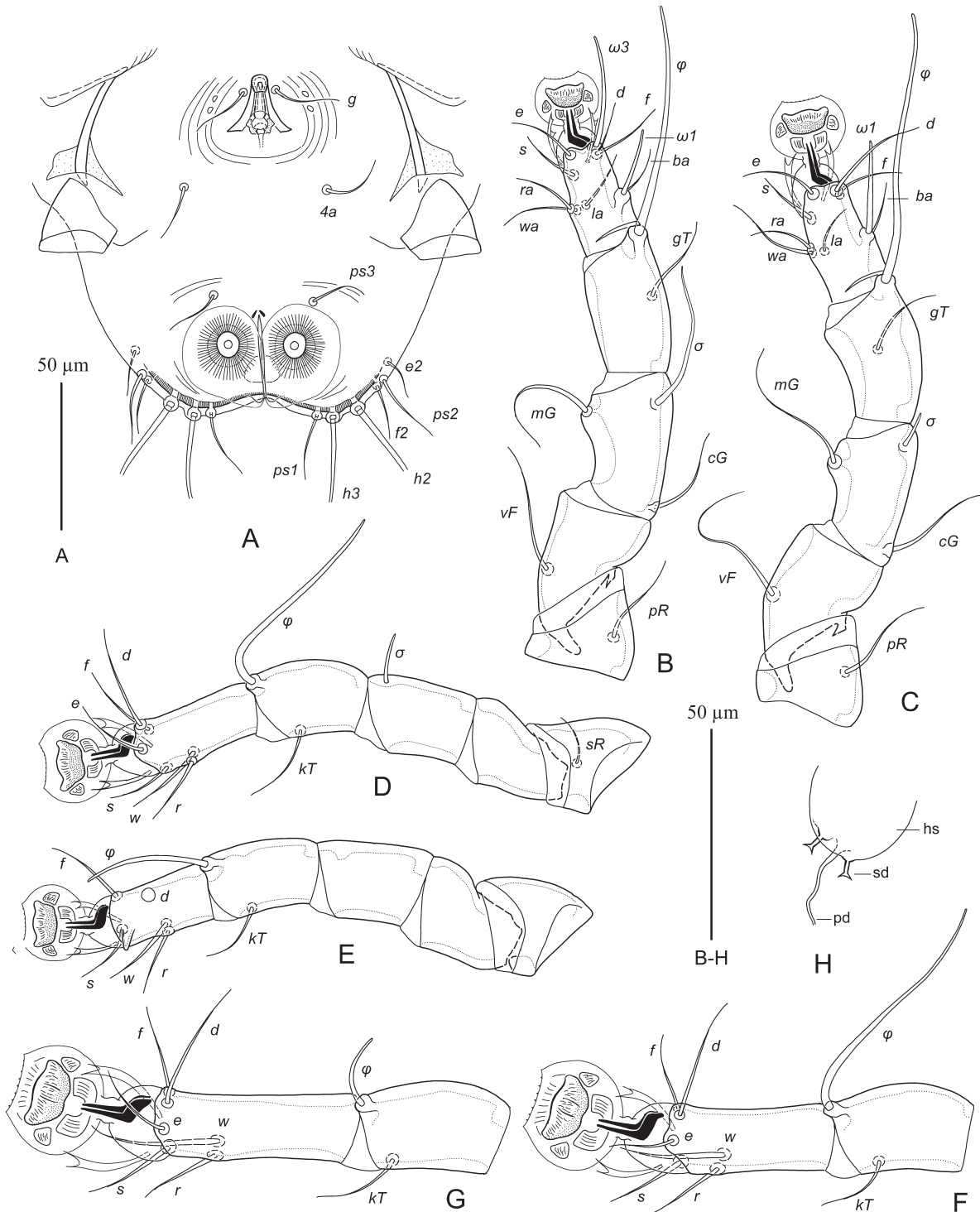


Fig. 5. *Phasianolichus phasiani* (Mironov, 1997), details. A—opisthosoma of male, ventral view; B–E—legs I–IV of male, respectively; F, G—tibiae and tarsi III, IV of female, respectively; H—spermatheca and spermatheca. Abbreviations: hs—head of spermatheca, pd—primary spermatheca, sd—secondary spermatheca.

and situated at level of epimerites IV bases. Distances between genital and coxal setae: 4b–g 23–28, g–4a 30–33, 4a–ps3 38–40, ps3–h3 35–43, g–g 10–13, ps3–ps3 33–37. Adanal apodemes absent.

Diameter of adanal suckers excluding striated membrane 10–13.

Genua I, II with small tubercle-like ventral enlargements (Fig. 5B, C). Solenidion σ of genu I

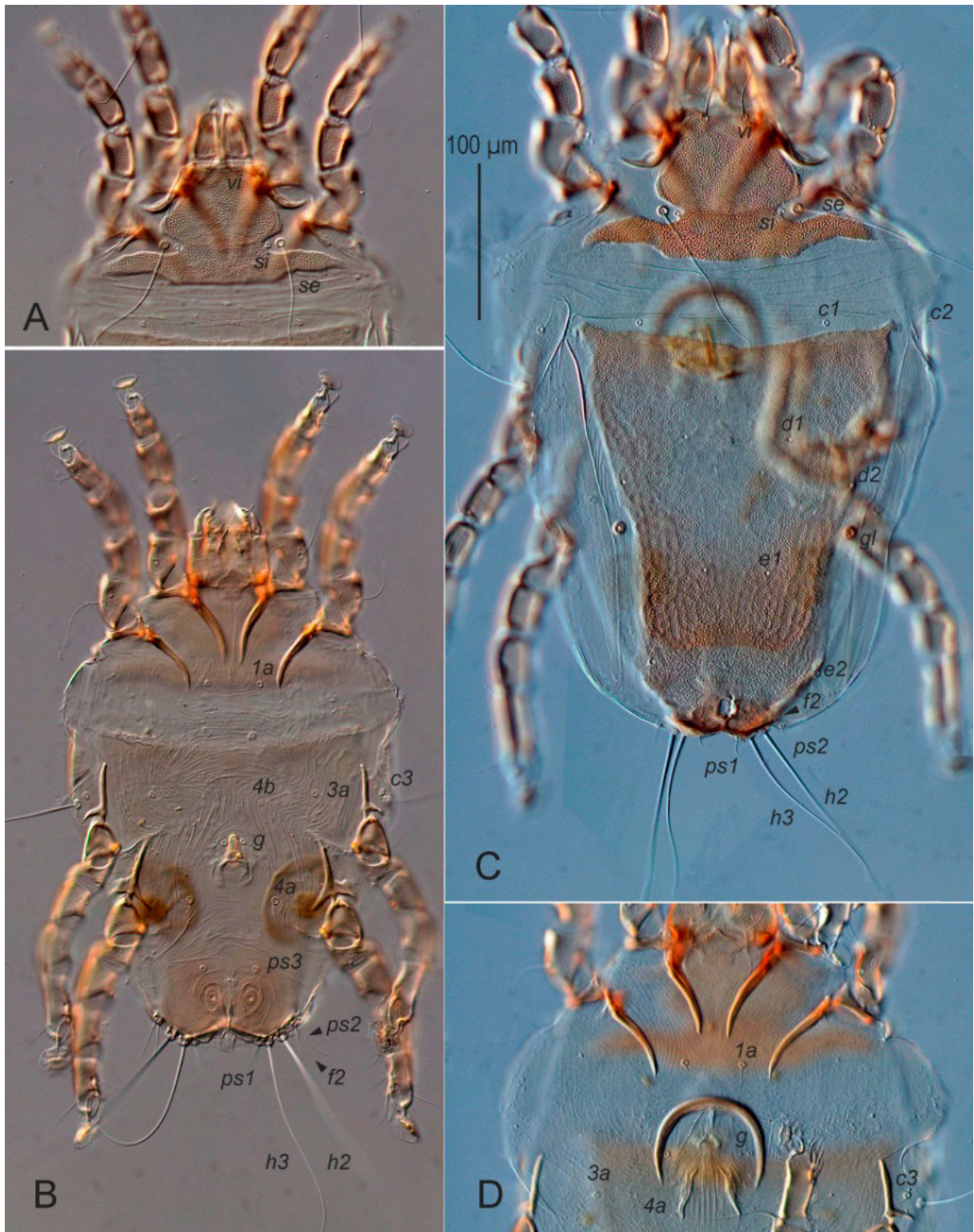


Fig. 6. *Phasianolichus phasiani* (Mironov, 1997), details of idiosoma. A—propodosoma of male, dorsal view, B—idiosoma of male, ventral view, C—idiosoma of female, dorsal view, D—oviporus and surrounding coxae of female. Scale bar: 100 µm for A–D.

equal to or slightly longer than this segment. Legs IV slightly thicker and shorter than legs III. Tarsus IV shorter than tibia IV, with spine-like subapical

process; modified seta *d* button-like, situated at midlength of this segment; seta *e* absent (Fig. 5E). Lengths of tarsi: I 25–28, II 28–30, III 27–30, IV

23–28. Lengths of solenidia: ω I 15–17, ω III 20–22, σ I 35–45, σ II 8–11, σ III 15–20, ϕ III 48–50, ϕ IV 25–30.

Female (range for 10 specimens) (Figs. 3, 4, 5F–H, 6C, D). Idiosoma ovate, length 385–420, width 250–275. Length of hysterosoma 260–285. Prodorsal shield shaped almost as in male, posterior margin with wide blunt extension or slightly sinuous, length 90–95, greatest width 170–180. Distance between setae *se* 78–88. Setae *vi* filiform, 60–65 long, almost extending to apices of chelicerae. Scapular shields strongly reduced. Setae *c2* filiform, 24–28 long, situated on humeral shields. Setae *c3* filiform, 27–30 long. Setae *c3* and *cp* on soft tegument between humeral shields and epimerites III. Hysteronotal shield: entire, wide, occupying median area of hysterosoma and extending to posterior margin of opisthosoma, slightly attenuate posteriorly; anterior margin slightly concave, greatest length 245–265, width at anterior margin 180–195; pygidial area constituting about $\frac{1}{8}$ of the shield, noticeably stronger sclerotized and delimited from the main body by 5–6 transverse dotted striae posterior to level of setae *e2*. Lateral bands separated from hysteronotal shield by narrow stripes of striated tegument, with anterior ends almost extending to level of setae *c2* and posterior ends extending to level of setae *e2*. Supranal concavity ovate or pyriform, situated on pygidial area. Hysteronotal gland openings *gl* on striated tegument between hysteronotal shield and lateral bands at level of trochanters IV. Cupules *ia* minute, situated on striated tegument lateral to anterior corners of hysteronotal shield; cupules *im* on lateral bands slightly anterior to level of gland openings *gl*. Setae *d1* anterior to setae *d2*; setae *e1* anterior to setae *e2*; setae *f2* situated anteromesal and relatively close to setae *ps2*. Setae *h1* absent. Setae *f2* and *ps2* short filiform, 10–12 long, setae *ps1* filiform, 15–18 long. Distances between setae: *c2*–*d2* 90–105, *d2*–*e2* 110–120, *e2*–*h3* 38–50, *d1*–*d2* 20–30, *e1*–*e2* 52–60, *d2*–*gl* 30–35, *h2*–*h2* 53–63, *h3*–*h3* 38–45, *ps1*–*ps1* 20–25.

Subcapitulum 65–68 × 68–75. Epigynium situated at level of humeral shields, horseshoe-shaped, with acute tips extending beyond bases of setae *4b*, 53–58 × 65–75. Genital papillae situated mesal to tips of epigynum. Apodemes of oviporus short and narrow, barely extending to level of trochanters III. Epimerites IVa absent. Copulatory opening on minute nipple-like extension immediately posterior to anal opening. Spermatheca and

spermatheca as in Fig. 5H, secondary spermatheca (sclerotized part) about 5 long.

Legs I, II as in the male. Solenidion σ of genu I slightly longer than this segment. Legs IV with distal half of tibia extending beyond posterior margin of opisthosoma. Lengths of tarsi: I 28–30, II 31–35, III 35–37, IV 42–45. Lengths of solenidia: ω I 20–22, ω III 25–27, σ I 42–45, σ II 10–12, σ III 18–20, ϕ III 56–60, ϕ IV 20–23.

DISCUSSION

In order to facilitate and encourage possible future investigations, the present study is supplemented with a checklist of the genera and the species of pterolichines known from galliforms (Tables 2, 3). The checklist contains valid names of mite taxa, type hosts, type localities and references, containing adequate descriptions and notes on the systematics.

The birds of the order Galliformes harbor a great diversity of feather mites of the family Pterolichidae. All the pterolichids living on the aforementioned hosts belong to the subfamily Pterolichinae. To date, including the new genus established herein, 95 species distributed across 38 genera have been reported from galliforms (Tables 2, 3). However, we need to consider that the extant world fauna of galliforms includes over 290 species distributed across 86 genera (Gill *et al.* 2024). In addition, one host species can bear several pterolichine species from different genera. For instance, eight species from seven genera have been reported from the dusky megapode, *Megapodius freycinet* Gaimard (Atyeo and Pérez 1991a; Atyeo 1992). The above considerations lead us to conclude that the fauna of pterolichines associated with galliforms is far from being fully studied.

Nevertheless, it is safe to state that the taxonomic system (diagnoses, morphological categories, species composition) of currently recognized pterolichid genera recorded from galliforms has been developed quite well. This is largely due to the efforts of the top feather mite experts of the second half of the 20th c., J. Gaud and W. T. Atyeo, who described 71 mite species and established 32 genera, associated with these avian hosts (Gaud and Mouchet 1959; Gaud 1960, 1965; Atyeo 1990, 1992; Pérez and Atyeo 1990; Atyeo and Pérez 1991a, b; Atyeo and Gaud 1992; Gaud and Atyeo, 1996). Just a few of the recognized genera need further clarification in regards to their species content and known host associations. Additionally,

several “old” species, described in the second part of the 19th c., are still in need of a redescription.

Of the 18 genera of pterolichines associated specifically with megapodes (Megapodidae) (Table 2), only *Echinozonus curtus* (Trouessart, 1887) needs to be commented on, because its formally recorded type host is the Pesquet’s parrot, *Psittrichas fulgidus* Lesson (Psittaciformes: Psittaculidae). This is an obvious case of an accidental contamination caused by collecting from museum dry skins. Based on numerous additional collections of pterolichids from megapodes, Atyeo (1992: 274) concluded that the natural host of *E. curtus* is apparently the Waigeo brushturkey, *Aepyodius bruijnii* (Oustalet).

Of the 20 genera of pterolichids associated with galliforms other than megapodes (Table 3), the species contents of only two genera look doubtful, mainly because of the inconsistencies in host associations of the included mite species. The most questionable and heterogeneous is the content of the genus *Tetraolichus* Atyeo and Gaud, 1992. Primarily, this genus incorporated only three species associated exclusively with the birds of the tribe Tetraonini (Phasianidae: Phasianinae) distributed in the Northern Hemisphere (Aty eo and Gaud 1992). In their review of the supraspecific feather mite taxa of the world, Gaud and Atyeo (1996: 139) tentatively placed ten old and insufficiently described “*Pterolichus*” species in the genus *Tetraolichus*. These included mite species are associated with the birds from the subfamilies Pavoninae and Phasianinae (Phasianidae), distributed in Eurasia and Africa, and the families of New World quails (Odontophoridae) and curassows (Cracidae), restricted to South America. The associations of the representatives of the same mite genus with selected taxa of the derived galliform families Phasianidae and Odontophoridae, and with the archaic lineage of curassows (Cracidae), seem highly unlikely. The mite species from the New World, both from Odontophoridae and Cracidae, assigned by Gaud and Atyeo to *Tetraolichus*, certainly require a careful reinvestigation. Similarly, in the genus *Xoloptes* Canestrini, 1879, two species were recorded from various species of Phasianidae in Eurasia (Dabert *et al.* 2009). At the same time, the superficially described *Xoloptes minor* Trouessart and Neumann 1888, the third species referred to this genus, was recorded from the scaled chachalaca *Ortalis squamata* (Lesson) (Cracidae) in South America.

Regarding the host associations of *Xoloptes claudicans* (Robin, 1877) (Table 3), it is generally believed that the type host of this mite is the common quail, *Coturnix coturnix* (Linnaeus) (Phasianidae: Pavoninae) (Canestrini and Kramer 1899; Dubinin 1956; Dabert *et al.* 2009). However, it is not so. The type host given in the original description (Robin and Mégnin 1877) is the grey partridge, *Perdix perdix* (Linnaeus) (Phasianidae: Phasianinae) (= *Starna cinerea* Bonaparte and *St. cinerea* var. *damascena* Brisson). Although *X. claudicans* is really common on *C. coturnix*, a misconception that the common quail is its type host appeared in the acarological literature after the work of Canestrini and Kramer (1899: 67). These authors put *C. coturnix* first in the list of hosts, followed by *P. perdix* and *Alectoris rufa* (Linnaeus). The red-legged partridge, *A. rufa*, is presently known as the host of another species of this genus, *X. blaszaki* Dabert *et al.* 2009.

In the conclusion of the review of pterolichid mites associated with galliform birds, it is worth to mention the feather mite family Thoracosathesidae, which also belongs to the superfamily Pterolichoidea. Thoracosathesidae currently includes only two species assigned to a single genus—*Thoracosathes* Gaud and Mouchet, 1959. The two species—*Thoracosathes thoracosathes* (Trouessart and Neumann, 1888) and *T. caudiculata* Atyeo, 1992—live on the flight feathers of megapodes *Megapodius freycinet* Gaimard and *Eulipoa wallacei* (Gray, GR), respectively. Although these mites are treated as a separate family (Gaud and Mouchet 1959; Atyeo 1992; Gaud and Atyeo 1996), they are completely similar to the pterolichine mites considered above, both in general appearance and in most morphological characteristics. This especially concerns the genera associated with megapodes, in particular such genera as *Ascetolichus* Pérez and Atyeo, 1990, *Goniodurus* Atyeo, 1992, *Heliaspis* Atyeo, 1992 and *Oxygynurus* Atyeo, 1992. The only morphological features that set thoracosathesids apart from pterolichines from megapodes are as follows: a strongly developed external copulatory tube, constituting $\frac{1}{4}$ – $\frac{1}{3}$ of the body length in females, and the displacement of the male genital apparatus strongly forward, between the tips of epimerites I. While the females of many pterolichines from megapodes also have the copulatory tube. In the four aforementioned genera, this tube is very well developed and can only be half the

length of that in the females of the genus *Thoracosathes*. Based on the general similarity, the aforementioned discriminating features, as well as their associations with the same host family, the most reasonable conclusion is that thoracosathesids are merely a derived lineage of pterolichines associated with megapodes. To test this highly probable hypothesis about a close phylogenetic affinity between the genus *Thoracosathes* and the pterolichine genera associated with megapodes, a molecular analysis is highly desirable.

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Table 1. Main diagnostic characters of the genus *Phasianolichus* and closely related genera.

Character	<i>Pterolichus</i>	<i>Pseudolichus</i>	<i>Tetraolichus</i>	<i>Contolichus</i>	<i>Phasianolichus</i> gen.n.
Both sexes					
Setae <i>f2</i>	Present	Present	Absent*	Absent	Present
Setae <i>h1</i>	Absent	Present	Present*	Absent	Absent
Male					
Legs III, IV	Subequal	Legs IV thickened	Legs IV thickened	Legs IV thickened	Legs IV thickened
Subapical spine on tarsus IV	Absent	Present	Present	Present	Present
Setae <i>3a</i> and <i>4b</i>	At same level	<i>4b</i> posterior to <i>3a</i>	At same level	<i>4b</i> posterior to <i>3a</i>	<i>4b</i> posterior to <i>3a</i>
Adanal apodemes	Absent	Present, tridentate	Absent	Absent	Absent
Setae <i>d</i> , <i>e</i> on tarsus IV	Both setae filiform	<i>d</i> —button-like, <i>e</i> —absent	<i>d</i> —button-like, <i>e</i> —absent	<i>d</i> —button-like, <i>e</i> —absent	<i>d</i> —button-like, <i>e</i> —absent
Female					
Hysteronotal shield	Split into main body and pygidial shield	Not developed in posterior 1/3	Split into main body and pygidial shield	Split into main body and pygidial shield	Entire, extending to posterior end of idiosoma
Pygidial shield(s)	Present	Absent	Present	Present	Not separated
Setae <i>e1</i> position	On shield	Off shield	Off shield	Off shield	On shield
Setae <i>d2</i> position	On shield	Off shield	Off shield	Off shield	On shield
Setae <i>f2</i> position	On pygidial shield	Off pygidial shield	N/A	N/A	On pygidial area
Arrangement of setae <i>e1</i> and <i>e2</i>	Tall trapezoid	Low trapezoid	Tall trapezoid	Transverse row	Tall trapezoid

Note: *—in contrast to the setal homology used in the present work, Atyeo and Gaud (1992) suggested that setae *f2* are present, while setae *h1* are absent in the genus *Tetraolichus*. See remarks after the diagnosis of *Phasianolichus*.

Table 2. Checklist of pterolichines associated with megapodes (Megapodidae)

Mite genus and species	Type host	Type locality	References
Ascetolichus Pérez and Atyeo, 1990			Pérez et Atyeo 1990
<i>Ascetolichus microthrix</i> Pérez and Atyeo, 1990	<i>Talegalla jobiensis jobiensis</i> Meyer, AB	Indonesia: Jayapura (Hollandia)	Pérez and Atyeo 1990
<i>Ascetolichus palmiger</i> (Trouessart 1887)*	<i>Aepyodius bruijnii</i> (Oustalet)	Indonesia: Waigeu Island	Trouessart 1887; Pérez and Atyeo 1990
<i>Ascetolichus ruidus</i> Pérez and Atyeo, 1990	<i>Alectura lathami</i> Gray, JE	Australia: Quinsland	Pérez and Atyeo 1990
<i>Botryaspis</i> Atyeo, 1992			Aty eo 1992
<i>Botryaspis cordata</i> Atyeo, 1992	<i>Eulipoa wallacei</i> (Gray, GR)	Indonesia: Halmahera Island	Aty eo 1992
<i>Botryaspis cordiforma</i> Atyeo, 1992*	<i>Megapodius freycineti freycineti</i> Gaimard	Indonesia: Waigeo Island (Waigeu)	Aty eo 1992
<i>Cycloprotarsus</i> Atyeo, 1992			Aty eo 1992
<i>Cycloprotarsus centralis</i> Atyeo, 1992	<i>Megapodius reinwardti</i> Dumont (= <i>Megapodius affinis</i> Meyer, AB)	Indonesia: Yapen Island (Japan)	Aty eo 1992
<i>Cycloprotarsus lineatus</i> Atyeo, 1992*	<i>Megapodius freycineti</i> Gaimard	Papua New Guinea: Kanganaman	Aty eo 1992
<i>Cycloprotarsus monacrotichus</i> Atyeo, 1992	<i>Eulipoa wallacei</i> (Gray, GR)	Indonesia: Ternate Island	Aty eo 1992
<i>Echinozonus</i> Atyeo and Pérez, 1991			Aty eo and Pérez 1991b
<i>Echinozonus colothrix</i> Atyeo and Pérez, 1991	<i>Talegalla cuvieri</i> Lesson, RP	New Guinea	Aty eo and Pérez 1991b
<i>Echinozonus curtus</i> (Trouessart, 1887)*	<i>Psittirichas fulgidus</i> (Lesson, RP) (?)	Indonesia: Waigeo Island (Waigeu)	Trouessart 1887; Aty eo and Pérez 1991b; Aty eo 1992
<i>Echinozonus infrequens</i> Atyeo and Pérez, 1991	<i>Talegalla cuvieri</i> Lesson, RP	New Guinea	Aty eo and Pérez 1991b
<i>Echinozonus kethleyi</i> Atyeo and Pérez, 1991	<i>Aepyodius bruijnii</i> (Oustalet)	Indonesia: Waigeo Island (Waigeu)	Aty eo and Pérez 1991b
<i>Echinozonus leurophyllus</i> Atyeo and Pérez, 1991	<i>Alectura lathami purpureicollis</i> (Le Souef)	Australia: Quinsland	Aty eo and Pérez 1991b
<i>Echinozonus longisetosus</i> Atyeo and Pérez, 1991	<i>Alectura lathami lathami</i> Gray, JE	Australia: Quinsland	Aty eo and Pérez 1991b
<i>Eurypterolichus</i> Atyeo, 1992			Aty eo 1992
<i>Eurypterolichus coniger</i> Atyeo, 1992	<i>Talegalla jobiensis jobiensis</i> Meyer, AB	Indonesia: Jayapura (Hollandia)	Aty eo 1992
<i>Eurypterolichus navicula</i> (Trouessart and Neumann, 1888)*	<i>Aepyodius bruijnii</i> (Oustalet)	Indonesia: Waigeo Island (Waigeu)	Trouessart and Neumann 1888
<i>Goniodurus</i> Atyeo, 1992			Aty eo 1992
<i>Goniodurus bilobatus</i> Atyeo, 1992	<i>Aepyodius bruijnii</i> (Oustalet)	Indonesia: Waigeo Island (Waigeu)	Aty eo 1992

<i>Goniodurus quadratus</i> (Trouessart, 1887)*	<i>Talegalla cuvieri</i> Lesson, RP	New Guinea	Trouessart 1887; Atyeo 1992
Haptigynus Atyeo, 1992			Atyeo 1992
<i>Haptigynus holonotus</i> Atyeo, 1992	<i>Aepyodius bruinjii</i> (Oustalet)	Indonesia: Waigeo Island (Waigeu)	Atyeo 1992
<i>Haptigynus tridentiger</i> (Trouessart, 1887)*	<i>Talegalla jobiensis</i> Meyer, AB	Indonesia: Yapen Island (Japen)	Trouessart 1887; Atyeo 1992
Heliaspis Atyeo, 1992			Atyeo 1992
<i>Heliaspis ventralis</i> Atyeo, 1992*	<i>Talegalla jobiensis jobiensis</i> Meyer, AB	Indonesia: Yapen Island (Japen)	Atyeo 1992
Leipobius Atyeo, 1992			Atyeo 1992
<i>Leipobius ocellatus</i> Atyeo, 1992*	<i>Leipoa ocellata ocellata</i> Gould	Western Australia	Atyeo 1992
Maleolichus Atyeo, 1992			Atyeo 1992
<i>Maleolichus maleo</i> Atyeo, 1992*	<i>Macrocephalon maleo</i> Müller, S	Indonesia: Sulawesi Island	Atyeo 1992
Mayracarus Atyeo, 1992			Atyeo 1992
<i>Mayracarus tritilobus</i> (Trouessart, 1887)*	<i>Megapodius reimwardt</i> Dumont (= <i>Megapodius affinis</i> Meyer, AB)	Indonesia: Yapen Island (Japen)	Trouessart 1887; Atyeo 1992
Megapodobius Atyeo, 1992			Atyeo 1992
<i>Megapodobius arcuatus</i> Atyeo, 1992*	<i>Megapodius freycinet freycinet</i> Gaimard	Indonesia: Misool Island (Mysol)	Atyeo 1992
<i>Megapodobius striatus</i> Atyeo, 1992	<i>Eulipoa wallacei</i> (Gray, GR)	Indonesia: Bacan Island (Batjan)	Atyeo 1992
Oxygynurus Atyeo, 1992			Atyeo 1992
<i>Oxygynurus brevissimus</i> Atyeo, 1992*	<i>Eulipoa wallacei</i> (Gray, GR)	Indonesia: Bacan Island (Batjan)	Atyeo 1992
<i>Oxygynurus longicaulus</i> Atyeo, 1992	<i>Megapodius freycinet freycinet</i> Gaimard	Indonesia: Morotai Island	Atyeo 1992
<i>Oxygynurus mediocaulus</i> Atyeo, 1992	<i>Megapodius freycinet freycinet</i> Gaimard	Indonesia: Waigeo Island (Waigeu)	Atyeo 1992
<i>Oxygynurus parvicaulus</i> Atyeo, 1992	<i>Megapodius reimwardt</i> Dumont (= <i>Megapodius affinis</i> Meyer, AB)	Indonesia: Yapen Island (Japen)	Atyeo 1992
Pereziella Atyeo, 1990			Atyeo 1990
<i>Pereziella decorata</i> Atyeo, 1990*	<i>Megapodius freycinet freycinet</i> Gaimard	Indonesia: Moluccas	Atyeo 1990
<i>Pereziella fuscina</i> (Trouessart, 1887) (= <i>Pereziella duplicata</i> Atyeo, 1990)	<i>Talegalla jobiensis</i> Meyer, AB <i>Megapodius eremita</i> Hartlaub	Indonesia: Yapen Island (Japen) Solomon Islands	Trouessart 1887; Atyeo 1990 1992
Phycoferus Atyeo et Pérez, 1991			Atyeo and Pérez 1991a
<i>Phycoferus freycinet</i> Atyeo and Pérez, 1991*	<i>Megapodius freycinet freycinet</i> Gaimard	Indonesia: Waigeo Island (Waigeu)	Atyeo and Pérez 1991a
<i>Phycoferus wallacei</i> Atyeo and Pérez, 1991	<i>Eulipoa wallacei</i> (Gray, GR)	Indonesia: Bacan Island (Batjan)	Atyeo and Pérez 1991a

<i>Prionoturus</i> Atyeo, 1992				Atyeo 1992
<i>Prionoturus amembranensis</i> Atyeo, 1992*		<i>Megapodius freycineti</i> Freycinet Gaimard	Indonesia: Waigeo Island (Waigeu)	Atyeo 1992
<i>Talegallobius</i> Atyeo, 1992				Atyeo 1992
<i>Talegallobius bidentatus</i> Atyeo, 1992*		<i>Talegalla jobiensis</i> Jobiensis Meyer, AB	Indonesia: Jayapura (Hollandia)	Atyeo 1992
<i>Tanysomacarus</i> Atyeo, 1992				Atyeo 1992
<i>Tanysomacarus brachymeles</i> Atyeo, 1992		<i>Eulipoa wallacei</i> (Gray, GR)	Indonesia: Halmahera Island	Atyeo 1992
<i>Tanysomacarus imperfectus</i> Atyeo, 1992*		<i>Megapodius freycineti</i> Freycinet Gaimard	Indonesia: Waigeo Island (Waigeu)	Atyeo 1992

Notes: *—type species of mite genera; (?)—questionable host association.

Table 3. Checklist of pterolichines associated with gallform hosts other than megapodes.

Mite genus and species	Type host	Host family	Type locality	References
<i>Ambodrilus</i> Gaud and Atyeo, 1996				
<i>Ambodrilus adelphus</i> (Gaud, 1965)	<i>Pternistis squamatus schuetti</i> (Cabanis) (= <i>P. squamatus zappeyi</i> Mearns)	Phasianidae	Rwanda	Gaud and Atyeo 1996
<i>Ambodrilus akidoderma</i> (Gaud and Mouchet, 1959)	<i>Guttera verreauxi sclateri</i> Reichenow (= <i>G. eduardi sclateri</i> Reichenow)	Numididae	Cameroon	Gaud and Mouchet 1959; Gaud and Atyeo 1996
<i>Ambodrilus chaetocercus</i> (Gaud, 1965)*	<i>Numida meleagris</i> (Linnaeus)	Numididae	DR of the Congo	Gaud 1965; Gaud and Atyeo 1996
<i>Ambodrilus climaxurus</i> (Gaud, 1965)	<i>Pternistis nobilis</i> (Reichenow)	Phasianidae	DR of the Congo	Gaud 1965; Gaud and Atyeo 1996
<i>Ambodrilus dermodons</i> (Gaud, 1965)	<i>Agelastes niger</i> (Cassin)	Numididae	DR of the Congo	Gaud 1965; Gaud and Atyeo 1996
<i>Ambodrilus diploderma</i> (Gaud and Mouchet, 1959)	<i>Numida meleagris</i> (Linnaeus)	Numididae	Cameroon	Gaud and Mouchet 1959; Gaud and Atyeo 1996
<i>Ambodrilus goniodurus</i> (Gaud and Mouchet, 1959)	<i>Guttera plumifera</i> (Cassin)	Numididae	Cameroon	Gaud and Mouchet 1959; Gaud and Atyeo 1996
<i>Ambodrilus hoplourus</i> (Gaud, 1965)	<i>Scleroptila shelleyi</i> (Ogilvie-Grant)	Phasianidae	DR of the Congo	Gaud 1965; Gaud and Atyeo 1996
<i>Ambodrilus hyalostictus</i> (Gaud, 1965)	<i>Pternistis squamatus</i> (Cassin)	Phasianidae	Cameroon	Gaud 1965; Gaud and Atyeo 1996
<i>Ambodrilus hypostictus</i> (Gaud, 1965)	<i>Pternistis bicalcaratus</i> (Linnaeus)	Phasianidae	Cameroon	Gaud 1965; Gaud and Atyeo 1996
<i>Ambodrilus microthyrsus</i> (Gaud and Mouchet, 1959)	<i>Numida meleagris</i> (Linnaeus)	Numididae	Cameroon	Gaud and Mouchet 1959; Gaud and Atyeo 1996
<i>Ambodrilus orthoderma</i> (Gaud, 1965)	<i>Orygornis sephaena</i> (Smith, A)	Phasianidae	South Africa: Transvaal	Gaud 1965; Gaud and Atyeo 1996
<i>Ambodrilus rhytidurus</i> (Gaud, 1965)	<i>Numida meleagris meleagris</i> (Linnaeus)	Numididae	Rwanda	Gaud 1965; Gaud and Atyeo 1996
<i>Ambodrilus temnurus</i> (Gaud, 1965)	<i>Pternistis nobilis</i> (Reichenow)	Phasianidae	DR of the Congo	Gaud 1965; Gaud and Atyeo 1996
<i>Ambodrilus tritus</i> (Gaud, 1965)	<i>Pternistis squamatus</i> (Cassin)	Phasianidae	Cameroon	Gaud 1965; Gaud and Atyeo 1996
<i>Anoplotarsus</i> Gaud and Atyeo, 1996				
<i>Anoplotarsus colesoma</i> (Gaud and Mouchet, 1959)	<i>Guttera edouardi</i> (Hartlaub)	Numididae	Cameroon	Gaud and Atyeo 1996
<i>Anoplotarsus diakidurus</i> (Gaud, 1965)*	<i>Afropavo congensis</i> Chapin	Phasianidae	DR of the Congo	Gaud 1965; Gaud and Atyeo 1996
<i>Anoplotarsus euryzonoides</i> (Gaud, 1965)	<i>Afropavo congensis</i> Chapin	Phasianidae	DR of the Congo	Gaud 1965; Gaud and Atyeo 1996

<i>Anoplotarsus euryzonus</i> (Gaud and Mouchet, 1959)	<i>Guttera edouardi</i> (Hartlaub)	Numididae	Cameroon	Gaud and Mouchet 1959; Gaud and Atyeo 1996
<i>Calvolichus</i> Gaud and Atyeo, 1996				Gaud and Atyeo 1996
<i>Calvolichus gallicolus</i> Gaud and Atyeo, 1996*	<i>Ptilopachus petrosus</i> (Gmelin, JF)	Odontophoridae	Ghana	Gaud and Atyeo 1996
<i>Colinichus</i> Gaud and Atyeo, 1996				Gaud and Atyeo 1996
<i>Colinichus virginianus</i> Gaud and Atyeo, 1996*	<i>Colinus virginianus</i> (Linnaeus)	Odontophoridae	USA: Michigan	Gaud and Atyeo 1996
<i>Contolichus</i> Atyeo and Gaud, 1992				Aty eo and Gaud 1992
<i>Contolichus latus</i> (Černý, 1970)*	<i>Meleagris gallopavo</i> Linnaeus	Phasianidae	Cuba	Černý 1970; Atyeo and Gaud 1992
<i>Cyrtonyxobius</i> Gaud and Atyeo, 1996				Gaud and Atyeo 1996
<i>Cyrtonyxobius quinidentatus</i> Gaud and Atyeo, 1996*	<i>Cyrtonyx ocellatus</i> (Gould)	Odontophoridae	Mexico	Gaud and Atyeo 1996
<i>Epistomolichus</i> Mironov, Perez and Palma, 2009				Mironov <i>et al.</i> 2009
<i>Epistomolichus reticulatus</i> Mironov, Perez and Palma, 2009*	<i>Gallus gallus</i> (Linnaeus)	Phasianidae	Ecuador: Galapagos Islands	Mironov <i>et al.</i> 2009
<i>Ornatumerus</i> Gaud and Atyeo, 1996				Gaud and Atyeo 1996
<i>Ornatumerus dictyothyris</i> (Gaud, 1965)*	<i>Afropavo congensis</i> Chapin	Phasianidae	DR of the Congo	Gaud 1965; Gaud and Atyeo 1996
<i>Pavolichus</i> Gaud, 1965				Gaud 1965
<i>Pavolichus pterygothrix</i> (Gaud, 1960)*	<i>Agelastes niger</i> (Cassin)	Numididae	DR of the Congo	Gaud 1960, 1965
<i>Periexocaulus</i> Gaud and Atyeo, 1996				Gaud and Atyeo 1996
<i>Periexocaulus anacanthus</i> (Gaud and Mouchet, 1959)	<i>Guttera edouardi</i> (Hartlaub)	Numididae	Cameroon	Gaud and Mouchet 1959; Gaud and Atyeo 1996
<i>Periexocaulus cercigynus</i> (Gaud, 1965)*	<i>Peliperdix lathamii</i> (Hartlaub)	Phasianidae	DR of the Congo	Gaud 1965; Gaud and Atyeo 1996
<i>Phasianolichus</i> gen. n.				
<i>Phasianolichus phasianii</i> (Mironov, 1997)* comb. n.	<i>Phasianus colchicus</i> Linnaeus	Phasianidae	Germany	Mironov 1997
<i>Phasidolichus</i> Gaud and Atyeo, 1996				Gaud and Atyeo 1996
<i>Phasidolichus pterygopus</i> (Gaud, 1965)*	<i>Agelastes niger</i> (Cassin)	Numididae	DR of the Congo	Gaud 1965; Gaud and Atyeo 1996
<i>Pseudalloptes</i> Trouessart, 1884				Trouessart 1884
<i>Pseudalloptes bisubulatus</i> (Robin, 1877)*	<i>Alectoris rufa</i> (Linnaeus)	Phasianidae	Europe	Robin and Mégnin 1877
<i>Pseudolichus</i> Atyeo and Gaud, 1992				Aty eo and Gaud 1992
<i>Pseudolichus solutocturus</i> (Dubinin, 1956)*	<i>Alectoris graeca saxatilis</i> (Bechstein)	Phasianidae	Italy	Berlese 1888; Dubinin 1956; Aty eo and Gaud 1992

<i>Pterolichus</i> Robin, 1877					Robin and Mégnin 1877; Atyeo and Gaud 1992; Gaud and Atyeo 1996; Lacerda <i>et al.</i> 2023
<i>Pterolichus lithodorus</i> Gaud, 1965 (†)		<i>Ortygornis sephaena</i> (Smith, A)	Phasianidae	South Africa: Transvaal	Gaud 1965
<i>Pterolichus obtusus</i> Robin, 1877*		<i>Gallus gallus</i> (Linnaeus)	Phasianidae	Europe	Robin and Mégnin 1877; Atyeo and Gaud 1992; Lacerda <i>et al.</i> 2023
<i>Pterolichus stenochaetus</i> Gaud, 1965 (†)		<i>Ortygornis sephaena</i> (Smith, A)	Phasianidae	South Africa: Transvaal	Gaud 1965
<i>Pterygocrusolichus</i> Dubinin, 1955					Dubinin 1955
<i>Pterygocrusolichus chanayi</i> (Trouessart, 1885)*		<i>Meleagris gallopavo</i> Linnaeus	Phasianidae	France	Trouessart 1885
<i>Pterygocrusolichus ovalis</i> (Haller, 1878)		<i>Meleagris ocellata</i> Cuvier	Phasianidae	Central America	Haller 1878; Dubinin 1955
<i>Pyssalgopus</i> Gaud and Atyeo, 1996					Gaud and Atyeo 1996
<i>Pyssalgopus cyrtocercus</i> (Gaud and Mouchet, 1959)		<i>Guttera edouardi</i> (Hartlaub)	Numididae	Cameroon	Gaud and Mouchet 1959; Gaud and Atyeo 1996
<i>Pyssalgopus diglossourus</i> (Gaud, 1965)*		<i>Numida meleagris</i> (Linnaeus)	Numididae	DR of the Congo	Gaud 1965; Gaud and Atyeo 1996
<i>Pyssalgopus passalurus</i> (Gaud and Mouchet, 1959)		<i>Guttera verreauxi sclateri</i> Reichenow (= <i>G. edouardi sclateri</i> Reichenow)	Numididae	Cameroon	Gaud and Mouchet 1959; Gaud and Atyeo 1996
<i>Synapsilobus</i> Gaud and Atyeo, 1996					Gaud and Atyeo 1996
<i>Synapsilobus allopoides</i> (Gaud and Mouchet, 1959)*		<i>Guttera plumifera</i> (Cassin)	Numididae	Cameroon	Gaud and Mouchet 1959; Gaud and Atyeo 1996
<i>Synapsilobus pachydorus</i> (Gaud and Mouchet, 1959)		<i>Agelastes niger</i> (Cassin)	Numididae	Cameroon	Gaud and Mouchet 1959; Gaud and Atyeo 1996
<i>Tammurolichus</i> Gaud and Atyeo, 1996					Gaud and Atyeo 1996
<i>Tammurolichus loculatus</i> Gaud and Atyeo, 1996*		<i>Pavo cristatus</i> Linnaeus	Phasianidae	Sri Lanka	Gaud and Atyeo 1996
<i>Tetraolichus</i> Atyeo and Gaud 1992					Atyeo and Gaud 1992
<i>Tetraolichus bimucronatus</i> (Trouessart, 1884)		<i>Lagopus lagopus</i> (Linnaeus)	Phasianidae	Europe	Trouessart 1884; Gaud and Atyeo 1996
<i>Tetraolichus cataphractus</i> (Mégnin and Trouessart, 1884)		<i>Tragopan satyra</i> (Linnaeus)	Phasianidae	Himalayans	Mégnin and Trouessart 1884; Gaud and Atyeo 1996

<i>Tetraolichus cupido</i> Atyeo and Gaud 1992*					USA: Texas	Aty eo and Gaud 1992
<i>Tetraolichus decoratus</i> (Még nin and Trouessart, 1884)		<i>Tempanuchus cupido</i> (Linnaeus)			Indonesia: Java	Még nin and Trouessart 1884; Gaud and Atyeo 1996
<i>Tetraolichus foifricula</i> (Trouessart et Neumann, 1888) (†)		<i>Rollulus rotuloul</i> (Scopoli)			Brazil	Trouessart and Neumann 1888; Gaud and Atyeo 1996
<i>Tetraolichus francolini</i> (Gaud and Mouchet, 1959)		<i>Ortalis squamata</i> (Lesson, RP)			Cameroon	Gaud and Mouchet 1959; Gaud and Atyeo 1996
<i>Te. gaudi</i> (Černý, 1971)		<i>Peliperdix lathamii</i> (Hartlaub)			Switzerland	Černý 1971; Atyeo and Gaud 1992
<i>Tetraolichus hyalosoma</i> (Gaud and Mouchet, 1959)		<i>Lyrurus tetrrix</i> (Linnaeus)			Cameroon	Gaud and Mouchet 1959; Gaud and Atyeo 1996
<i>Tetraolichus lagopi</i> Mironov, Skirmisson, Thorarins- dotir and Nielsen, 2010		<i>Pternistis bicalcaratus</i> (Linnaeus)			Iceland	Mironov <i>et al.</i> 2010
<i>Tetraolichus microdiscus</i> (Trouessart, 1887)		<i>Lagopus muta</i> (Montin)			Europe	Trouessart 1887; Gaud and Atyeo 1996
<i>Tetraolichus pavonis</i> (Oudemans, 1905)		<i>Tetrao urogallus</i> Linnaeus			Unknown	Oudemans 1905; Gaud and Atyeo 1996
<i>Tetraolichus pustulatus</i> (Még nin and Trouessart, 1884) (†)		<i>Pavo cristatus</i> Linnaeus			Guyana	Még nin and Trouessart 1884; Gaud and Atyeo 1996
<i>Tetraolichus subobtusus</i> (Gaud 1965) (†)		<i>Crax alector</i> Linnaeus			DR of the Congo	Gaud 1965; Gaud and Atyeo 1996
<i>Xoloptes Canestrini</i>, 1879		<i>Philopachus nahani</i> (Dubois, AIC)				Canestrini 1879
<i>Xoloptes claudicans</i> (Robin, 1877)*		<i>Perdix perdix</i> (Linnaeus) (?)			Europe	Robin and Megnin 1877
<i>Xoloptes blaszaki</i> Dabert, Natress and Dabert, 2008		<i>Alectoris rufa</i> (Linnaeus)			England	Dabert <i>et al.</i> 2008
<i>Xoloptes minor</i> Trouessart and Neumann, 1888 (†)		<i>Ortalis squamata</i> (Lesson, RP)			Brazil	Trouessart and Neumann 1888; Dabert <i>et al.</i> 2008

Notes: *—type species of mite genera; (†)—doubtful whether the mite species belongs to the corresponding genus; (?)—questionable host association.