

**A TAXONOMIC NOTE ON THE TYPE SPECIES OF THE FEATHER MITE
GENUS *ANISANCHUS* PETERSON ET ATYEAO, 1977
(ACARIFORMES: ANALGOIDEA: ALLOPTIDAE)**

S.V. Mironov

Zoological Institute, Russian Academy of Sciences, Universitetskaya embankment 1, 199034, Saint Petersburg, Russia; e-mail: Sergei.Mironov@zin.ru

ABSTRACT: *Anisanchus ptilotus* Peterson et Atyeo 1977 syn. n., the type species of the monotypic feather mite genus *Anisanchus* Peterson et Atyeo 1977 (Analgoidea: Alloptidae), is synonymized with *Alloptes (Pterocolus) trachelurus* Trouessart, 1885 based on a study of the type specimens. The modern name of the species described by Trouessart is now *Anisanchus trachelurus* (Trouessart, 1885) comb. n.

KEY WORDS: Feather mites, Alloptidae, *Anisanchus*, systematics

INTRODUCTION

Peterson and Atyeo (1977) established the feather mite genus *Anisanchus* Peterson et Atyeo 1977 (Analgoidea: Alloptidae) with a single species *Anisanchus ptilotus* Peterson et Atyeo 1977, described in the same paper from the Roseate Spoonbill *Platalea ajaja* Linnaeus, 1758 (Aves: Pelecaniformes: Threskiornithidae) from several countries of Central and South America. However the morphologically identical mite was described much earlier by Trouessart (1885) under the name *Alloptes (Pterocolus) trachelurus* Trouessart, 1885 from the same host. Although the mite described by Trouessart was quite unmistakable in the morphological appearance of males, it was not noticed by the authors of the genus *Anisanchus*.

In the recently published checklist of feather mites recorded in Brazil, Valim et al. (2011) listed both mite species as valid. They indicated my personal communication that the species described by Peterson and Atyeo (1977) should be placed in the synonym of the Trouessart's species. In the present paper I formally synonymize *Anisanchus ptilotus* Peterson et Atyeo 1977 syn. n. with *Alloptes (Pterocolus) trachelurus* Trouessart, 1885. The synonymy is based on the comparative study of the type specimens of *Al. (P.) trachelurus*, deposited in the Muséum national d'Histoire naturelle (MNHN, Paris, France), and a few specimens, used for the description of *Anisanchus ptilotus* by Peterson and Atyeo and granted to the mite collection of the Zoological Institute of the Russian Academy of Sciences (Saint Petersburg, Russia).

SYSTEMATICS

Family Alloptidae Gaud, 1957
Subfamily Alloptinae Gaud, 1957
Genus *Anisanchus* Peterson et Atyeo, 1977

Type species: *Anisanchus ptilotus* Peterson et Atyeo, 1977 by original designation, = *Alloptes (Pterocolus) trachelurus* Trouessart, 1885.

Remark. Mites of the genus *Anisanchus* have a typical appearance of alloptid genera, where males have opisthosomal lobes secondarily fused into a narrow and usually long median extension of opisthosoma, like it is observed in the genus *Alloptes* Canestrini, 1879. As it was shown in the phylogenetic investigation of the family Alloptidae (Mironov 2007), the genus *Anisanchus* along with five more genera, *Ibidocolus* Mironov, 1998, *Hyperpedalloptes* Dubinin, 1955, *Nealloptes* Gaud et Mouchet, 1957, and *Tauralloptes* Mironov, 2002 also restricted to ibises (Threskiornithidae), and *Heterobrephosceles* Peterson et Atyeo, 1978 occurring on some hosts of Anseriformes, constitute a distinct phylogenetic lineage within the subfamily Alloptinae and could be treated as a tribe or even as a separate subfamily. The brightest diagnostic feature of this lineage is a spine-like form of trochanteral setae *sRIII* in both sexes, not occurring in other alloptids. Within this generic group, the genus *Anisanchus* is clearly discernible by having the dorsal genual processes asymmetrical developed on legs II of the left and right sides, the strongly narrowed and parallel-sided opisthosoma (fused opisthosomal lobes), and spine like setae *h1* in males (Dubinin 1955; Gaud and Mouchet 1957; Peterson and Atyeo 1977, 1978; Gaud and Atyeo 1996; Mironov 1998, 2002).

Anisanchus trachelurus (Trouessart, 1885)
comb. n.

Alloptes (Pterocolus) trachelurus Trouessart, 1885: 70.

Alloptes trachelurus: Valim et al., 2011: 296.

Trouessartia trachelura: Novaes and Carvalho, 1952: 303; Radford, 1953: 24; 1958: 116.

Anisanchus ptilotus Peterson and Atyeo, 1977: 191, figs. 1–4, syn. n.; Valim et al., 2011: 296.

Material examined: “*Pterocolus trachelurus*”, male holotype (MNHN: TRT 31A11) from *Platalea ajaja* Linnaeus, 1758 (Pelecaniformes, Threskiornithidae), Amerique de chaude, no other data; “*Alloptes trachelurus*” male and female (MNHN: TRT 40D4), same host, Amerique de chaude, no other data; *Anisanchus ptilotus* male (UGA 7618, AMNH 45761) from same host, BRAZIL, no other data; and *An. ptilotus* female (UGA 7617, AMNH67565) from same host, no other data.

Remark. Under the name *Anisanchus ptilotus*, this mite was quite clearly described and illustrated by Peterson and Atyeo (1977). Males of this species are unmistakable among all recognized alloptid genera by having strongly narrowed and almost parallel-sided opisthosoma which is similar in its general shape to the anterior end of propodosoma, and legs I–IV being approximately equal in size and similar in shape to each other and having strongly inflated distal part of their femora. Trouessart (1885: 70) described *Al. (P.) trachelurus* without any illustrations. However he indicated a remarkable similarity of the anterior and posterior ends of males and wrote that this mite gives an impression of an animal of two heads (“Mâle très remarquable au premier coup d’œil par sa forme générale qui donne la sensation d’un animal à deux têtes, les deux extrémités du corps étant semblable, et la partie rétrécie de l’abdomen ayant les proportions du rostre; cette ressemblance encore augmentée par la forme des pattes”). Therefore it is really surprising that the authors of the genus *Anisanchis* did not recognize that this impressive species has been already described from the same host, *Platalea ajaja*.

ACKNOWLEDGEMENTS

I thank Dr. M. Judson (Muséum national d’Histoire naturelle, Paris, France) for loaning specimens deposited in MNHN for the present work. The study was supported by the Russian Fund for Basic Research (Grant № 13-04-00608a).

REFERENCES

- Dubinin, V.B. 1955. [New genera and species of feather mites.] *Trudy Zoologicheskogo instituta Akademii nauk SSSR*, 18: 248–286. [In Russian]
- Gaud, J. and Atyeo, W.T. 1996. Feather mites of the World (Acarina, Astigmata): the supraspecific taxa. *Musée Royal de l’Afrique Centrale, Annales, Sciences Zoologiques*, 277: 1–193 (Pt. 1, text), 1–436 (Pt. 2, illustrations).
- Gaud, J. and Mouchet, J. 1957. Acariens plumicoles (Analgesoidea) des oiseaux du Cameroun. I. Proctophyllodidae. *Annales de Parasitologie humaine et comparée*, 32 (5–6): 491–546.
- Mironov, S.V. 1998. [Two new genera of feather mites of the family Alloptidae (Acariformes: Analgoidea)]. *Parazitologiya*, 32 (1): 40–51. [In Russian with English summary]
- Mironov, S.V. 2002. Three new feather mite genera of the family Alloptidae (Acari: Astigmata) from the ibises (Ciconiiformes: Threskiornithidae). *Acarina*, 10 (1): 25–42.
- Mironov, S.V. 2007. Phylogeny of the feather mite family Alloptidae and coevolutionary trends with aquatic birds. P. 617–634. In: J.B. Morales-Malacara, V. Behan-Pelletier, E. Ueckermann, T.M. Perez, E. Estrada-Venegas, and M. Badíi (Eds.). *Acarology XI: Proceedings of the International Congress* (Merida, Yucatan, Mexico, 8–13 September 2002). Instituto de Biología and Facultad de Ciencias, Universidad Nacional Autónoma de México; Sociedad Latinoamericana de Acarología. México.
- Novaes, F.C. and Carvalho, J.C.M., 1952. A new species of *Megninia* from the roseate spoonbill (Analgesidae, Analgesinae). *Anais da Academia Brasileira de Ciências*, 24: 303–306.
- Peterson, P.C. and Atyeo, W.T., 1977. A new genus and species of alloptine feather mite from the roseate spoonbill (Acarina, Analgoidea, Alloptidae). *Steenstrupia*, 4: 189–193.
- Peterson, P.C. and Atyeo, W.T., 1978. The feather mite family Alloptidae Gaud. IV. A new genus of the Alloptinae (Acarina, Analgoidea). *Acarologia*, 19 (2): 318–330.
- Radford, C.D. 1953. The mites (Acarina: Analgesidae) living on or in the feathers of birds. *Parasitology*, 42 (3–4): 199–230.
- Radford, C.D. 1958. The host-parasite relationships of the feather mites (Acarina: Analgesoidea). *Revista brasileira de entomologia*, 8: 107–170.
- Trouessart, E.L. (1884) 1885. Note sur le classification des Analgésiens et diagnoses d’espèces et de genres nouveaux. *Bulletin de la Société d’Etudes scientifiques d’Angers*, 14: 46–89. (Published: February 1885, for year 1884)
- Valim, M.P., Hernandes, F.A. and Proctor, H.C. 2011. Feather mites of Brazil (Acari: Astigmata: Analgoidea and Pterolichoidea). *International Journal of Acarology*, 37 (4) 293–324.