A NEW NAME FOR THE FEATHER MITE GENUS CHEILOCERAS TROUESSART, 1899 (ACARI: ASTIGMATA: FALCULIFERIDAE)

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ABSTRACT: A new substitute name *Cheiloceratoides* nom. n. is proposed for the feather mite genus *Cheiloceras* Trouessart, 1899 (Acari: Falculiferidae), which is a junior homonym of *Cheiloceras* Frech, 1897 (Mollusca: Cephalopoda). It is shown that *Cheiloceras taurus* Trouessart, 1899 was originally designated by Trouessart (1899) as the type species of the mite genus *Cheiloceras*, while the subsequent designation of *Cheiloceras cervus* Trouessart, 1899 proposed by Trouessart (1916) much later and followed by recent authors (Atyeo and Gaud 1978) is illegitimate. New combinations for eight species included in the genus *Cheiloceratoides ancoratum* (Atyeo et Gaud, 1978) comb. n., *Ch. cervus* (Trouessart, 1899) comb. n., *Ch. cornulatum* (Atyeo et Gaud, 1978) comb. n., *Ch. megachelicum* (Atyeo et Gaud, 1978) comb. n., *ch. taurus* (Trouessart, 1899) comb. n., *Ch. serrulatum* (Atyeo et Gaud, 1978) comb. n., and *Ch. taurus* (Trouessart, 1899).

KEY WORDS: Feather mites, Pterolichoidea, Falculiferidae, taxonomy correction

DISCUSSION

The feather mite genus *Cheiloceras* (Pterolichoidea: Falculiferidae) was established by Trouessart (1899a) in the content of the "section" Pterolicheae (Sarcoptidae: Analginae), which incorporated in that period of acarology most feather mites presently belonging to the superfamily Pterolichoidea. As for all representatives of the family Falculiferidae, mites of the genus *Cheiloceras* currently including eight species are restricted to pigeons and doves (Columbiformes), and most species of this genus are known from fruit pigeons (Columbidae: Treroninae) distributed in the Indo-Malayan and Australian regions (Atyeo and Gaud 1978).

However this name Cheiloceras Trouessart, 1899 is a junior homonym of the generic name proposed by Frech (1897) for fossil ammonites (Mollusca: Cephalopoda). This fact was early found by malacologists and paleontologists, but remained unnoticed by acaroligists; and a new name for the mite genus has not yet been proposed. It is necessary to add that at first malacologists erroneously concluded that Cheiloceras Trouessart, 1899 had a priority that had led to appearance of several invalid names proposed for Cheiloceras Frech, 1897 (see House and Kirchgasser 2008 for the discussion and references). This wrong conclusion was apparently caused by the matter that the last part of the three-volume monograph of Frech was published in 1902.

Additional curious concerning these generic taxa from mollusks and mites is that the mite taxon once more had appeared a junior homonym of the mollusk one. Haug (1899: 21, published by January) emended *Cheiloceras* Frech, 1897 for *Chilo*-

ceras. In the same year, Canestrini (in: Canestrini and Kramer 1899: 69, published by April) emended *Cheiloceras* Trouessart, 1899 also for *Chiloceras*. Since the monograph by Canestrini and Kramer (1899) was published in April, *Chiloceras* Canestrini, 1899 had again appeared a junior homonym of *Chiloceras* Haug, 1899, although the latter was invalid. Otherwise the name *Chiloceras* Canestrini, 1899 might be used as a new name for the mite genus considered herein.

Therefore in the present work we propose a replacement name for *Cheiloceras* Trouessart, 1899.

SYSTEMATICS

Superfamily Pterolichoidea Trouessart et Mégnin, 1884 Family Falculiferidae Oudemans, 1905 Genus *Cheiloceratoides* Mironov et Hallan nom. n.

Cheiloceras Trouessart, 1899a: 971 (preoccupied by Frech, 1897: 125, Mollusca: Cephalopoda), 1899b: 321; Atyeo and Gaud, 1978: 495; Gaud and Atyeo, 1996: 90.

Chiloceras Canestrini in: Canestrini and Kramer, 1899: 69 (incorrect emend. pro *Cheiloceras* Trouessart, 1899; preoccupied by Haug, 1899: 21, incorrect emend. pro *Cheiloceras* Frech, 1897); Oudemans, 1905: 218; Trouessart, 1916: 215.

Type species: *Cheiloceras taurus* Trouessart, 1899, by original designation.

Remark. When Trouessart (1899a) established the genus *Cheiloceras*, he described two species, *Cheiloceras taurus* Trouessart, 1899 and

C. cervus Trouessart, 1899, and clearly indicated the first as a type species. In another paper published in the same year, Trouessart (1899b) described these genus and two species once more as new taxa and also described a new species C. retusum Trouessart, 1899, which was actually the only new taxon established in this paper; any type species of the "new" genus was not mentioned. Further, in the revision of feather mite genera, Trouessart (1916: 215) unexpectedly indicated C. cervus Trouessart, 1899 as a type species. It is possible to suggest that he either had illegitimately decided to change the type species or had forgotten that the type species had already been designated. Atyeo and Gaud (1978) making a revision of the genus Cheiloceras did not notice that Trouessart (1899a: 921) had already designated the type species in the primary paper, perhaps, because it was indicated in the text before the proper diagnosis of the genus. Therefore Atyeo and Gaud followed his revision of feather mite genera (Trouessart, 1916) and erroneously pointed C. cervus as a type species "by subsequent designation".

Included species: *Cheiloceratoides ancoratum* (Atyeo et Gaud, 1978) comb. n., *Ch. cervus* (Trouessart, 1899) comb. n., *Ch. cornulatum* (Atyeo et Gaud, 1978) comb. n., *Ch. foliatum* (Atyeo et Gaud, 1978) comb. n., *Ch. megachelicum* (Atyeo et Gaud, 1978) comb. n., *Ch. retusum* (Trouessart, 1899) comb. n., *Ch. serrulatum* (Atyeo et Gaud, 1978) comb. n., and *Ch. taurus* (Trouessart, 1899).

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REFERENCES

- Atyeo, W.T. and Gaud, J. (1977) 1978. The genus *Cheiloceras* Trouessart, 1898 (Analgoidea: Falculiferidae). *Acarologia*, 19: 494–512.
- Canestrini, G. and Kramer, P. 1899. Demodicidae und Sarcoptidae. *Das Tierreich*, 7: 1–193.
- Frech, F. 1897–1902. Lethaea geognostica oder Beschreibung und Abbildung der für die Gebirgs-Formationen bezeichnendsten Versteinerungen. I. Theil. Lethaea palaeozoica. 2. Band. E. Schweizerbart, Stuttgart, 578 pp., 35 pls., 6 maps, 551 figs. (1897: 1–283; 1899: 284–471, 1902: 472– 578).
- 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, illustrationst).
- Haug, E. 1899. Cephalopodes. *Revue Critique de Paleozoologie*, 3 (№1, Janvier): 20–30.
- Oudemans, A.C. 1905. Acarologische Aanteekeningen XVI. *Entomologische Berichten*, 1: 216–218.
- Trouessart, E.L. (1898) 1899a. Sur un nouveau genre de Sarcoptides plumicoles. *Comptes rendus des Séances et Memoires de la Société de Biologique*, Series X (5): 970–972.
- Trouessart, E.L. (1898) 1899b. Diagnoses préliminaires d'espèces nouvelle de Sarcoptides plumicoles (Acar.). *Bulletin de la Société entomologique de France*, 3: 289–292, 308–311, 319–322.
- Trouessart, E.L. (1915) 1916. Révision des genres de la sous-famille des Analgesinae, ou Sarcoptides plumicoles. Bulletin de la Société zoologique de France, 40: 207–223. (December 1915, publ. March 20, 1916).