

Acarologia

A quarterly journal of acarology, since 1959
Publishing on all aspects of the Acari

All information:

<http://www1.montpellier.inra.fr/CBGP/acarologia/>
acarologia-contact@supagro.fr



**Acarologia is proudly non-profit,
with no page charges and free open access**

Please help us maintain this system by
encouraging your institutes to subscribe to the print version of the journal
and by sending us your high quality research on the Acari.

Subscriptions: Year 2022 (Volume 61): 450 €

<http://www1.montpellier.inra.fr/CBGP/acarologia/subscribe.php>

Previous volumes (2010-2020): 250 € / year (4 issues)

Acarologia, CBGP, CS 30016, 34988 MONTFERRIER-sur-LEZ Cedex, France

ISSN 0044-586X (print), ISSN 2107-7207 (electronic)

The digitalization of Acarologia papers prior to 2000 was supported by Agropolis Fondation under the reference ID 1500-024 through the « Investissements d'avenir » programme (Labex Agro: ANR-10-LABX-0001-01)



Acarologia is under **free license** and distributed under the terms of the Creative Commons-BY.

NOTE ON *HEXIDIONIS* n. g. AND *PENTIDIONIS* n. sg.

BY

P. H. VERCAMMEN-GRANDJEAN¹ and R. B. LOOMIS²

Hexidionis n. g. and **Pentidionis** n. sg. are created for two groups of trombiculid mites showing an association of very peculiar characters rather unusual for the tribe *TROMBICULINI*.

A. *Hexidionis* n.sg., has six of those characters :

1. Scutum with two kinds of punctations : one large and sparse, the other small and more dense. The AM slightly before the ALs line near the anterior margin, slightly prominent.
2. Tarsus, tibia and genu of each leg provided with numerous bars (internal sclerotized rings).
3. Parasubterminala is a short barbed seta.
4. Tibialae 1 and 2 rather short and grouped in a very apical position.
5. Genuala 2 and 3 also in a very apical position.
6. Claws provided with inconspicuous cilia (onychotriches).

B. *Pentidionis* n.sg., exhibits five outstanding characters of which some are common to those given above for *Hexidionis* :

1. Scutum as in *Hexidionis*.
2. Tarsus, tibia and genu with numerous bars as in *Hexidionis*.
3. Tibialae 1 and 2 as in *Hexidionis*.
4. Two of the genualae 1 in a very proximal position.
5. Claws provided with inconspicuous cilia as in *Hexidionis*.

Some peculiar characters are common to the two groups :

1. Presence of two long whip-like masti-setae on tarsus 3, often ciliated near base.
2. Galeala always branched.

1. Research Parasitologist, The George Williams Hooper Foundation, University of California Medical Center, San Francisco California 94122, U.S.A.
2. California State College at Long Beach, California.

Acarologia, t. IX, fasc. 1, 1967.

3. Tarsus of each leg showing often a peculiar profile (more or less sigmoid).
4. Palpo-tibial claw trifurcate and cheliceral tricuspid cap normal (no dentation).

On the other hand, the following differential characters are observed :

1. The gross palpotarsal formula, $fT = 7B.S$, in *Hexidionis* and $7B$ in *Pentidionis*.
3. Parasubterminala branched in *Hexidionis*, nude in *Pentidionis*.
3. Genuala 2 and 3 distal in *Hexidionis*, proximal in *Pentidionis*.
4. Eye lenses contiguous in *Hexidionis*, separated by some epiostracal pleats in *Pentidionis*.

The type species of the new genus *Hexidionis* is :

Trombicula (Trombicula) jessiema Gould, 1956. Eight other species are known of which three are new.

The type species of the new subgenus *Pentidionis* is :

Thrombicula agamae André, 1929, and two other species were described.

GENERIC DIAGNOSIS :

SIF = $7B$ or $7B.S-B-3-3III.2'000$. Scutum with two kinds of punctations, one large and sparse, [the other small and more dense; with convex posterior margin, and with sensillae branched on their distal half; otherwise similar to that of many *Neotrombicula*. Eyes, two pairs. Galeal setae branched. Palpal claw trifurcate. Cheliceral blade with usual tricuspid cap. Two mastitarsalae basally ciliate. Peculiarly shaped tarsi. Tarsal, tibial and genual multi-bars. Parasubterminala branched in *Hexidionis* s.g., nude in *Pentidionis* s.g. Tibialae of legs 1 and 2 apical. Leg claws and empodia with cilia (onychotriches).

SUBGENERIC DIAGNOSIS :

a) *Hexidionis* : SIF = $7-B.S.-B-3-3III.2'000$. Leg genuala 2 and 3 inserted distally. Parasubterminala short and branched. Eye lenses contiguous. America; rodent parasites.

Type species : *Hexidionis (Hexidionis) jessiema* (Gould, 1956).

b) *Pentidionis* : SIF = $7B.S-B-3-3III.2'000$. Two of the genualae 1 are proximal, leg genuala 2 and 3 proximal. Nude parasubterminala. Eye lenses separated by epiostracal pleats. North Africa; on rodents, birds and reptiles.

Type species : *Hexidionis (Pentidionis) agamae* (André, 1929).

The genus *Hexidionis* is morphologically close to the genus *Neotrombicula*.
