

*WHARTONIA PACHYWHARTONI* n. sp.,  
AN EXTRAORDINARY PARASITE OF A BRAZILIAN BAT.  
(LEEUEWENHOEKIIDAE — ACARINA) <sup>1</sup>

BY

P. H. VERCAMMEN-GRANDJEAN <sup>2</sup>

Six specimens of *Whartonia pachywhartoni* n. sp. were collected from the wings of a *Micronycteris megalotis*, captured by Mr. G. SCEVA, in Lagoa Ltd., Brazil, 10 April, 1962.

What is astonishing at first glance is the exceptional sclerotization of this unusually large species (Ip = 1342). Leg and palp segments and other parts of the gnathosome have fairly thick walls and little medullary space (fig. 8 = cross-section of tarsus I, see fig. 5). The gnathosome is also remarkable, as it has a very different mechanism from that of other mites. The galea is considerably developed and its dorsal flap does not cap the external apophysis of the chelobase articulation, as is customary. In fact, in this species, the external apophysis remains free, but the internal one is capped by the chelobase itself. This chelobase is strong, wider than long, with a concave anterior shoulder within which the large galeal flap articulates (figs. 1, 2 & 3). The two "chelostyles" \* are notable for their elegant shape. Body setae are stout and stiff (figs. 4 & 9).

Description of *Whartonia pachywhartoni* n. sp.

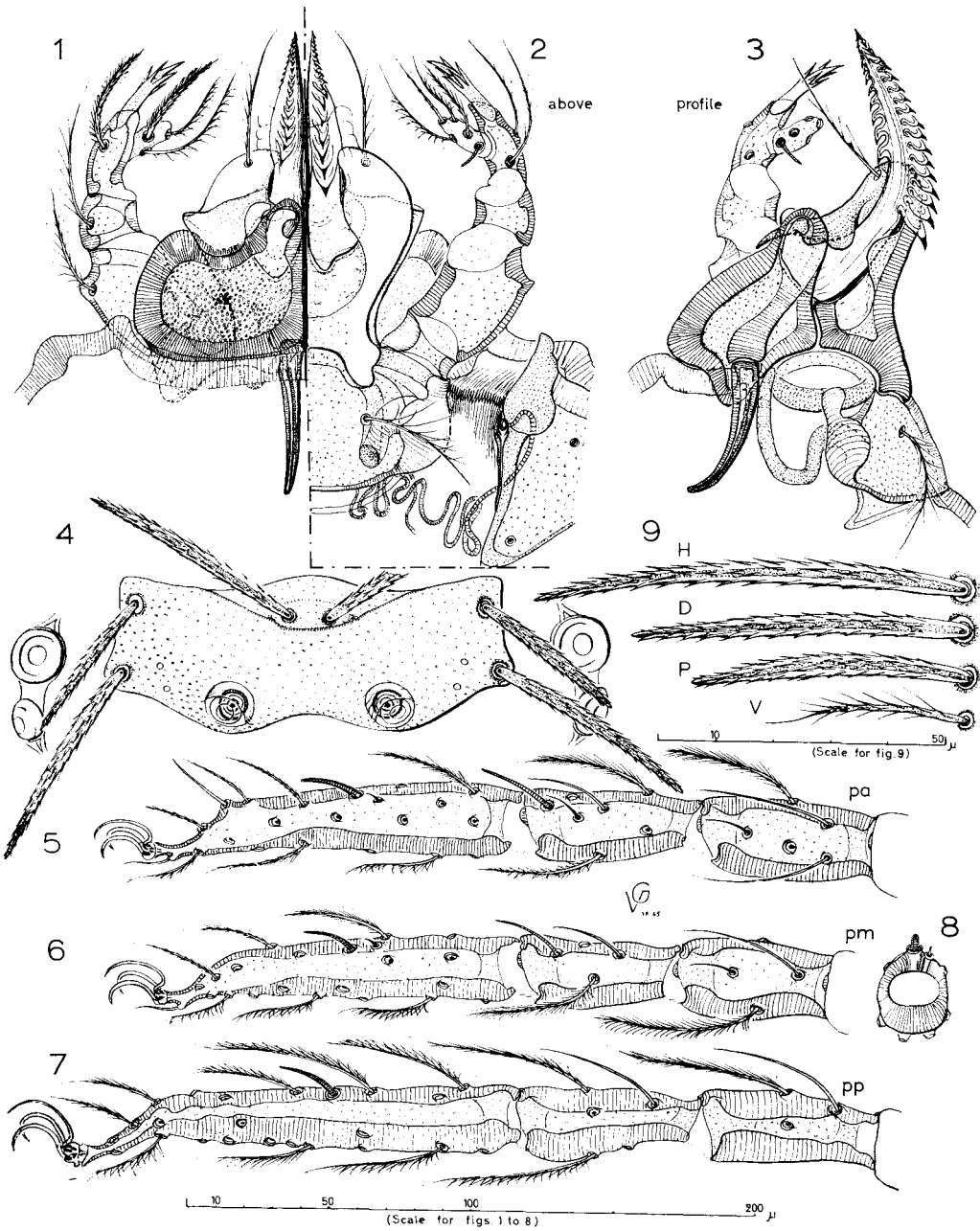
- a) *Host* : *Micronycteris megalotis* (n° 4265, 4671, 4672).  
*PT* : pteri-patagium.  
*Loc.* : Lagoa Ltd., Brazil.  
*Date* : 10 April 1962.  
*Type material* : Holotype n° 10462/6, in the U.S. Nat. Mus., Washington D.C., U.S.A.
- b) SIF = 7B-B-6-2111.S<sup>3</sup>000 and fPp = (B)-(B)-(B).B.B.  
(ST, PT' & PT'') = N and pST = B ; fsp = 6/6/6.

1. This work was supported by Research Grant AI-03793 from the National Institute of Allergy and Infectious Diseases, National Institutes of Health, U.S. Public Health Service.

2. Research Parasitologist, the G. W. Hooper Foundation, University of California Medical Center, San Francisco, California, 94122, U.S.A.

\*. See Note 3, p. 285, of this volume.

Whartonia pachywhartoni n.sp.



fCx = 2/1/2 and fSt = 0/2 ; fBT = b-b-b.

fD = 2H + (6.10).10.10.8.6.6.4.2 = 64

fV = 4.10.12.10.10.10.8.6.4 = 84 and NDV = 64 + 84 = 148.

|    |     |     |    |     |     |    |    |    |    |    |   |    |       |    |       |     |     |     |      |
|----|-----|-----|----|-----|-----|----|----|----|----|----|---|----|-------|----|-------|-----|-----|-----|------|
| AA | AW  | PW  | SB | ASB | PSB | SD | AP | AM | AL | PL | S | H  | D     | P  | V     | pa  | pp  | pm  | Ip   |
| 14 | 123 | 134 | 54 | 46  | 8   | 54 | 24 | 83 | 57 | 79 | ? | 74 | 59/53 | 48 | 35/40 | 449 | 424 | 469 | 1342 |

- c) *Obs.* : Species of large size, Ip = 1320 to 1360. Body setae numerous (NDV = 148), thick and stiff, covered with short barbs (fig. 9, H, D & P) ; antero-ventral setae slender and with long, thin branches (fig. 9, V). Stigmata and trachea are visible, although the stigmata is somewhat inconspicuous in the antero-margin of the coxa 1 (fig. 2). Neosomic ectostracal thickenings are observed.

1 — *Scutum* : (fig. 4), Sub-rectangular, much wider than long (PW > 5 AP), punctations conspicuous, normal in density. Sensillae missing ; sensillary bases near postero-margin and well apart. Scutal setae thick and stiff, covered with numerous, short barbs ; AM > PL > AL. Two large eyes on each side of scutum.

2 — *Legs* : (figs. 5, 6, 7 & 8), Long and strongly sclerotized. pST branched (leg 1, fig. 5). Two leg genualae 1 (ga = 2), both inserted near base of segment. Famuli on tibia 1 and genua 1 and 2, long and slender. Genualae and tibialae of all legs, also long and slender. One solenidion on leg tarsus 3 (S<sup>3</sup>), no famulus.

3 — *Gnathosoma* : (fig. 1, 2 & 3), Peculiar and powerful. Elongated palps but compact chelobase. Galea strong, partly ensheathing the "chelostyle" (fig. 3) ; galeala branched. Chelostyle with numerous hook-like teeth on ventral as well as on dorsal edge (fig. 3). Palpotibial claw with 6 sharp prongs. Palpotarsus with habitual basal solenidion (internal) and 7 branched setae (fT = 7B).

I thank here heartedly Dr. Barbara LAURENCE, Curator of mammals of the Museum of comparative zoology, Harvard University, Cambridge (Massachusetts), for allowing me to inspect certain specimens under her supervision.

## BIBLIOGRAPHY

- (1) VERCAMMEN-GRANDJEAN (P. H.), 1965. — "*Whartonia lepidopteriscuta* n. sp., a noteworthy parasite of an African bat (Acarina — Leeuwenhoekiiidae)", *Acarologia*, 7, suppl., 325-328.
- (2) VERCAMMEN-GRANDJEAN (P. H.), WATKINS (S.) & DEBLAUWE (C.), 1965. — "Revision of *Brennanella* Radford, 1954 (Acarina — Leeuwenhoekiiidae)", *Acarologia*, 7, suppl., 329-335.
- (3) VERCAMMEN-GRANDJEAN (P. H.), WATKINS (S. G.) & BECK (A. J.), 1965. — "Revision of *Whartonia glenni* Brennan, 1962, an american bat parasite (Acarina — Leeuwenhoekiiidae)", *Acarologia*, 7, 492-509.