ON THE CUBAN SPECIES OF THE GENUS *SPELAEORHYNCHUS* (ACARINA)

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More than a thousand of bats belonging to 19 species were examined during the investigation of external parasites of Cuban bats by the workers of the Czechoslovak and Cuban Academies of Sciences in 1964-1967. The mites of the family Spelaeorhynchidae were collected only from *Artibeus jamaicensis parvipes* Rehn in the following localities :

26 females in Cueva del Indio, Tapaste, Prov. of Havana, 24.5.1965 ; 11 females in Cueva del Cayame, Punta del Este, Isla de Pinos, 26.6.1965 ; 1 " young " female and 21 adult females in Soroa, Prov. of Pinar del Rio, 19.8.1965 ; 1 " young " female and 7 adult females in Cueva Bonita, Sierra Cubitas, Prov. of Camagüey, 29.10.1965 ; 21 females in Cueva de los Cayames, Punta del Este, Isla de Pinos, 17.1.1966 — all lgt. V. ČERNÝ, F. DUSBÁBEK and J. DE LA CRUZ.

From this material only *Spelaeorhynchus praecursor* Neumann, 1902 was determined. About 44 % of bats of the species *Artibeus jamaicensis parvipes* Rehn were parasitized by this mite with average intensity 3.3, from 1 to 9 specimens per host.

The species *Spelaeorhynchus praecursor* Neumann, 1902 has been recorded from Cuba already by PÉREZ VIGUERAZ (1956), FAIN & AL. (1967) and DUSBÁBEK (1970), mentioned also by SILVA TABOADA (1965). In 1958 SANTOS DIAS designated as a new species, *Spelaeorhynchus cubanus*, the material of mites deposited in the Museum of Hamburg. This material originates from Cuba (mountains near Guisa, C. Bayamo), but the host is unknown. This species was separated from *Spelaeorhynchus praecursor* Neumann, 1902 on the basis of the pointed posterior margin of dorsal shield and the presence of a blunt chitinized projections on coxa I-III.

By courtesy of Miss Dr. G. RACK from the Museum of Hamburg I was able to study the paratype material of *Spelaeorhynchus cubanus* Santos Dias, 1958 from the collection of this Museum. The material was originally preserved in alcohol, one female was later prepared in a microscopic slide by Dr. C. E. YUNKER, one female and one nymph by me during this study. The paratype material consists of four females of *Spelaeorhynchus praecursor* Neumann, 1902, which fully correspond with those from our material and the redescription and measurements of species done by FAIN & AL. (1967). One nymph is also present in this material. In uterus of one female a larva may be clearly distinguished.

FAIN & AL. (1967) characterized also the " young " female of *S. praecursor* which differ from adult females by the presence of ambulacral suckers on tarsi, by smaller idiosoma and incomplete sclerotization of some chitinized parts, specially of coxae. In this specimens only the posterior margins of coxae are strongly chitinized in a lobe-shaped band (Fig. 4-5) which may be in alco-

holic material or slightly clarified specimens considered as projections mentioned by SANTOS DIAS (1958) for *S. cubanus* and also by FONSECA (1937) for *S. latus* Banks, 1917 (= *S. praecursor* Neumann, 1902). In one female from the paratype material of *S. cubanus* (the female with larva in uterus) the coxae are incompletely sclerotized and on the tarsus of the left leg IV an ambulacral sucker may be observed, but the opisthosoma measures 1704 × 1512 μ as in adult females of *S. praecursor*, which may be due to its gravidity.

The posterior margin of dorsal shield in females from the paratype material of *S. cubanus* is rounded, but in some females of *S. praecursor* from our material (and probably also in holotype of *S. cubanus*) is slightly pointed. I consider this feature only as a scutal variability.

For all these reasons it is necessary to conclude, that *Spelaeorhynchus cubanus* Santos Dias, 1958 is no more than a synonym of *Spelaeorhynchus praecursor* Neumann, 1902.

Because in the genus *Spelaeorhynchus* only the females are known, I present here the description of a nymphal stage from the paratype material of *Spelaeorhynchus cubanus*, deposited in the Museum of Hamburg :

Nymph : The specimen is in a very poor condition. Length of idiosoma (including gnathosoma) 969 μ, width 765 μ. The body only weekly sclerotized.

Dorsum (Fig. 1) : Dorsal shield distinguishable with difficulty, weekly sclerotized. It is 602 μ long, 494 μ wide and appears to be divided by transverse furrow in the posterior half.

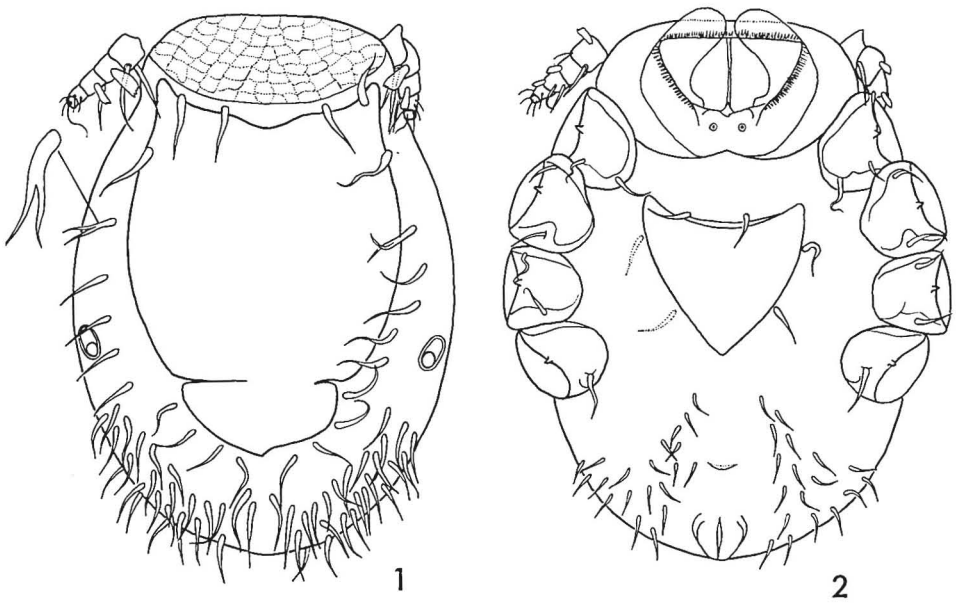

FIG. 1-2 : *Spelaeorhynchus praecursor* Neumann, 1902, nymph.
1. — Dorsal view ; 2. — Ventral view.

Two pairs of setae anteriorly to the shield, ten pairs of setae surrounding the shield laterally and posteriorly. The first pair of lateral setae situated on the shield, the second pair distinctly bifurcated and situated on the integument. Opisthosoma bears 25-28 pairs of setae. All dorsal setae very long (70 μ-98 μ) and stout (5 μ-8 μ), without circular basis, smooth. The lateral

opisthosomal setae are the shortest, the median opisthosomal setae the longest. Peritreme situated at the level of anterior margin of coxa IV, 67 μ long and 32 μ wide.

Venter (Fig. 2) : Sternal shield triangular, with concave anterior margin, without pores. Three pairs of sternal setae. Opisthosoma with 18-20 pairs of setae, which are 47 μ-59 μ long. Anal pore situated terminally, the adanal setae and platelets indistinguishible. Genital aperture not yet open, discernible only as a short transverse furrow.

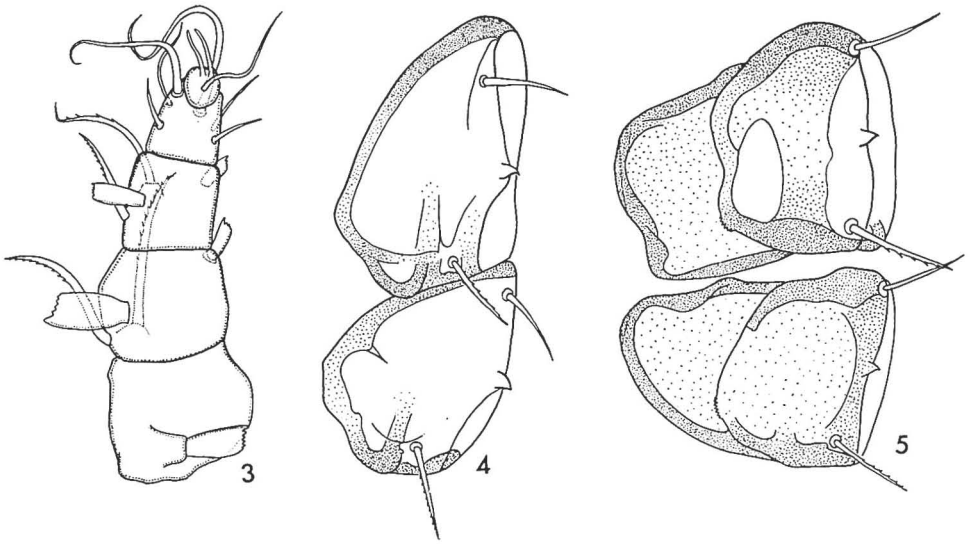

FIG. 3-5 : *Spelaeorhynchus praecursor* Neumann, 1902.
3. — Left palp of nymph ; 4. — Coxa II and III of " young " female ;
5. — Coxa II and III of adult female.

Gnathosoma : The maximal width of gnathosoma is 339 μ, the width of mouth 251 μ. Gnathosoma dorsally with a distinct network pattern, ventrally without setae, only with one pair of pores. Internal gnathosomal spinelets barbed, pointed, bi- or trifurcated. Palpae similar to those of female (Fig. 3), but the fifth segment is very small. In the studied specimen the chelicerae are absent.

Legs : Coxae only weekly sclerotized, the coxal setae smooth. Only both tarsi on legs IV and left tarsi on legs I and III are preserved in the studied specimen, all without ambulacral suckers.

SUMMARY.

Only *Spelaeorhynchus praecursor* Neumann, 1902 was determined from the big material of spelaeorhynchid mites collected from Cuban bats. The species *Spelaeorhynchus cubanus* Santos Dias, 1958 is synonymized with *Spelaeorhynchus praecursor* Neumann, 1902 on the basis of the study of paratype material of *Spelaeorhynchus cubanus* Santos Dias, 1958 from the collection of the Museum of Hamburg. The nymph from this material is also described.

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