

Research Note

STUDY ON THE PERITREME OF THE FEMALE OF *VARROA JACOBSONI* OUD., 1904 (ACARI, MESOSTIGMATA)

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Emergent peritremes are primarily known from Prostigmatid mites: *Pimeliaphilus* sp. (Pterigosomatidae), Cheyletidae and Anystidae (Vitzthum, 1943), Trombidiidae (Baker and Wharton, 1952) and some genera of Tetranychoida (Krantz, 1978).

Such peritremes have not yet been reported from the Mesostigmata, although Krantz' (1978) figure of *Heterozercon* sp. suggests their presence in one member of the Heterozerconidae, found in Florida, U.S.A.

In this note the presence of emergent peritremes is reported for the female of *Varroa jacobsoni* Oudemans, 1904 (Varroidae, Mesostigmata) (Figs. 1 and 2).

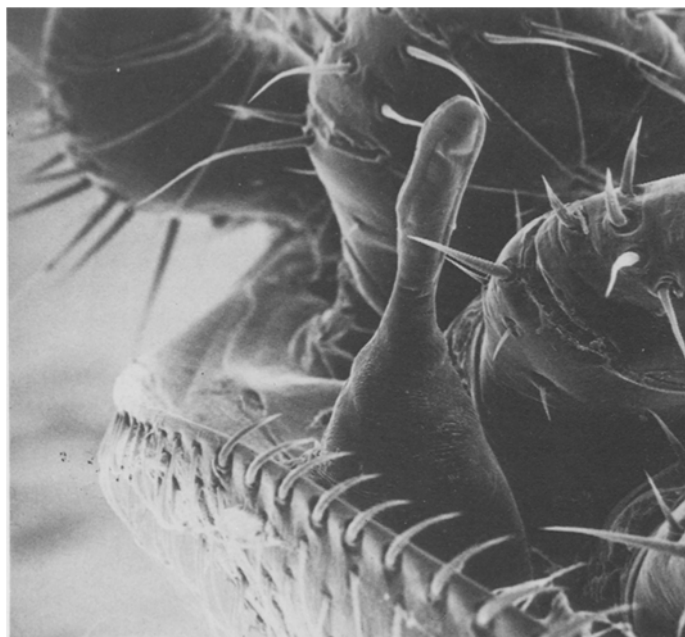


Fig. 1. Lateral aspect of female of *Varroa jacobsoni*, region of legs III and IV, showing emergent peritreme (S.E.M., 260 \times).



Fig. 2. Detail of the peritreme of *Varroa jacobsoni*, showing its retrorse distal portion (D.I.C., 420 \times).

The stigma is situated on the usual place between the (so-called) coxae III and IV, while the peritreme occurs largely on the ventral surface of the appendage but bends dorsally anteriorly (Akimov and Yastrebčov, 1984).

Such peritremes, protruding from the lateroventral body wall of the mite, may have the following functions: on the one hand the peritremes function as plastrons (Hinton, 1975), ensuring that respiration continues should the mite be accidentally immersed in liquid; on the other hand they act as buoyancy organs when the mite is in the liquid food of the host larva (on which the female mite floats upside down) before the liquid is consumed by the honey bee.

ACKNOWLEDGEMENTS

We thank Firma Carl Zeiss/Oberkochem for their help with optical instruments.

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