

SEM OBSERVATIONS ON *PYEMOTES VENTRICOSUS* (PROSTIGMATA: PYEMOTIDAE) REMOVED FROM SOME OLD FRAMES.

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INTRODUCTION

Pyemotes ventricosus is a mite parasiting larvae of insects, above all o *Anobiidae* beetles, the so-called "woodworms". It is often found living free in house with old furniture and in those places it frequently causes serious dermatitis in humans (1-6). In this study, some specimens of *P. ventricosus* were observed from the morphological aspect.

MATERIALS AND METHODS

Mites were revealed through a direct exanination of the environmental dusts, affected by a saturated solution of NaCl on dust samples removed from some old frames; these were parasited by *Oligomerus ptilinoides*, beetles of which *P. ventricosus* is a parasite. The isolation of the mites was carried out by means of microneedles. The specimens were prefixed in glutaraldehyde for 24 hours, washed with 0.1 M phosphate buffer, ph 7.2 for 6 hours, postfixed with 1% OsO₄ for 3 hours, dehydrated with alcohol growing series, immersed in amyl acetate, critical-point dried, sputtered with 200A of gold, observed by Philips 501/B SEM. Photographs were taken in the Centro Universitario di Microscopia Elettronica di Perugia.

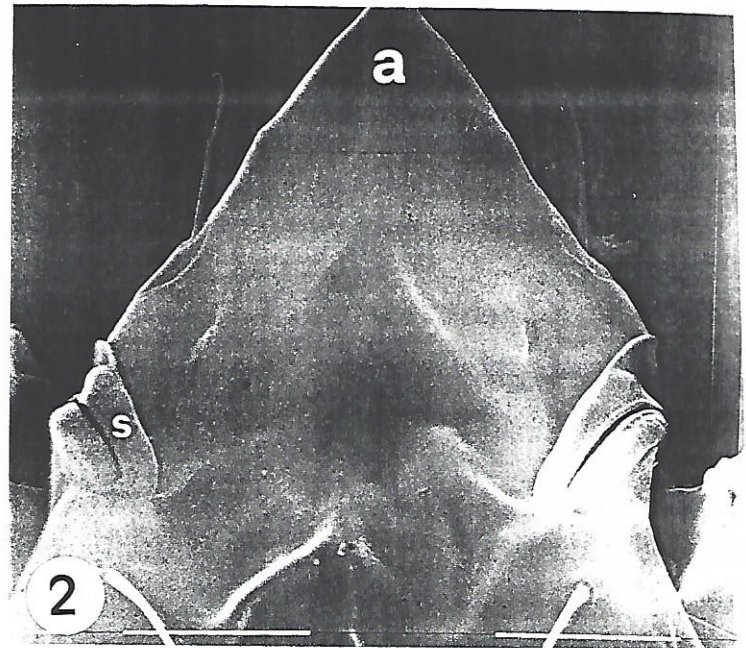
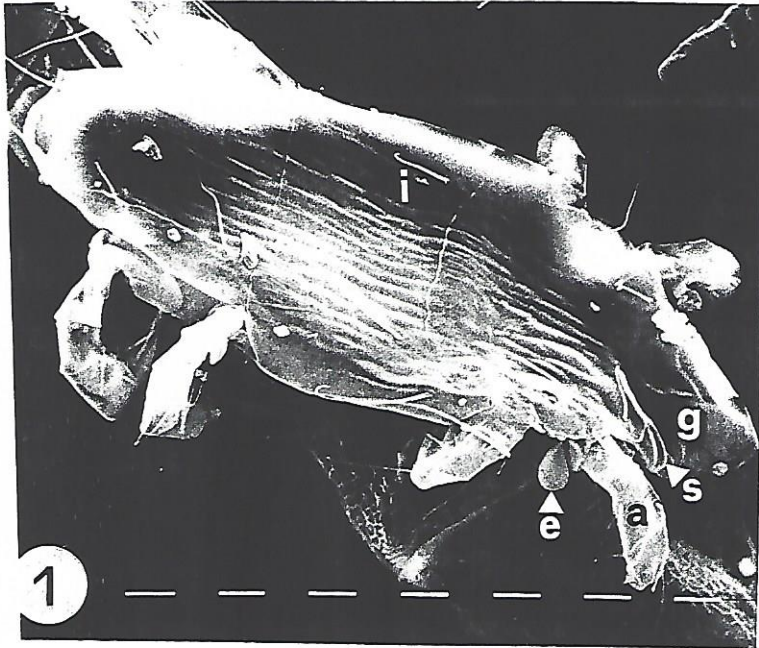
RESULTS

P. ventricosus has an elongated idiosoma with two hind legs at the level of the terminal part of hysterosoma, at a clear distance from the fore legs (Fig.1). On the sides of the propodosoma, between the fore legs, there are two big pear-shaped sensilla protuding laterally, typical of *Pyemotidae* mites (Fig.1 e). The gnathosoma appears covered by the propodosomal cuticle to form a hood protecting the chelicera (Fig.2a). These appear joined in a rigid everted needle-shaped structure. Although the gnathosoma is not clearly distinguishable dorsally from the rest of the idiosoma, a deep furrow separates it ventrally from the propodosoma (Fig.3). Laterally there are two slit-shaped respiratory spiracles, located well ahead, typical characteristic of Prostigmata mites (Fig.2s). The legs end with two curved claws, greatly developed (Fig.4u).

CONCLUSIONS

P. ventricosus is a mite morphologically protected by the dorsal cuticular structure of idiosoma and has ambulacral structures enabling it to more quickly on the ground and to penetrate easily into the tunnels dug by woodworms. Its presence in old furniture and its capacity of stinging humans

represent a risk for all them who deal with restoring those materials.



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