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The surface integument ultrastructure of <u>Stylocellus</u> <u>silhavyi</u> Rambla 1988 (Opiliones, Cyphophthalmi, Stylocellidae)

<u>Summary.</u>-The Cyphophtalmid integument is very rigid, and rich in cutaneous structures, that are sensory or secretory and others purely ornamental with a systematic value due to its form, size, numbers, distribution and function. The recent application of SEM in the Sironids, revealed a pattern ornamentation that includes different types of hairs, grains, spines, solenidions, nipples, teeth and groves or pores.

Ultrastructures of the surface integument of the species <u>Stylocellus</u> <u>silhavyi</u> Rambla, 1988, are studied here and compared to the already known Sironids. The results are illustrated in the four plates of ten pictures briefly presented here:

A) <u>The Body</u>. It is not totally nippled as in the Sironids. The unnippled zones are not smooth like it has been said. On the contrary, they have a polygonal structure resembling the cellular limits of the juvenile states with three levels of granulation in every polygone. Riddle plates, sensory hairs and glandular pores are dispersed on the surface. The ozophores are covered by elongated narrow nipples and by an oval plug on its apical end. Towards the end of the abdomen the polygons begin to diminish and the surface appears spinulated.

B) <u>The appendages</u>. All have pointed nippled tarsi and metatarsi. Its surface is spinulated and cellular limits are still visible. Adenostyle is covered by spinulated plates at the base and smooths towards its apical end, with a brush of apical setae. An elongated plate with spinulated like-scales, that could be a stridulatory organ, is visible in the front of the adenostyle.
C) <u>Genitalia</u>. The penis is spinulated. In each of three central setae towards the apical end, we find a formation that could be part of the setae, or an external body. The last joint of the ovipositor is covered by imbricated like-scales spinulated in the superior border.

Integument in juvenils is smooth with visible cellular limits, so the genesis of the adult structures are the same as in the Sironids. Even though, the development is different, since the surface ornamentation is richer, but on the contrary the persistance of cellular limits and the scarcity of nipples in the surface of the body in the adult, are reminescent juvenil characteristics. The results suggest that ultrastructural studies could be useful in phylogenic analysis.