

SPIRACLES OF 5TH INSTAR NYMPHS IN SIX SPECIES OF TRIATOMINAE (HEMIPTERA, REDUVIIDAE) USING SCANNING ELECTRON MICROSCOPY

JOÃO ARISTEU DA ROSA; JOSÉ MARIA SOARES BARATA* & NILSO BARELLI**

Faculdade de Ciências Farmacêuticas, UNESP, Caixa Postal 502, 14801-902 Araraquara, SP, Brasil

*Faculdade de Saúde Pública, USP, Av. Dr. Arnaldo, 715, 01246-904 São Paulo, SP, Brasil

**Instituto de Química, UNESP, Rua Prof. Francisco Degne, s/no, 14800-900 Araraquara, SP, Brasil

According to Corrêa, (R. R. Corrêa, 1954, *Folia Clin. Biol.*, 22: 23-50) nymphs of Triatominae have two (1+1) spiracles per segment, present from the 2nd to the 8th sternites and in the 1st tergite under the proto-wing. The present paper describes the spiracles situated in the 7th and 8th sternites of 5th instar nymphs in six species of Triatominae.

Panstrongylus megistus; *Triatoma brasiliensis* and *T. matogrossensis* – In these species, the "filter apparatus" (R. E. Snodgrass, 1935, *Principles of insect morphology*, McGraw-Hill Book Company, Inc., New York and London, p. 439) in the spiracles is filled with simple and composed spines (Figs 1, 3, 5).

Rhodnius neglectus – The 8th sternite spi-

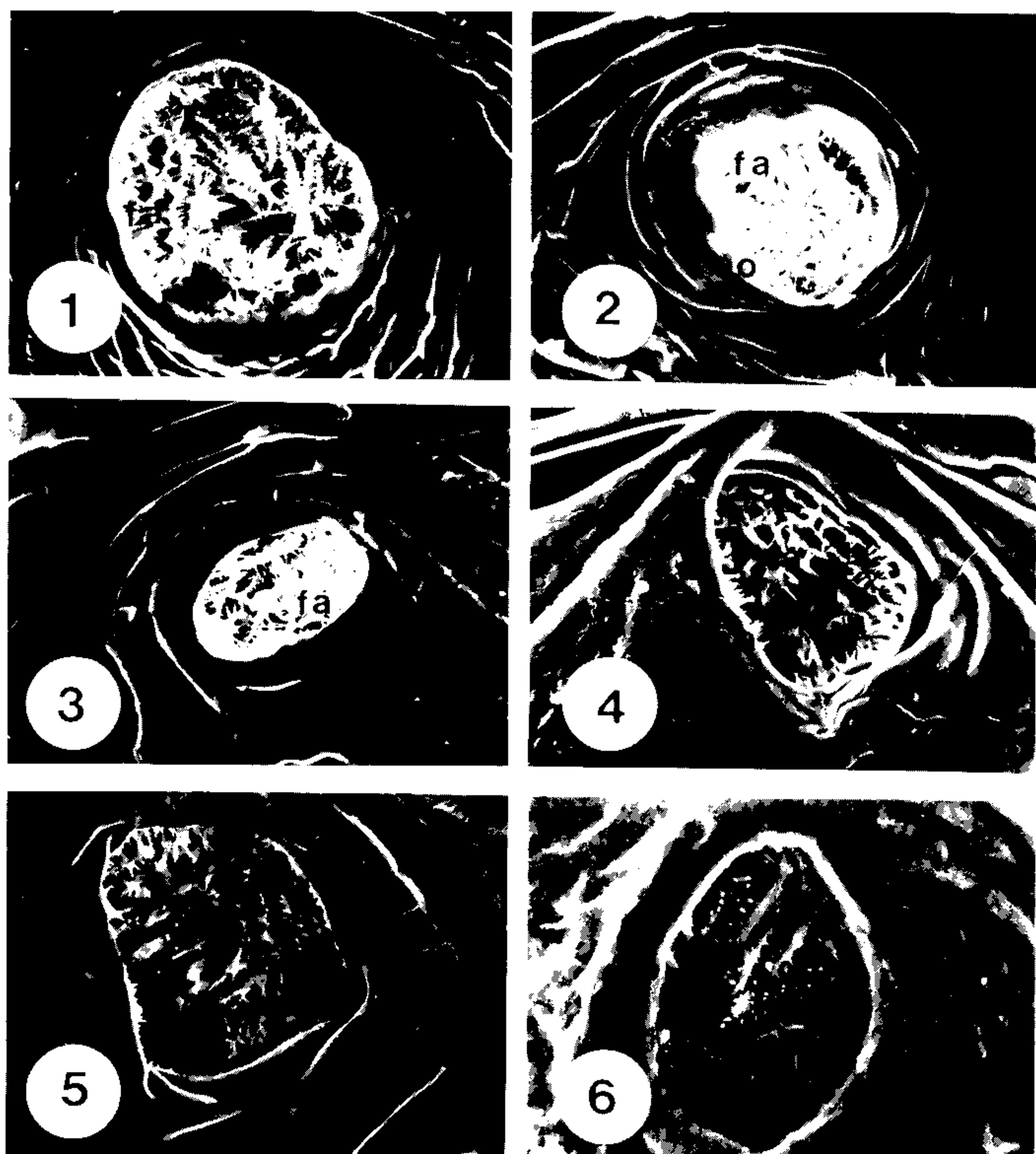
racle presents just simple spines filling in the filter apparatus (internal part of entry) (Fig. 2).

Triatoma infestans – The filter apparatus in the 7th sternite spiracle is filled with simple and ramified flat spines (Fig. 4).

Triatoma tibiamaculata – Simple and composed spines do not totally fill in the filter apparatus in the 7th sternite spiracle (Fig. 6).

The "atrial orifice", (R. E. Snodgrass, *loc. cit.*) is slightly irregular, the shape varying between round and oval (Figs 1 to 6).

Triatominae's spiracles differ from *Metacuterebra apicalis* (Diptera, Cuterebridae) spiracle (A. C. R. Leite & P. Williams, 1988, *Mem. Inst. Oswaldo Cruz*, 83: 493-507).



Spiracles of 5th instar nymphs – SEM (fa = filter apparatus; ao = atrial orifice). Fig. 1: *Panstrongylus megistus*, 7th segment (800X). Fig. 2: *Rhodnius neglectus*, 8th segment (1000X). Fig. 3: *Triatoma brasiliensis*, 8th segment (800X). Fig. 4: *T. infestans*, 7th segment (1000X). Fig. 5: *T. matogrossensis*, 8th segment (1000X). Fig. 6: *T. tibiamaculata*, 7th segment (1000X).