

EVIDENCE OF ALAE IN *AELUROSTRONGYLUS ABSTRUSUS* LARVAE EXAMINED BY SCANNING ELECTRON MICROSCOPE (SEM)

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Summary :

Aelurostrongylus abstrusus larvae lateral alae, previously noticed in cat lung sections, are described by SEM in larvae found in the faeces of an infected cat.

KEY WORDS : *Aelurostrongylus abstrusus*, larvae, lateral alae, SEM.
MOTS CLES : *Aelurostrongylus abstrusus*, larves, ailes latérales, SEM.

Résumé : DESCRIPTION DES AILES LATÉRALES DES LARVES D'*AELUROSTRONGYLUS ABSTRUSUS*

Les auteurs décrivent au microscope électronique à balayage les ailes latérales des larves (L1) d'*Aelurostrongylus abstrusus* recueillies dans les selles d'un chat, précédemment observées au microscope optique par l'un des auteurs dans des coupes transversales de larves pulmonaires du nématode.

In the larvae L1 of *Aelurostrongylus abstrusus* (Nematoda, Metastrongylidae), observed in sections of cat lung, Pampiglione *et al.*, 1990, reported the existence of slim lateral alae. These alae had gone unnoticed by the authors who studied the worm before.

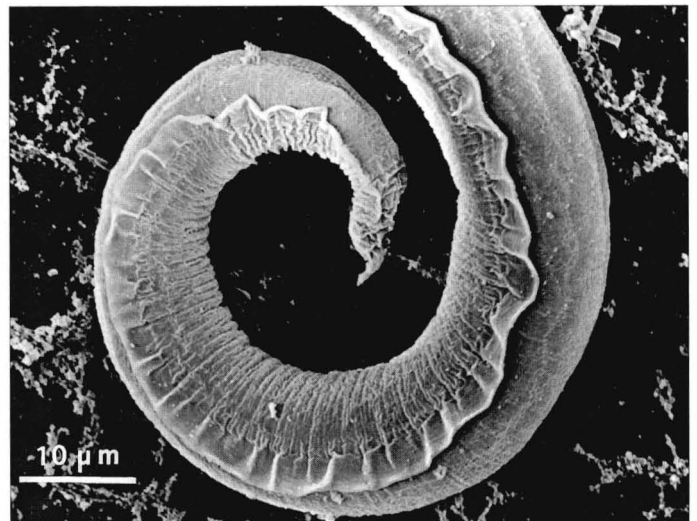
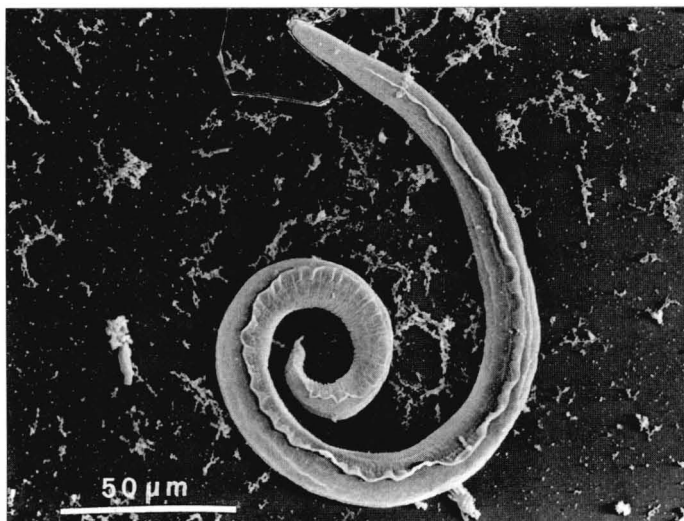
We now completed our first report examining by SEM L1 found in the faeces of an infected cat. Specimens were fixed in glutaraldehyde in 0.1 M cacodylate buffer, pH 7.2, placed on cover slip treated with poly-lysine hydrobromide and then performed according to SEM usual methodology.

Figs. 1 and 2 illustrate the results. The slim lateral alae may be noticed really occurring along almost all the lateral wall of the larva, starting from about μm 25

from the cephalic extremity and ending nearly at the caudal extremity. The ala measures about μm 0.45 in thickness and μm 3 in width. The edge of the ala is slightly waved along all the length. The cuticular surface beyond the ala, in the ventral surface, shows fine transverse striations, more evident than on the dorsal surface probably due to the curving of the nematode body. In whole larvae, the alae are scarcely detected under light microscopy. Because of their slimness they flatten indeed, easily collapsing on the cuticular surface. This is why they had gone unnoticed by the authors who studied these larvae before but, on the contrary, they are evident under light microscope in histological sections both of cat lung and of larvae collected in the faeces, after paraffin embedding, colouring and transversal sectioning (Fig. 3).

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Figs. 1-2. – SEM. Larva (L1) of *Aelurostrongylus abstrusus* showing lateral ala.

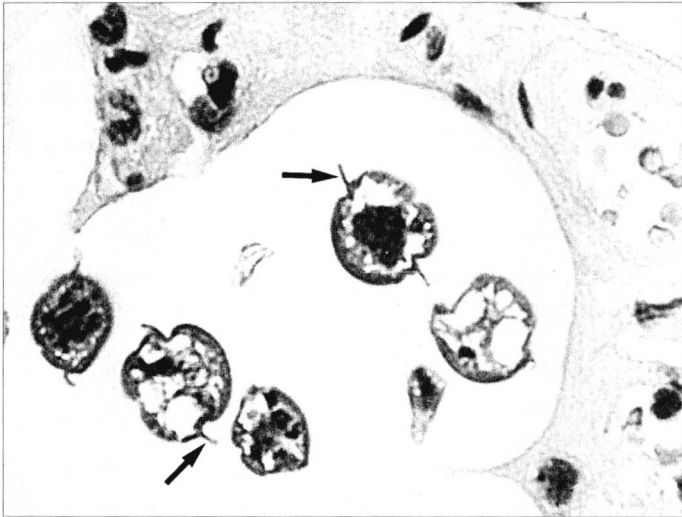


Fig. 3. — Light microscope. Transversal sections of larvae (L1) of *Aelurostrongylus abstrusus* (arrows) in cat lung (from $\times 1250$, oil immersion H&E).

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