

"Cotton shrimp" disease in the freshwater shrimp *Palaemonetes argentinus* from La Plata, Argentina.



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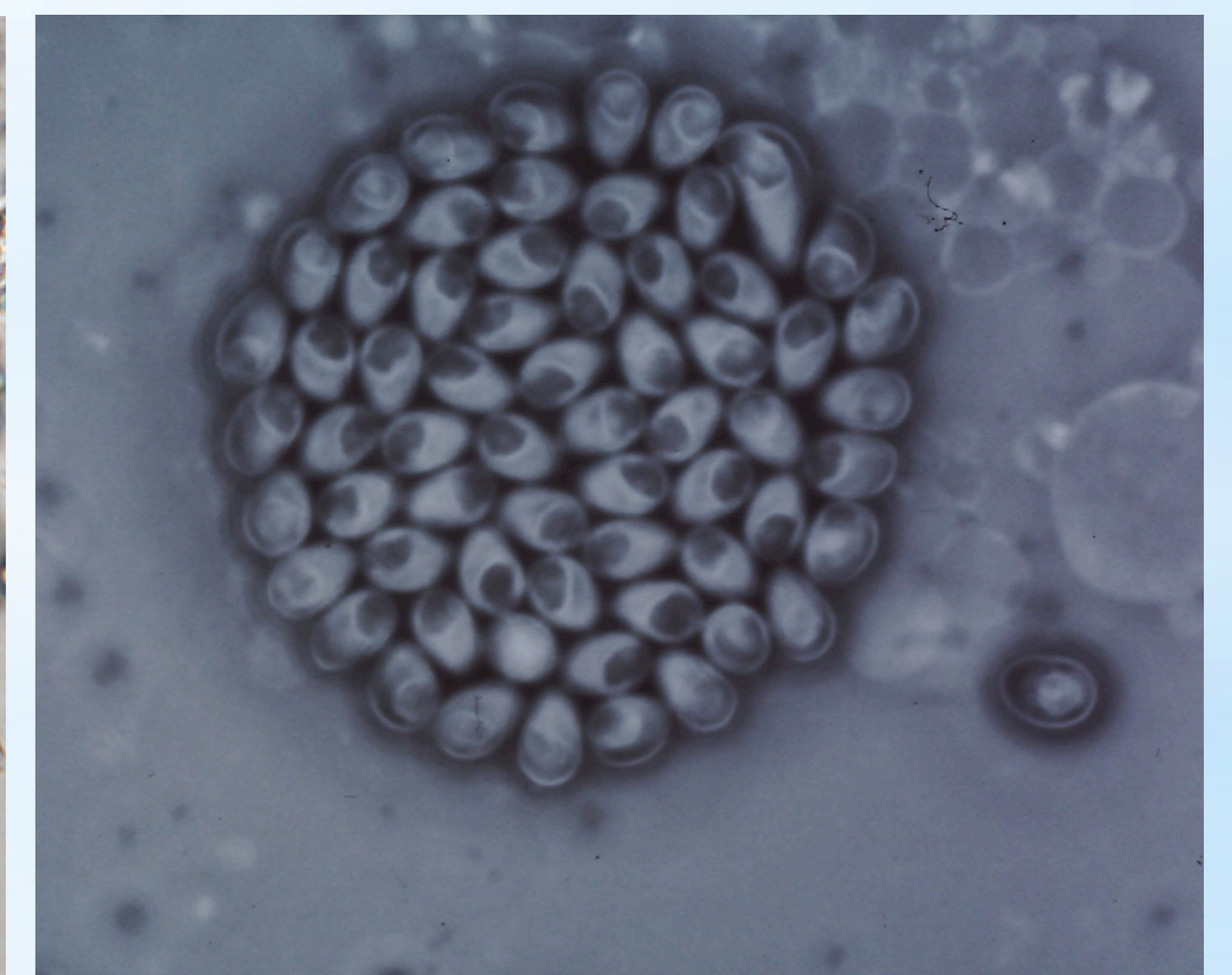
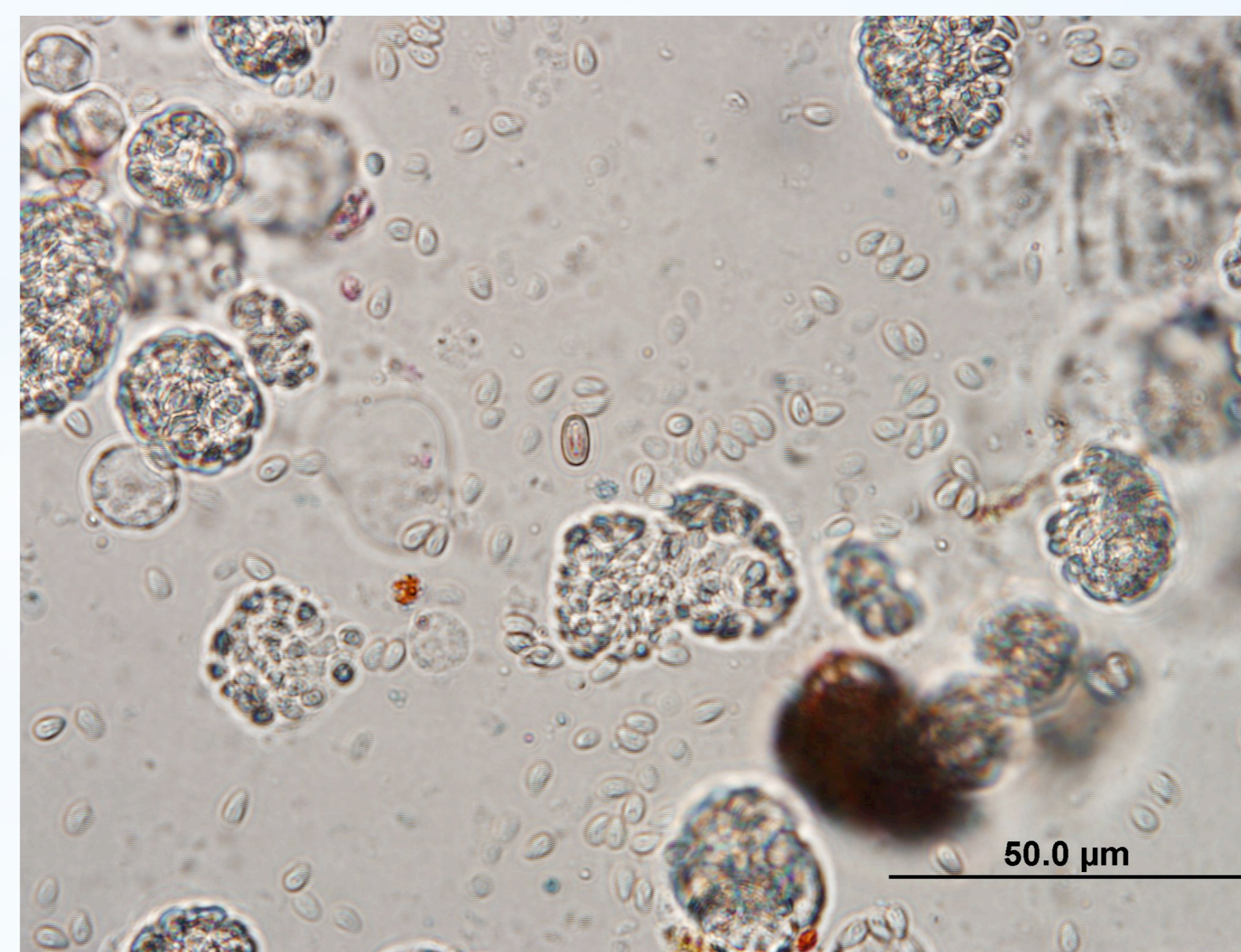
Palaemonetes argentinus is one of the most common palaemonidae shrimp in the freshwater environmental of Argentina and from many years has been studied for parasites and pathogens.

In a temporary pond from La Plata we found specimens with microsporidian. Infected shrimp showed a whitish coloration with the typical "cotton shrimp" aspect.



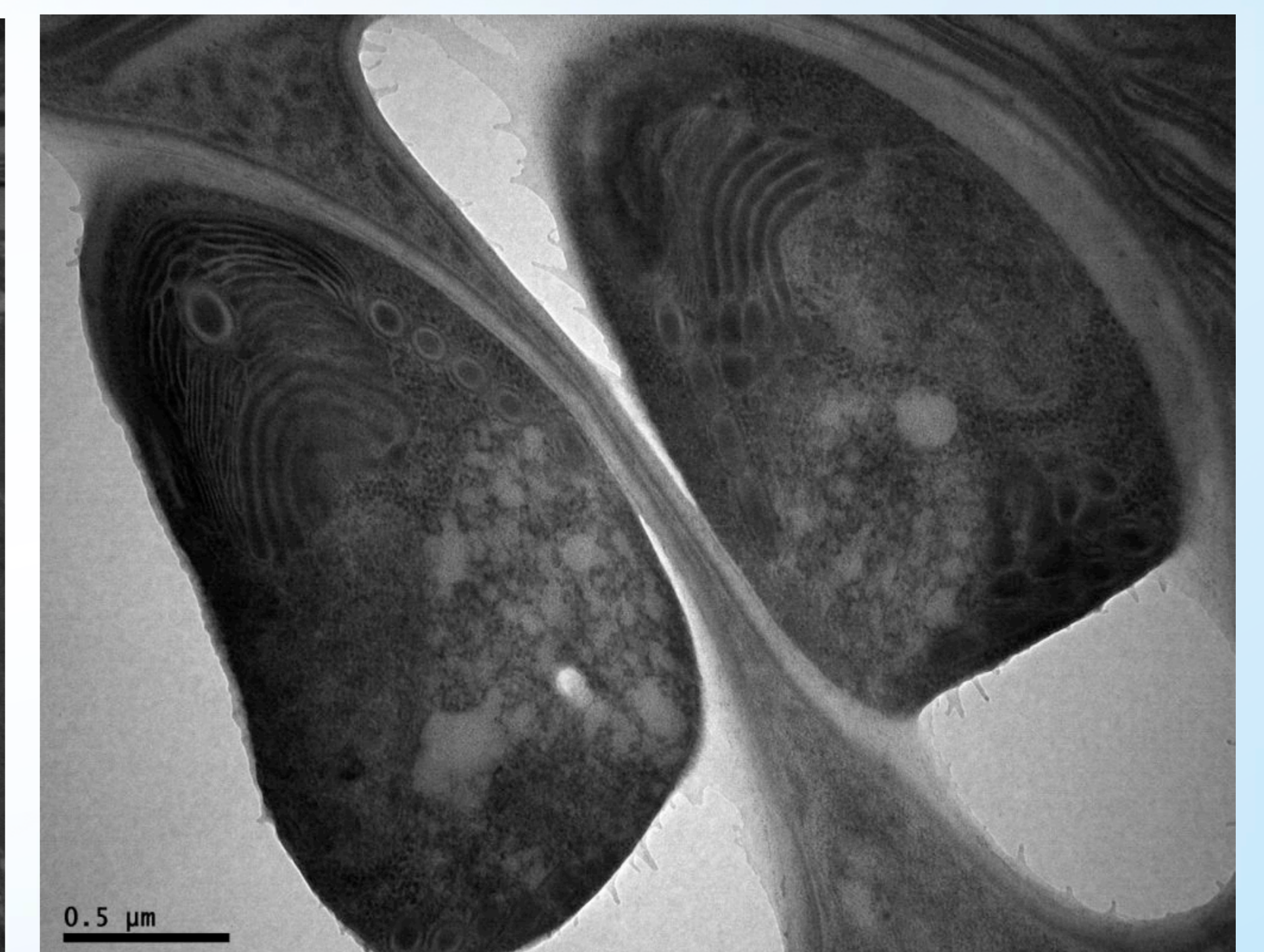
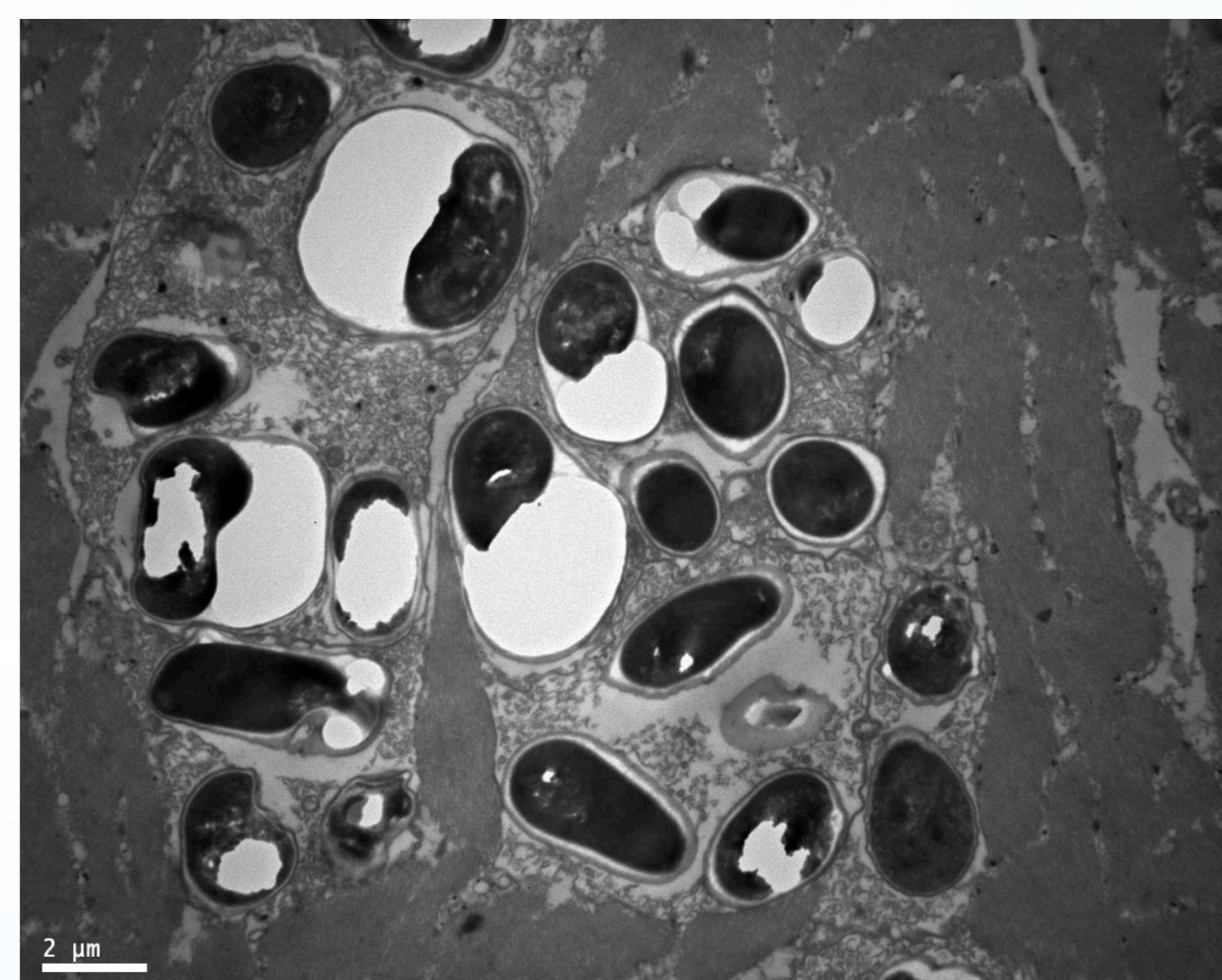
wet mount sporophorous vesicles

The infection was recorded as spore masses embedded in the skeletal muscle. Sporophorous vesicles filled with a large number of mature spores. Unfixed spores measured 4.4 ± 0.3 (4.02 – $4.99 \mu\text{m}$) \times $2.9 \pm 0.2 \mu\text{m}$ (2.52 – $3.33 \mu\text{m}$) in size.



Spores under TEM

Under TEM spores were pyriform in shape. The polar tube consists of a straight shaft and a coiled region (11–14 coils) arranged in many rows along the inside periphery of the spore. The polaroplast consisted of an anterior region of closely and loosely packed membranes.



According with this features the microsporidian found in *P. argentinus* seem to belong to *Pleistophora*. More studies of the developmental stages will be necessary for the final identification. This is the third microsporidian reported from decapods crustaceans in Argentina.