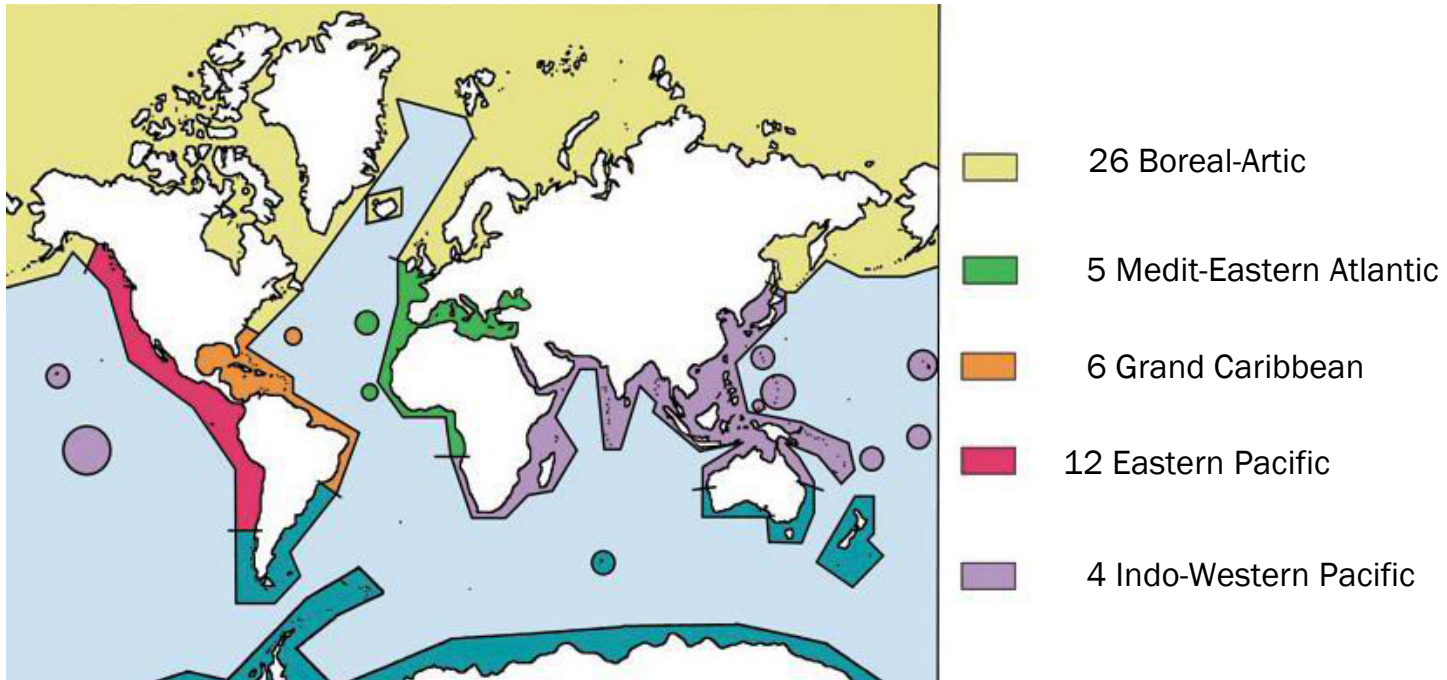


Systematic revision of *Chone* Krøyer, 1856
(Polychaeta: Sabellidae)

María Ana Tovar-Hernández
ECOSUR (Chetumal, Quintana Roo, Mexico)

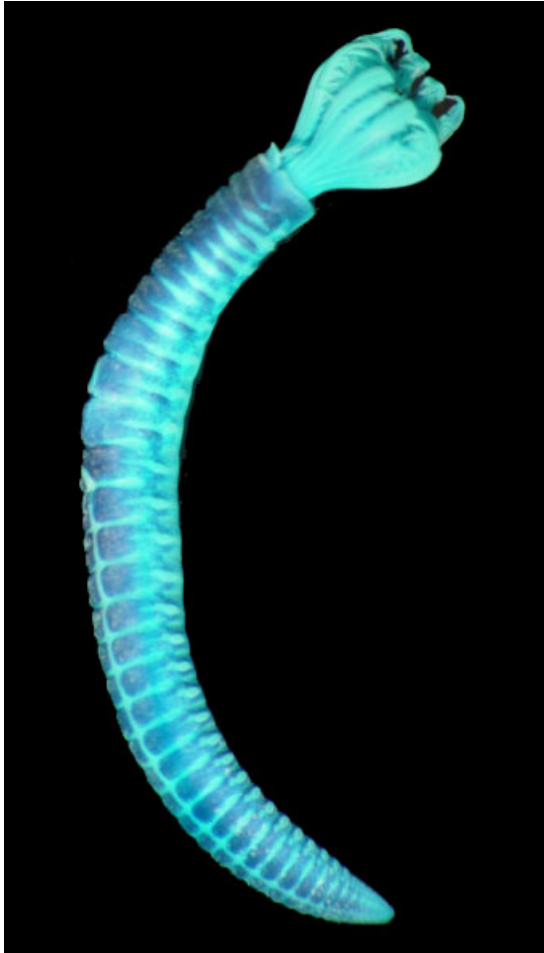
Chone



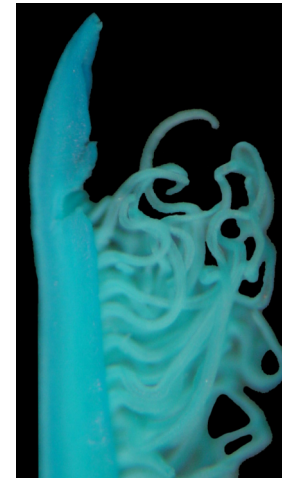
53 species

What is *Chone*?

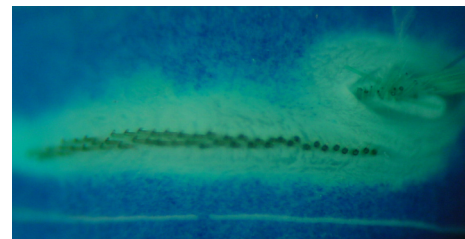
GENERAL MORPHOLOGY



radiolar membrane



radiolar flanges

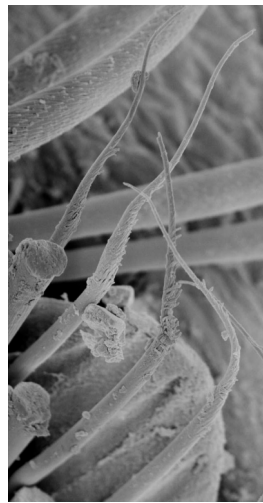


glandular ridge

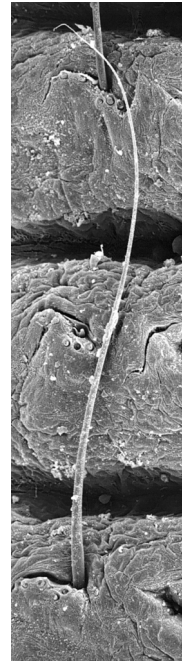
THORAX



paleate chaetae



bayonet chaetae



*elongate, narrowly
hooded chaeta*

ABDOMEN

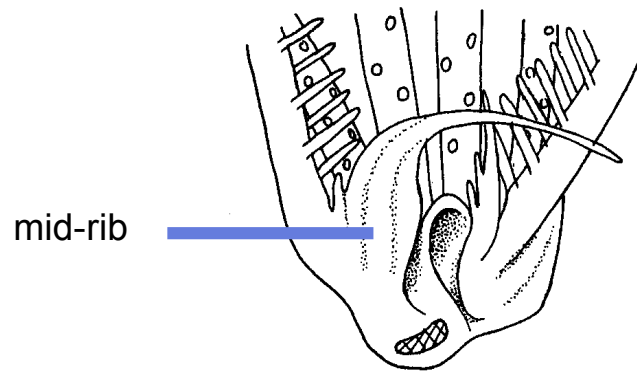


uncinus



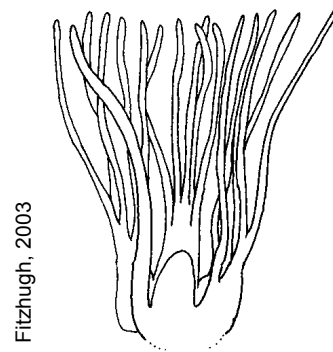
DORSAL LIPS

triangular



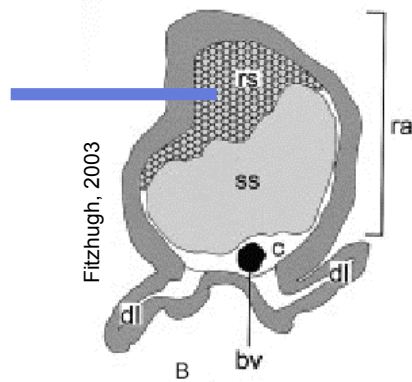
Fitzhugh, 2003

rounded



Fitzhugh, 2003

skeleton



Fitzhugh, 2003

Phylogenetic studies

Rouse & Fitzhugh, 1994

Fitzhugh & Rouse, 1999

Cochrane, 2003

Fitzhugh, 2003

Difficulties in the study of Chone

High degree of variation in characters

- About 70% of the descriptions are brief and lack illustrations
- Numerous misidentifications
- Literature and taxonomic keys from other regions of the world
- Inadequate inclusion of exotic names (not necessarily exotic species)
- No revision of the species

My study deals with the worldwide revision of all *Chone* species (type and non-type material) to solve their taxonomy and propose their phylogeny.

PROGRESS

Revision of aprox. 30 species

Definition of *Chone*

Definition of a new genus

Description of new species in both genera

AUTHENTIC *Chone*

(25% of the species described)

<i>C. infundibuliformis</i>	<i>Greenland</i>
<i>C. magna</i>	<i>San Miguel, CA</i>
<i>C. aurantiaca</i>	<i>Puget Sound, WA</i>
<i>C. mollis</i>	<i>Pacific Grove, CA</i>
<i>C. picta</i>	<i>Martha's Vineyard, MASS</i>
<i>C. gracilis</i>	<i>Kodiak Island, Alaska</i>

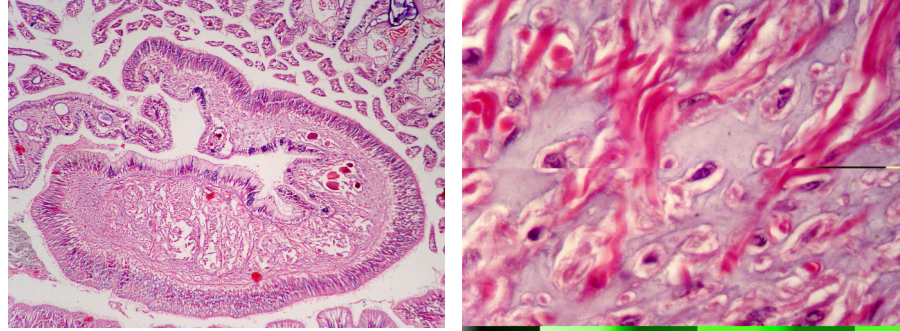
DORSAL LIPS

Externally

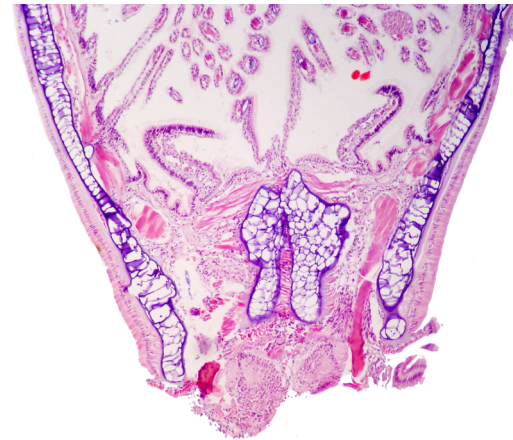


broadly rounded
no mid-rib

Internal construction

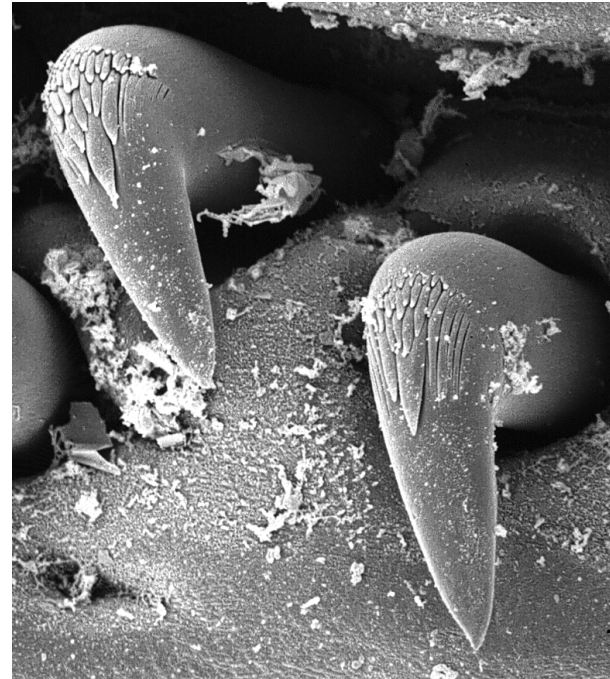
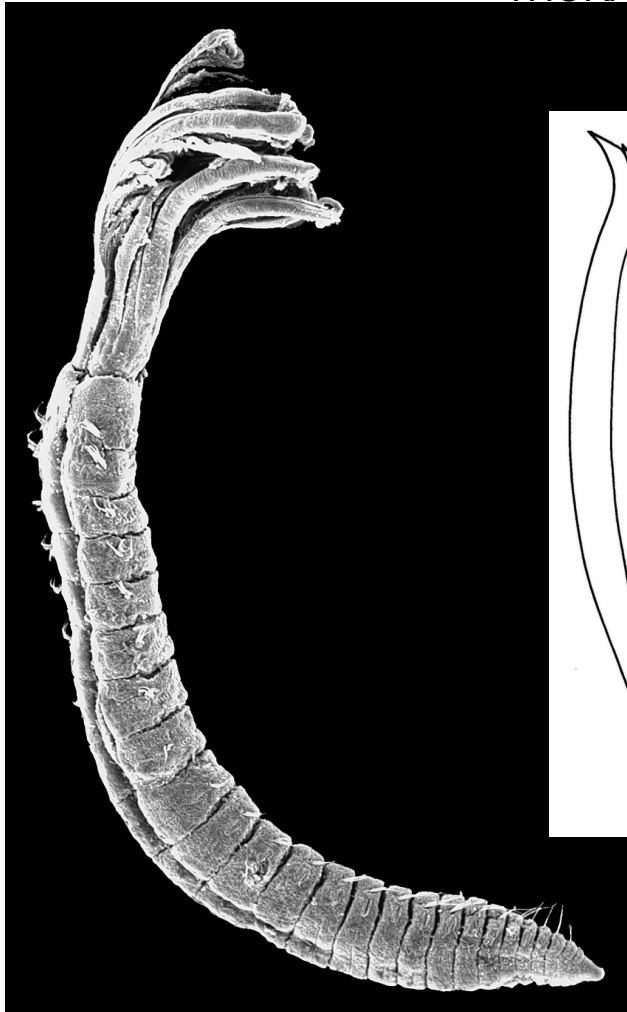


elastic and fibrous cartilage



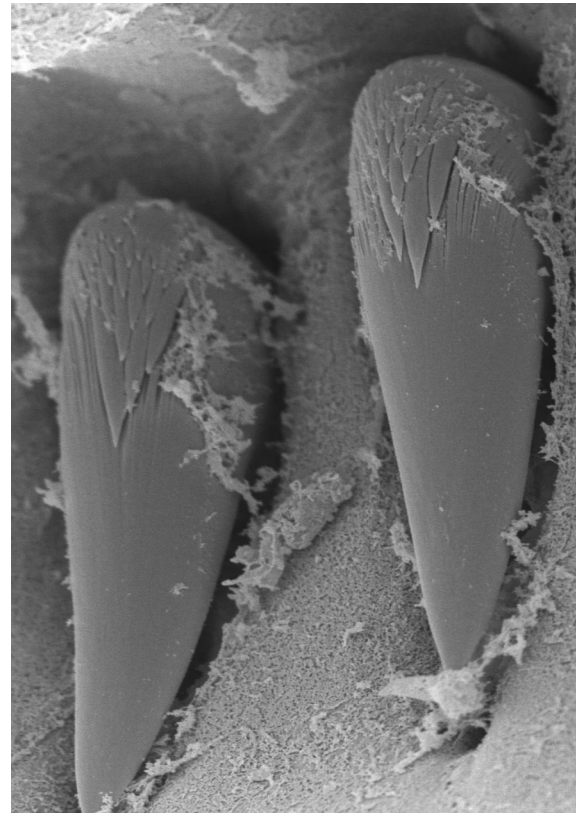
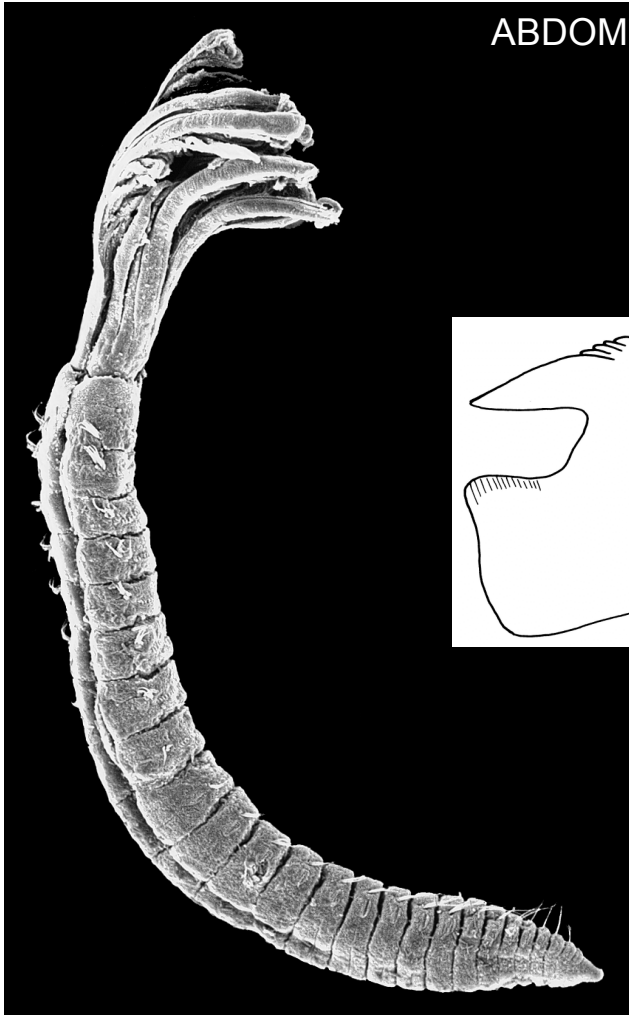
no extension of the skeleton

THORACIC UNCINI



teeth unequal in size
irregular rows of teeth

ABDOMINAL UNCINI



uniform shape
teeth unequal in size
irregular rows of teeth

SHAPE OF ABDOMEN



SPERM MORPHOLOGY



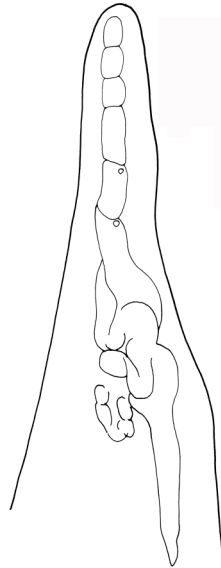
NEW GENUS

<i>C. veleronis</i>	<i>off Seal Beach, CA</i>
<i>C. albocincta</i>	<i>off Seal Beach, CA</i>
<i>C. minuta</i>	<i>Dillon Beach, CA</i>
<i>C. ecaudata</i>	<i>Santa Cruz, CA</i>
<i>C. bimaculata</i>	<i>Puget Sound, WA</i>
<i>C. americana</i>	<i>North Carolina</i>
<i>C. perkinsi</i>	<i>Florida</i>
<i>C. farringtonae</i>	<i>Florida</i>
<i>C. uebelackerae</i>	<i>Florida</i>
<i>C. sp. A Harris</i>	
<i>C. sp. B Harris</i>	
<i>C. sp. C Harris</i>	
<i>C. sp. 1</i>	
<i>C. sp. 2</i>	
<i>C. sp. 3</i>	

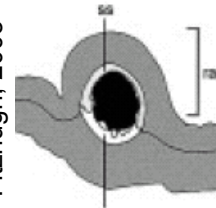
DORSAL LIPS



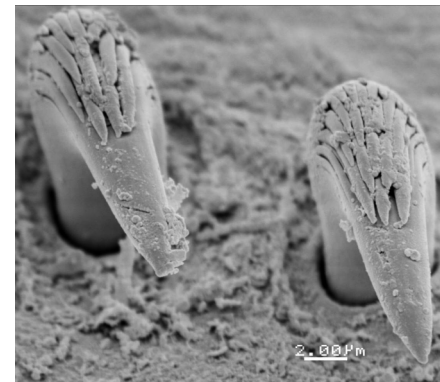
Triangular
Erect
No mid-rib



Fitzhugh, 2003

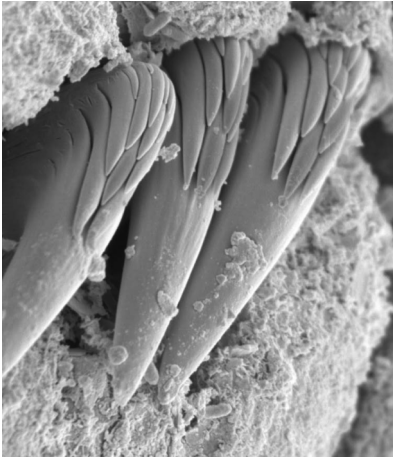


THORACIC UNCINI



ABDOMEN

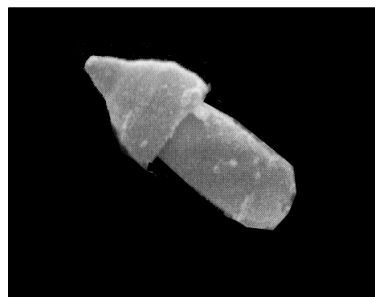
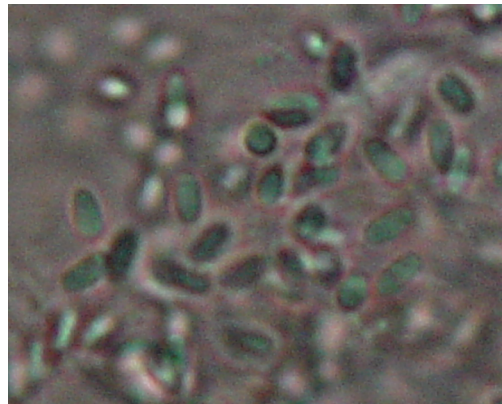
Anterior



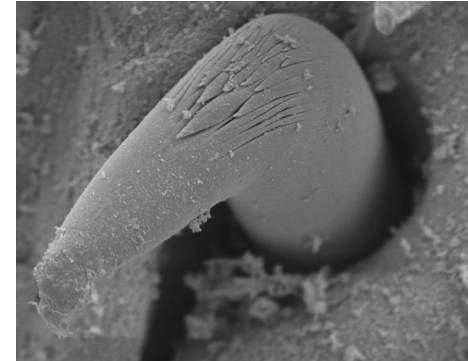
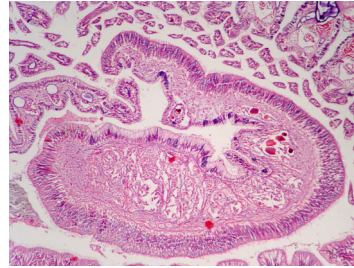
Posterior



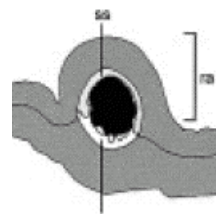
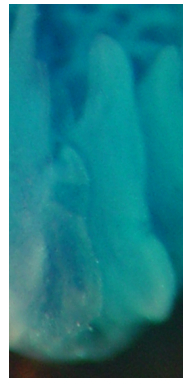
SPERM MORPHOLOGY



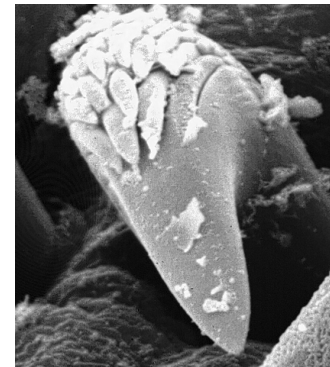
Chone



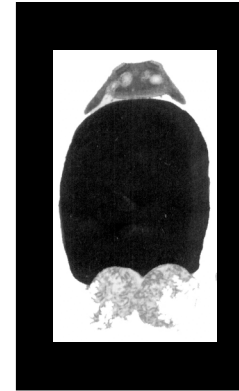
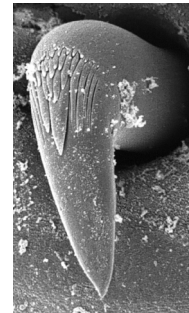
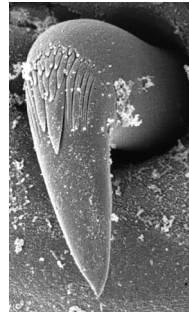
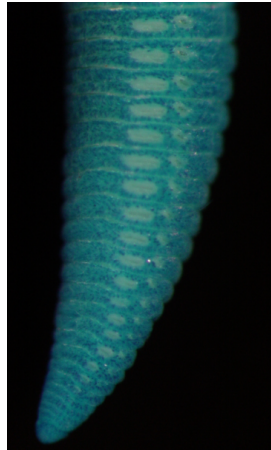
N. gen.



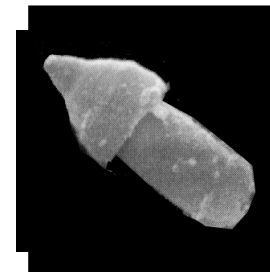
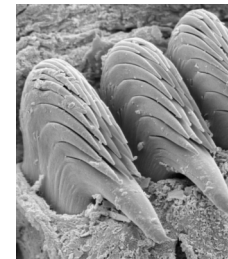
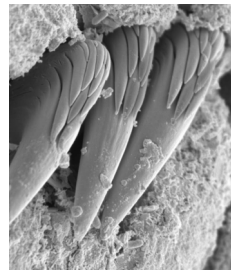
Fitzhugh, 2003



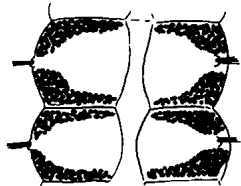
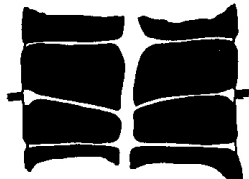
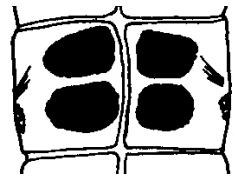
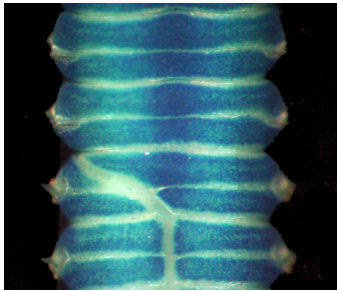
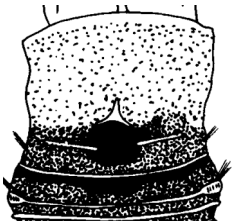
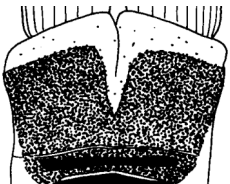
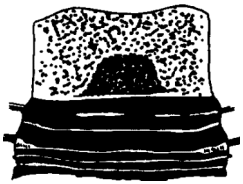
Chone



N. gen.

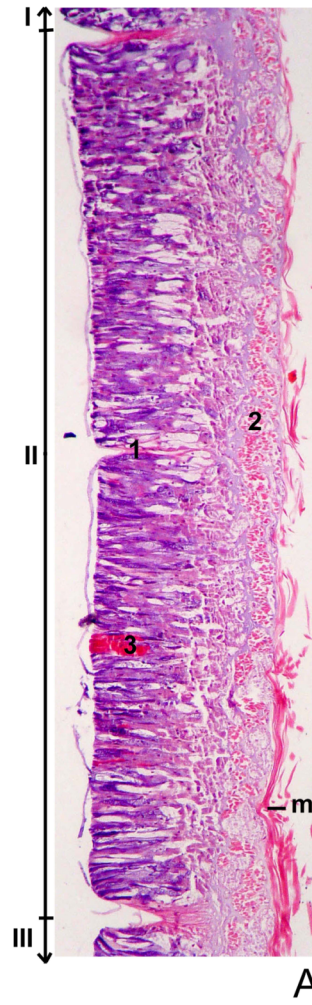


Glands

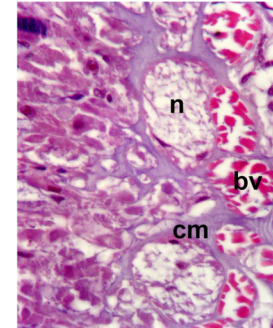


Banse, 1972

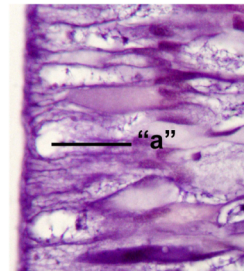
Glandular ridge



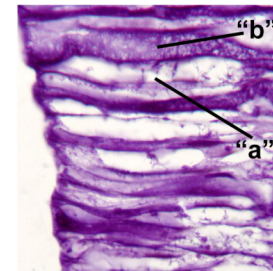
B



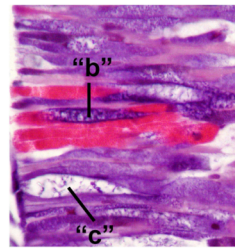
C



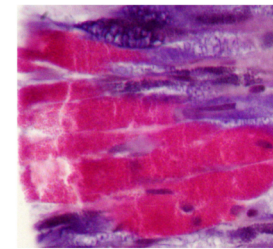
D



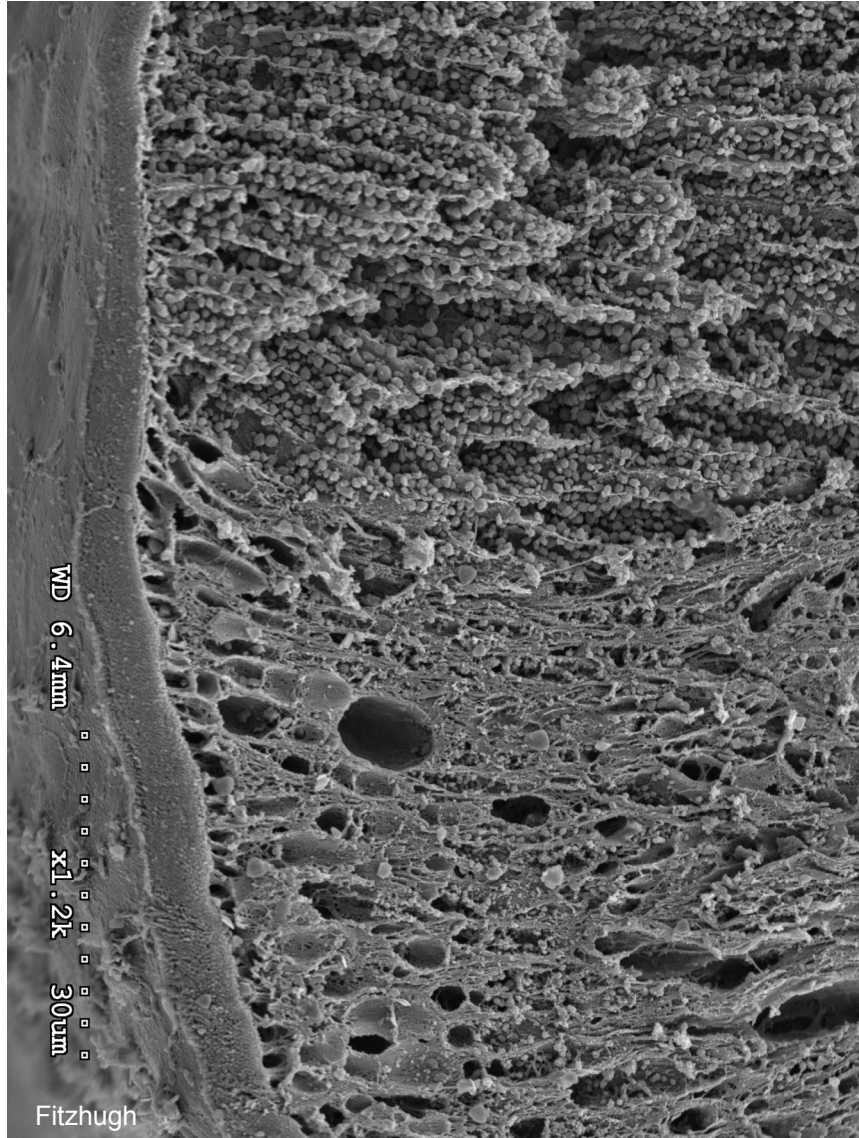
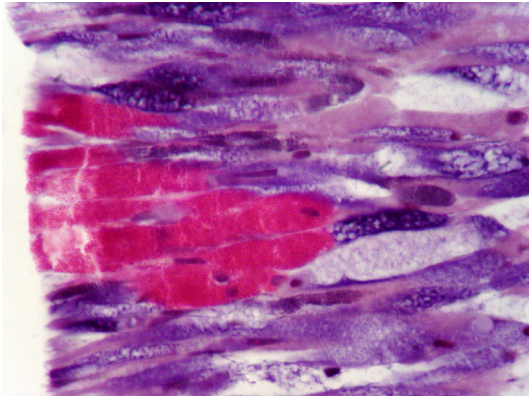
E



F



G



wanted!



"C". sp. 1



"C". sp. 2



"C". sp. 3

C. sp. A Harris

C. sp. B Harris

C. sp. C Harris

maria_ana_tovar@yahoo.com