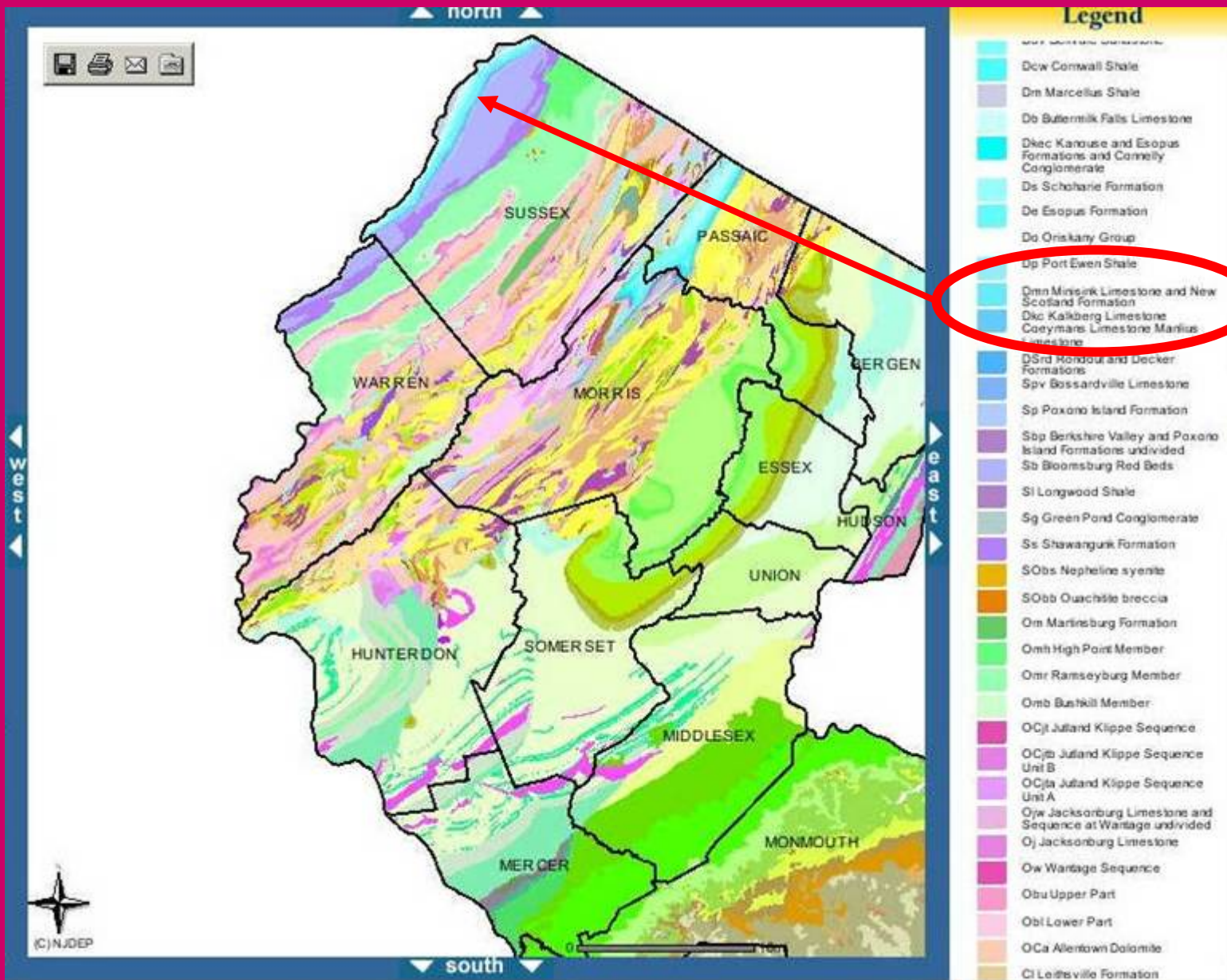
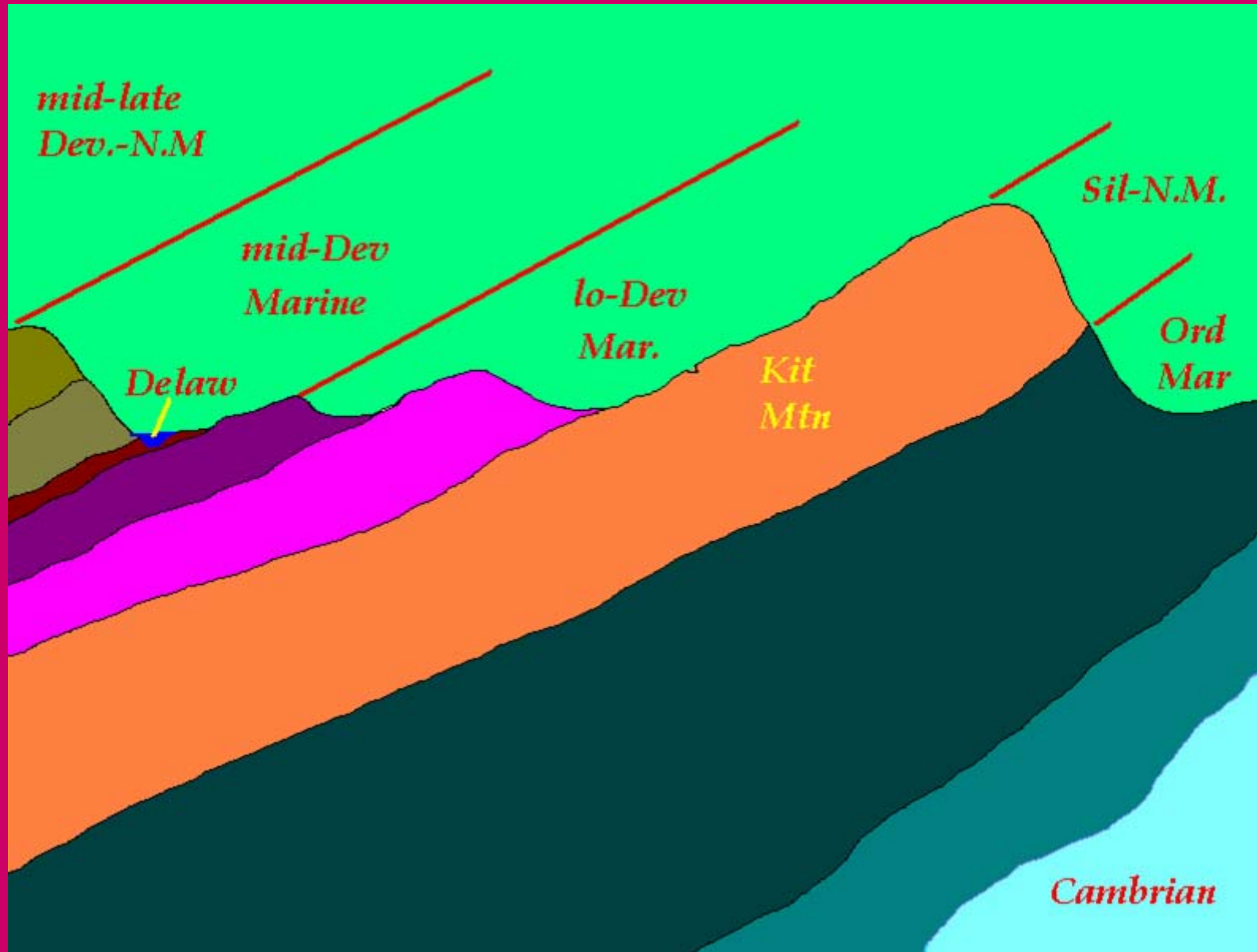


**Lower Devonian Ostracods  
And other Microfossils  
Of The New Scotland Fm.,  
Deckertown Rd.,Sussex  
County, NJ**

*John E.B. Baker*



# NW-SE Cross Section Pa-Sussex,NJ





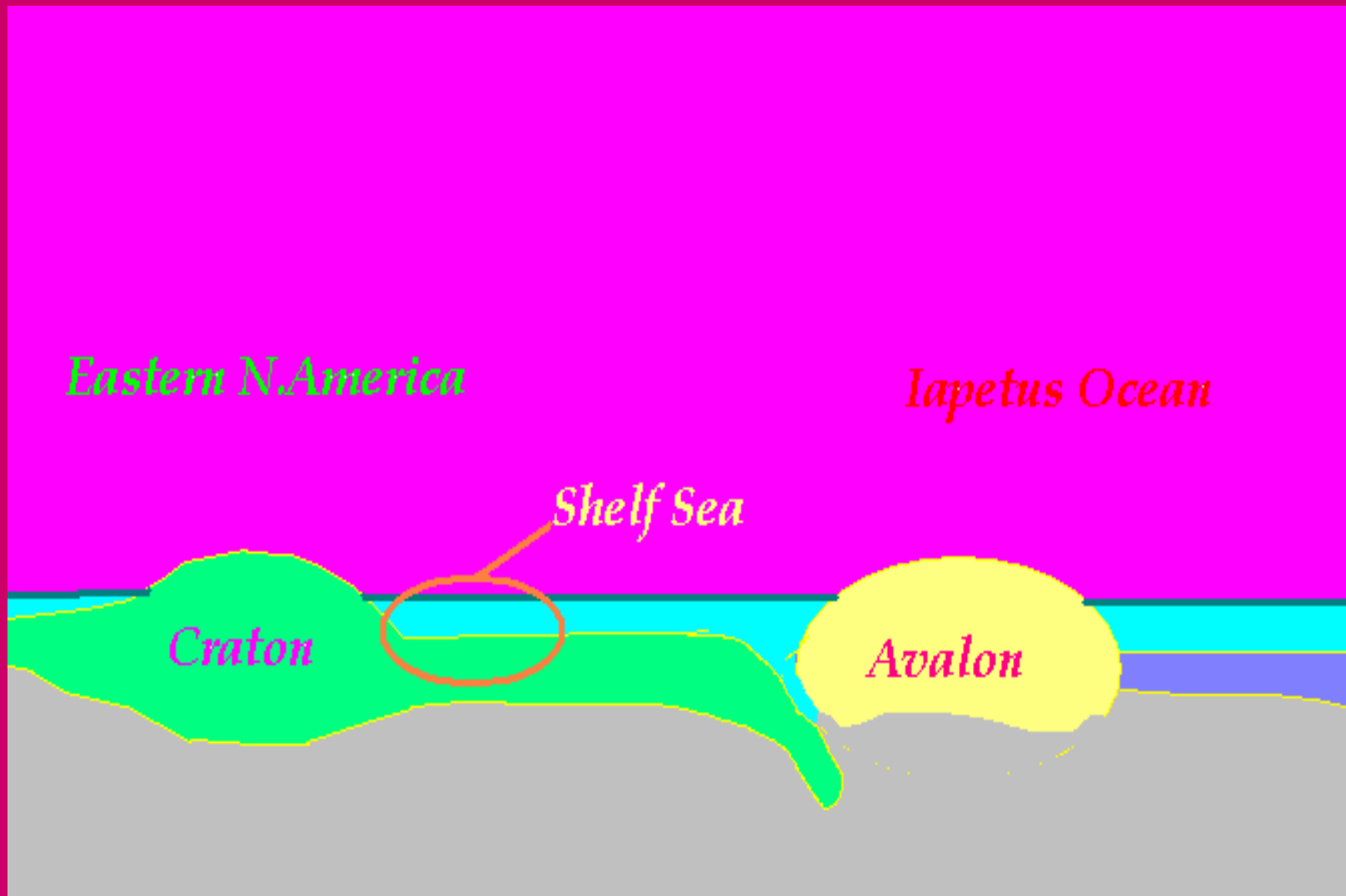
*Eastern N.America*

*Iapetus Ocean*

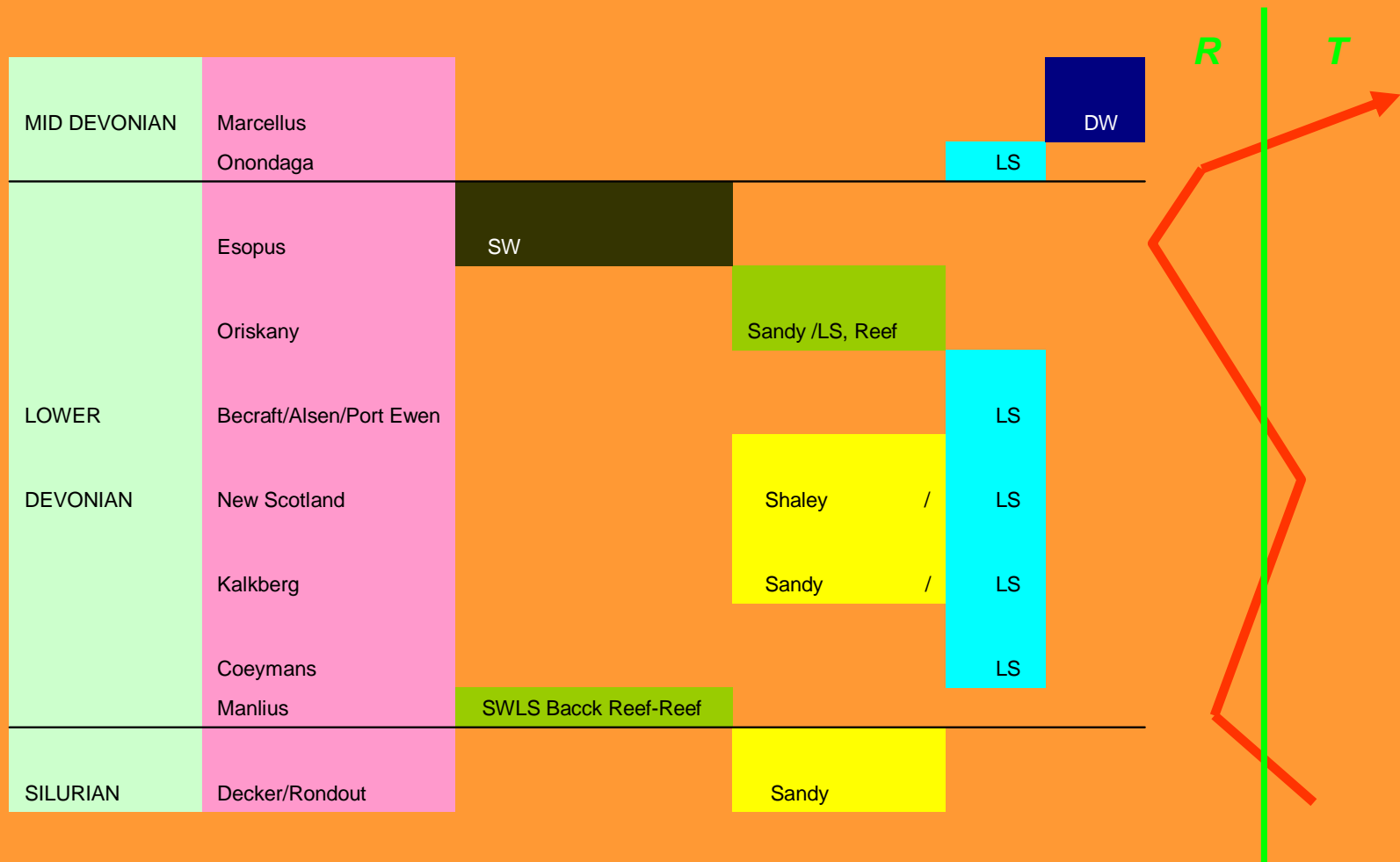
*Shelf Sea*

*Craton*

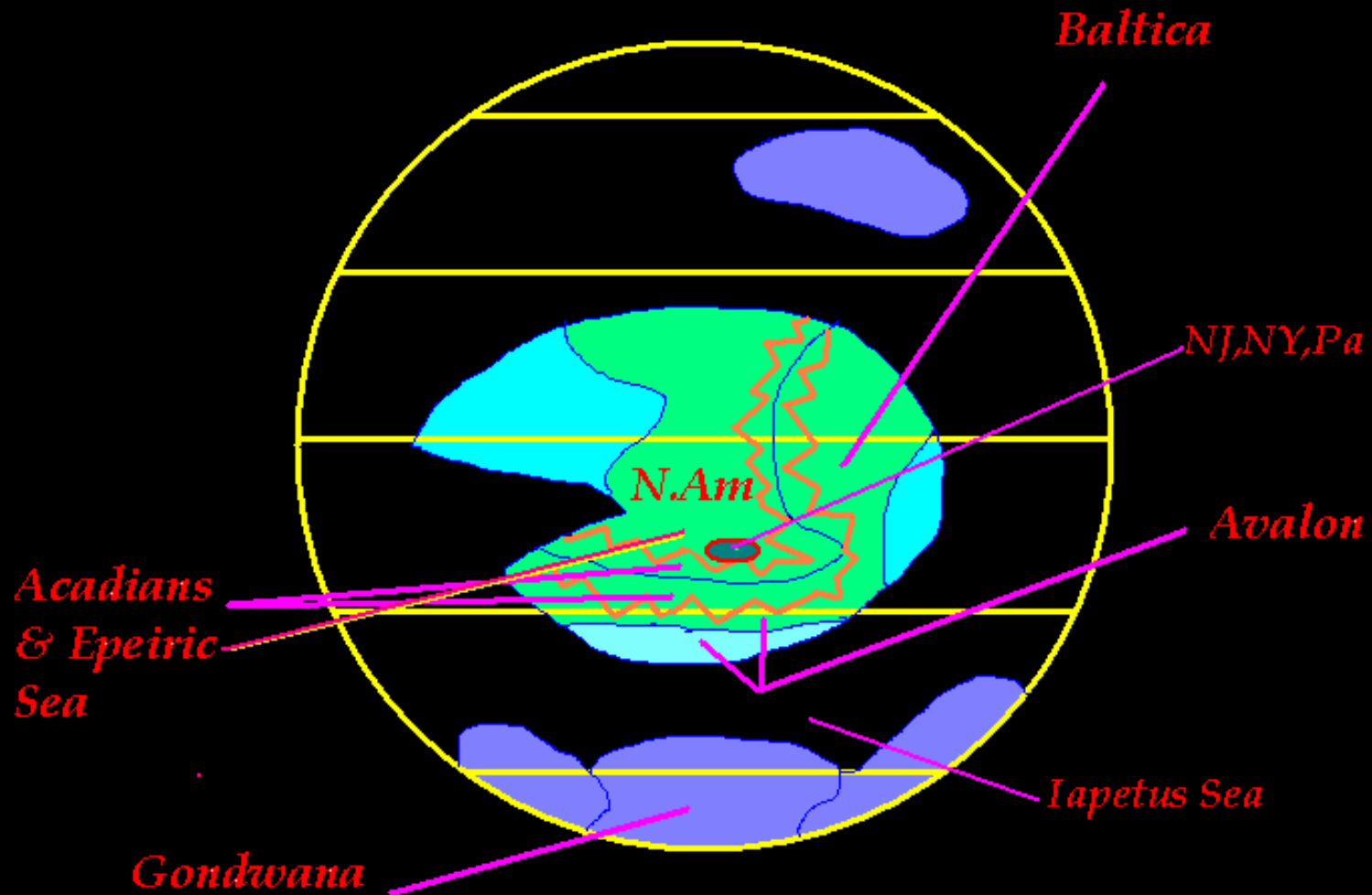
*Avalon*



## NE Lower Devonian: A shallow, post-Taconic, epeiric trough developing just before the Avalon collision and Acadian Uplift to the East



*North America: Middle  
Devonian 380 Ma*



# Hog Back Ridges of NW New Jersey

Pa Delaware NJ Delaware Riv Kitatinny Ridge Kit.Valley





[zoom in](#) [zoom out](#) [full extent](#) [list extent](#) [pan](#) [identify](#) [find](#) [select](#) [clear selection](#) [print](#)

### Data Layers

[refresh map](#)

Visible Active

- [Countries](#)
- [Municipalities](#)
- [Quad grid](#)
- [Topos](#)
- [Ambient-Pesticides](#)
- [Ambient-Radionuclides](#)
- [Ambient-Nutrients](#)
- [Ambient-VOC](#)
- [Ambient-Major Ions](#)
- [Ambient-Metals](#)
- [Quarries](#)
- [Abandoned Mines](#)
- [Earthquake Epicenters](#)
- [Public Community Water Supply Wells](#)
- [Community Wellhead Protection Areas](#)
- [Non-Community Wellhead Protection Areas](#)
- [Roads \(Tele Atlas\)](#)
- [Dikes](#)
- [Faults](#)
- [Folds](#)
- [Gravity anomalies \(1 mgal\)](#)
- [Magnetic Anomalies \(gammas\)](#)
- [Watershed Management Areas](#)
- [Drought Regions](#)



### Legend

- Dsk Skuzemunk Conglomerate
- Dbv Bellvale Sandstone
- Dcw Cornwall Shale
- Dm Marcellus Shale
- Dd Butternut Falls Limestone
- Dkcc Kanouse and Esopus Formations and Connelly Conglomerate
- Ds Schoharie Formation
- De Esopus Formation
- Do Oriskany Group
- Dp Port Ewen Shale
- Dmn Missisquoi Limestone and New Scotland Formation
- Dkc Kaikberg Limestone
- Dcs Cosmans Limestone
- Dsrds Rondout and Decker Formations
- Spv Bossardville Limestone
- Sp Poxono Island Formation
- Spv Berkshire Valley and Poxono Island Formations undivided
- Sb Bloomsburg Red Beds
- Sl Longwood Shale
- Sg Green Pond Conglomerate
- Ss Shawangunk Formation
- SObs Nepheline syenite
- SObs Ouachita breccia
- Omr Martinsburg Formation
- Omh High Point Member
- Omr Ramseyburg Member
- Omh Baitkill Member
- OCj Juland Klippe Sequence
- OCjB Juland Klippe Sequence Unit B
- OCjA Juland Klippe Sequence Unit A
- Ojw Jacksonburg Limestone and Sequence at Wartage undivided
- Oj Jacksonburg Limestone
- Ow Wartage Sequence
- Obu Upper Part
- Obl Lower Part
- Oca ...



Store Rd

Google Earth - New Placemark



Google Earth - New Placemark



Image © 2006 State of New Jersey

© 2006 Navteq

© 2006 Google

Pointer 41°17'43.50" N 74°46'59.44" W elev 650 ft Streaming ||||| 100% Eye alt 1632 ft

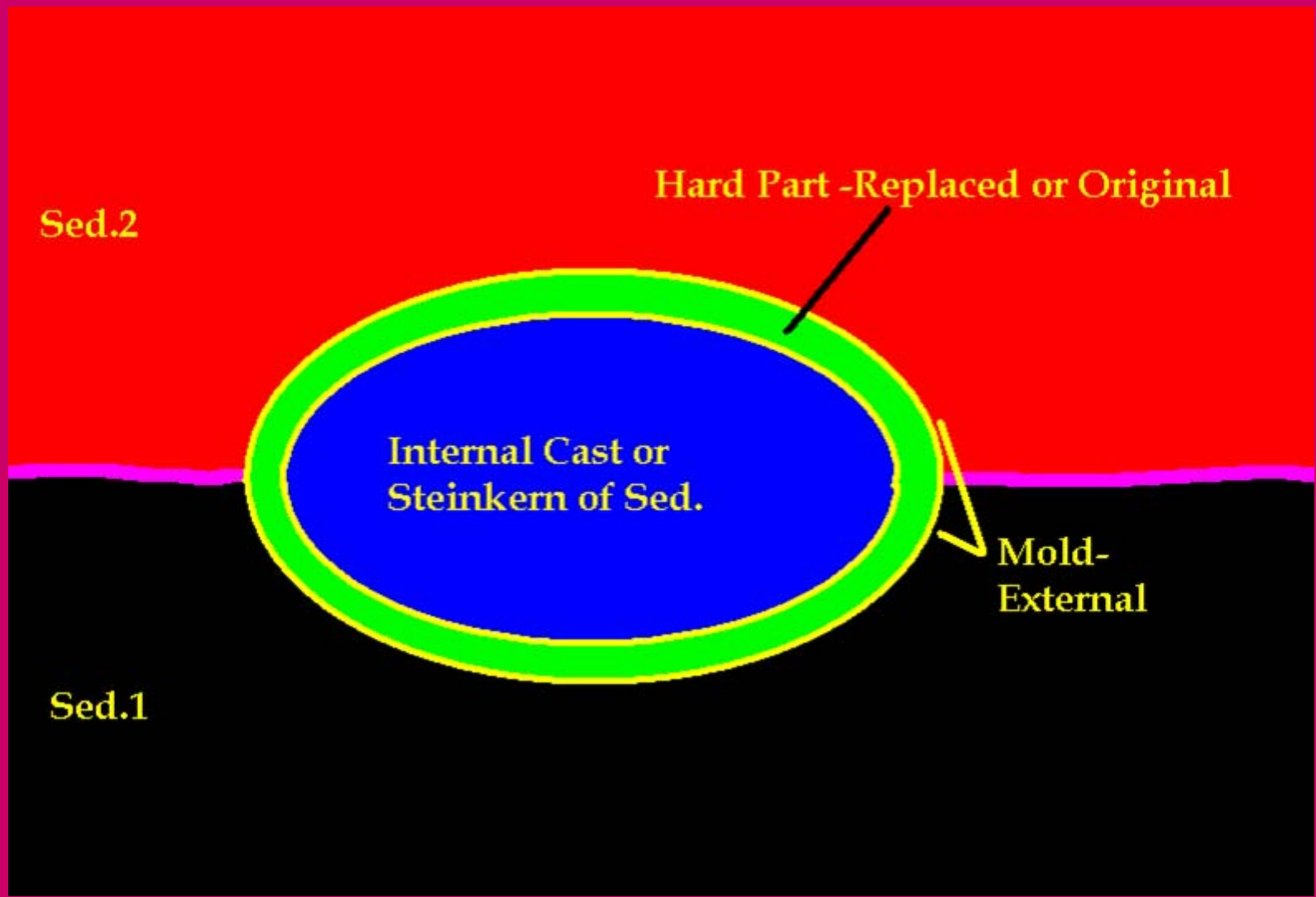
GENERA	Latest Silurian	Early Devonian	Middle Devonian
Aechmina	Red	Red	Red
Eucraterellina	Yellow	Red	Red
Bollia	Red	Red	Red
Quasillites	Yellow	Red	Red
Bairdiocypris	Red	Red	Red
Tubulibairdia	Red	Red	Red
Thlipsurella	Red	Red	Yellow



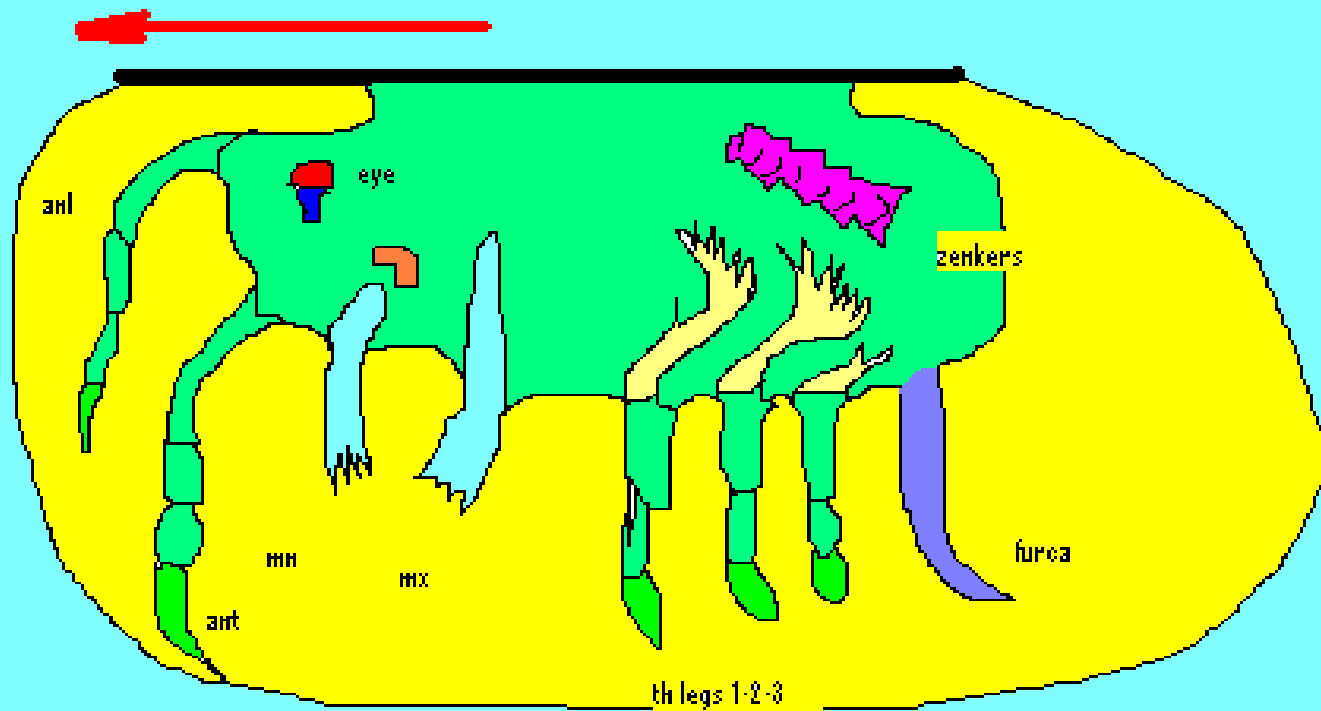
410 Ma

## Fossils

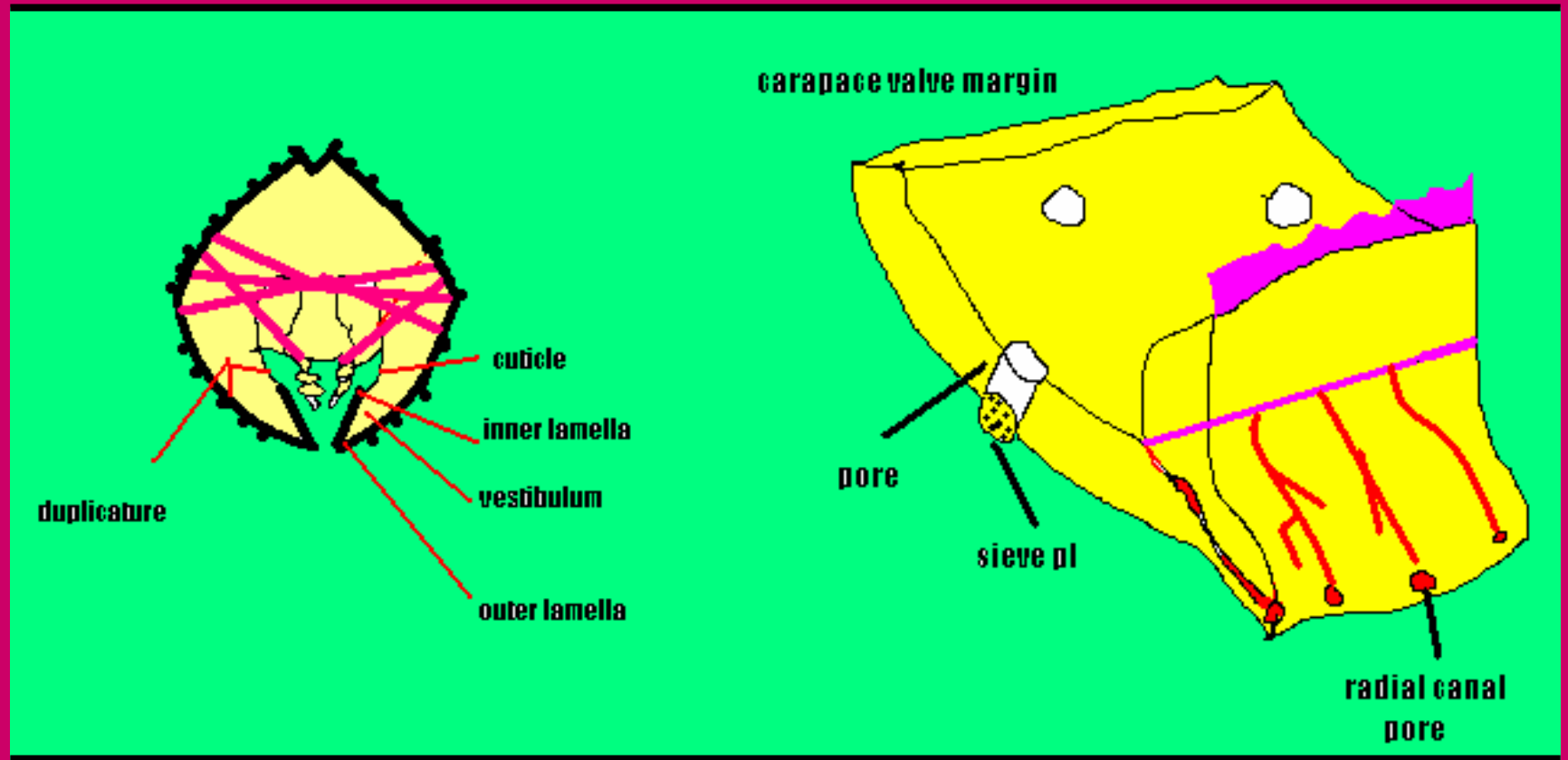
1. Any evidence of pre-existing life
2. General Requirements: a) Rapid Burial  
b) Hard Parts
3. May be: a) Original bone or shell  
b) Dissolved and Replaced by same or different mineral  
c) Molds or Casts- internal (Steinkern)& external  
d) pores in bone can be filled with cement  
e) traces, tracks or coprolites (fecal)



# Ostracode Guts

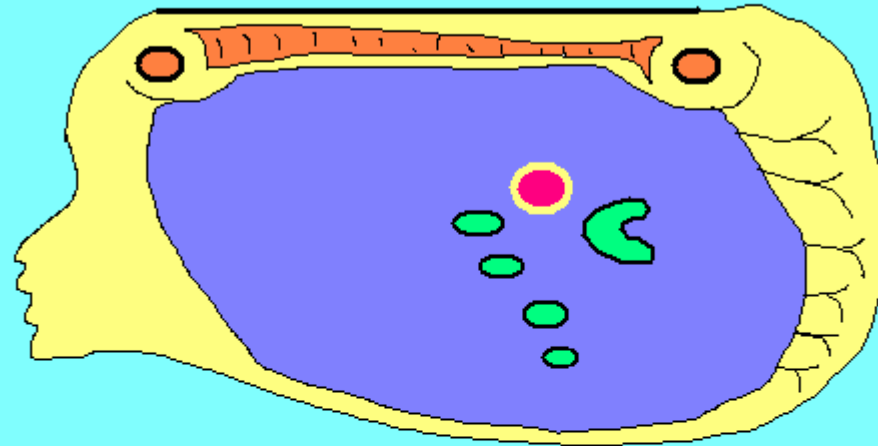


## *Cross Section and Duplicature*

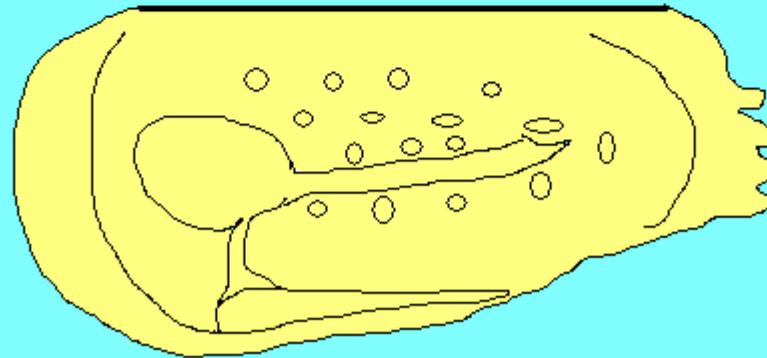


# Crustacea: Ostracodes

*Internal view Left Valve*



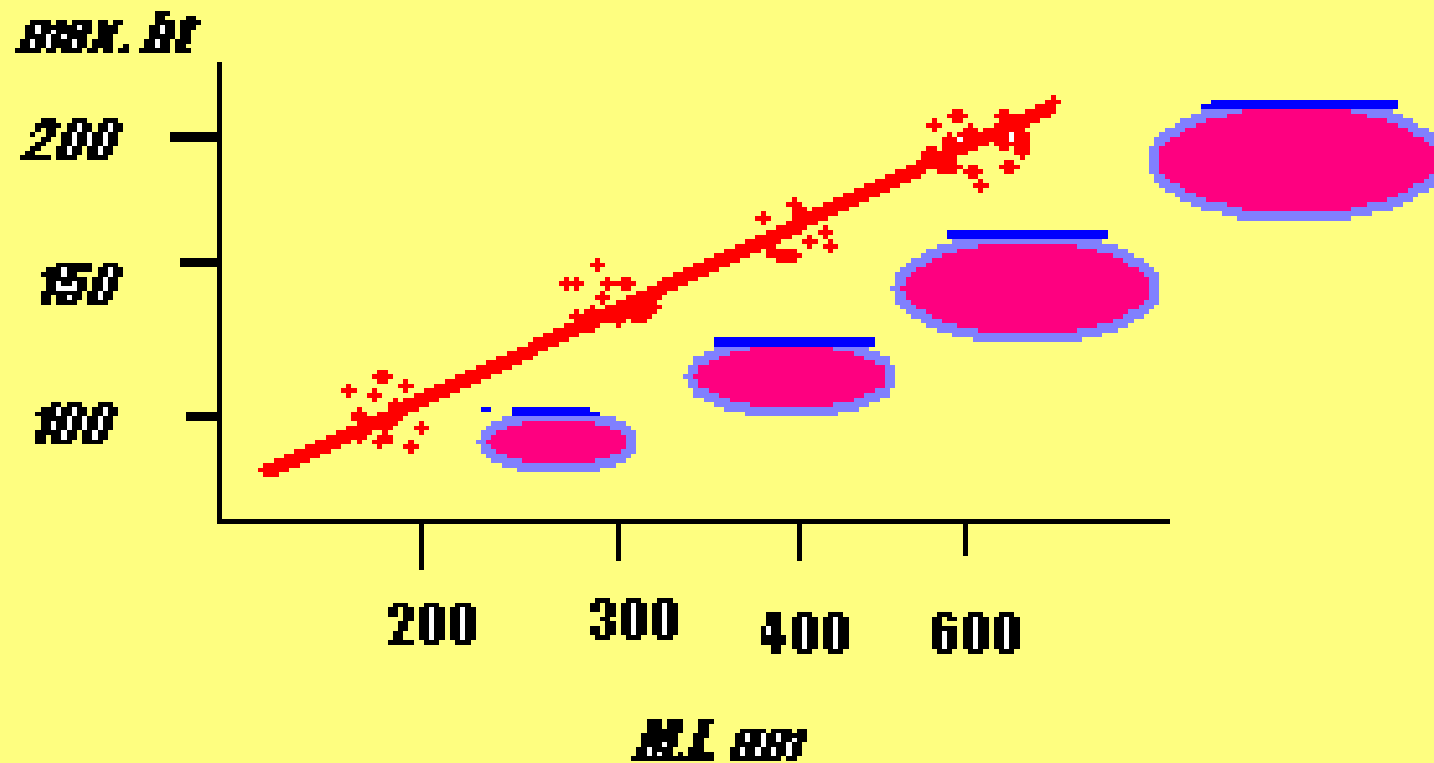
*External view Left Valve*



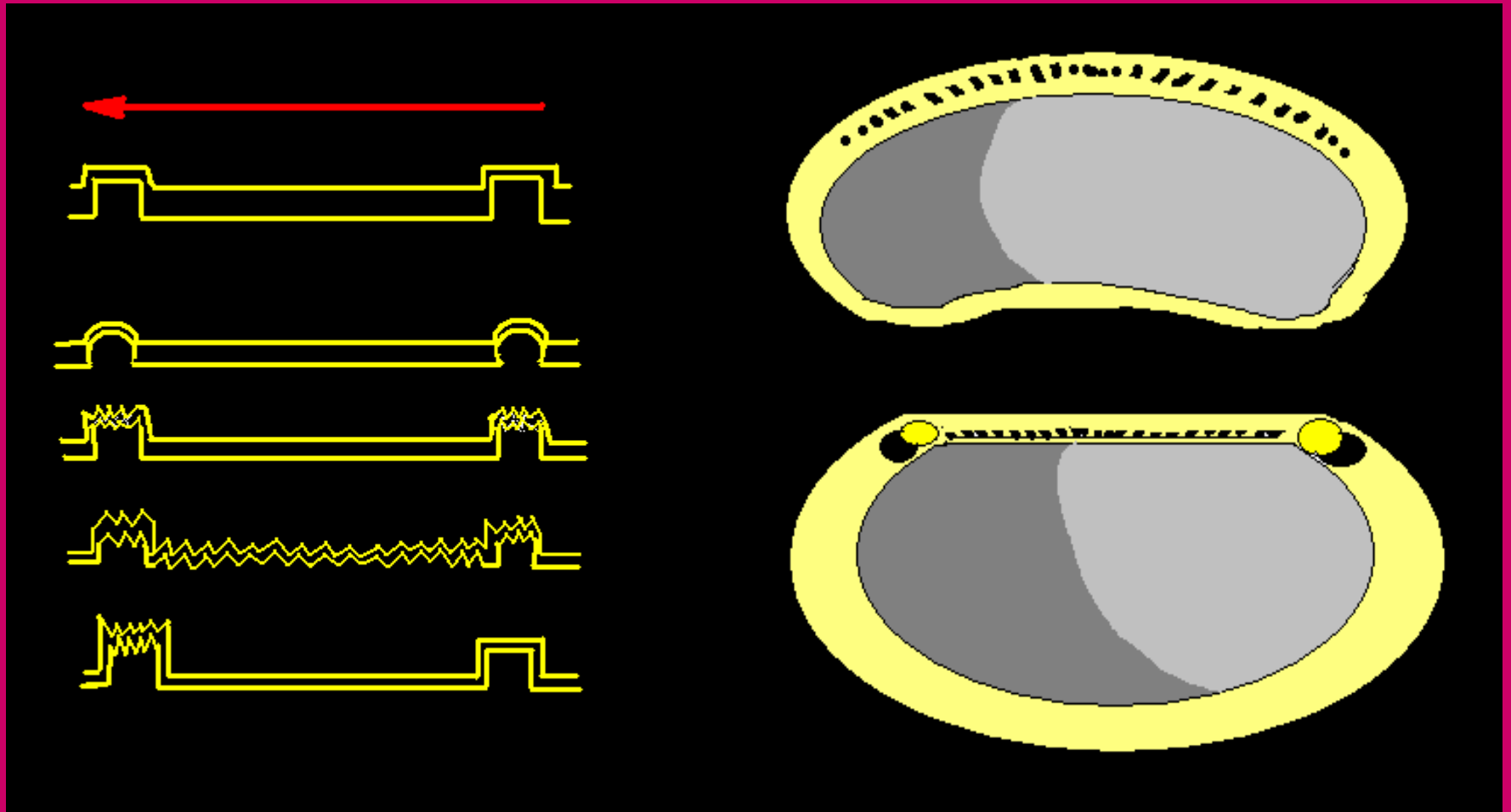


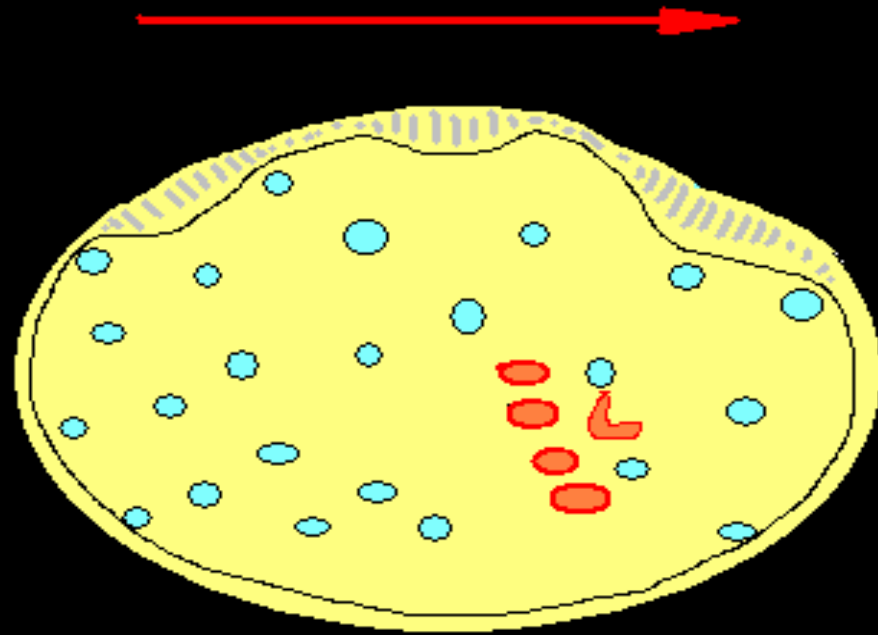
# INSTARS

**Ecdysis = Molting = Larva to Adult**



## Hinges & Classification





*Peratocytheridea sp.*



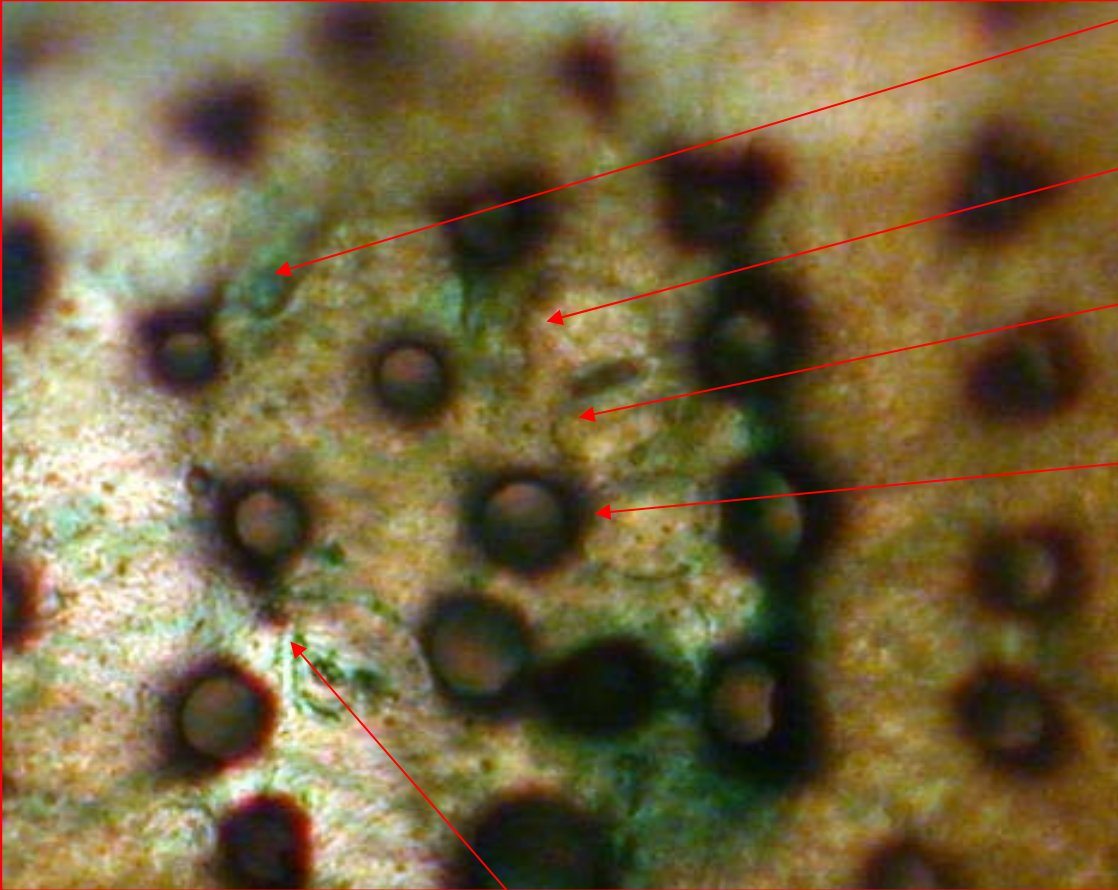
*Peratocytheridea, Sarasota Bay*

Muscle scars (Podocopida: Cytheracea)

Mand. Scar

Adductor  
M.S.

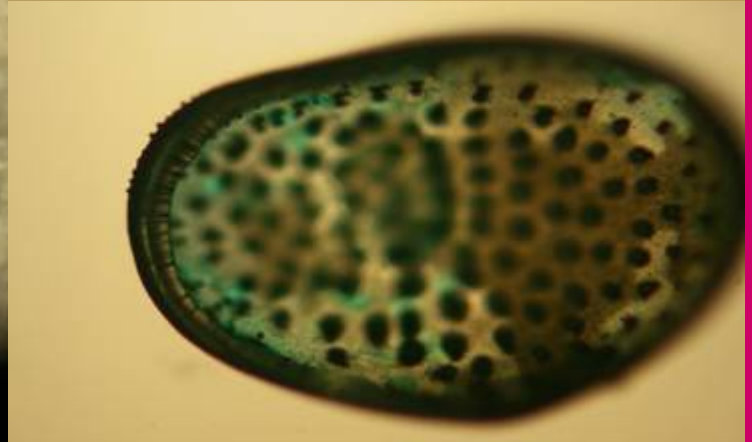
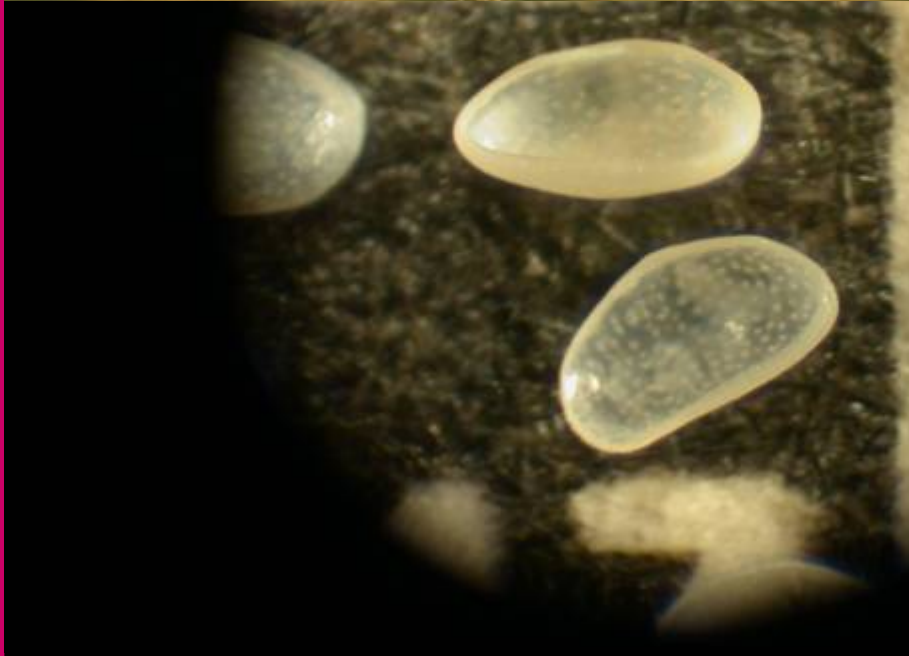
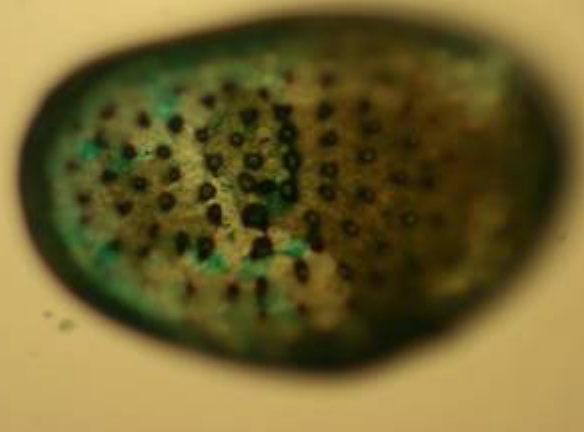
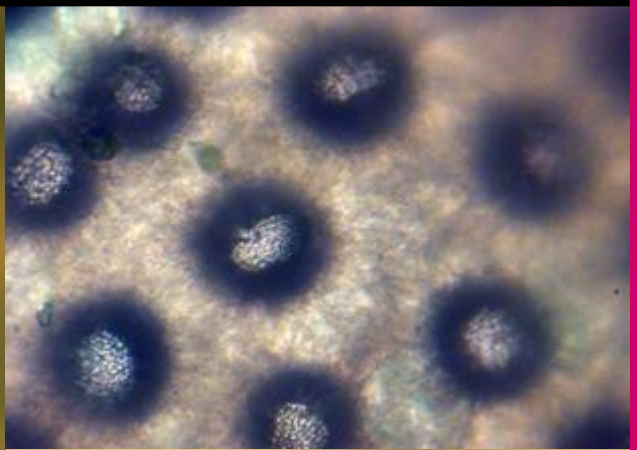
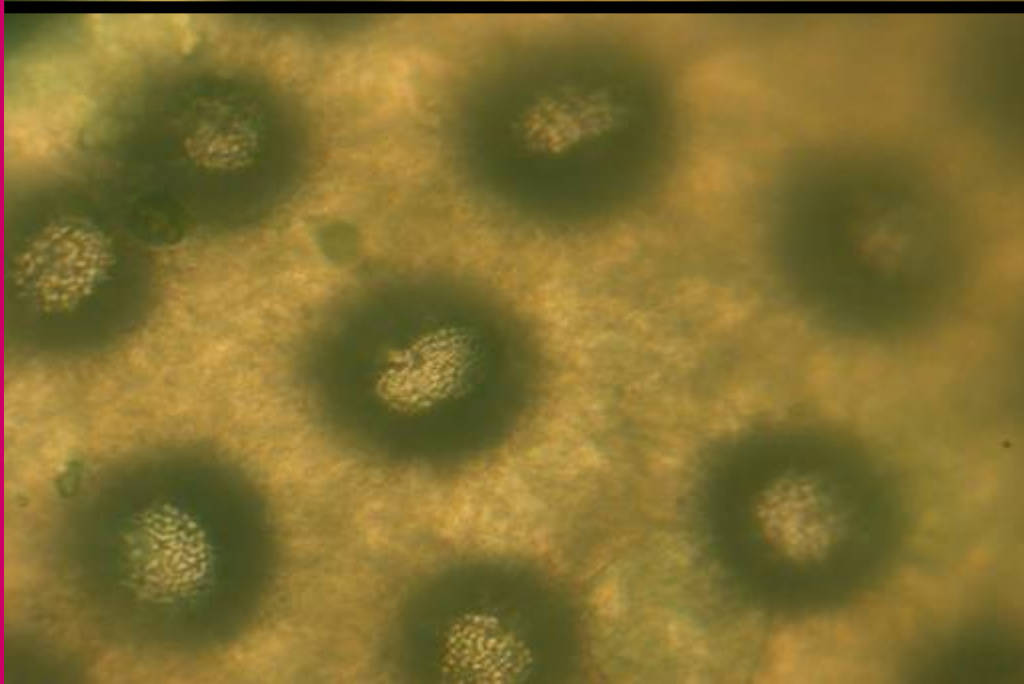
Antennal Scar (Heart-shaped)



V

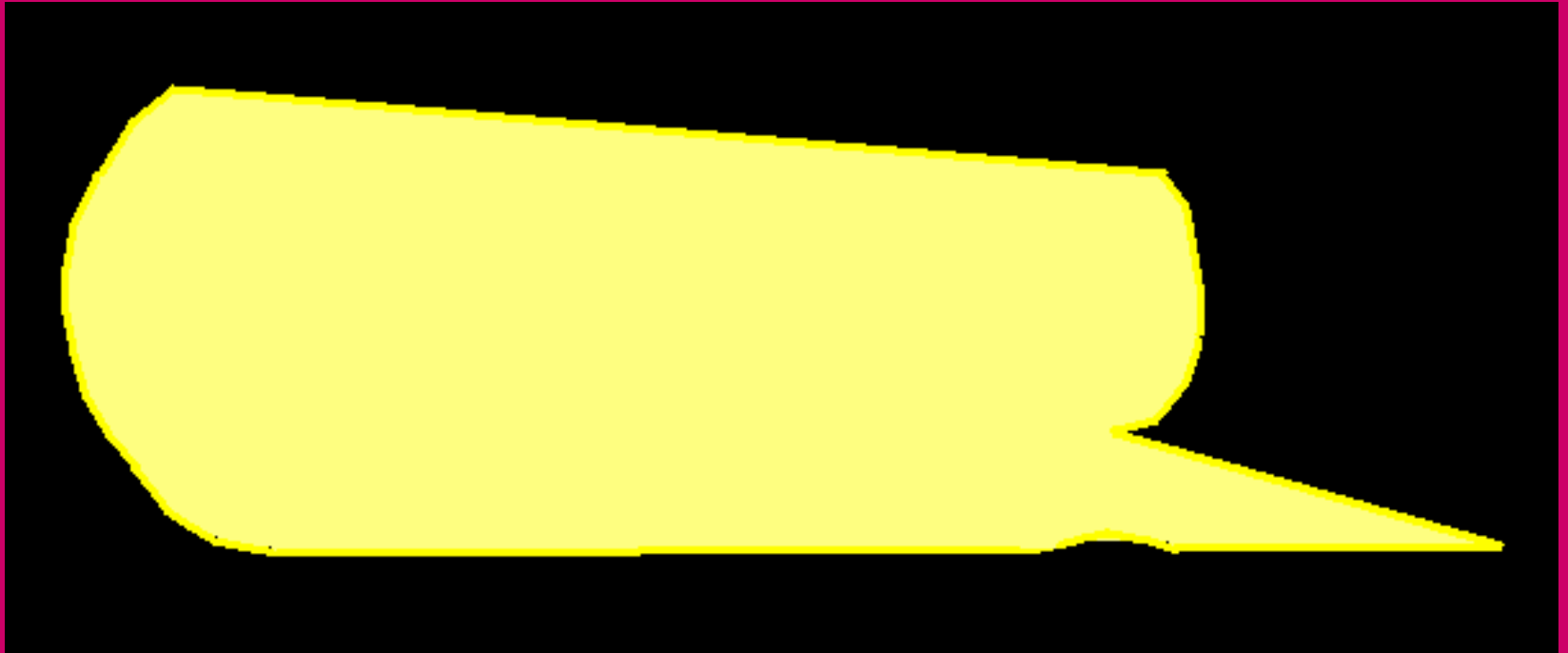
A

D

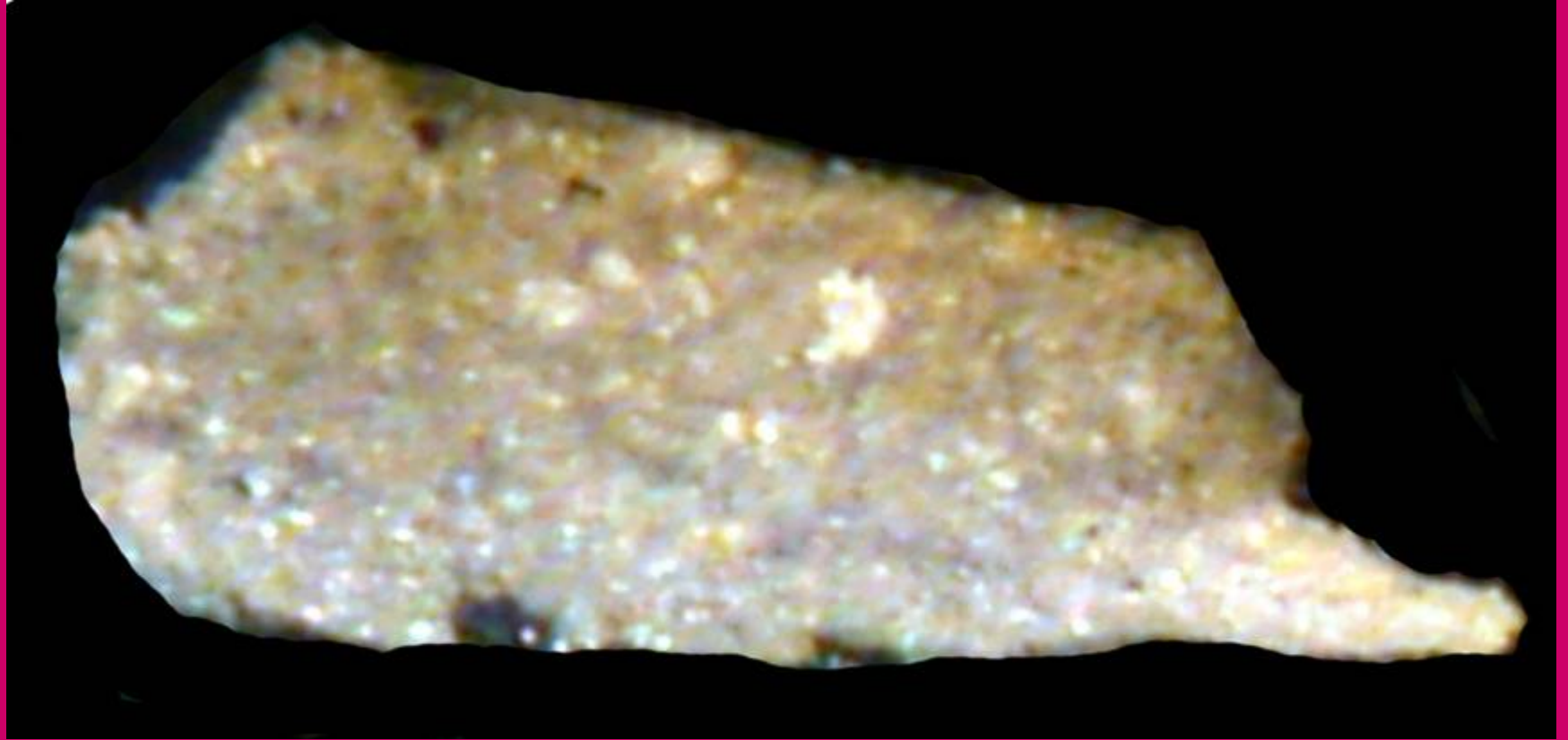


**Note: all but sponge spicule  
Are *replaced* by  $\text{SiO}_2$  after  
original  $\text{CaCO}_3$**

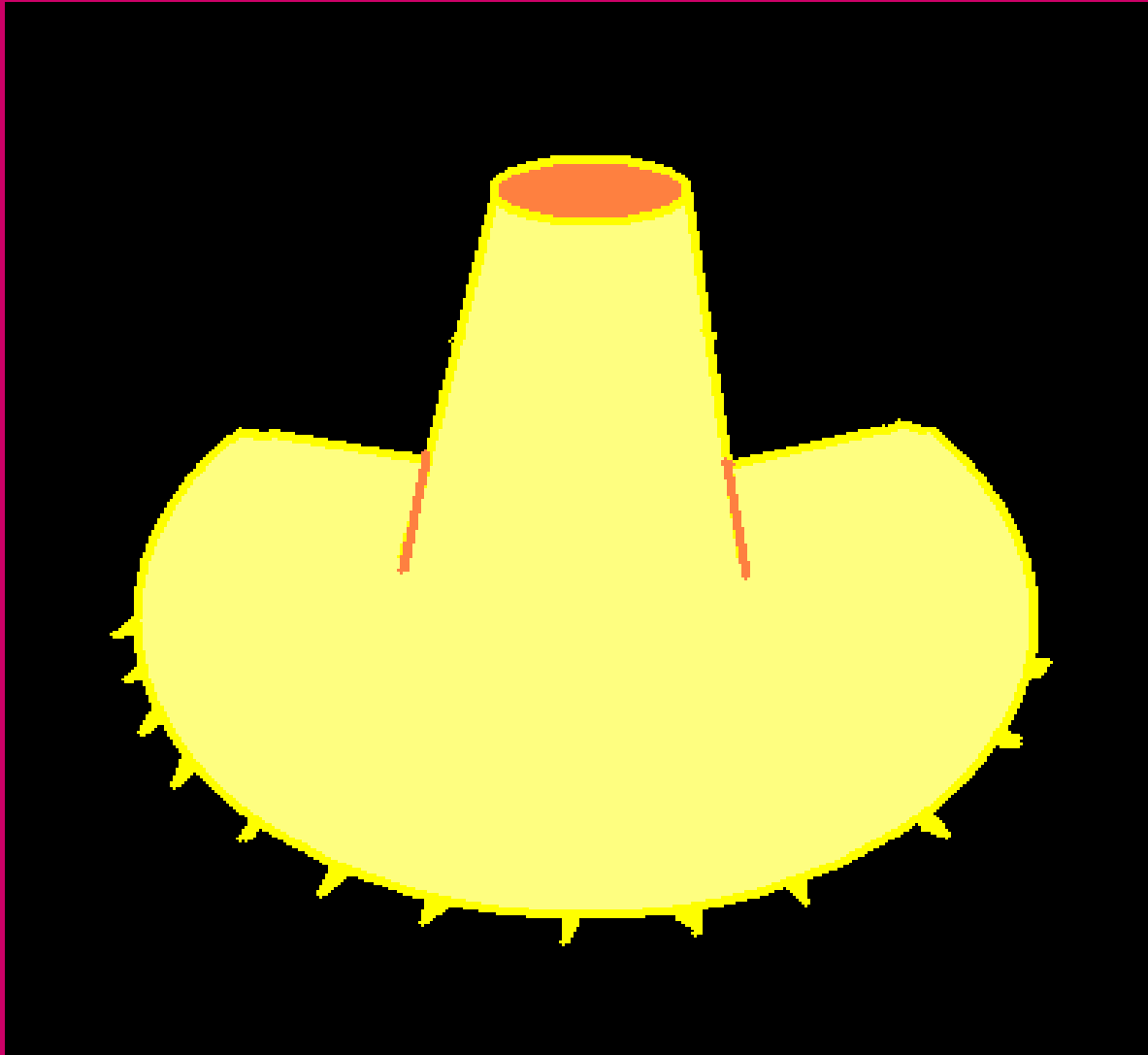
*Quasillites cf sublunatas*





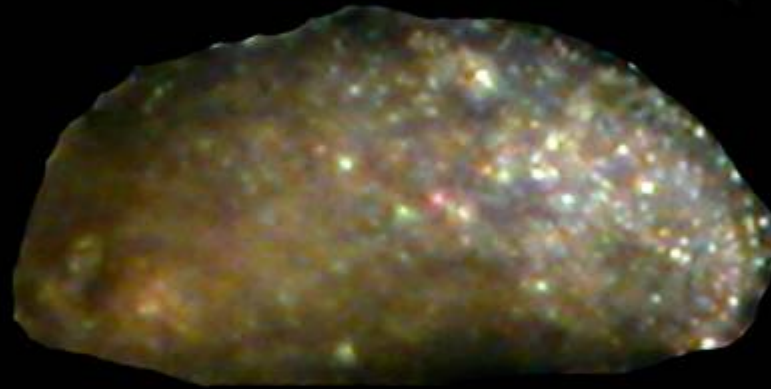


*Aechmina cf crenulata*

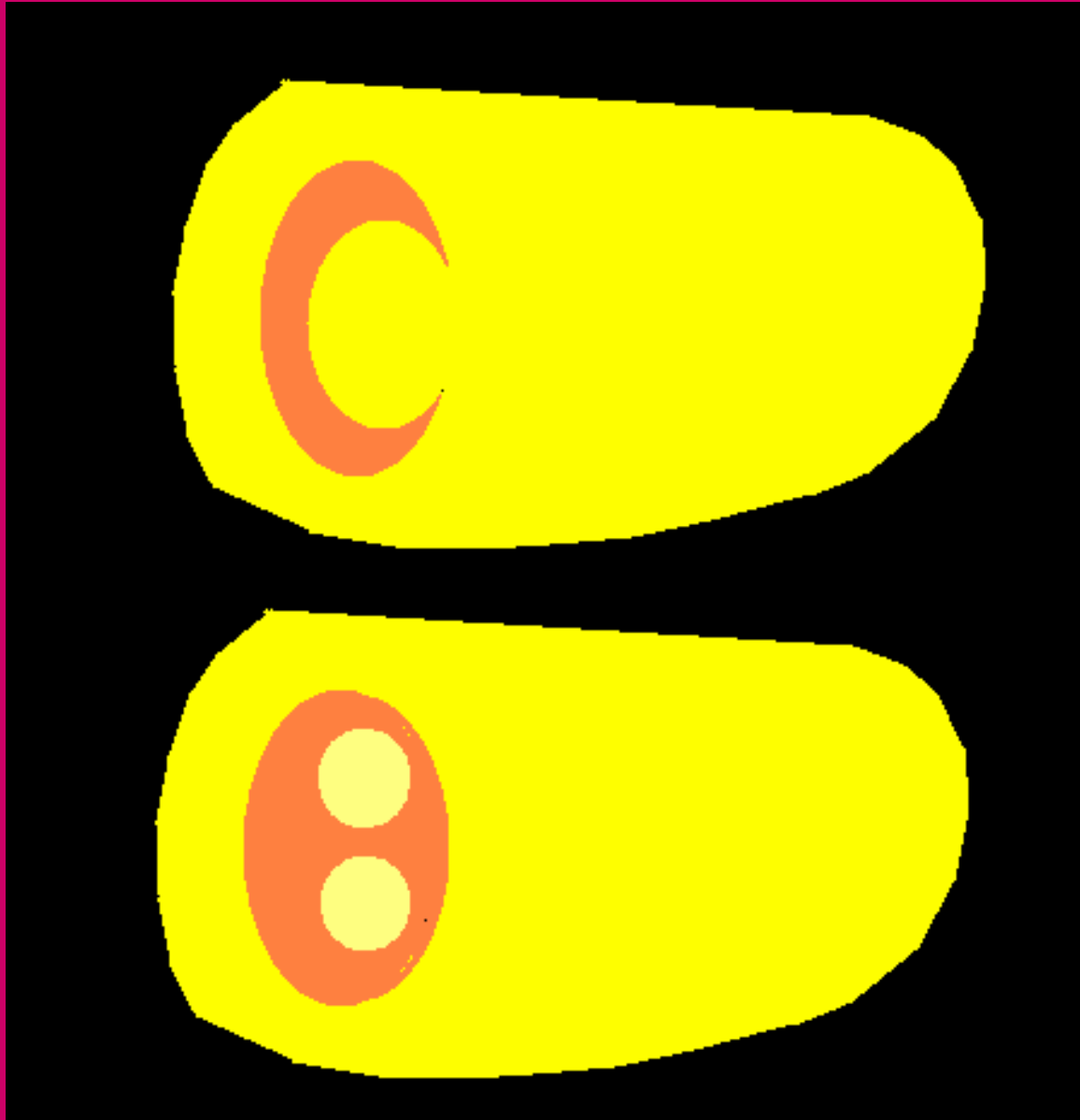


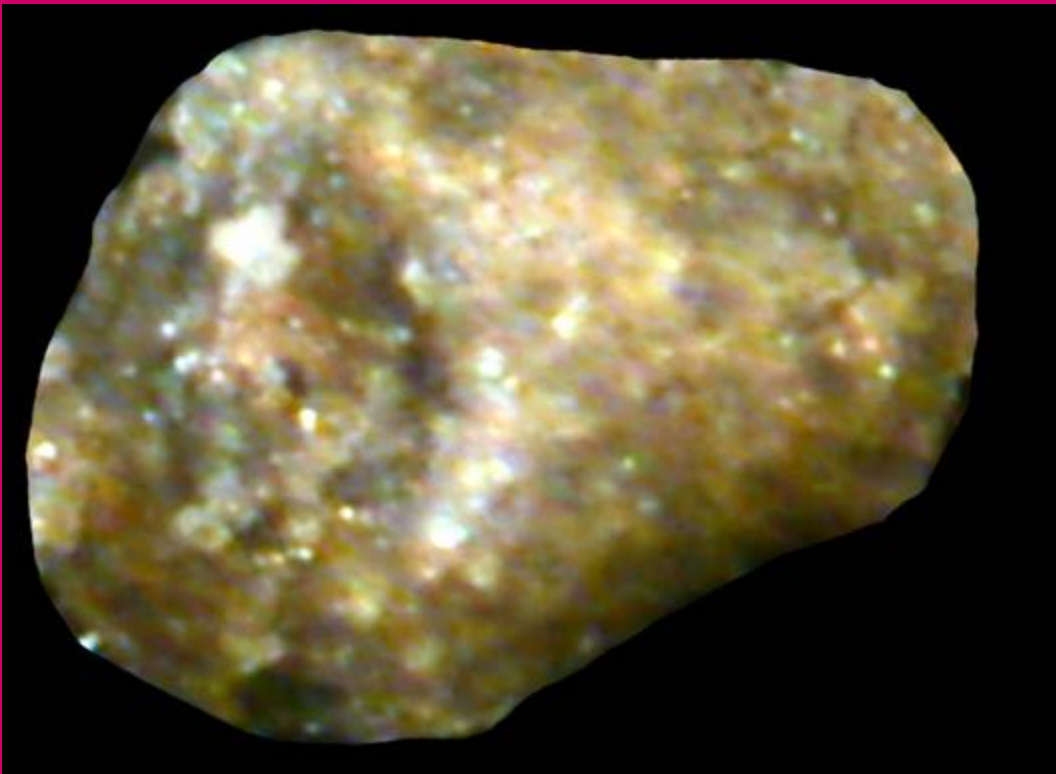


*Bairdiocypris sp*



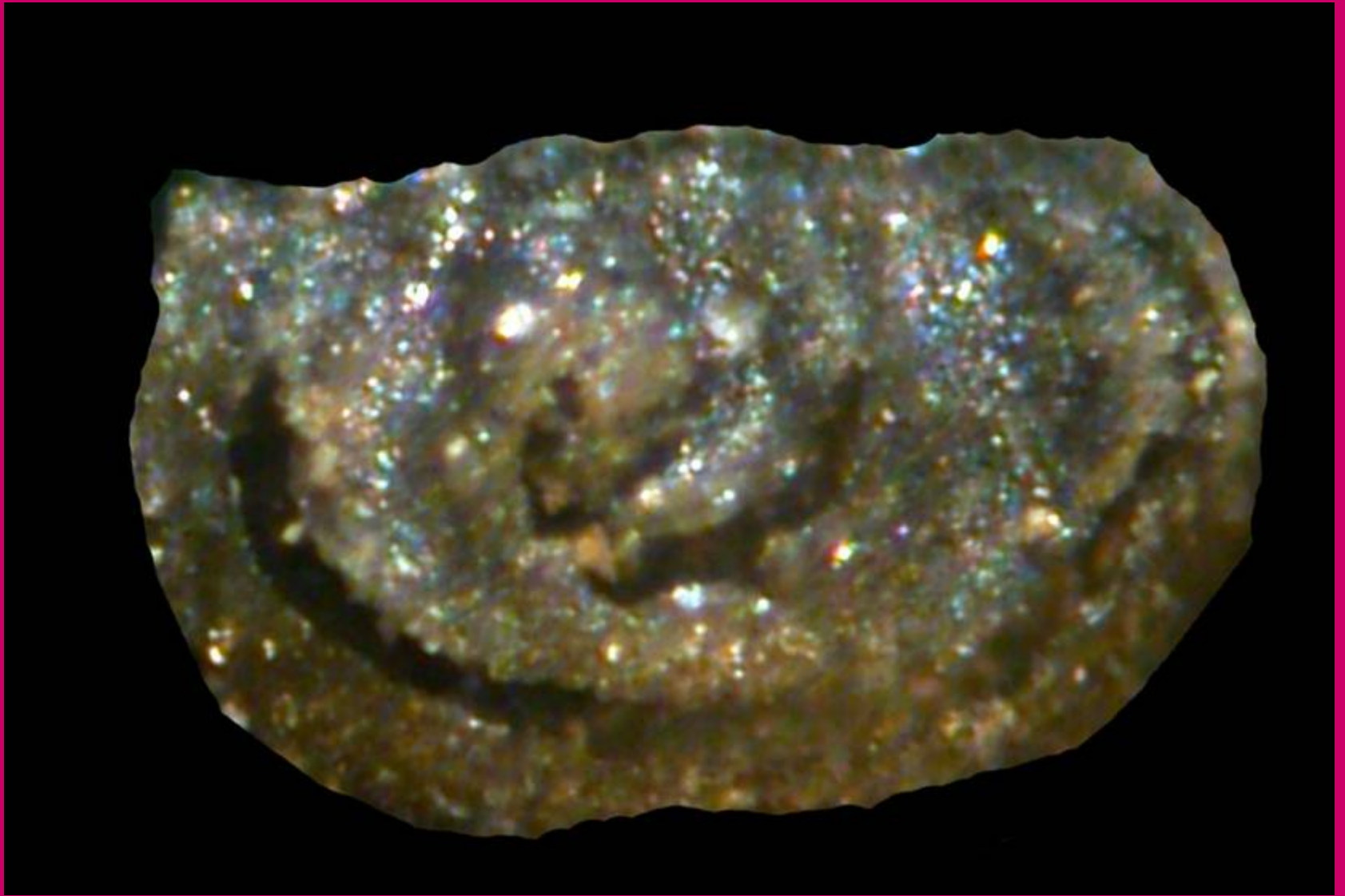
*Eucraterellina* ( 2 sp)





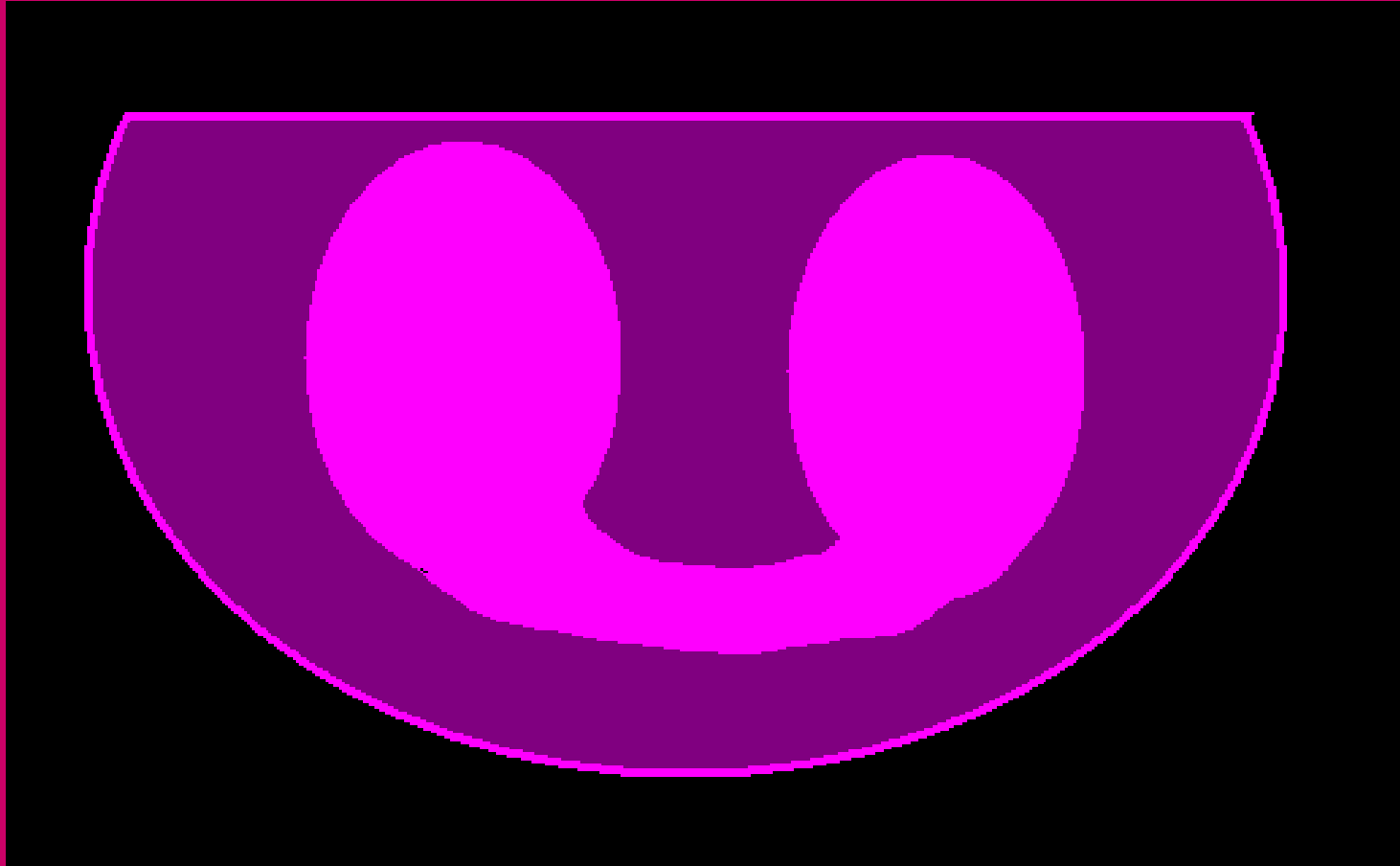
*Bollia* sp.1







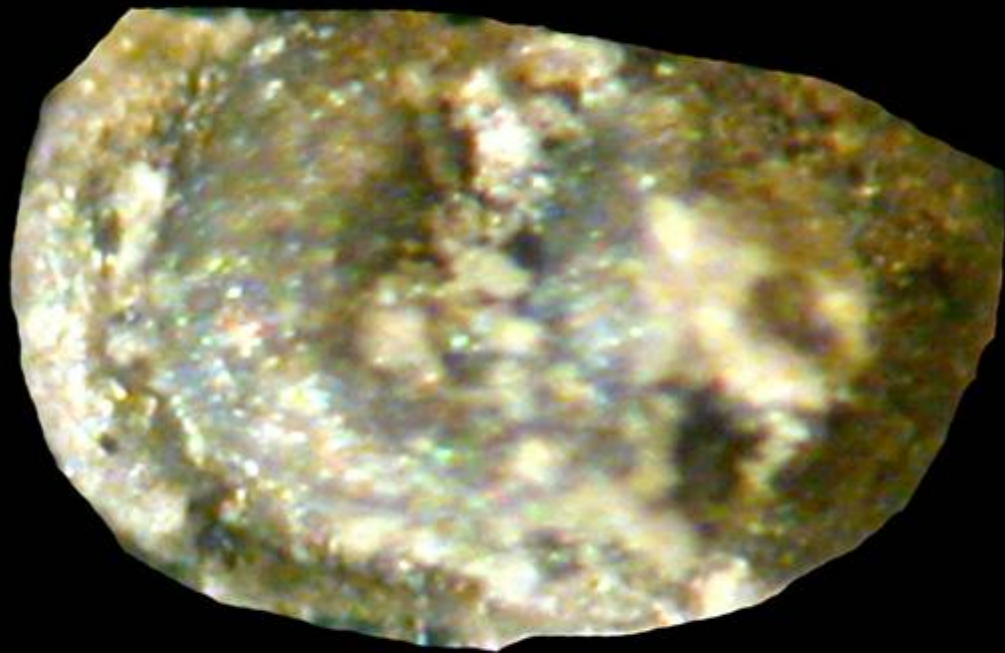
*Bollia* sp.2





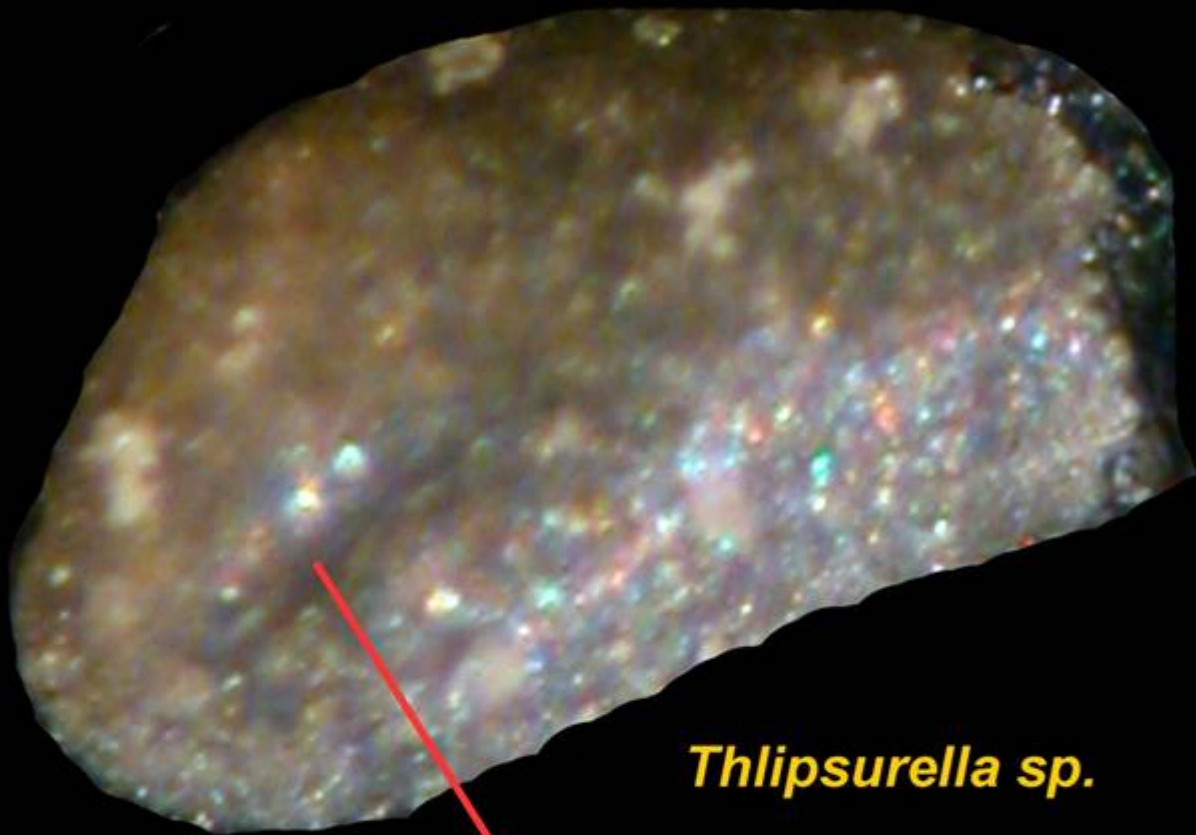
*Bollia* sp.3



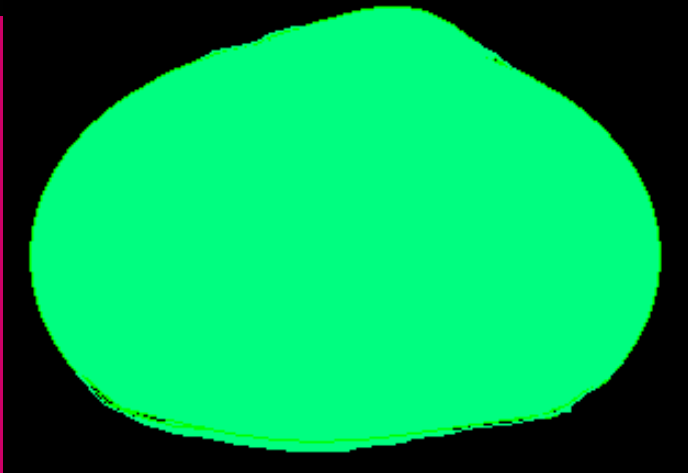


*Thlipsurella fossata*





*Thlipsurella sp.*

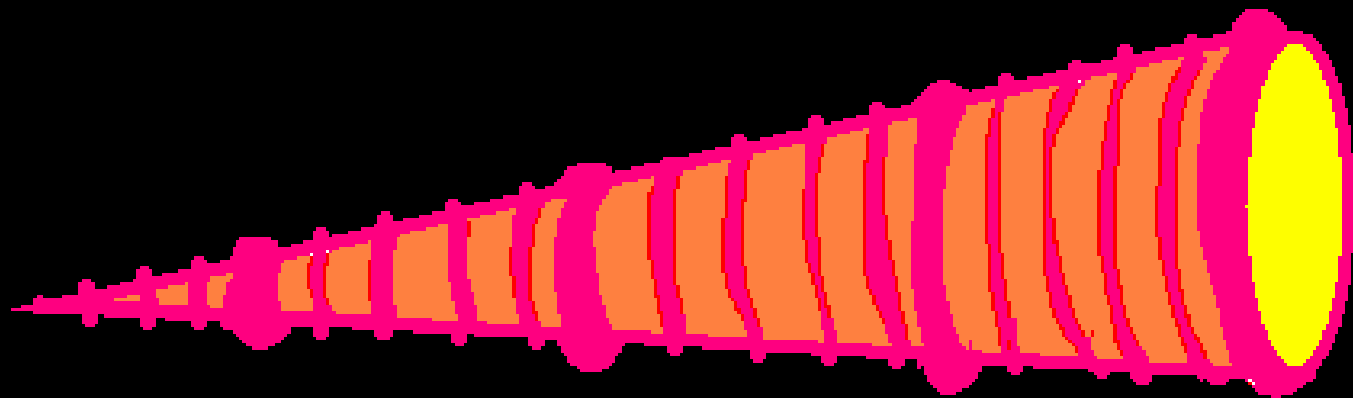


*Tubulibairdia simplex*

*Bairdiocypris sp.*

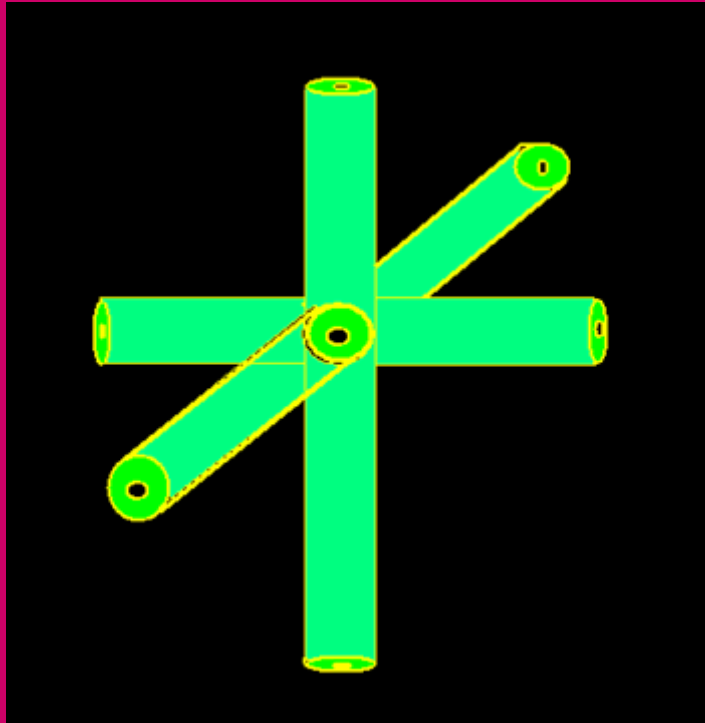


*Tentaculites gyracanthus*







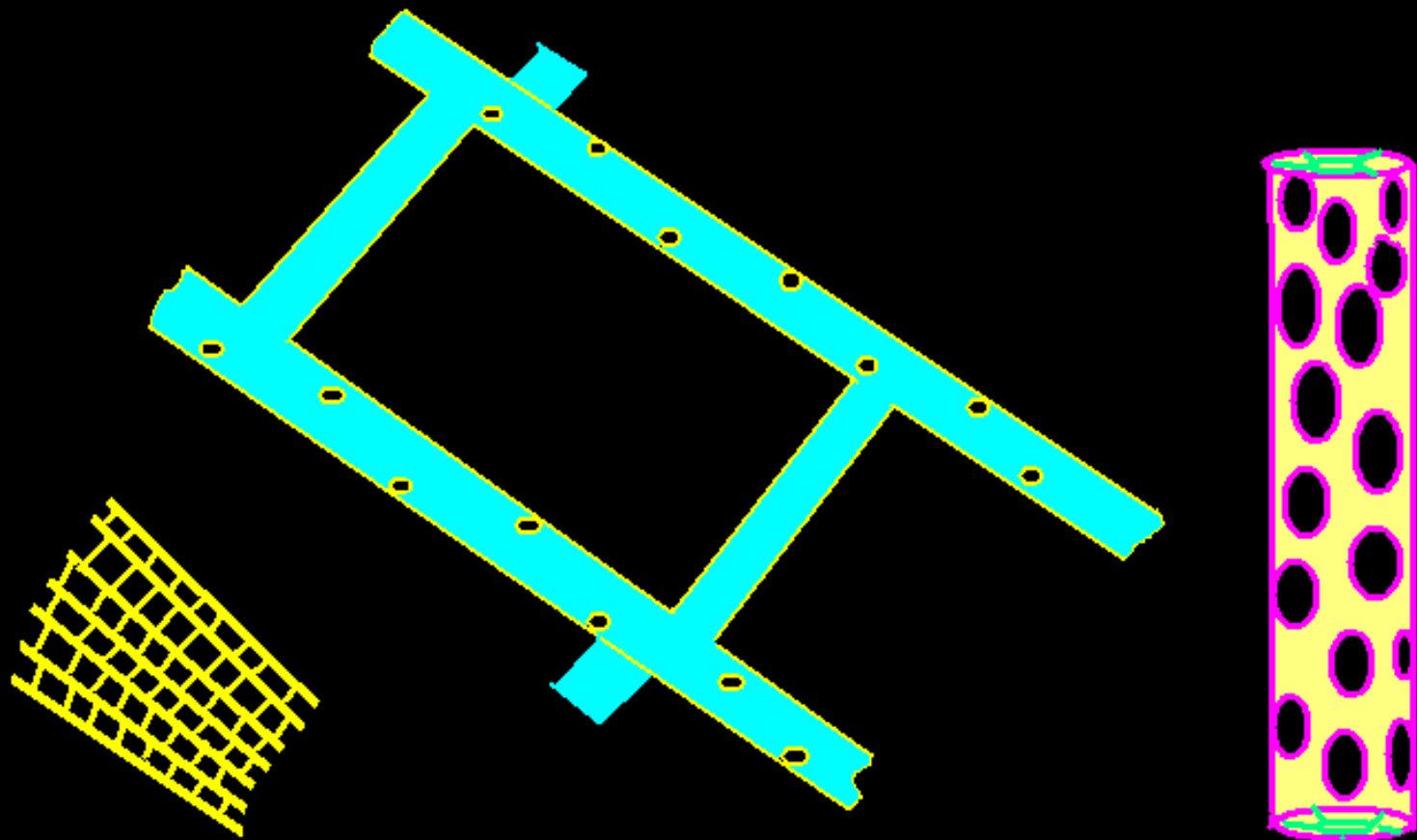


***Triaxonina***  
**(=*Hexactinellida*)**

A Sponge Spicule ( $\text{SiO}_2$ )

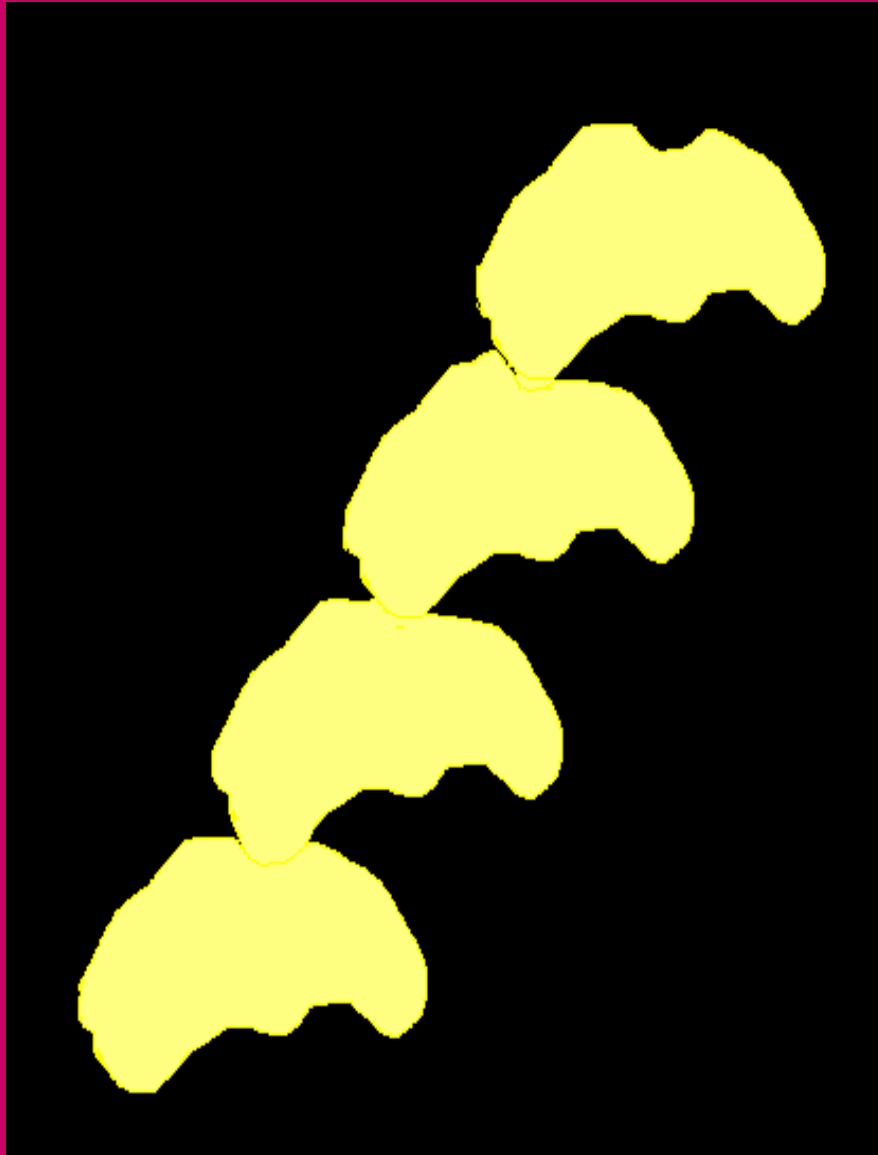


*Fenestellid and "Stick" Bryozoa*



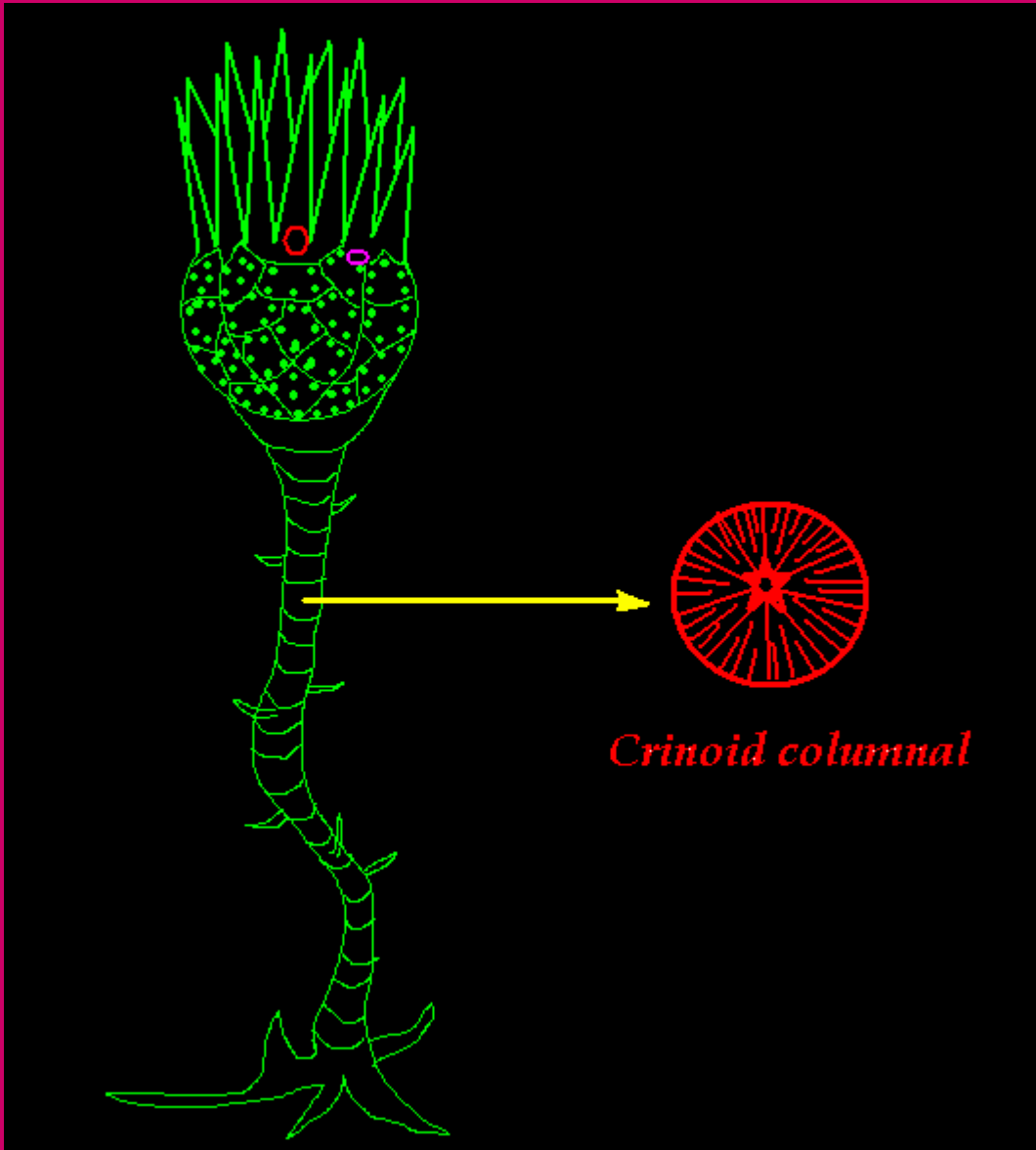


Zooecial pores



*?Graptolite or*

*?Bryozoa*



**CRINOIDEA**