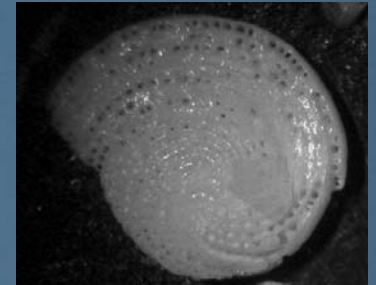
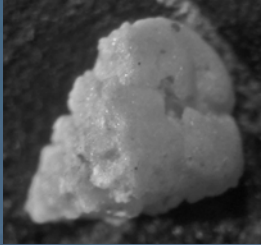


# Identification of Common Tropical and Subtropical Shallow Water Foraminifera of South Florida

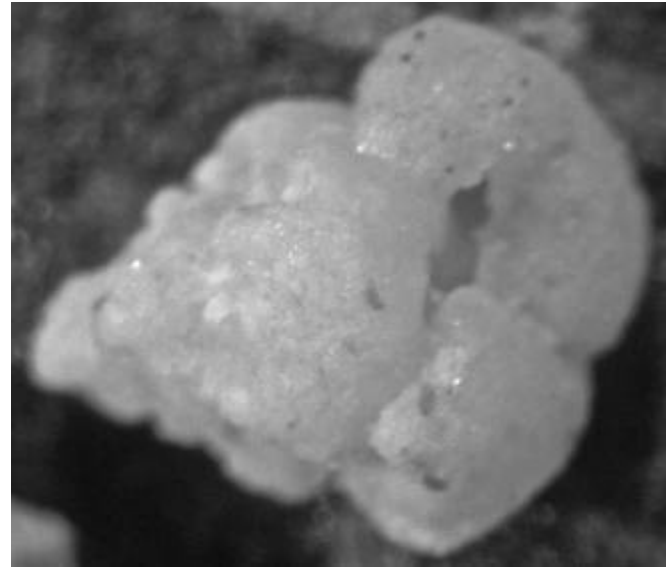
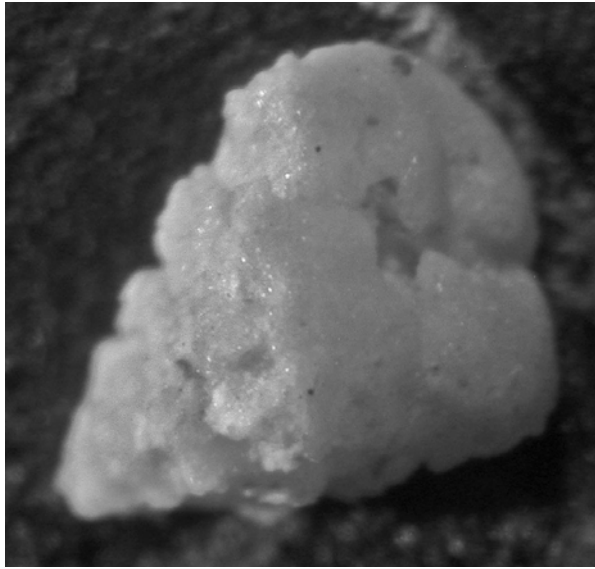
(50+ common forms for students)



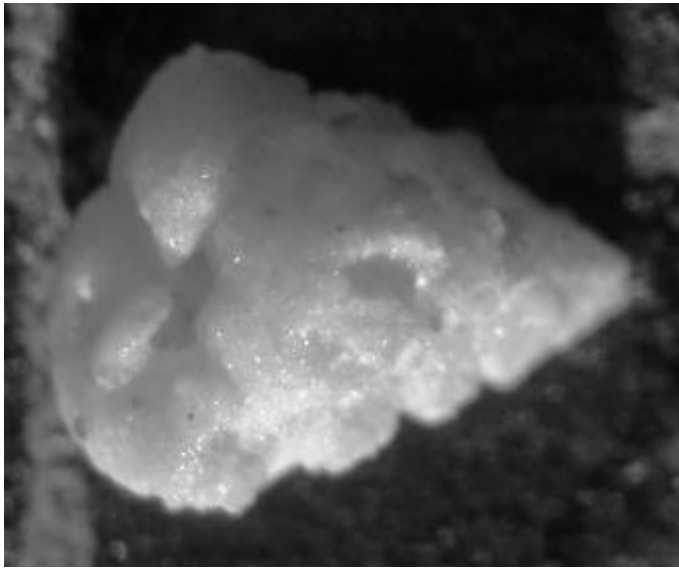
# Mi rogeo

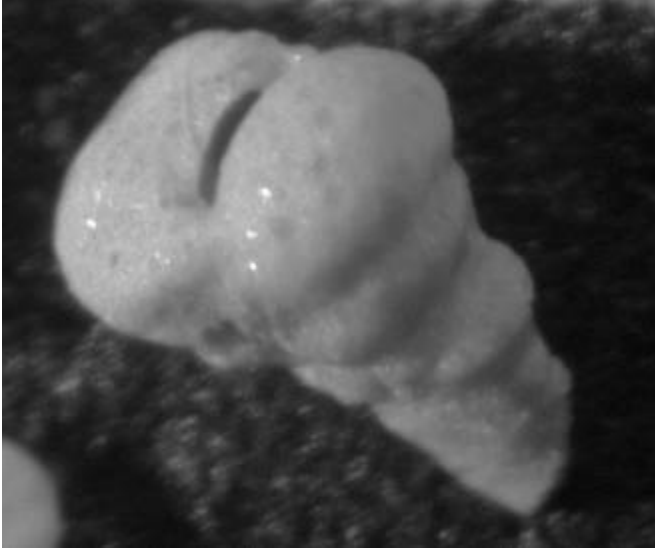
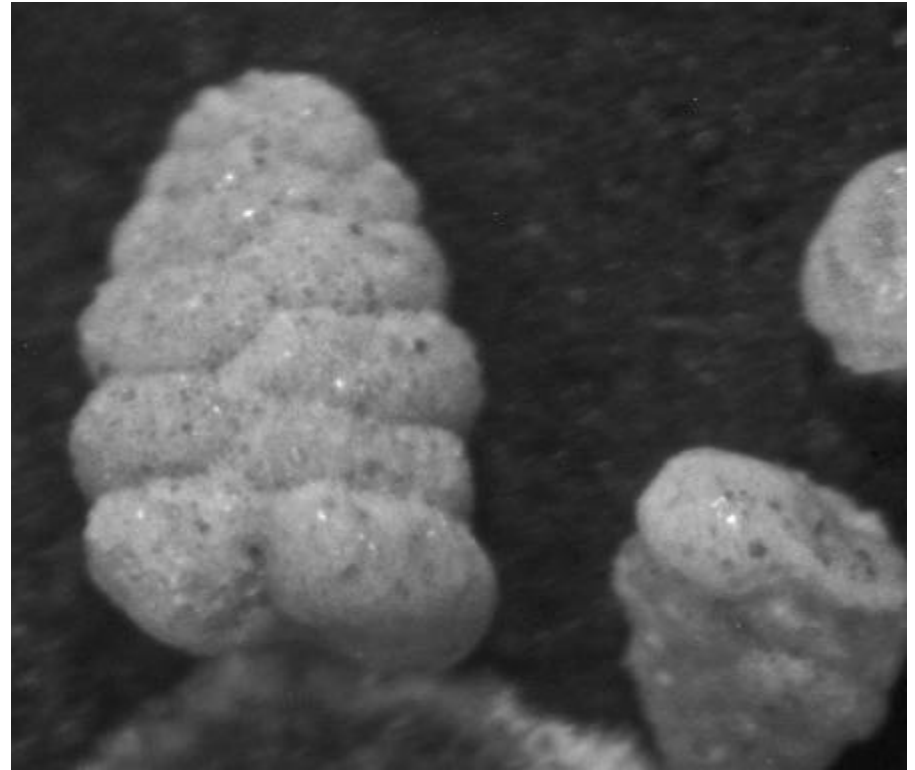
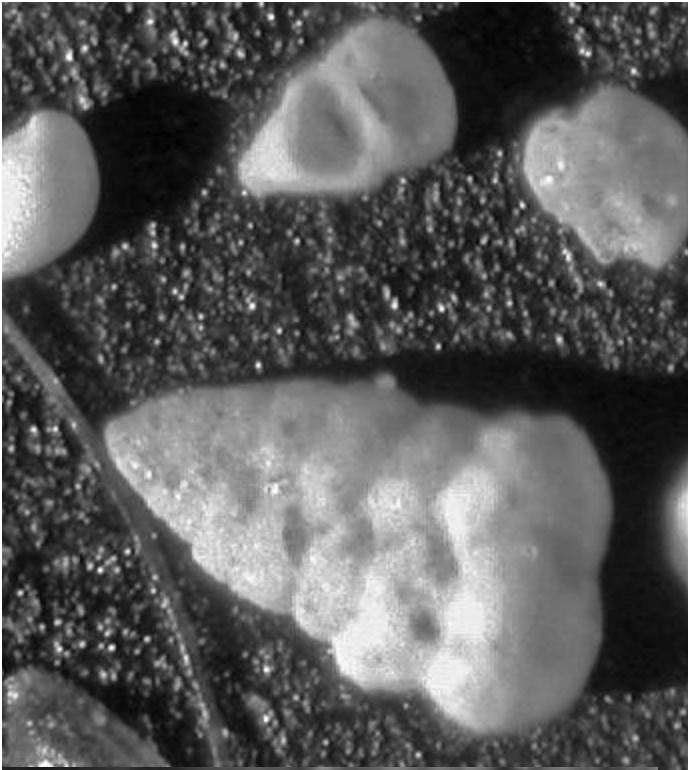


[mikrogeo.com](http://mikrogeo.com)

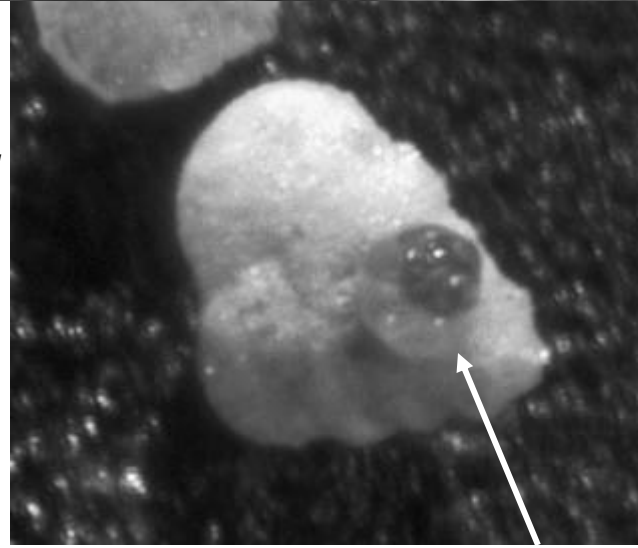


***Valvulina oviedoiana*; triserial**

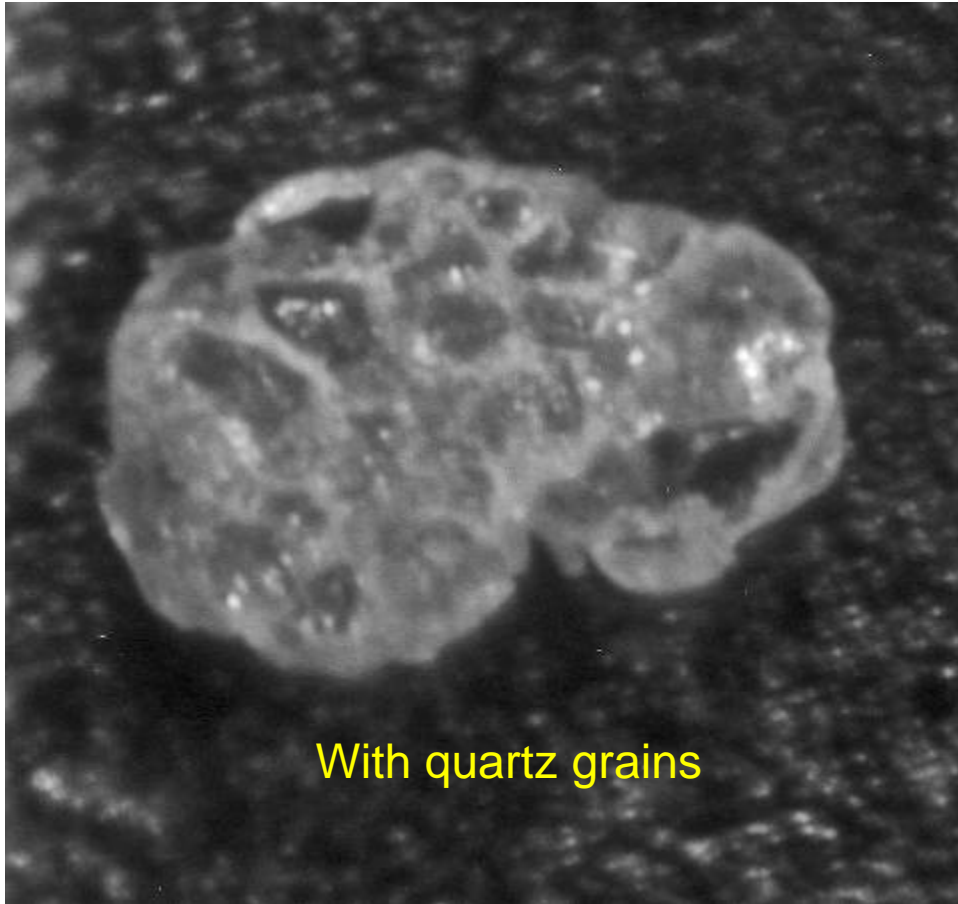




***Textularia  
agglutinans*;  
biserial**

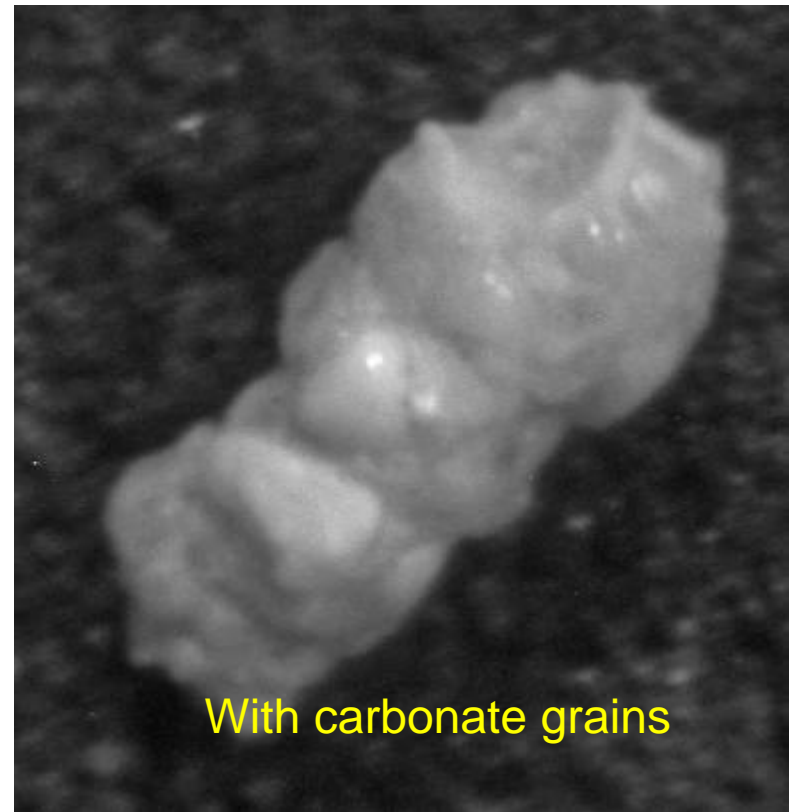


***Rosalina concinna***

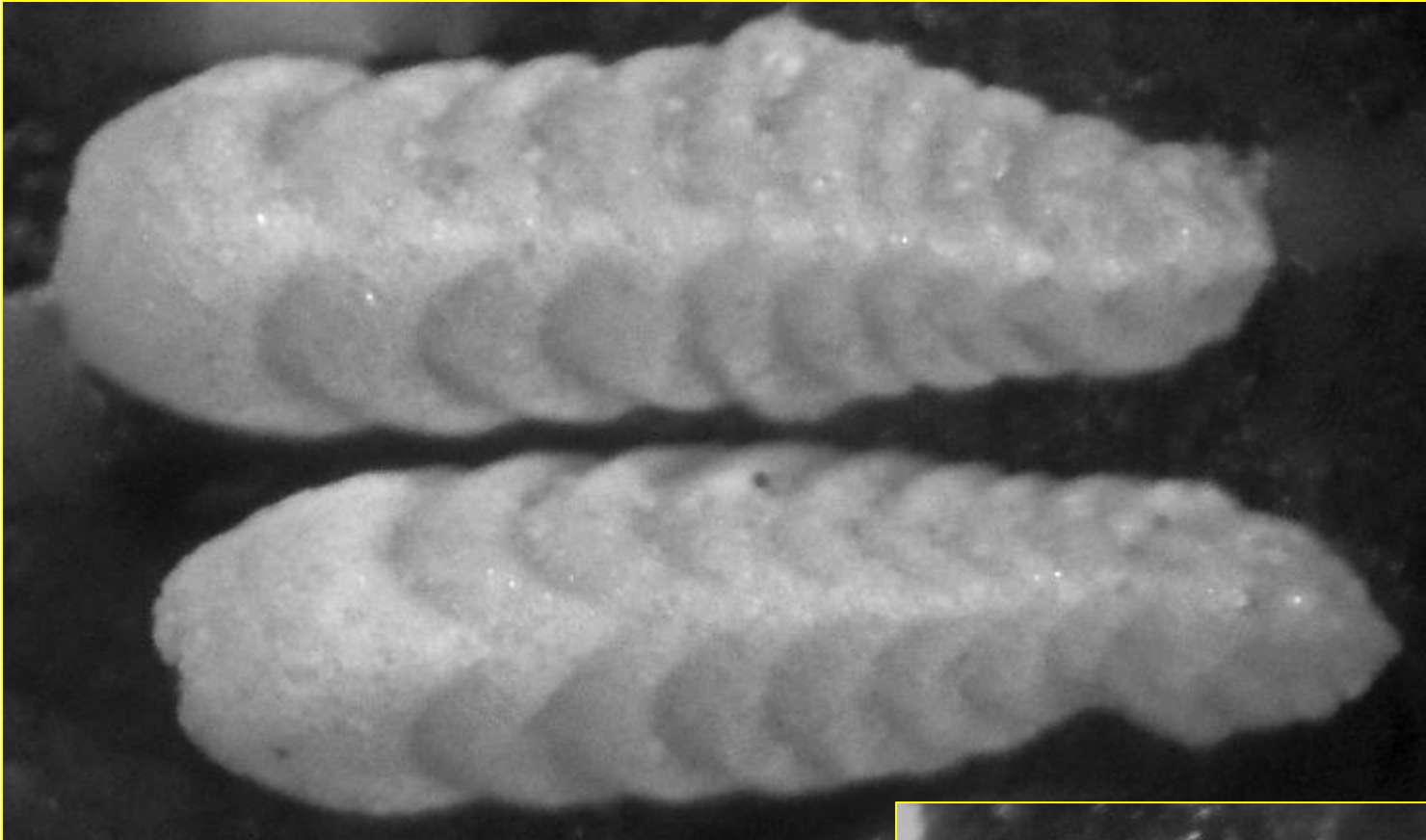


With quartz grains

*Ammotium sp.*,  
Often listed as  
*Ammobaculites*

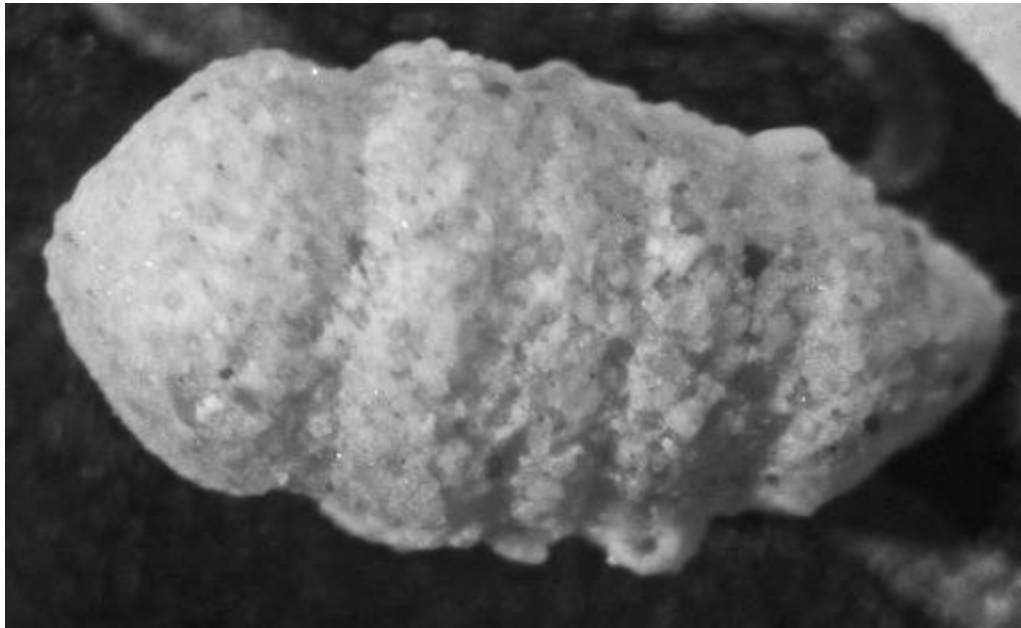


With carbonate grains

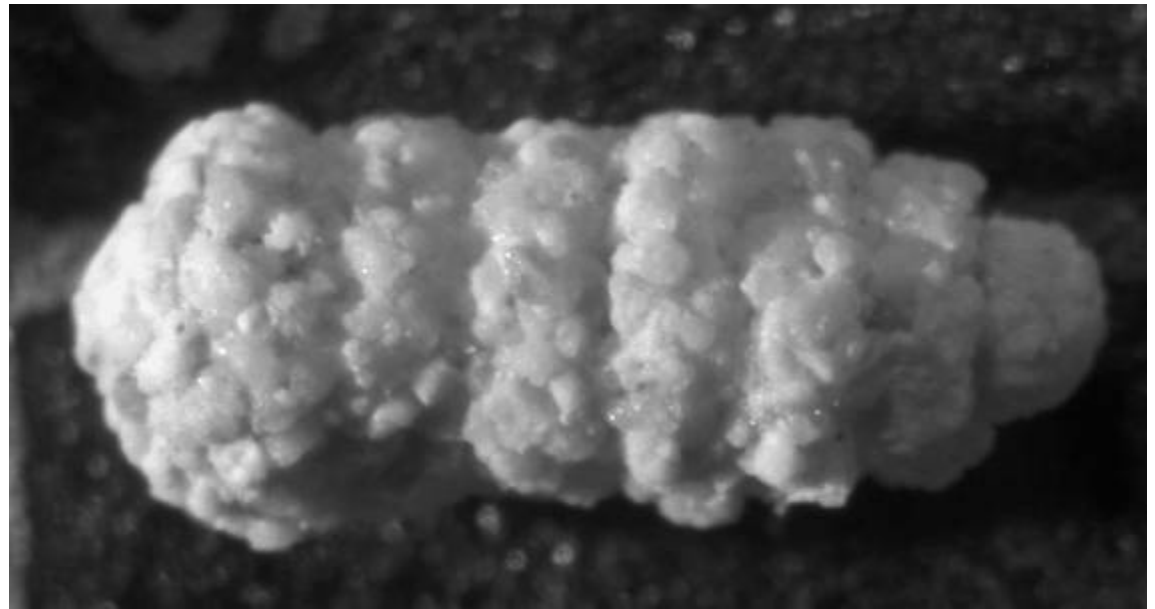


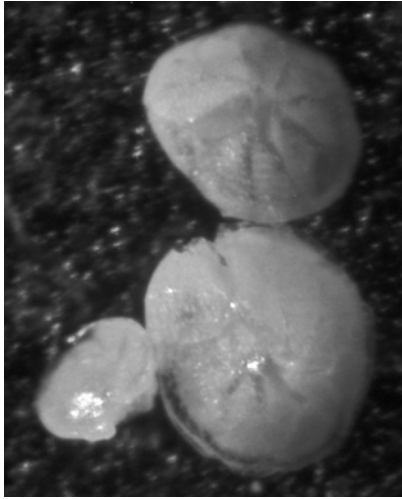
***Clavulina tricarinata***



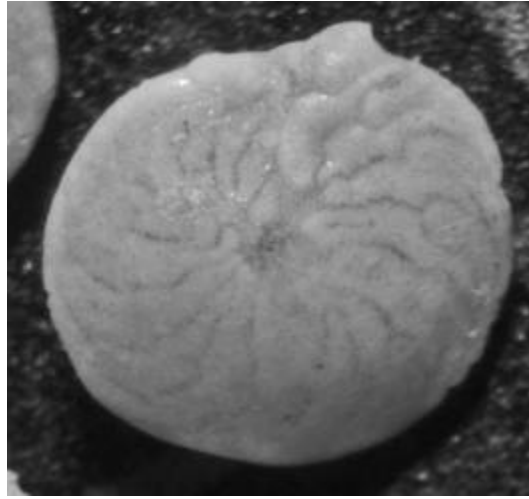


*Liebusella soldanii*

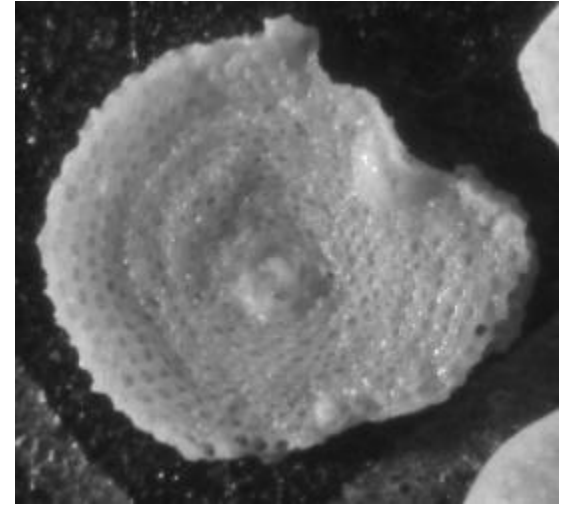




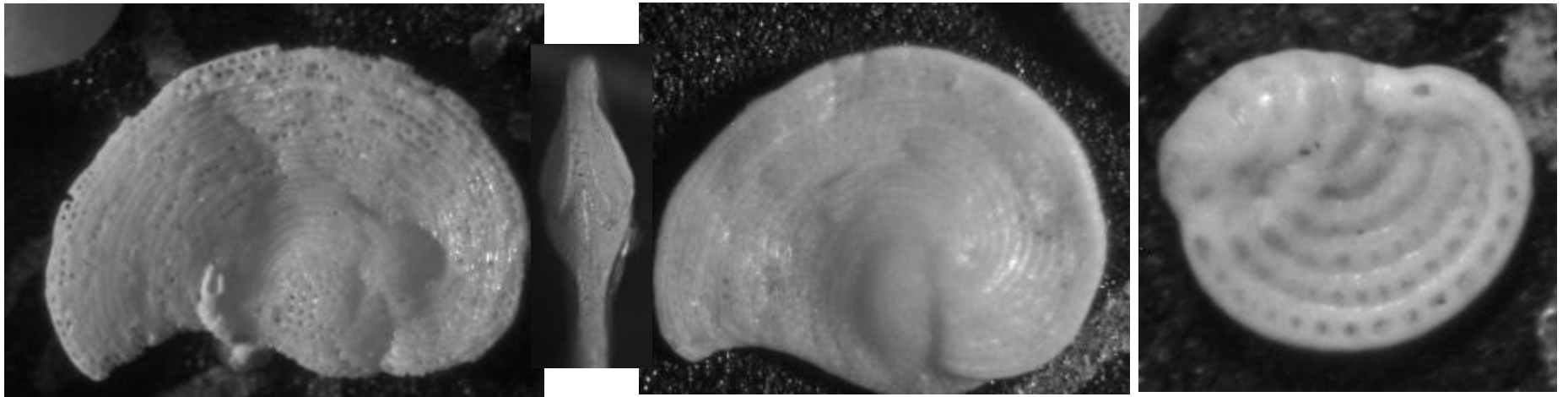
***Asterigerina carinata***



***Amphistegina lessonii***



***Sorites marginalis***

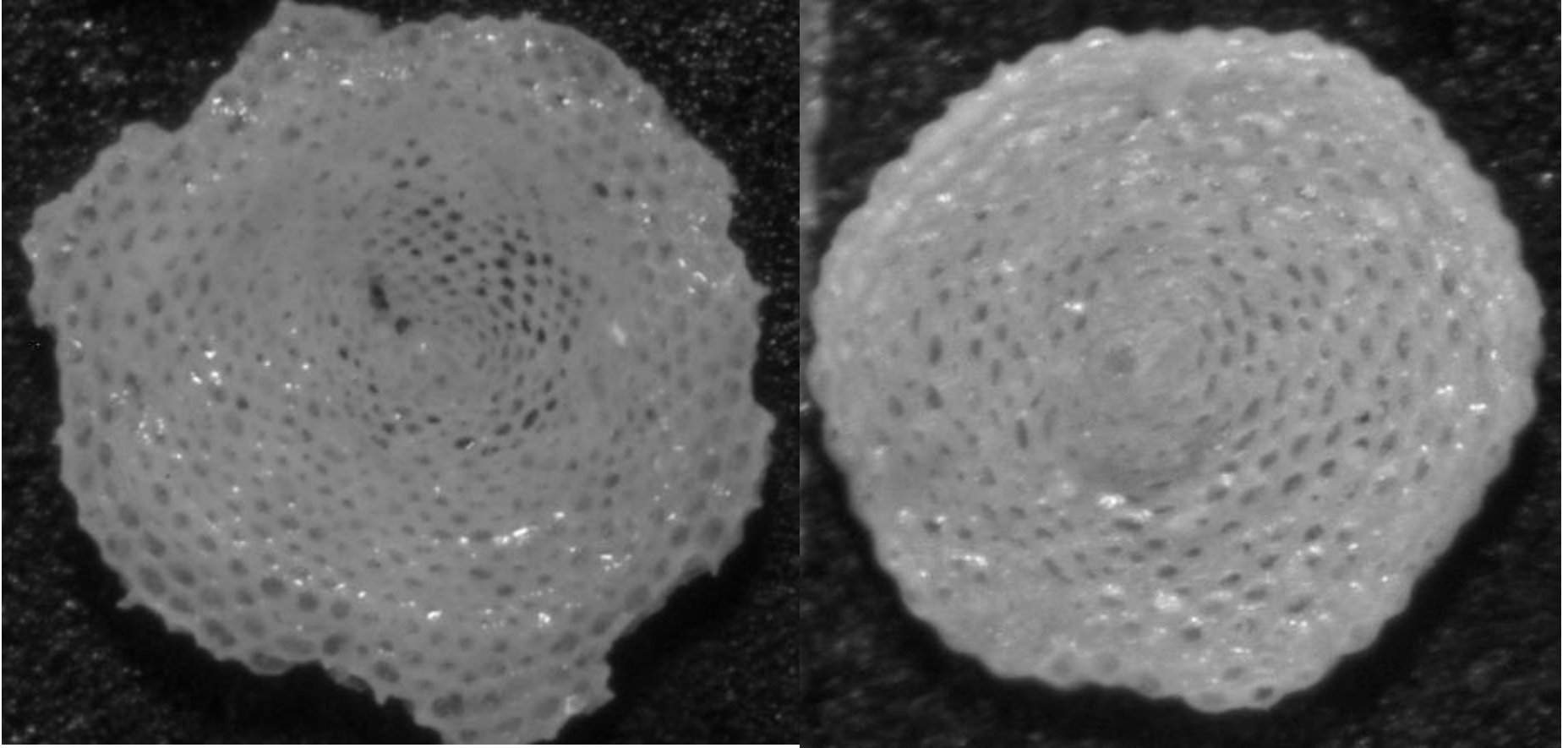


***Archais angulatus***

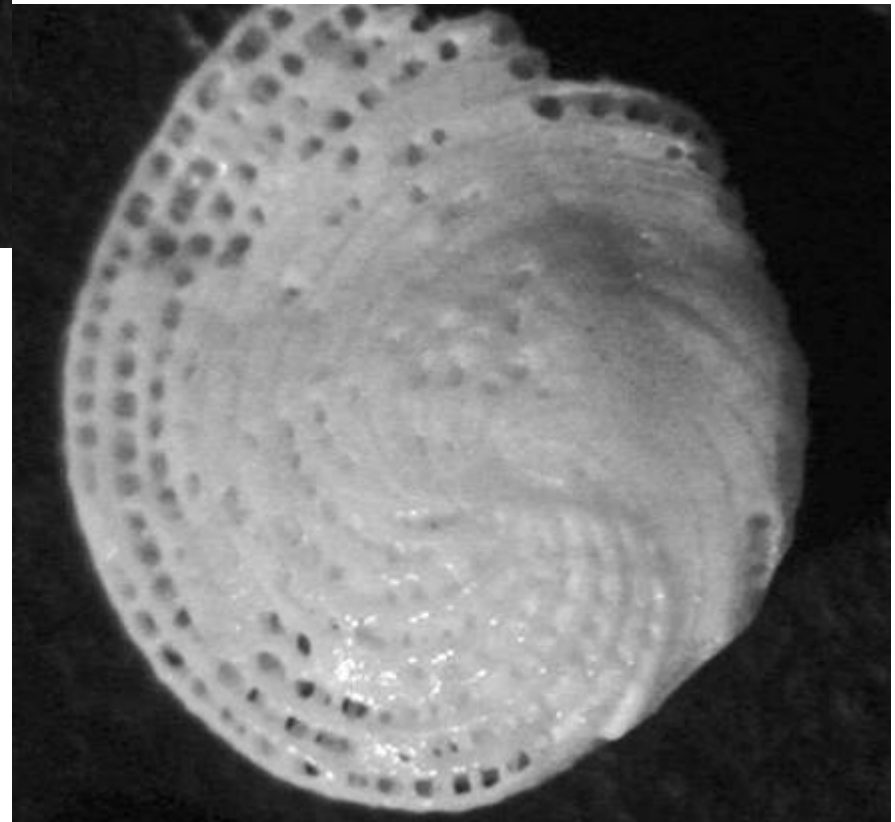
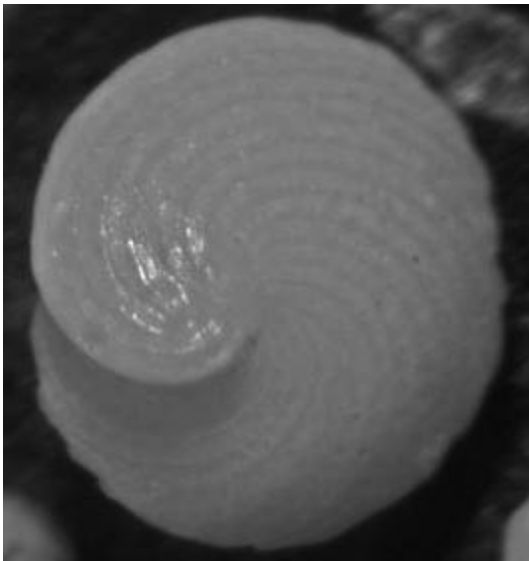
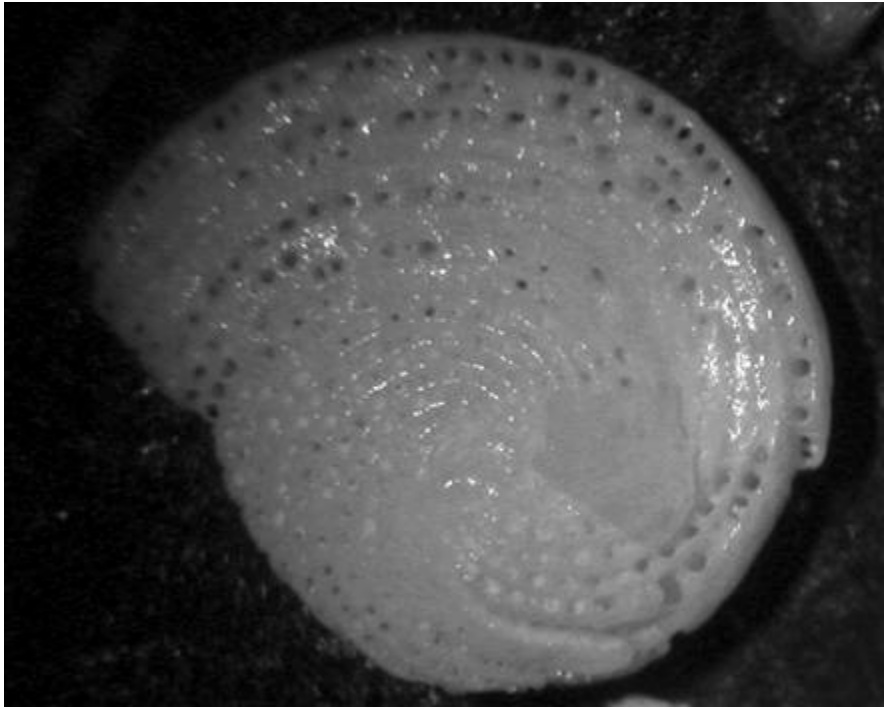
***Broeckina orbitolitoides***



*Sorites marginalis*



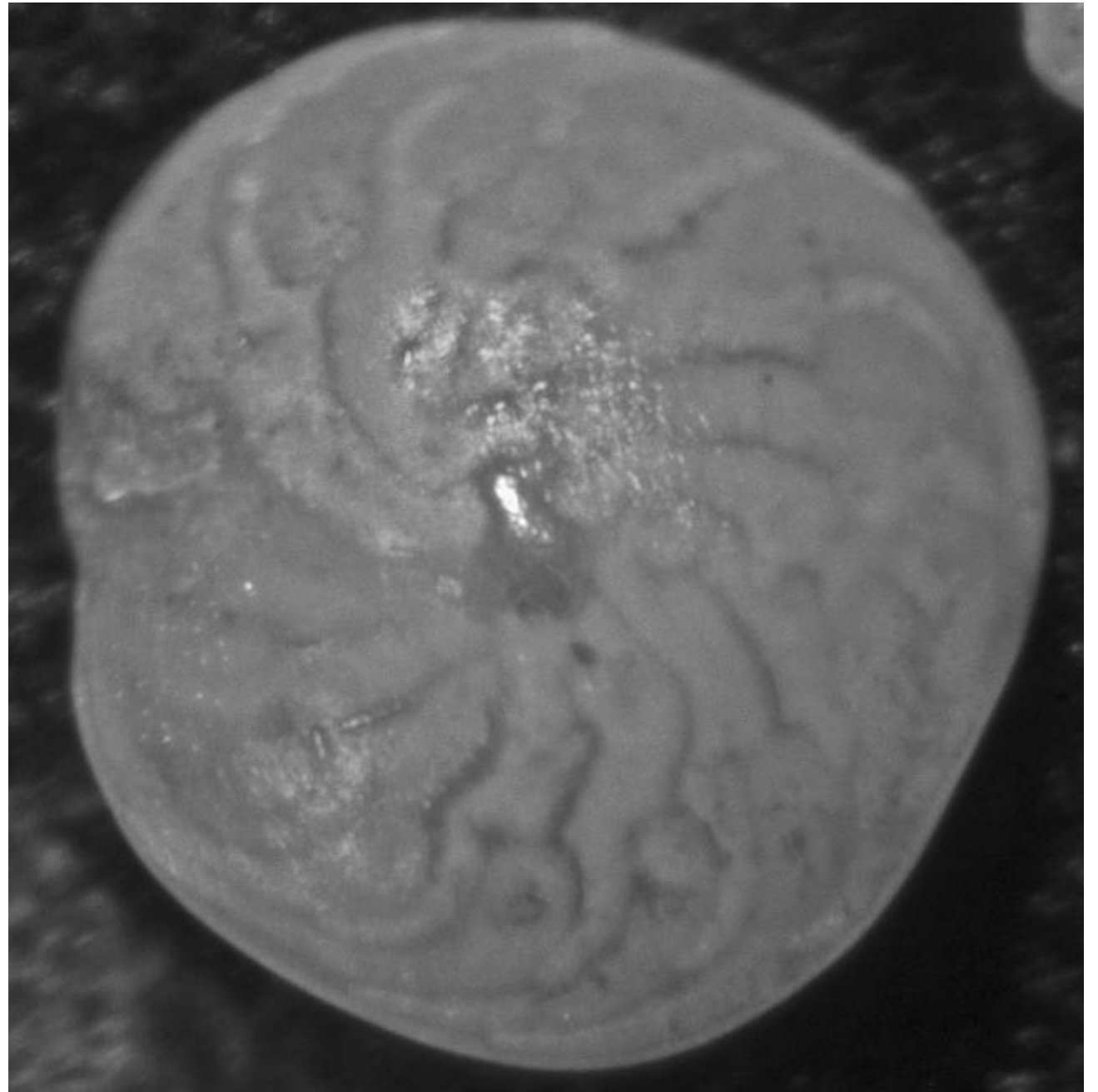
***Archais angulatus***

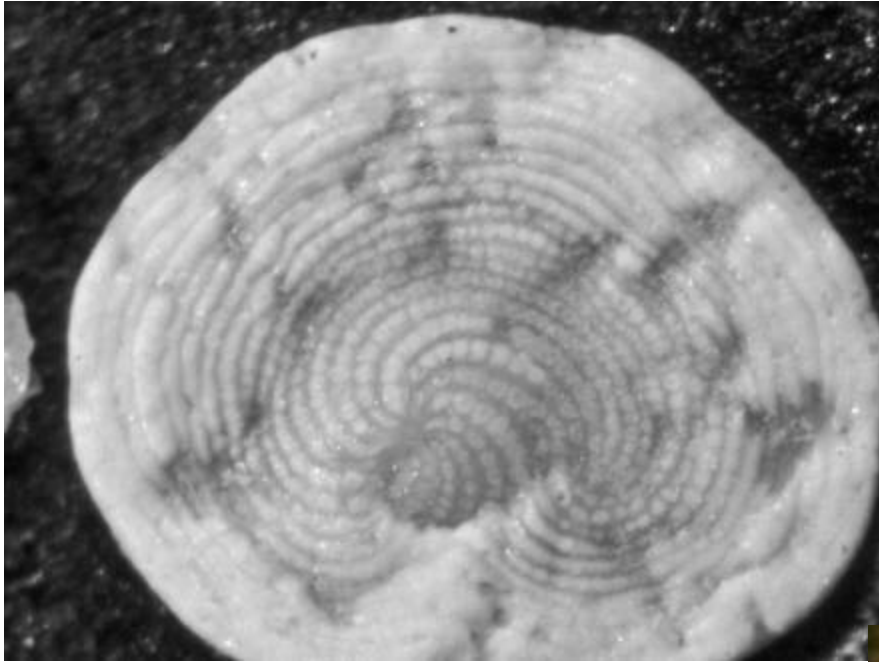


*Amphistegina lessonii*



***Amphistegina lessonii***

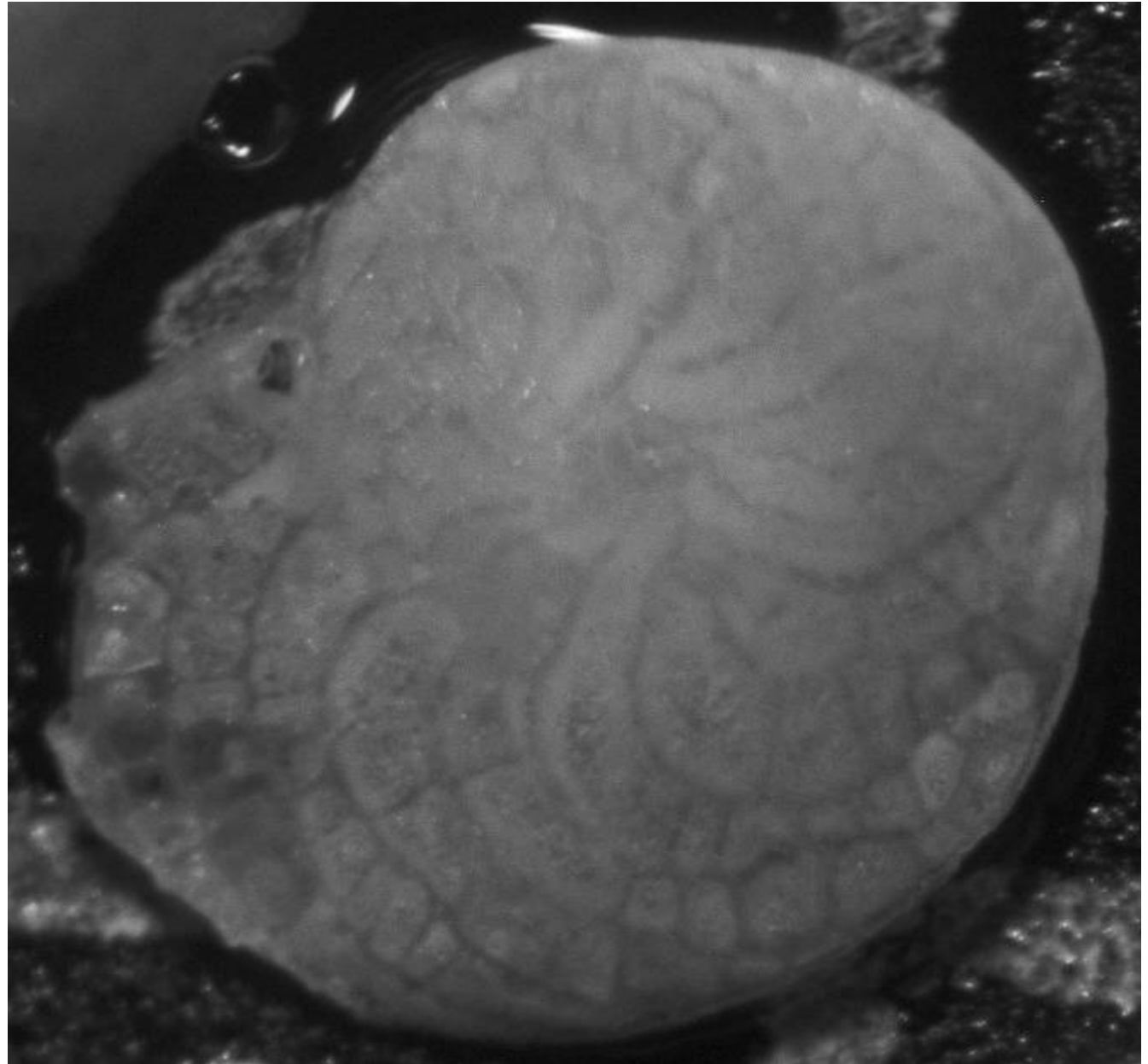


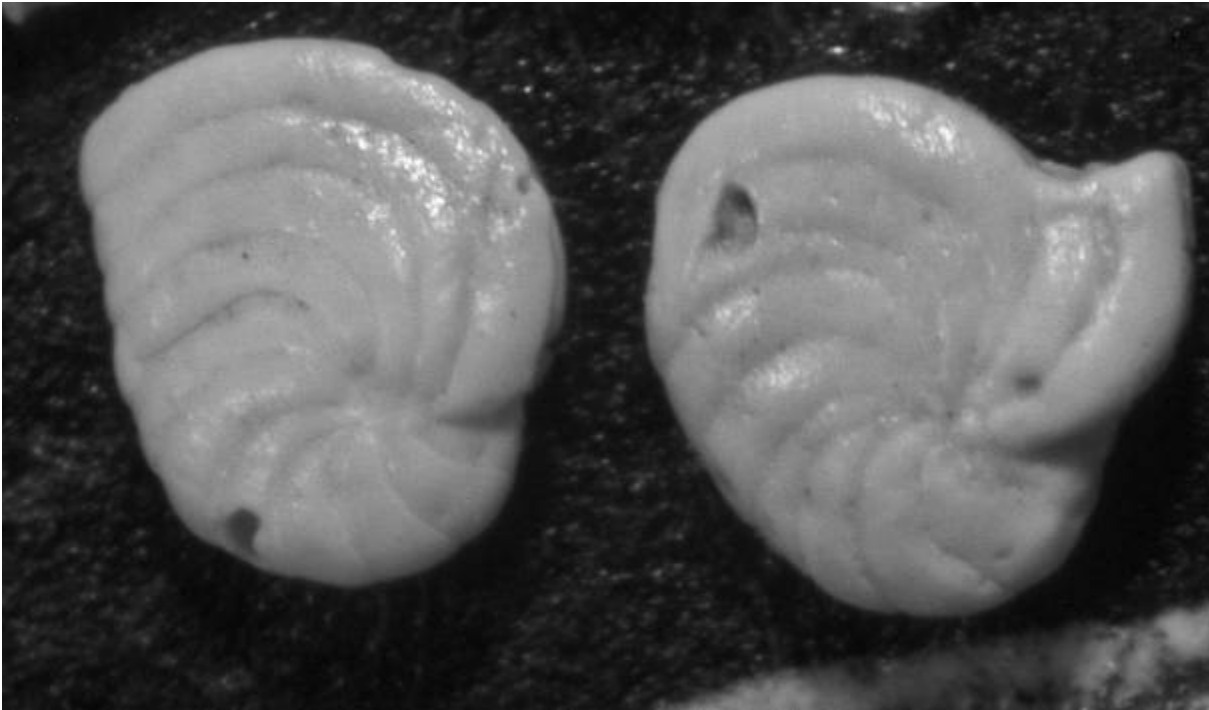


***Cyclorbiculina compressa***-  
note greenish hue of  
zooxanthellae-  
photosynthetic alga

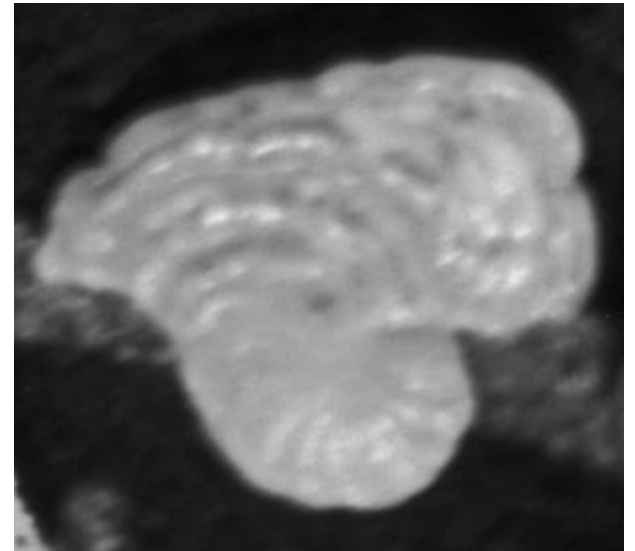


*Heterostegina  
depressa*

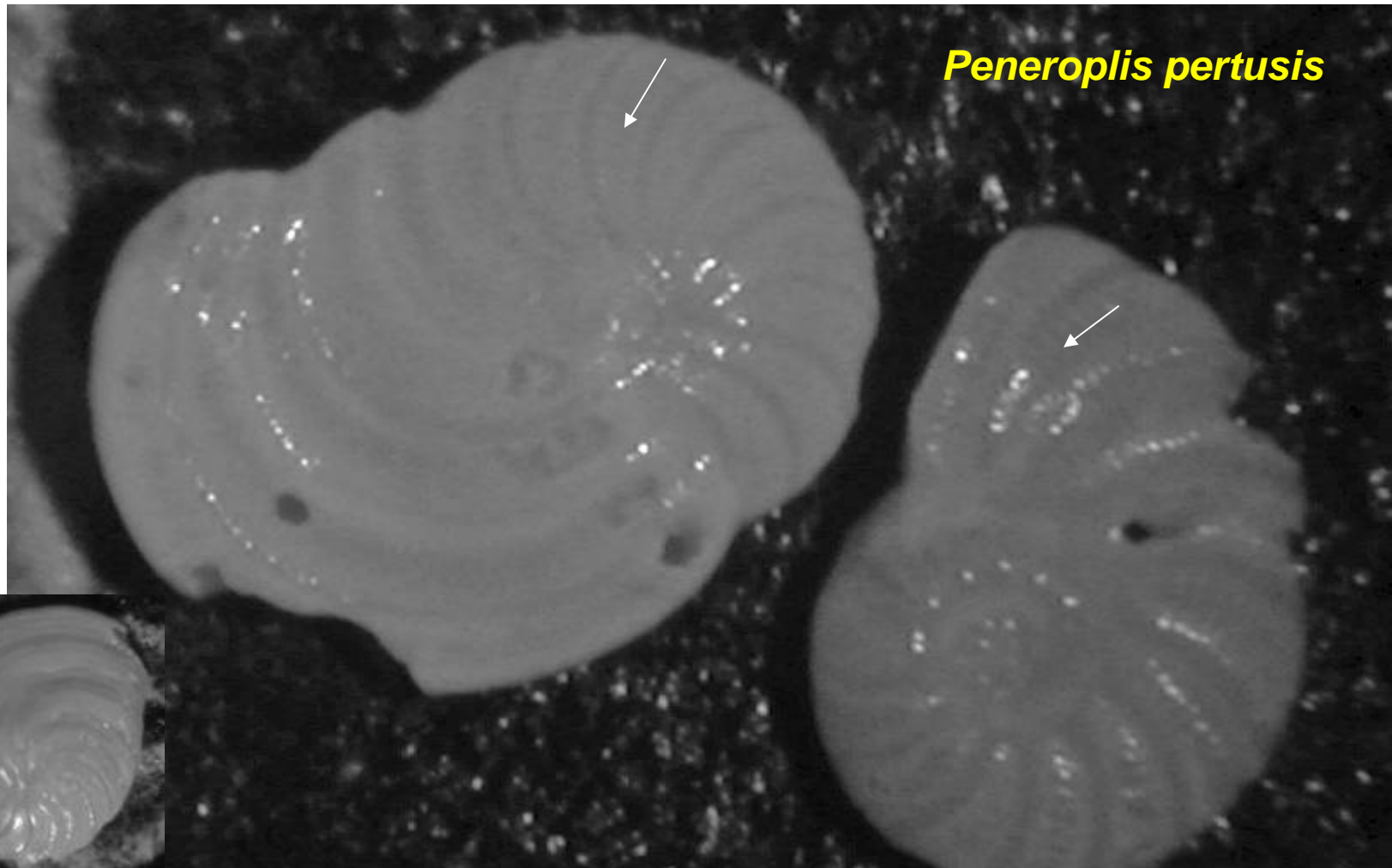




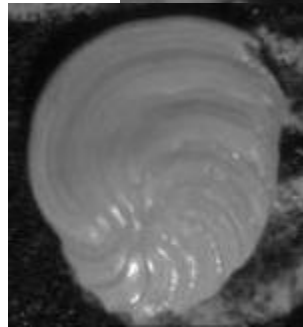
*Peneroplis bradyi*



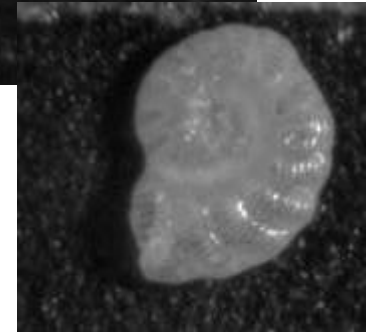
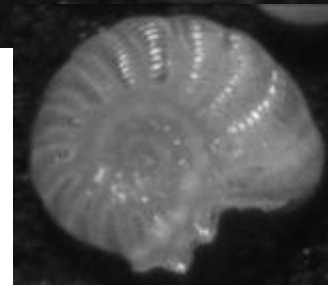
*Laevipeneroplis proteus*



*Peneroplis pertusis*

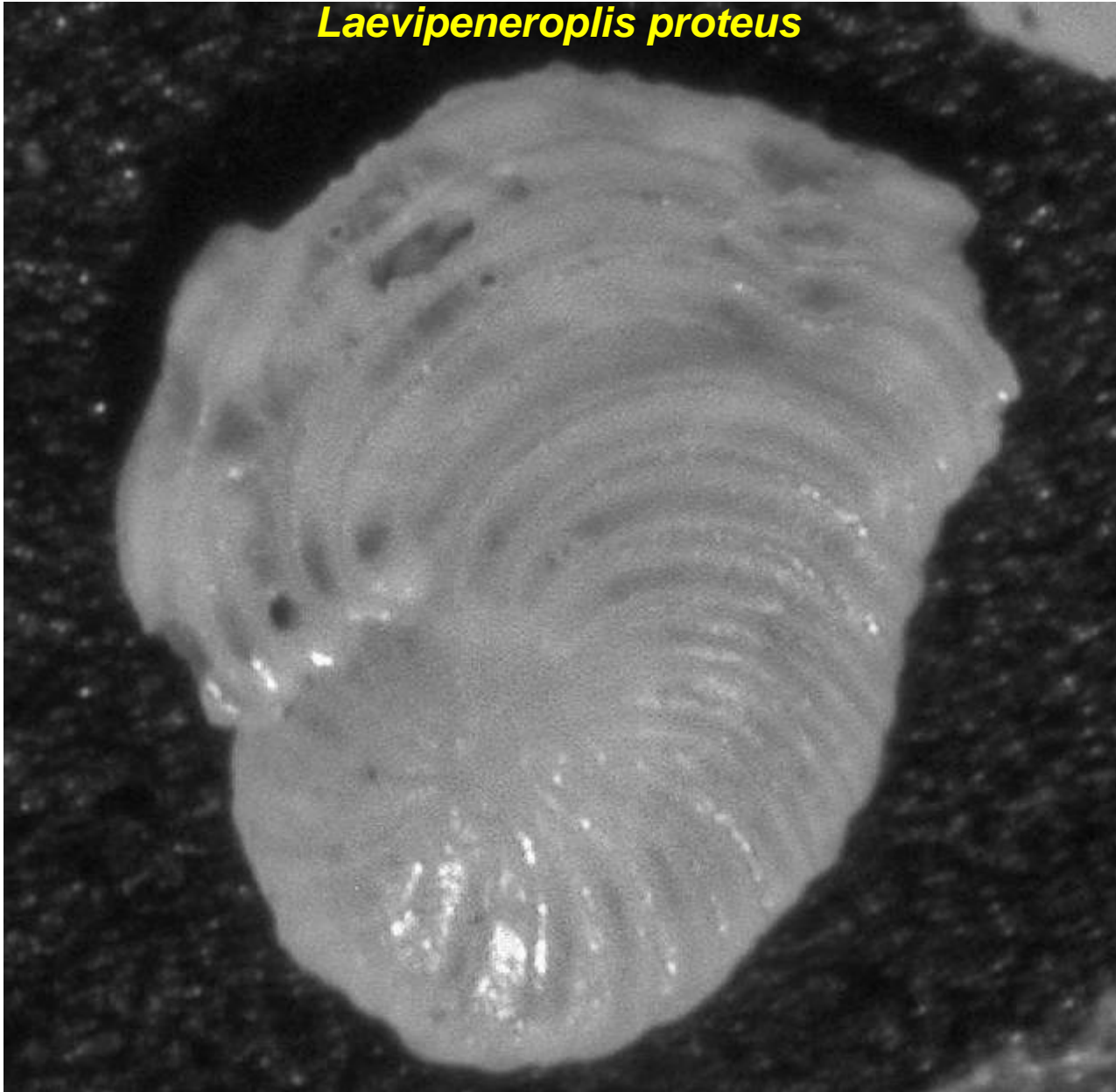


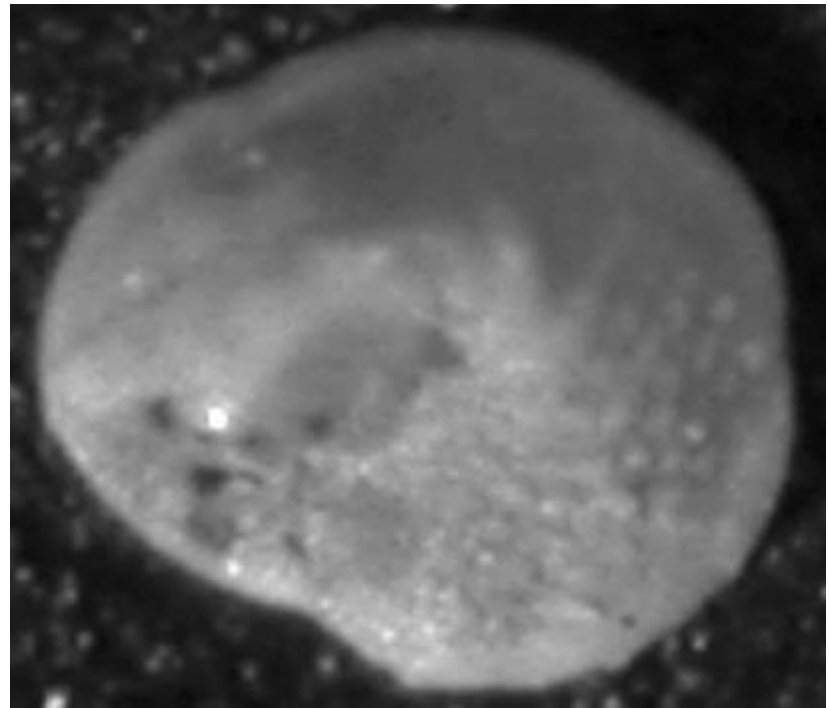
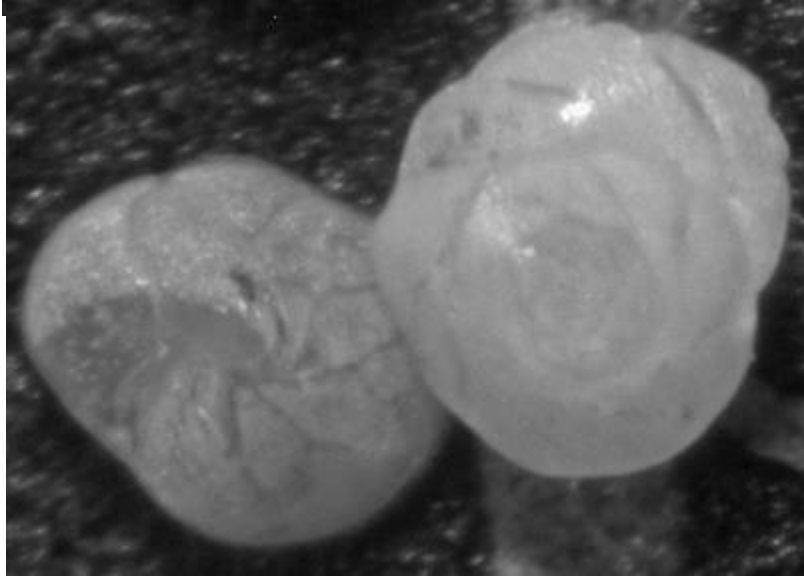
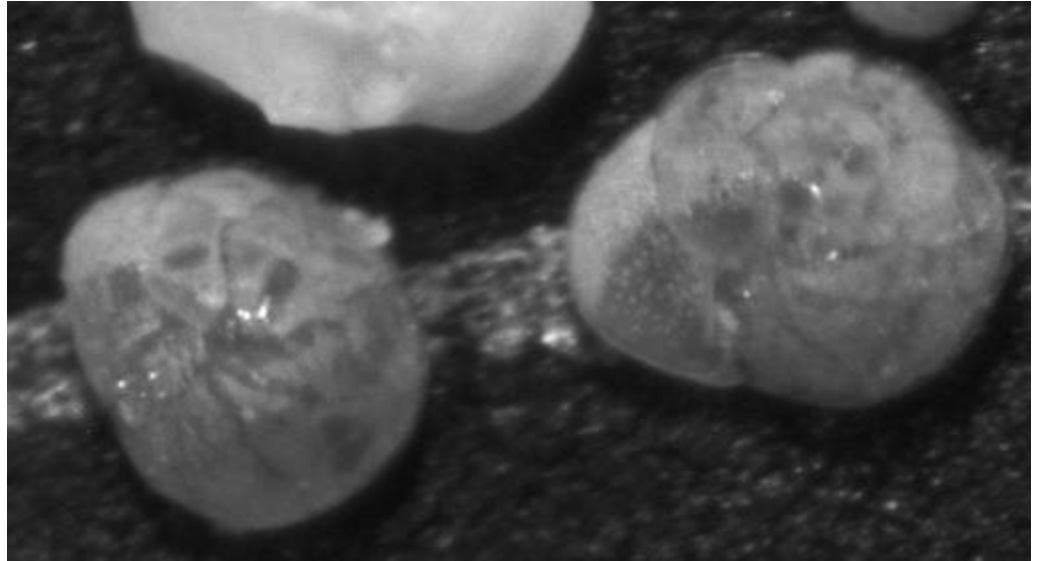
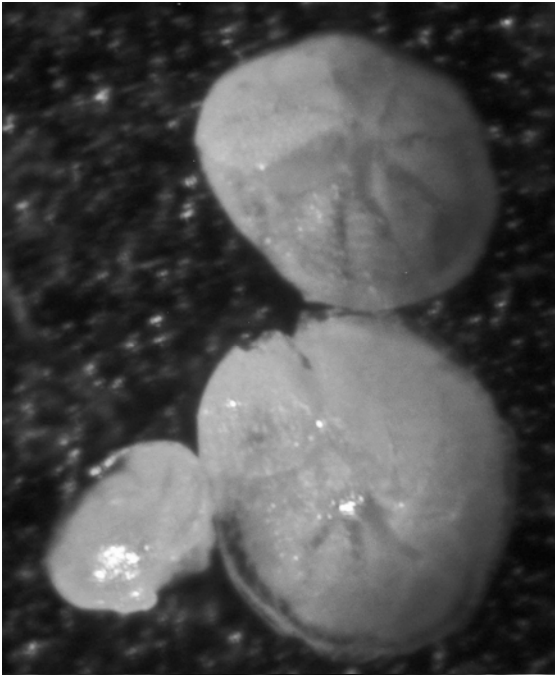
*Laevipeneroplis proteus*



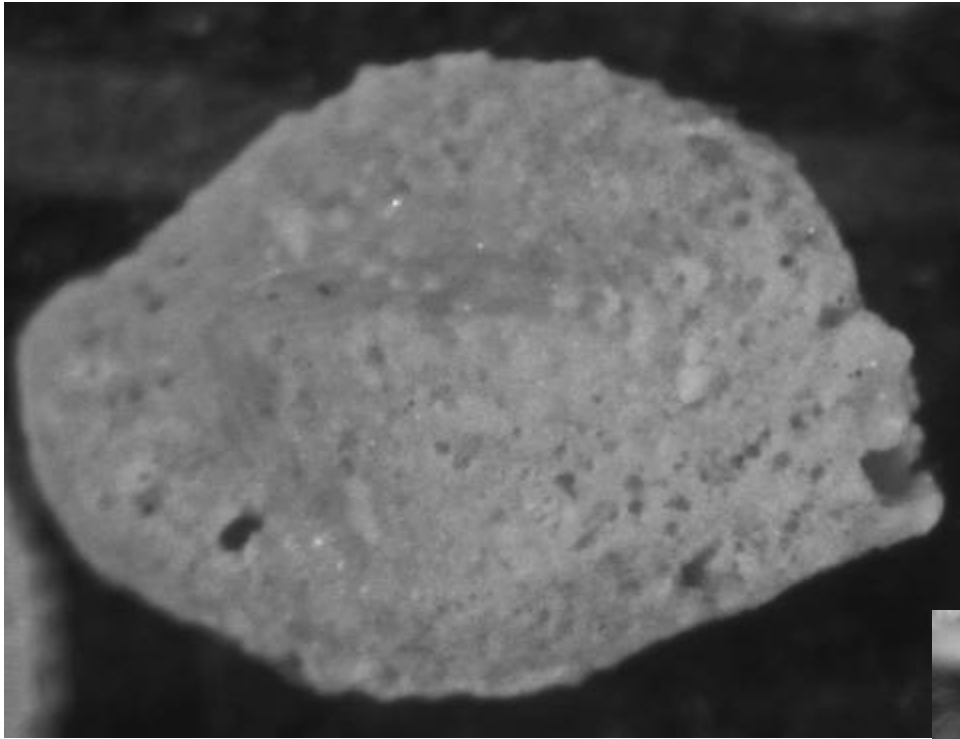


*Laevipeneroplis proteus*





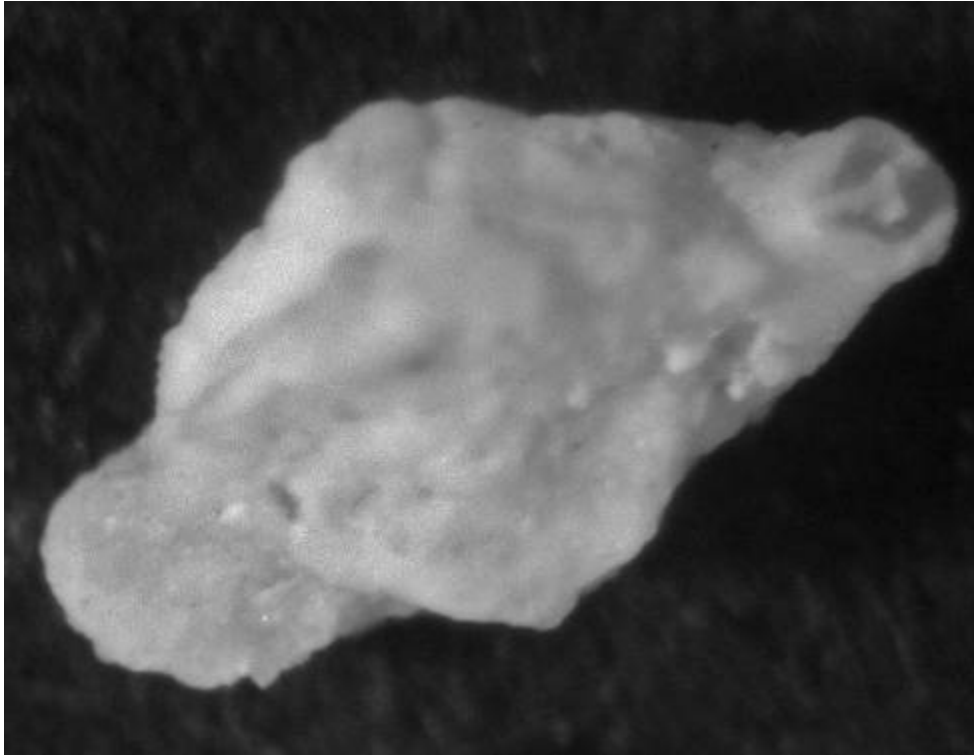
***Asterigerina carinata***



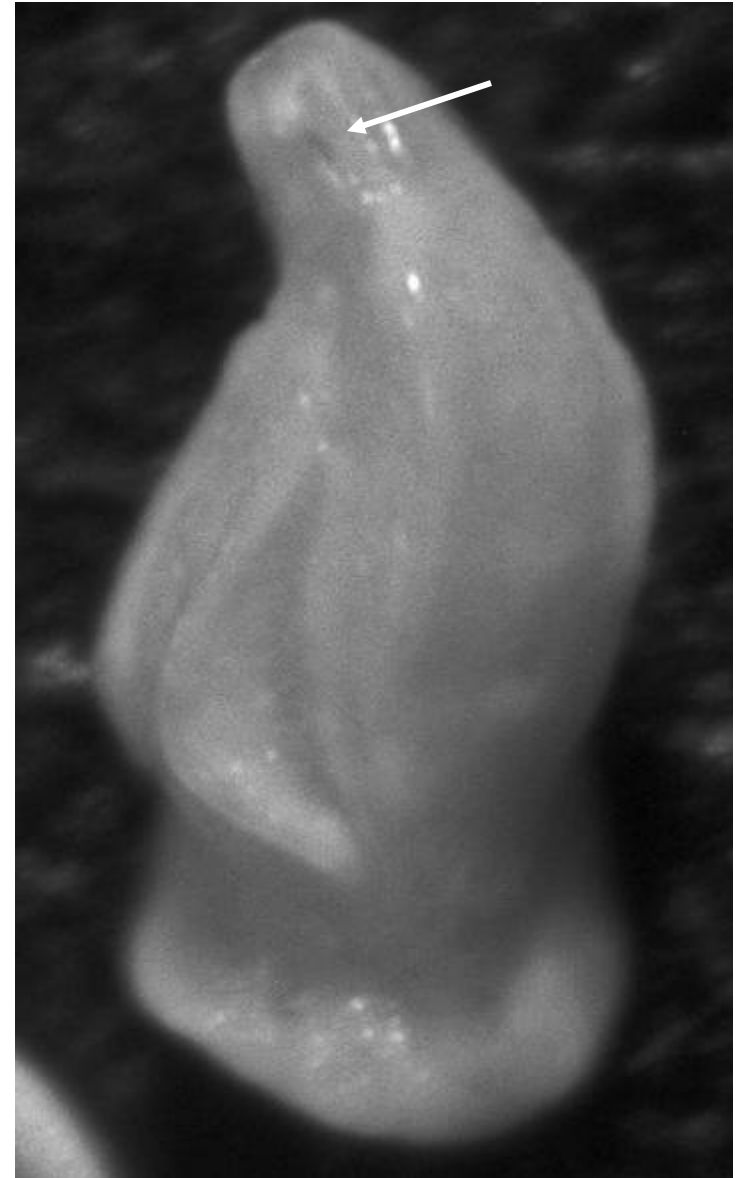
*Quinqueloculina  
agglutinans*

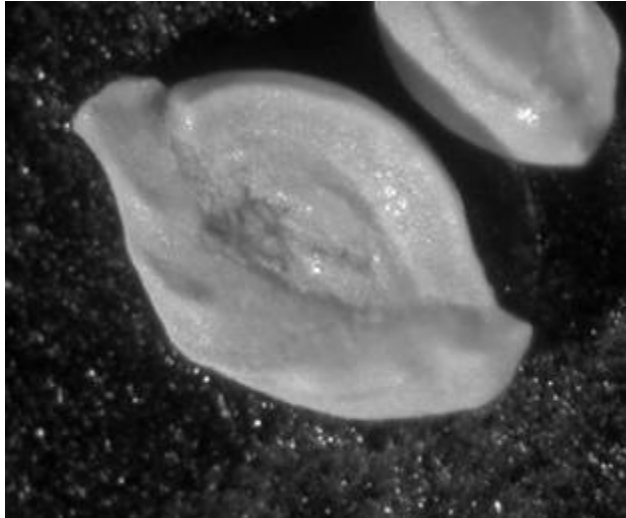


***Quinqueloculina bidentata***

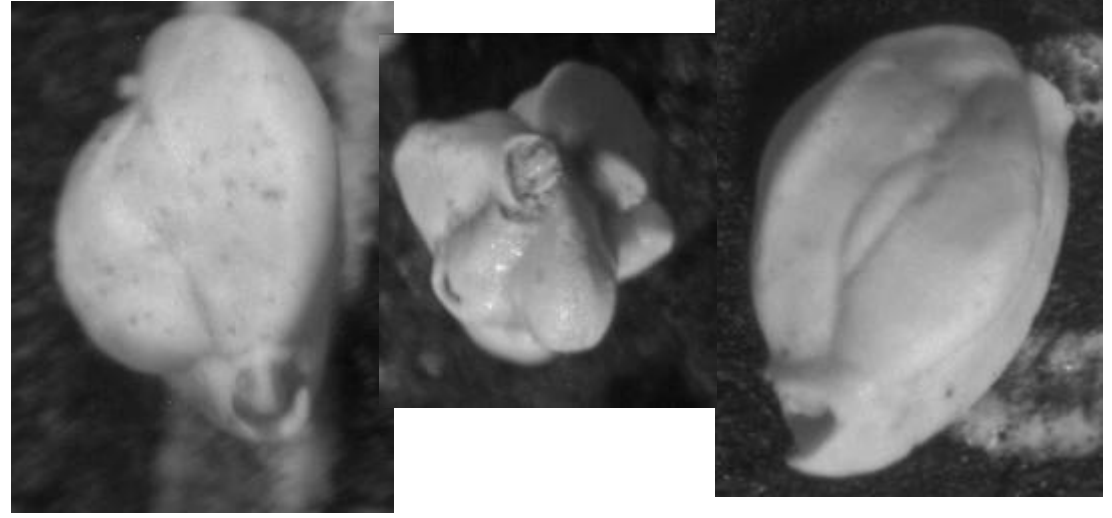


***Quinqueloculina polygona***

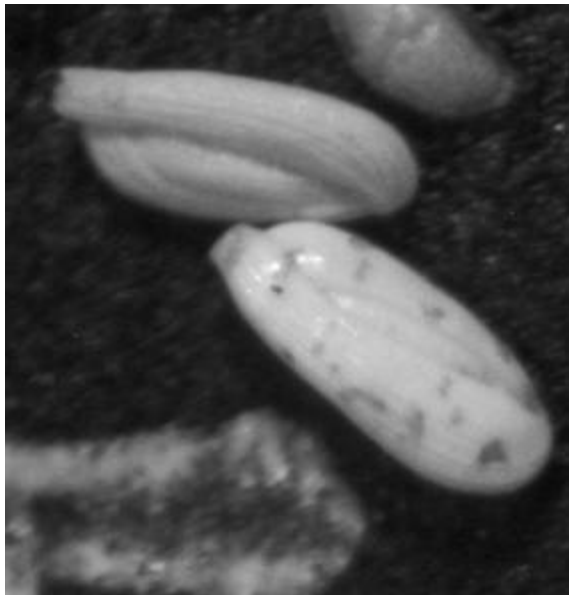




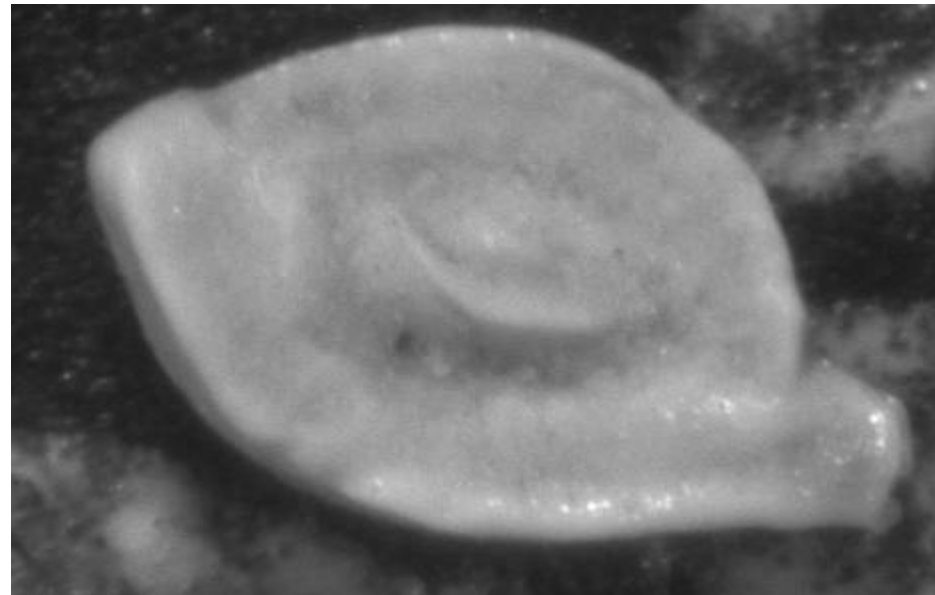
***Spiroloculina planulata***



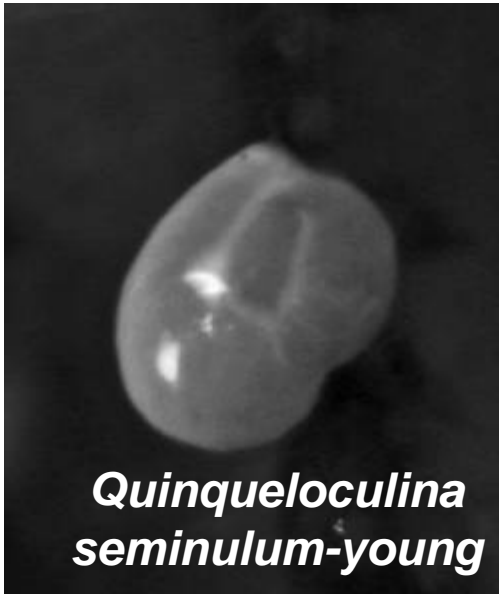
***Quinqueloculina lamarckiana***



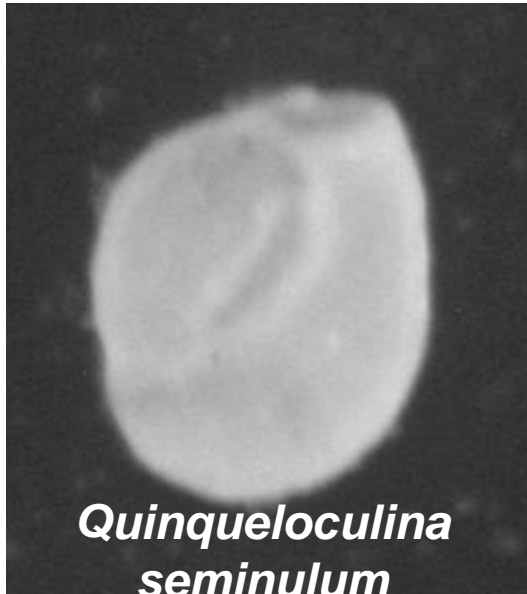
***Quinqueloculina poeyanum***



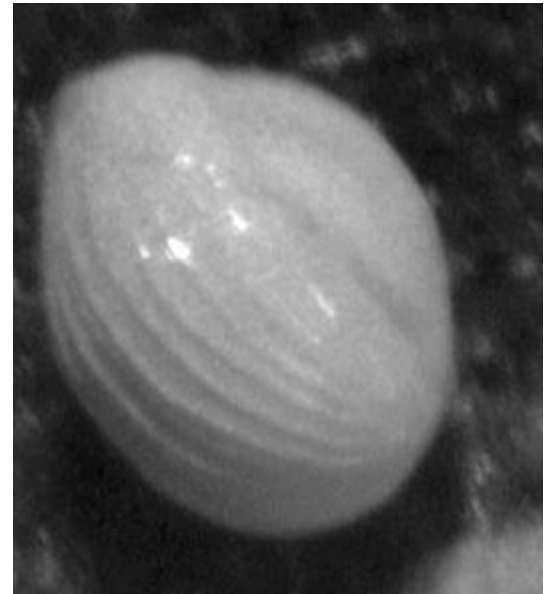
***Spiroloculina communis***



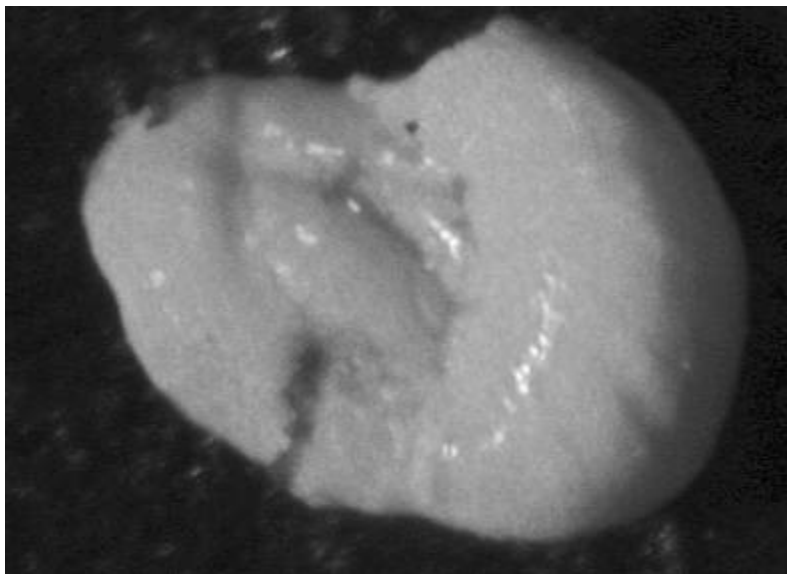
*Quinqueloculina  
seminulum-young*



*Quinqueloculina  
seminulum*

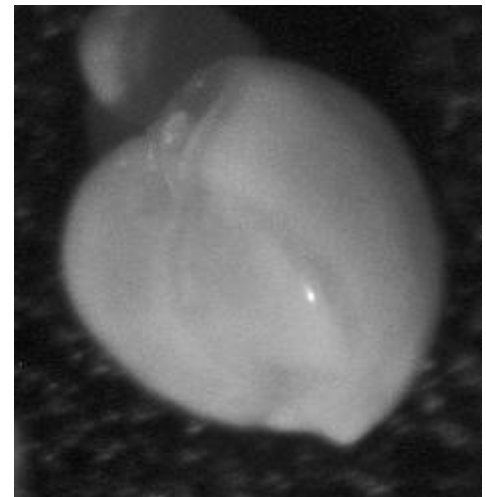
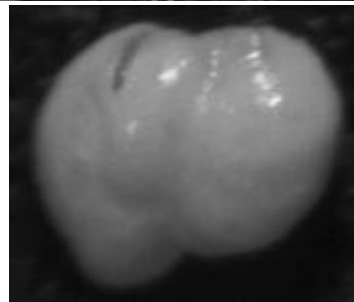
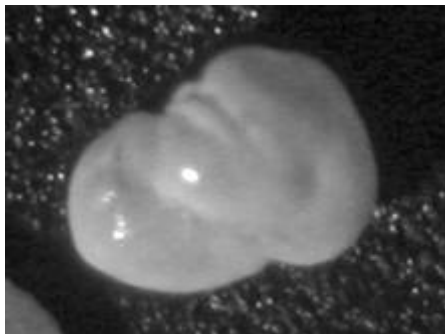


*Pyrgo comata*

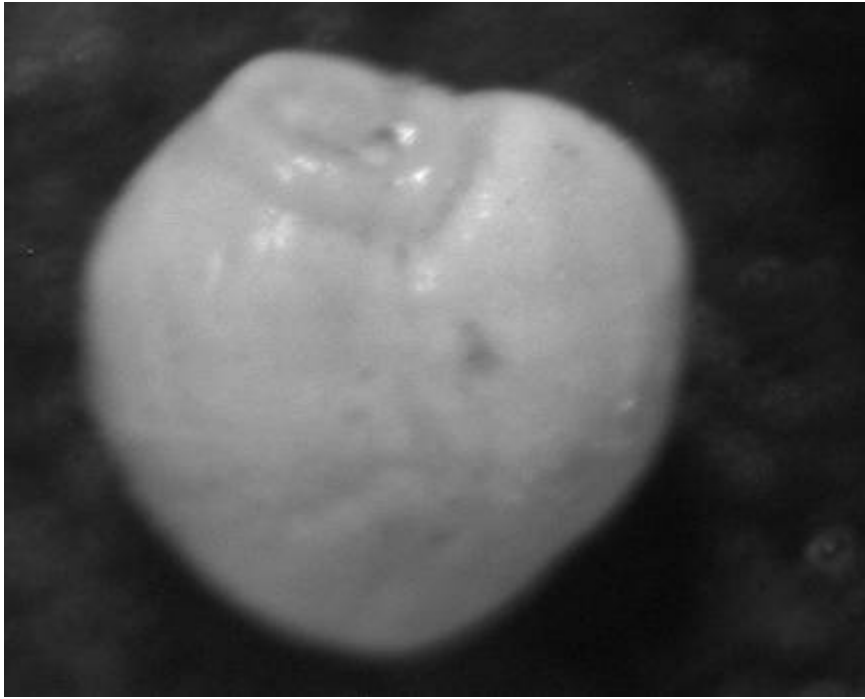


*Triloculina sidebottomi*

*Miliolinella labiosa*

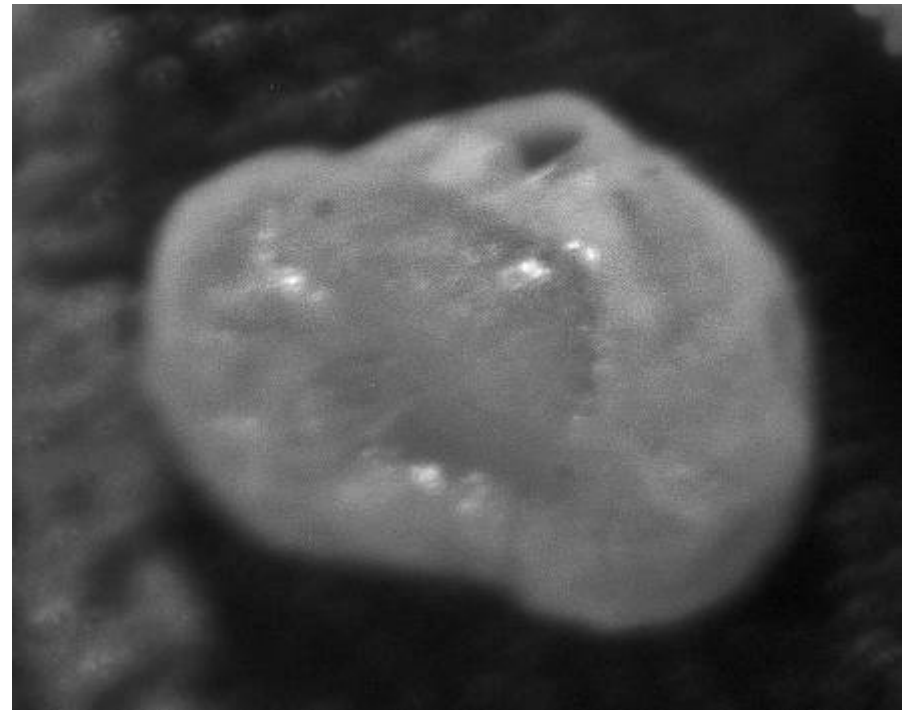


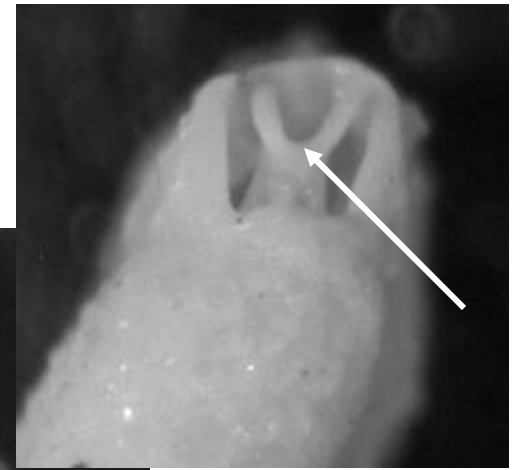
*Quinqueloculina  
seminulum*



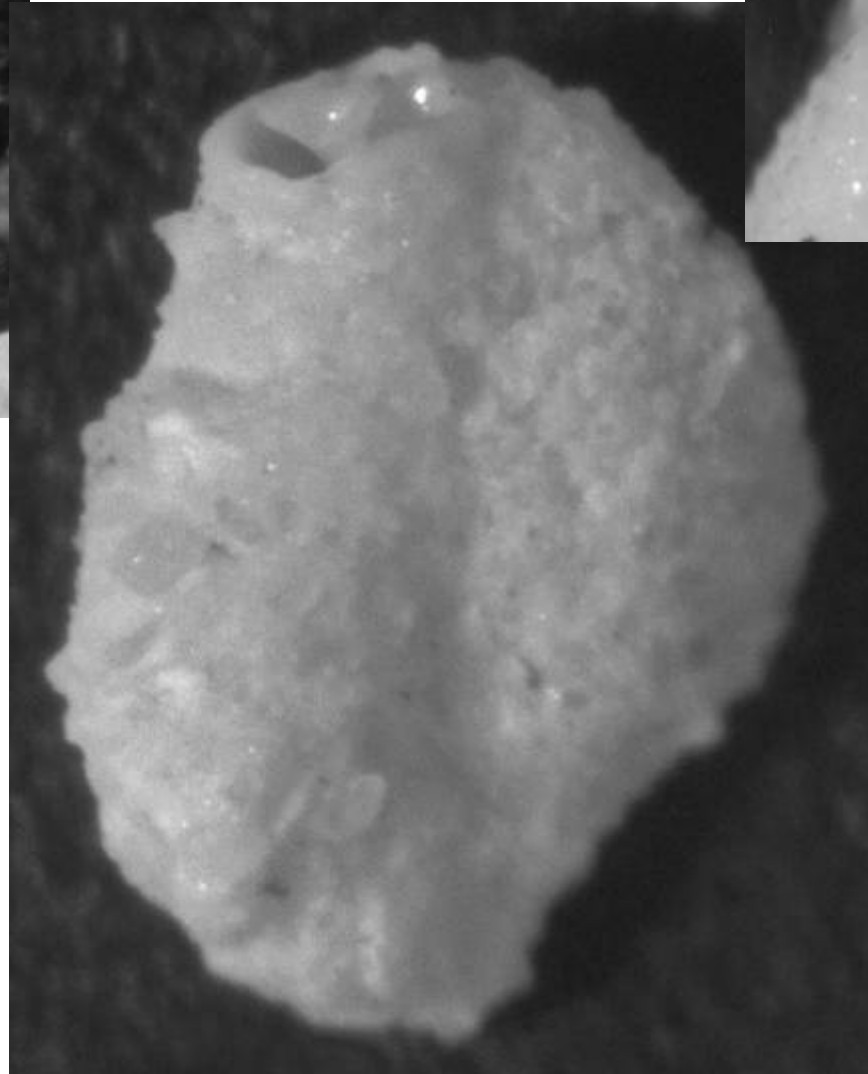
*Triloculina rotunda*

*Triloculina sidebottomi*





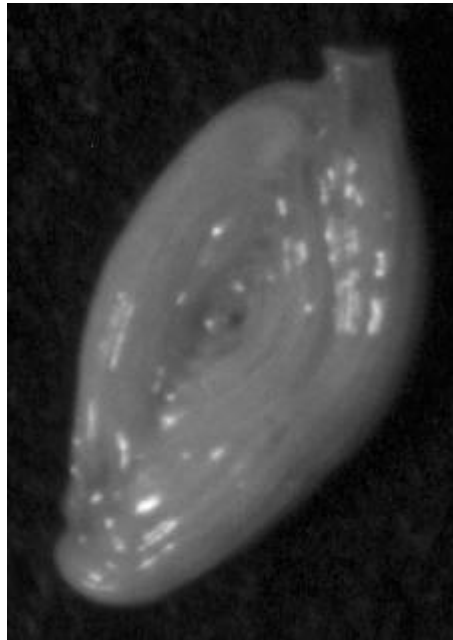
*Quinqueloculina  
bradyana*



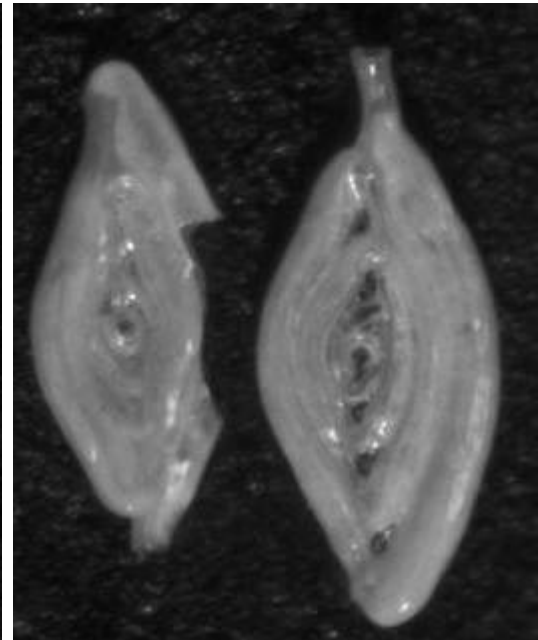




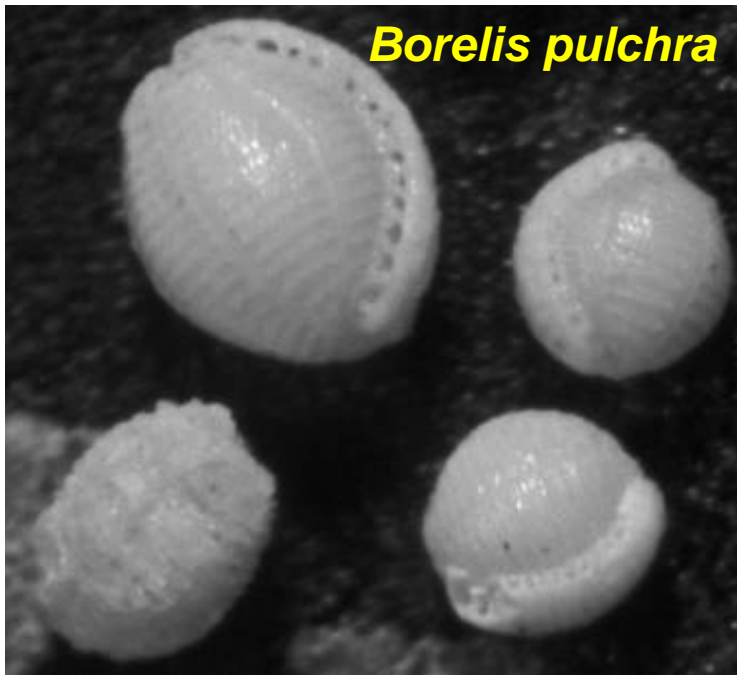
*Triloculina carinata*



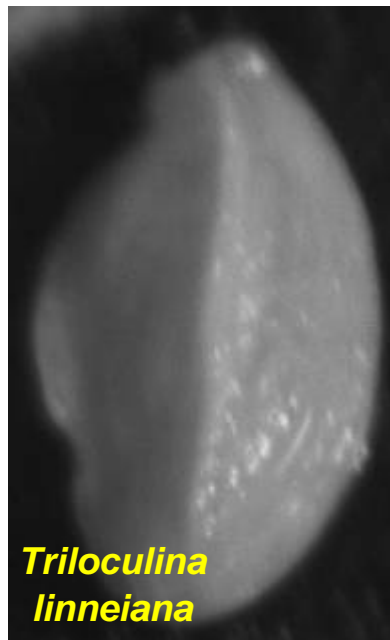
*Spiroloculina angulata*



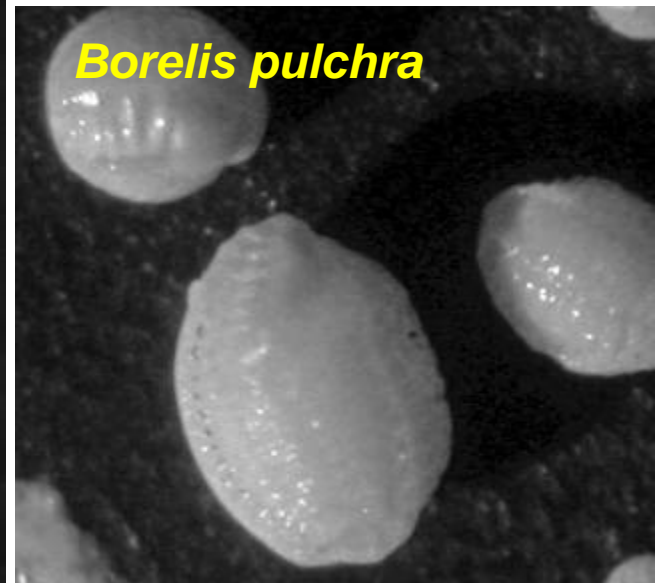
*S. antillarum*



*Borelis pulchra*

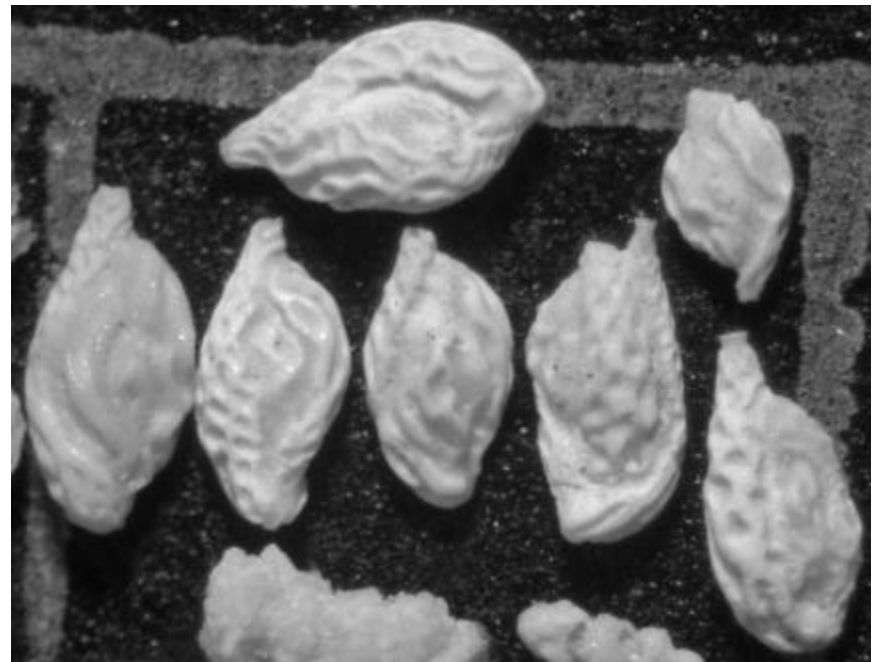
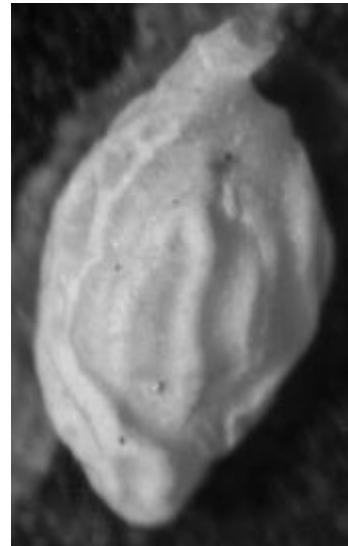
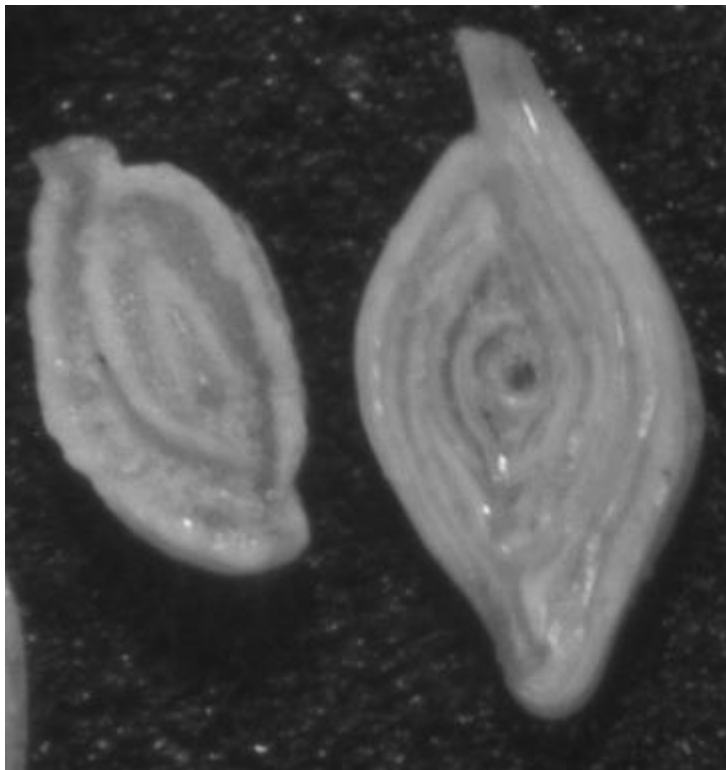


*Triloculina linneiana*

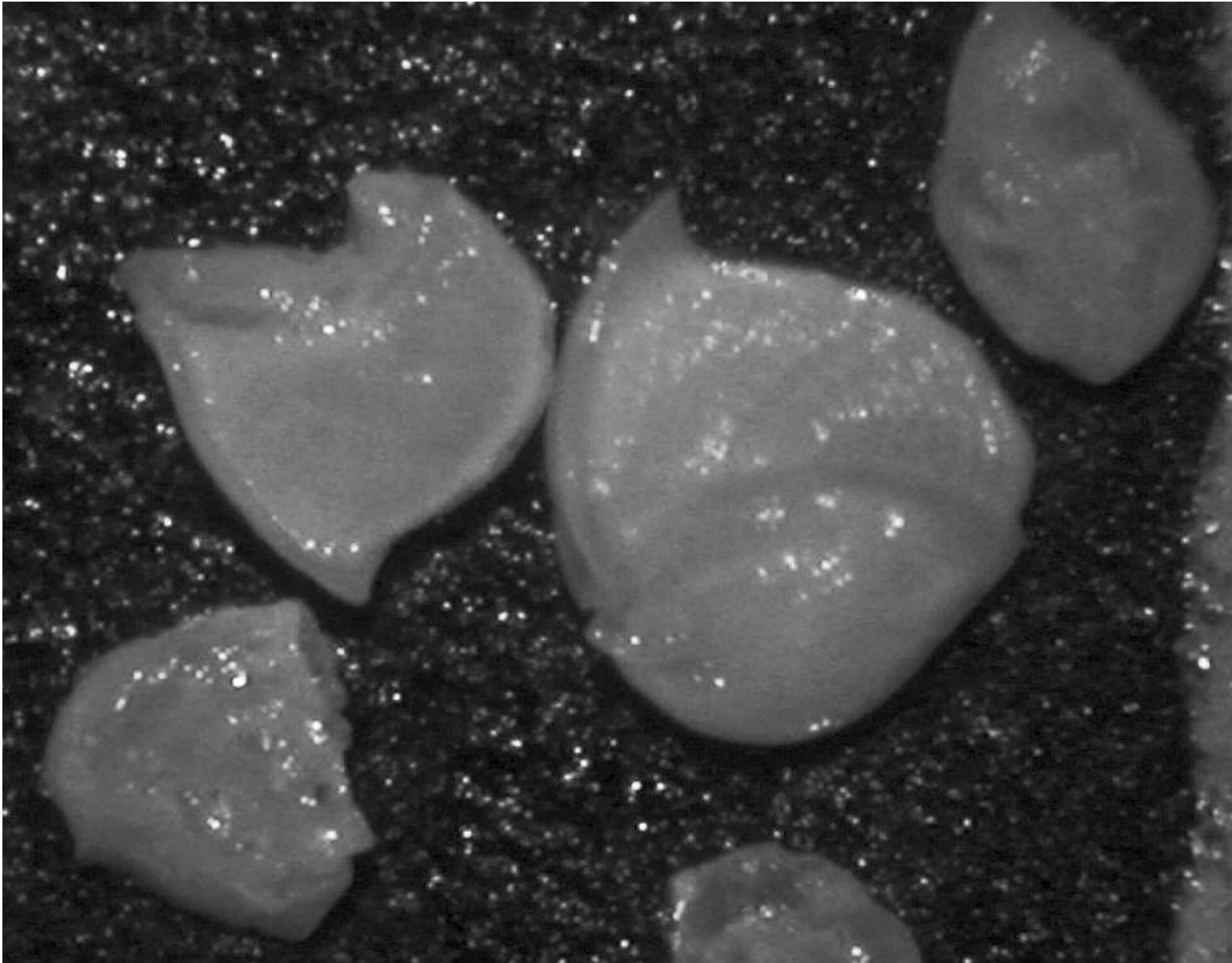


*Borelis pulchra*

***Spiroloculina:***  
***communis antillarum***

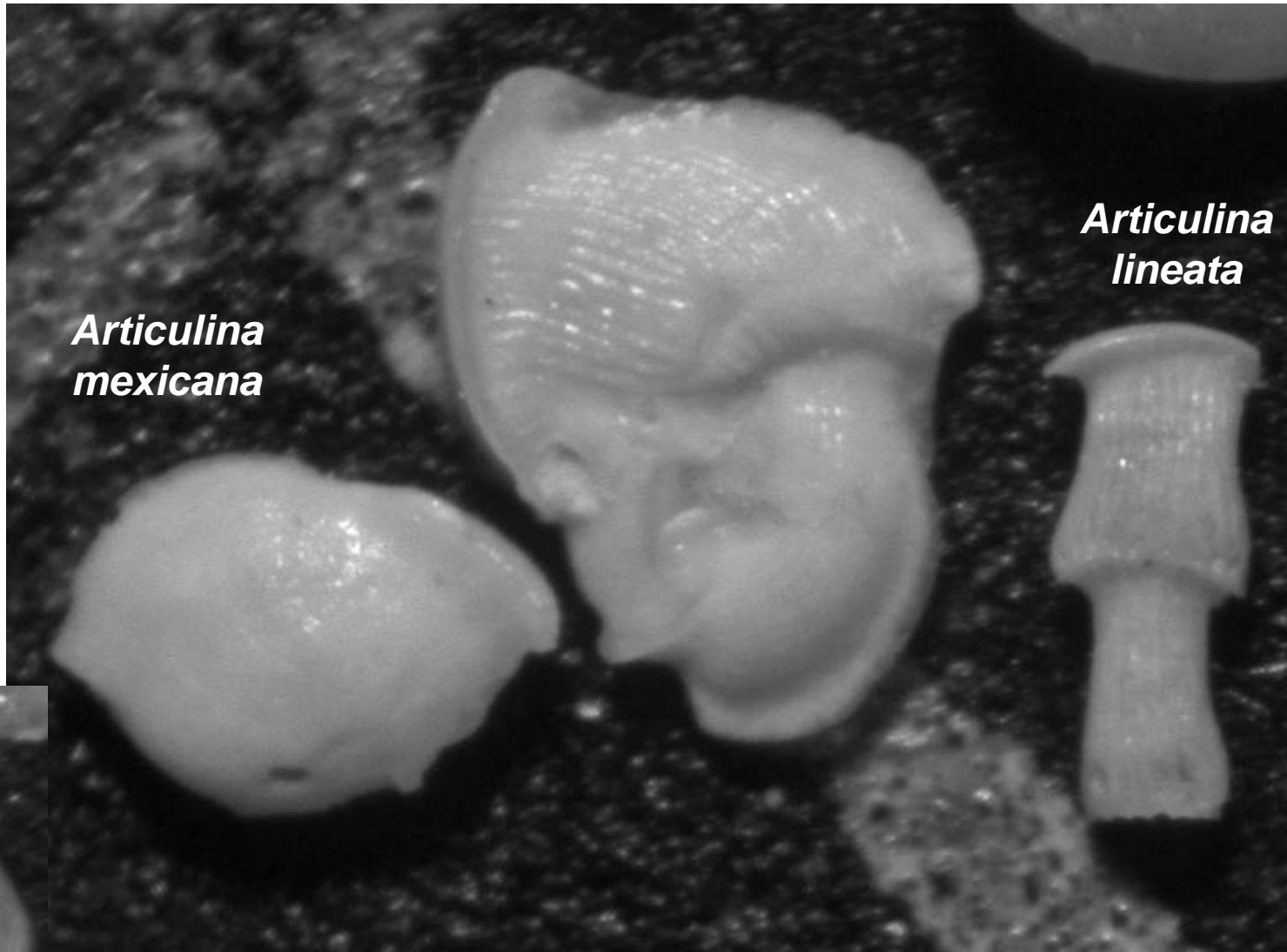


***Quinqueloculina***  
***tricarinata***



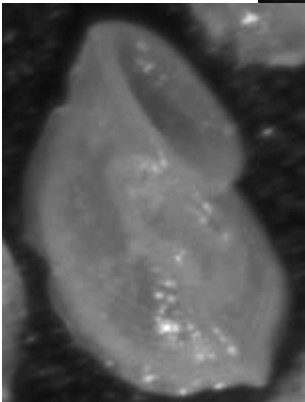
*Articulina pacifica*

*Nodobaculariella cassis*



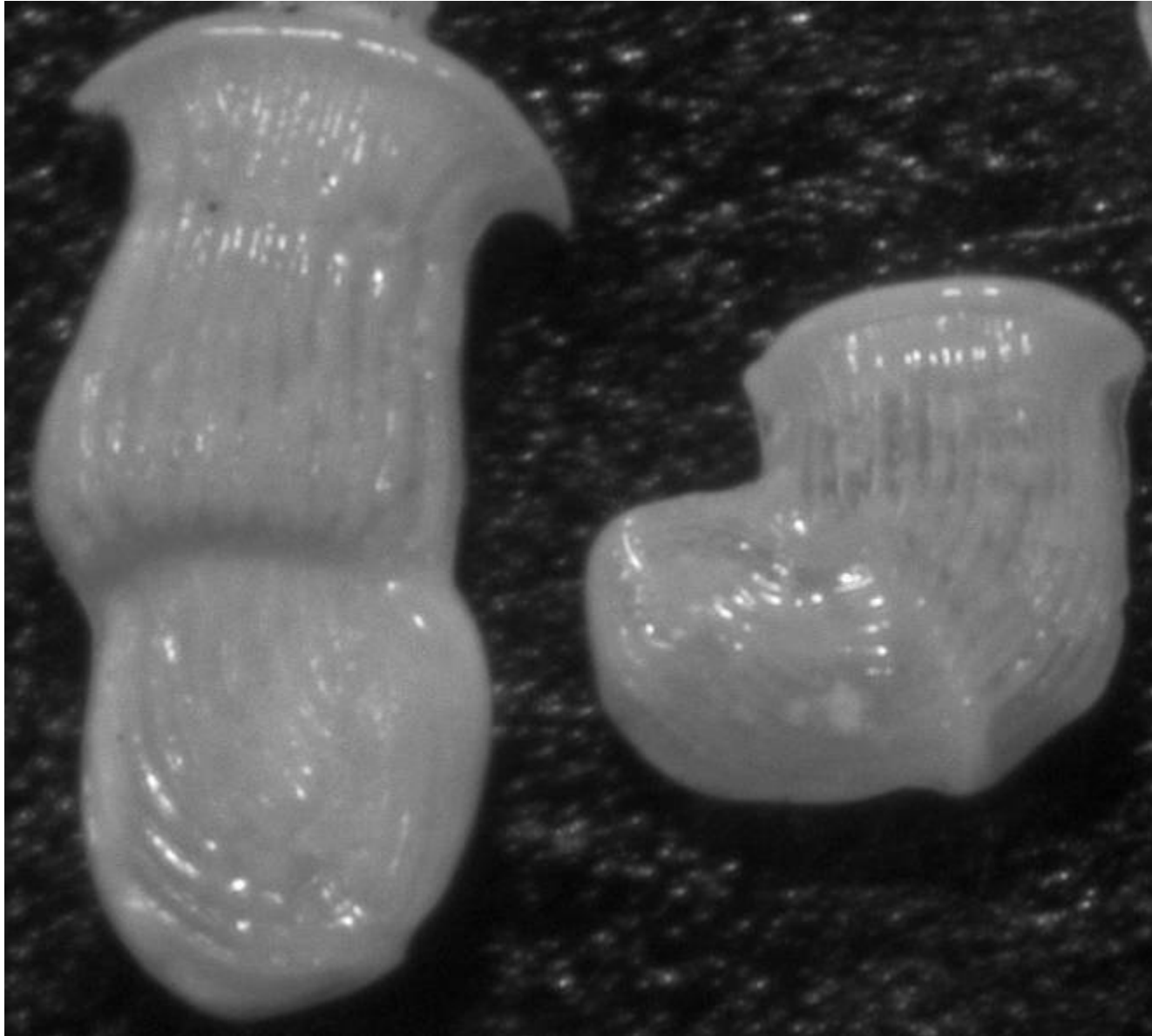
*Articulina  
mexicana*

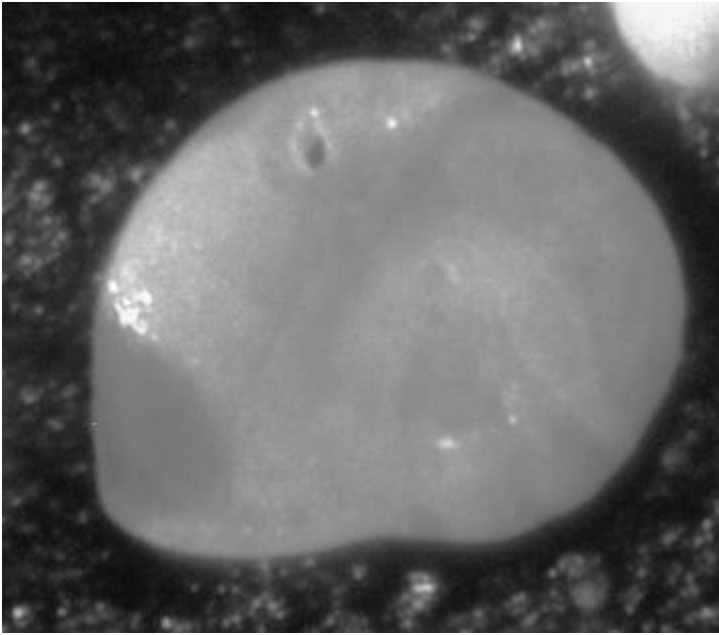
*Articulina  
lineata*



***Articulina mucronata***

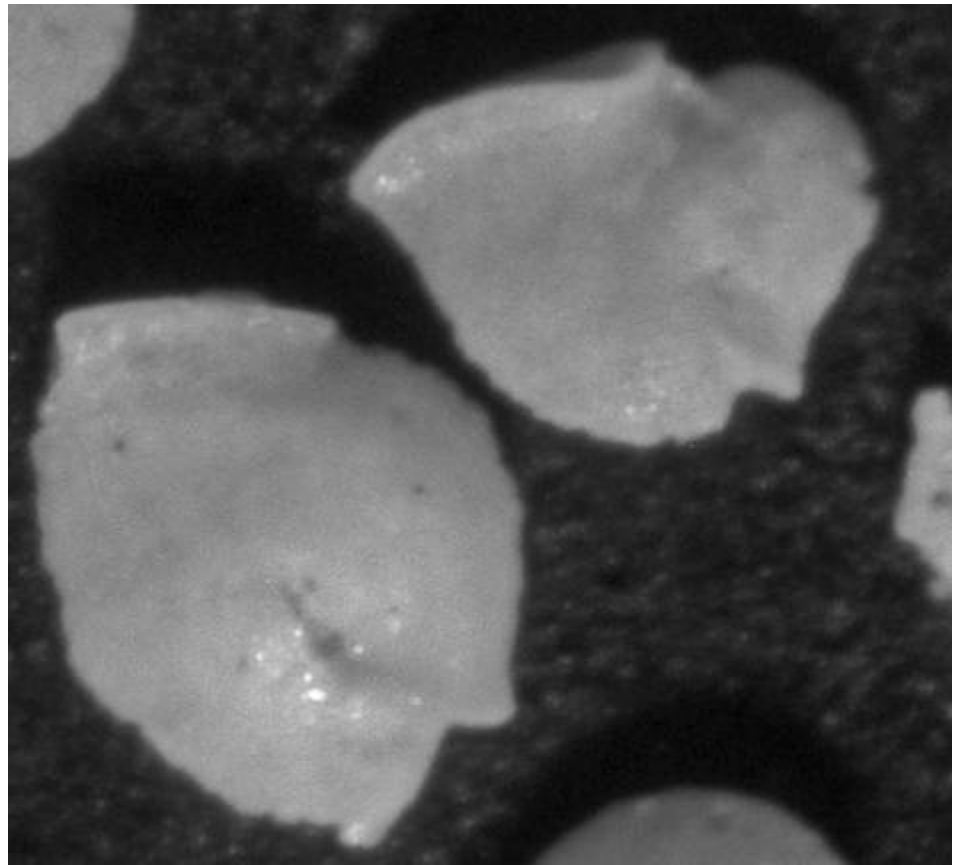
***Nodobaculariella* sp.**



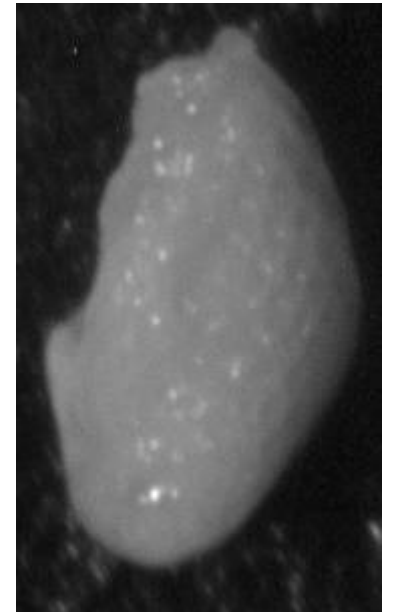
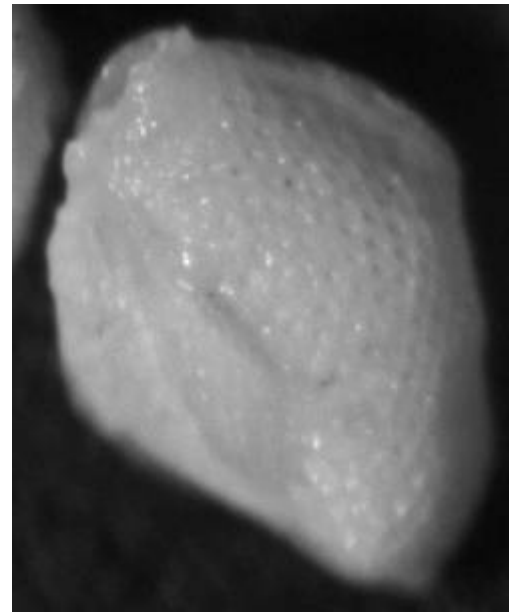
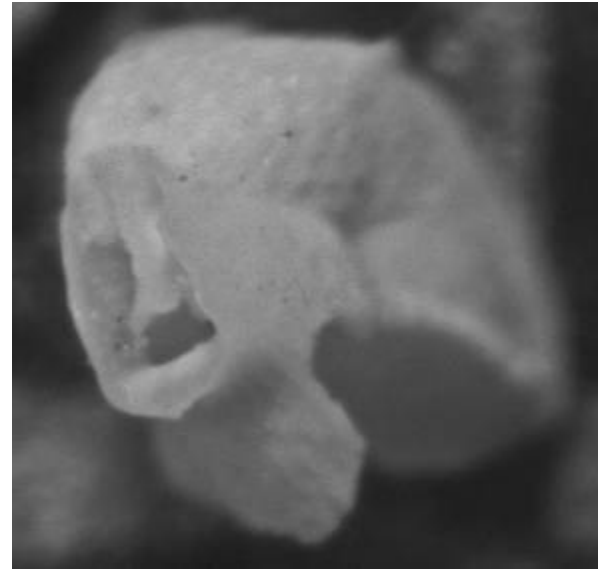


***Hauerina sp.***

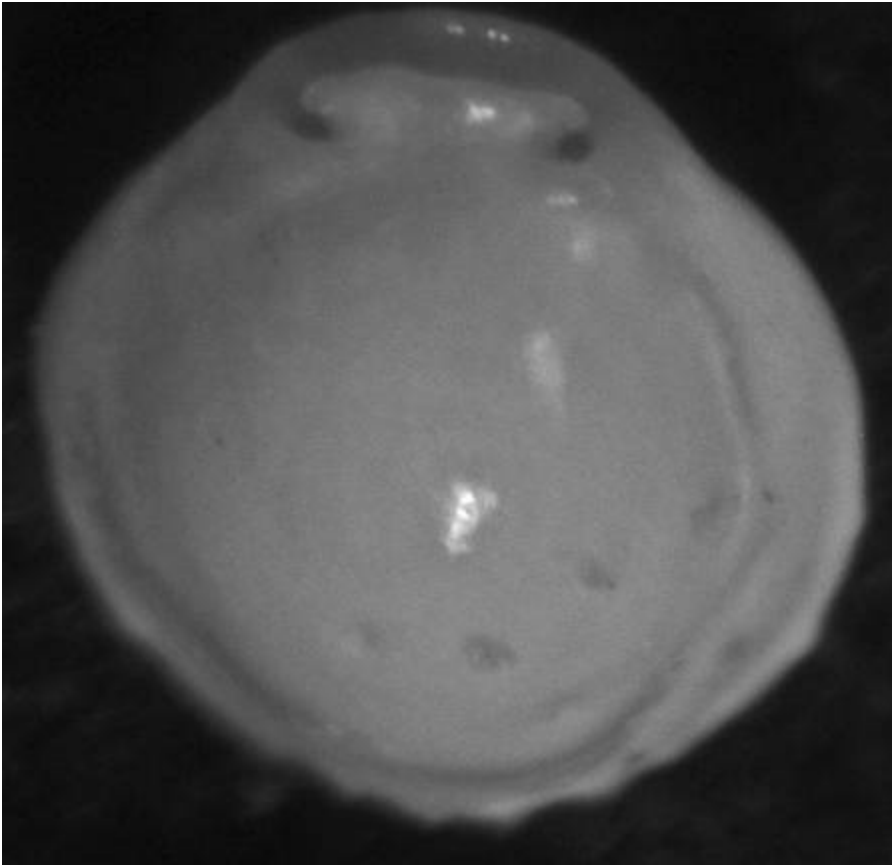
***Articulina pacifica***



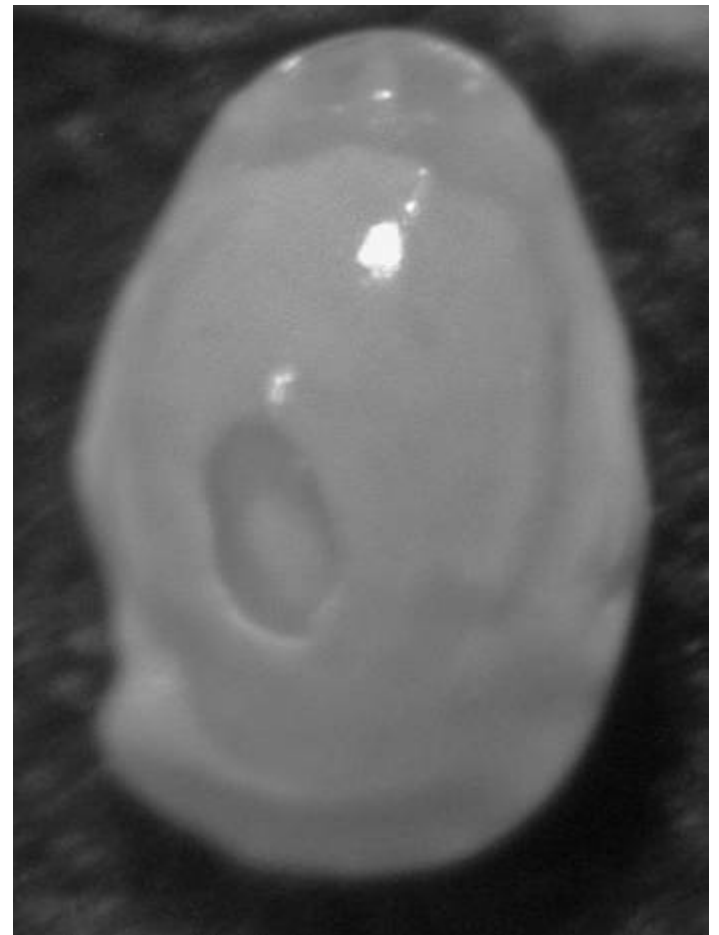
*Triloculina bicarinata*



*Pyrgo fornasinii*

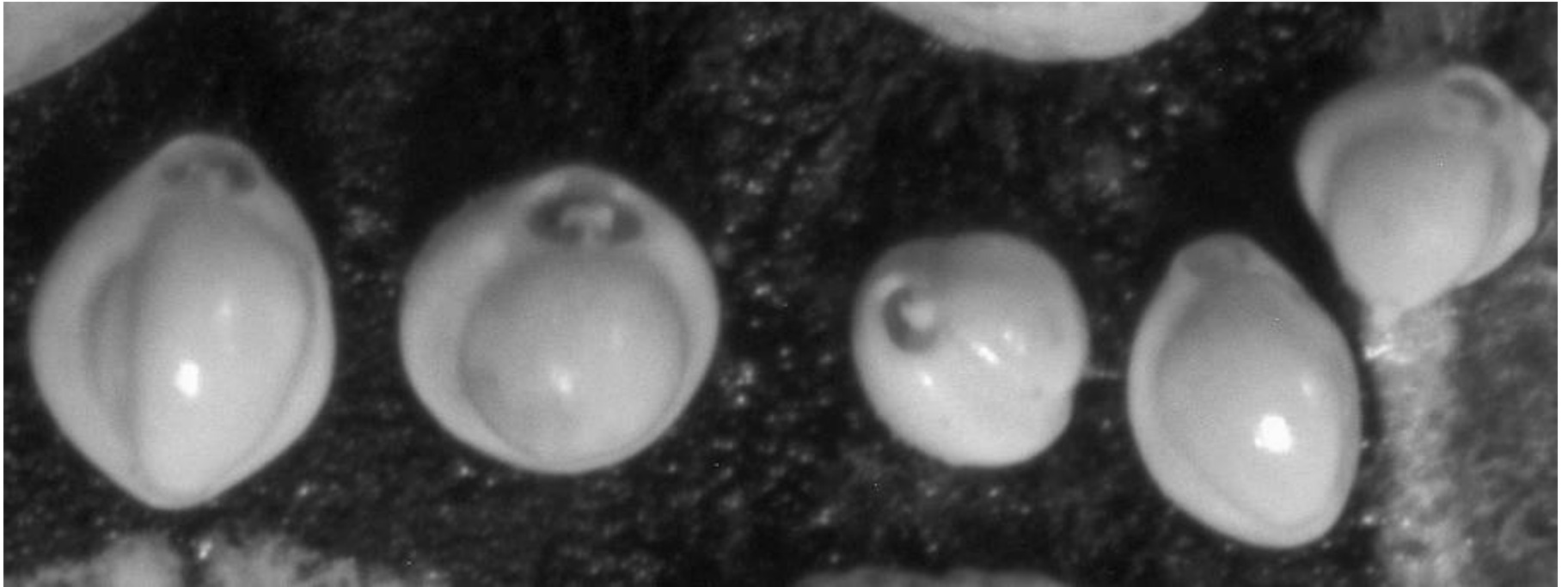


*Pyrgo denticulata*



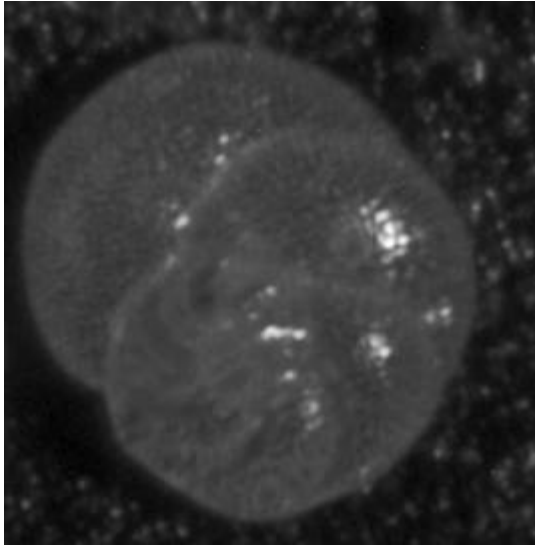


*Pyrgo murrhina*

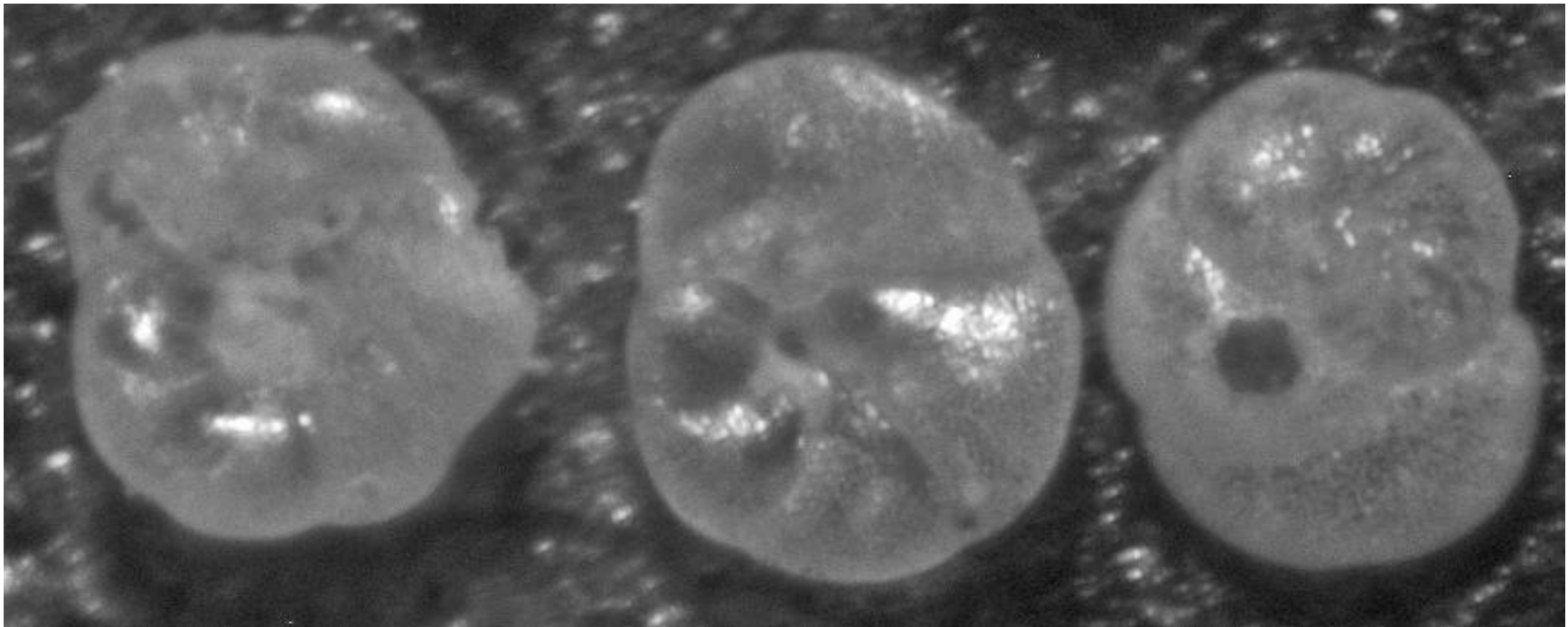


*Quinqueloculina  
bosciana*

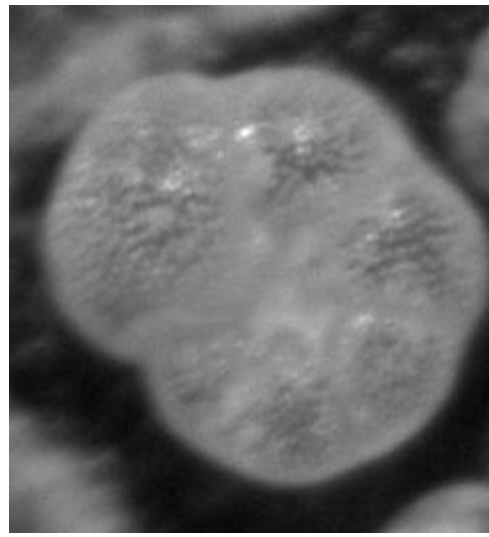
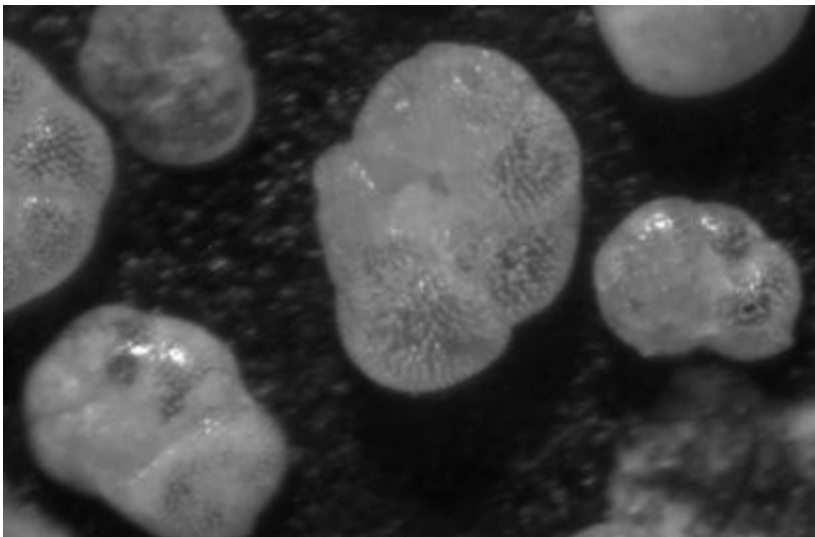
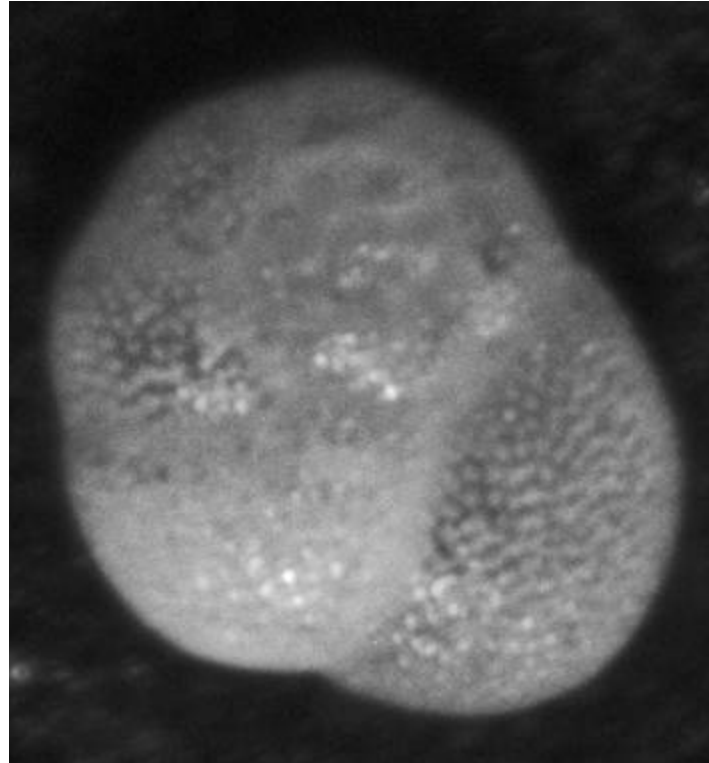
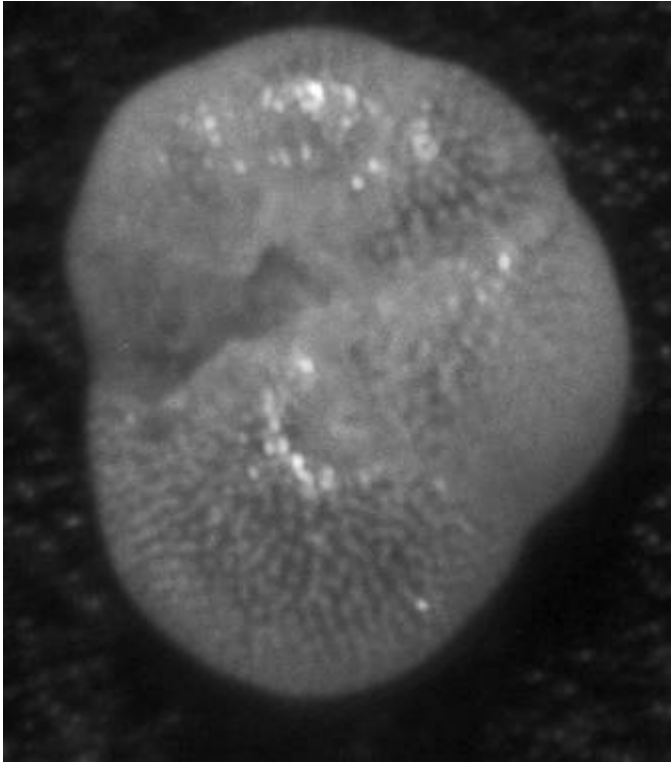
*Quinqueloculina  
bosciana*

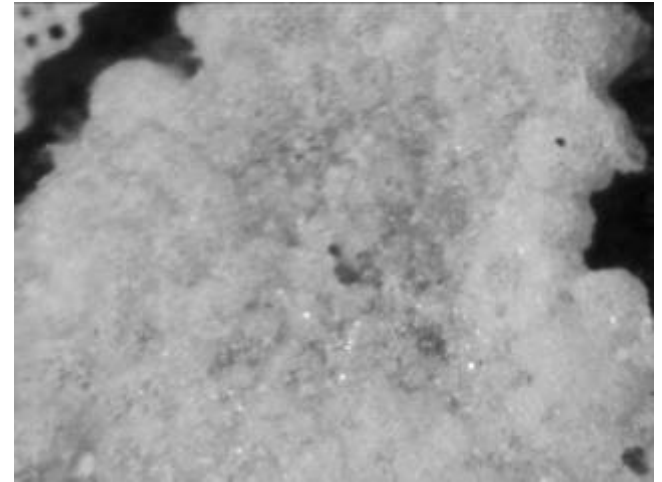
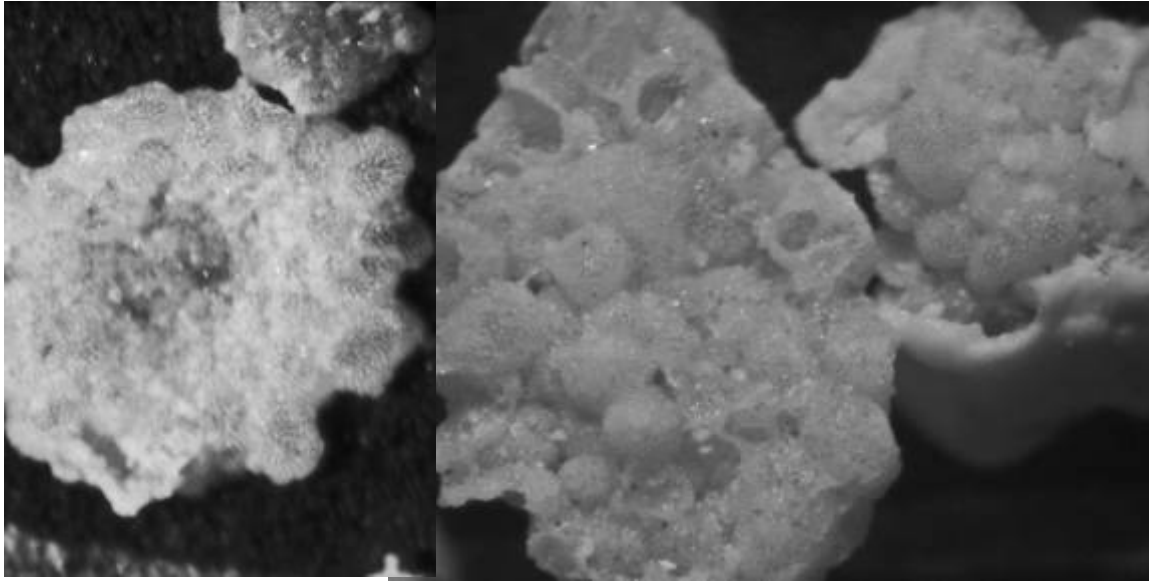


***Rosalina subaraucana***

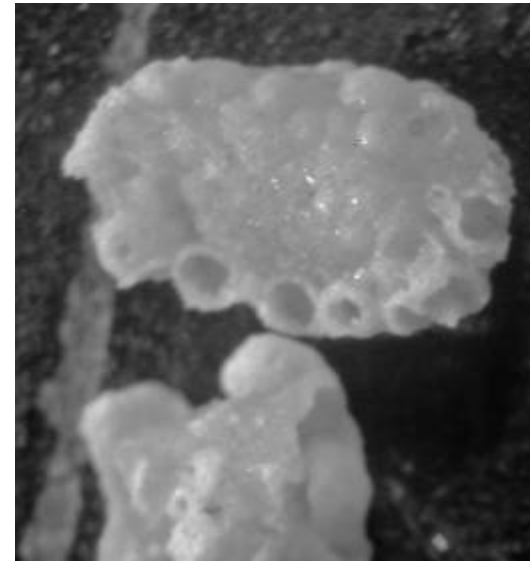
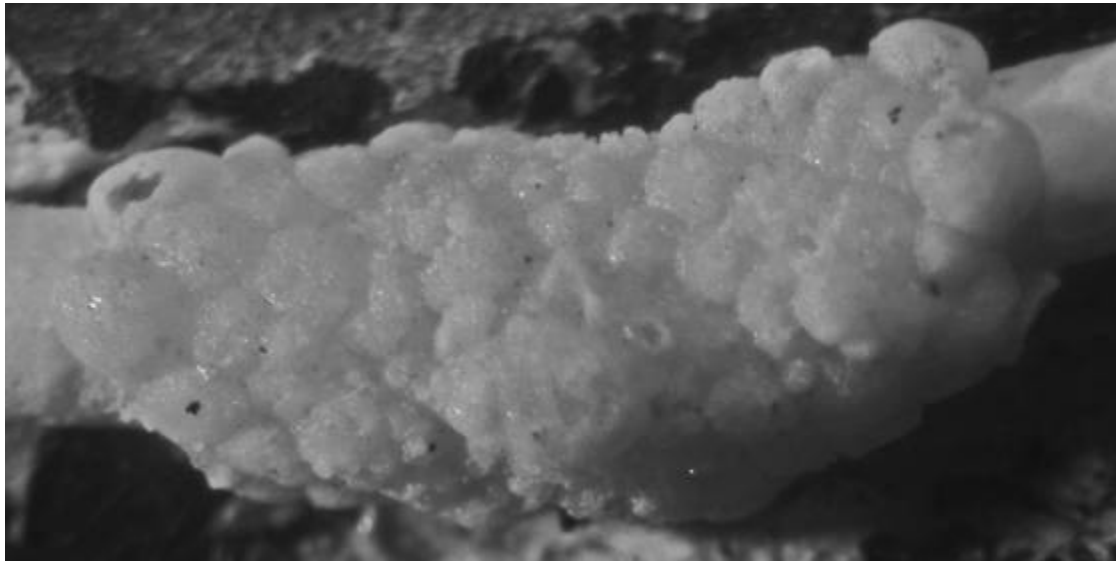


***Rosalina  
floridana***



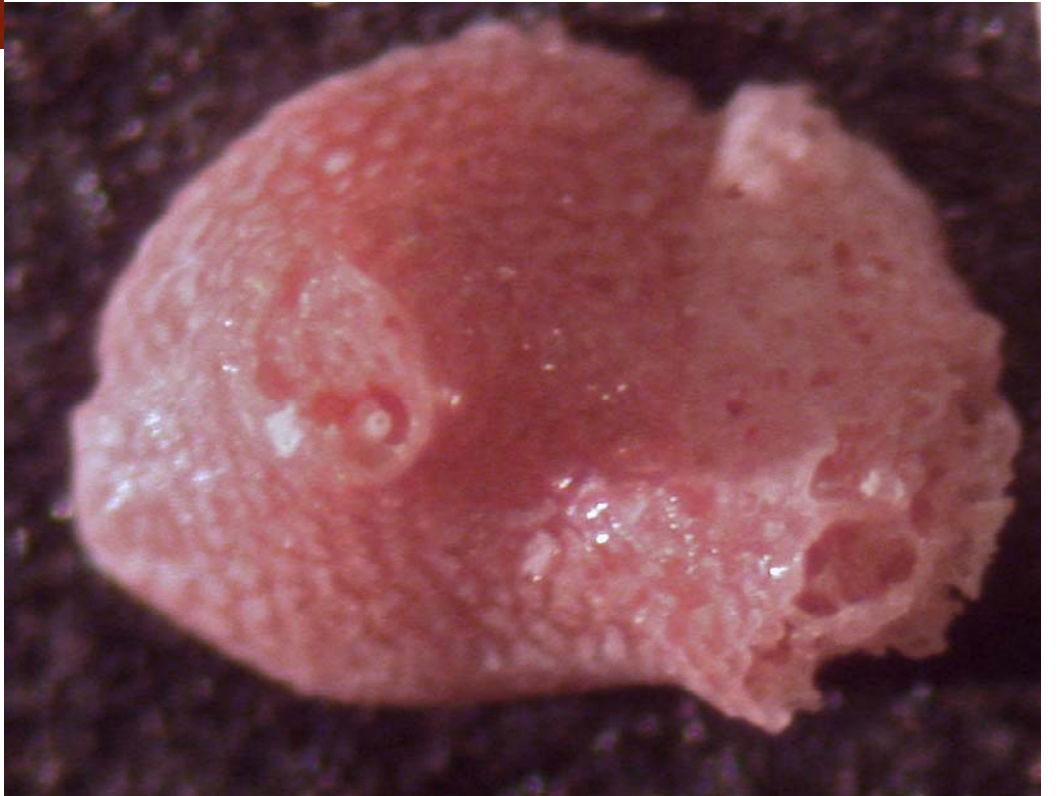


***Planorbulina mediterannensis***



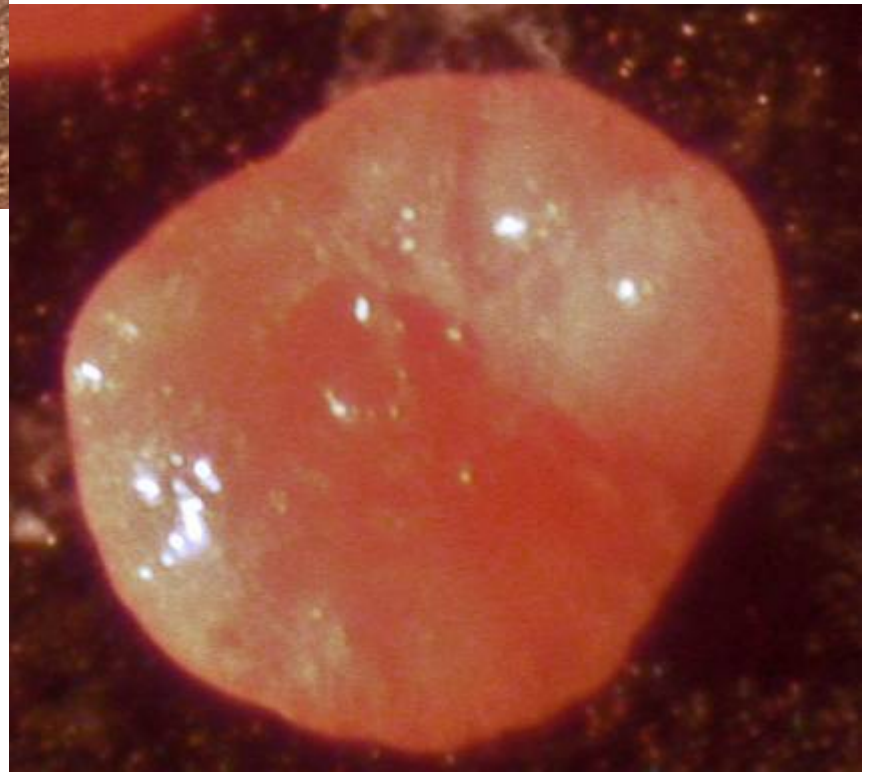


*Homotrema rubrum*



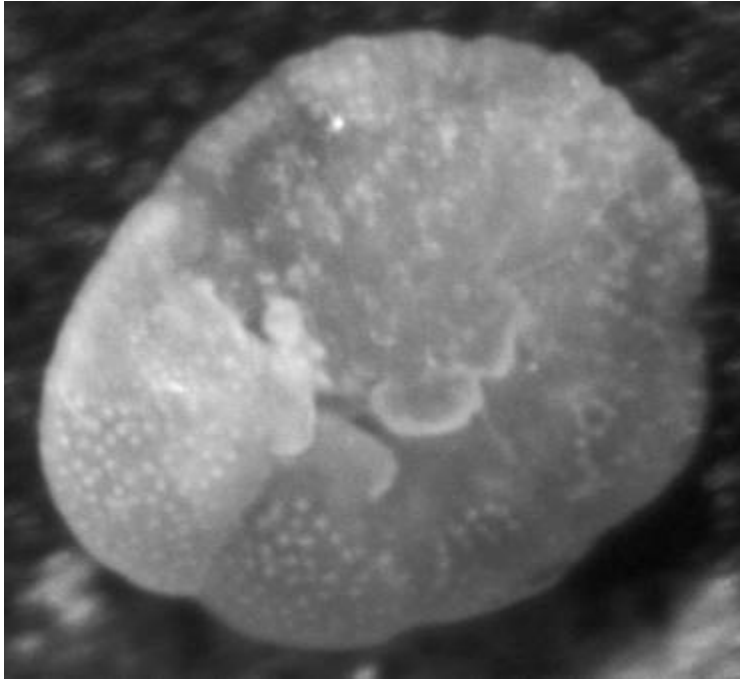


*Discorbis rosea*



*Discorbis rosea*

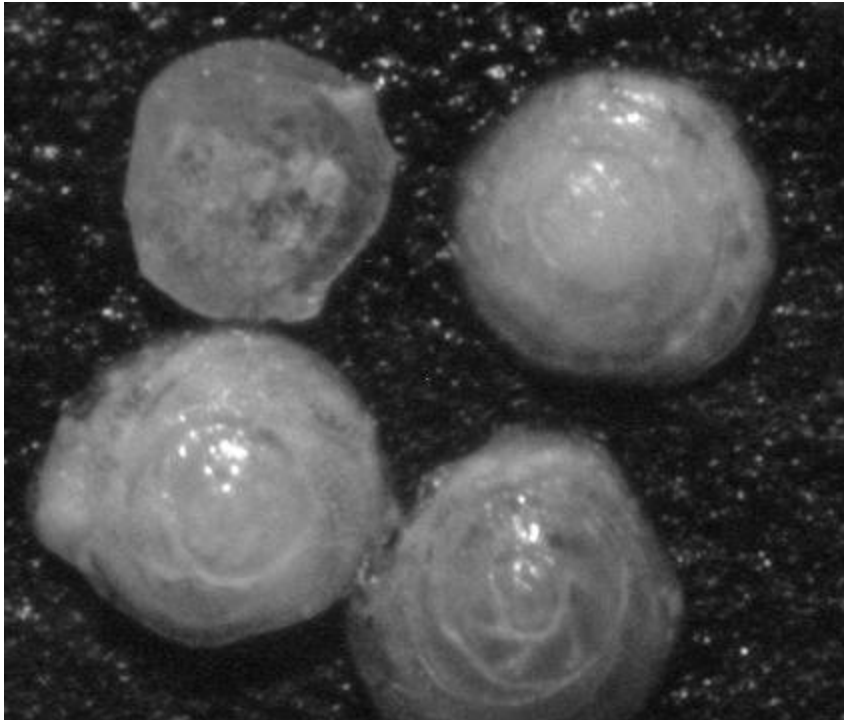
Brady-  
Challenger  
Report



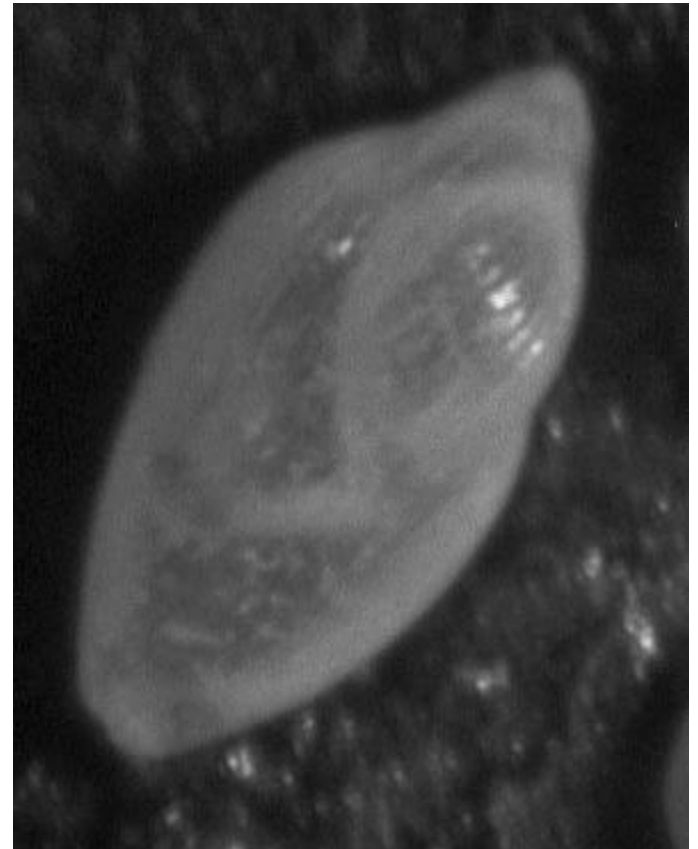
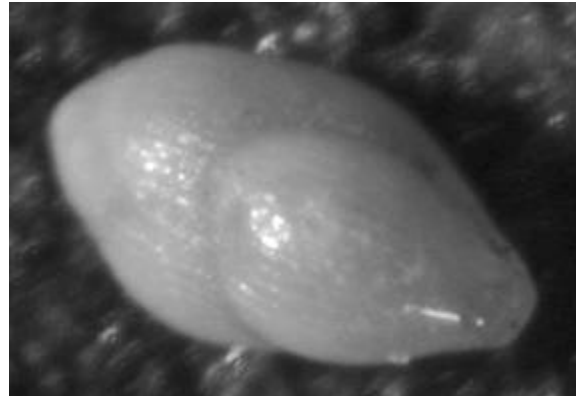
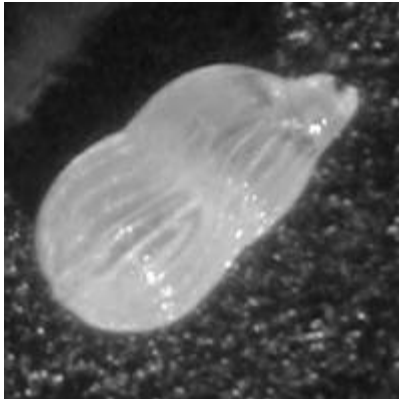
*Discorbis rosea*



***Neoconorbina orbicularis***



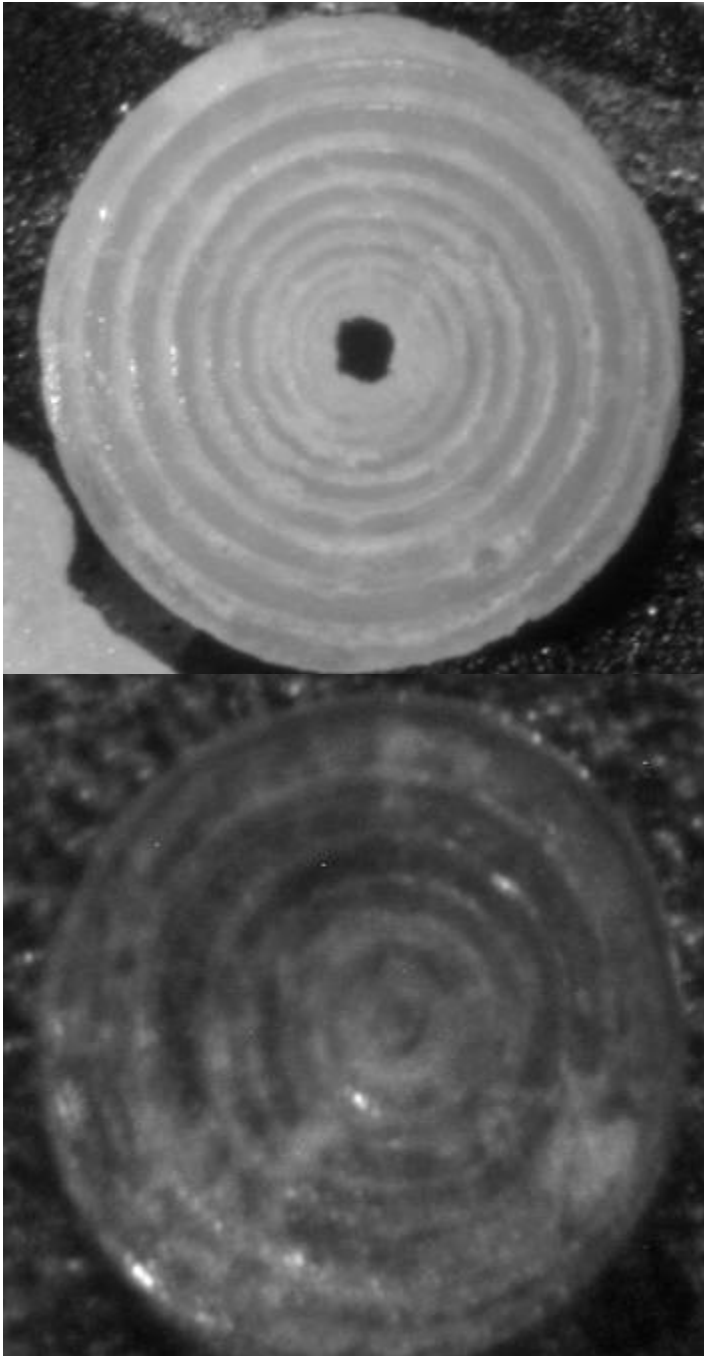
***Marginulinopsis bradyi***



***Guttulina australis***

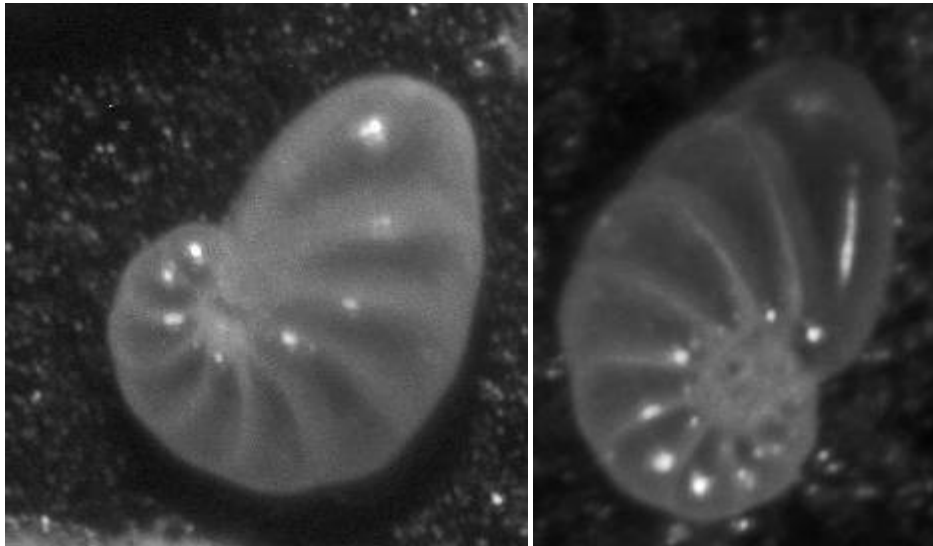


***Spirillina obconica***



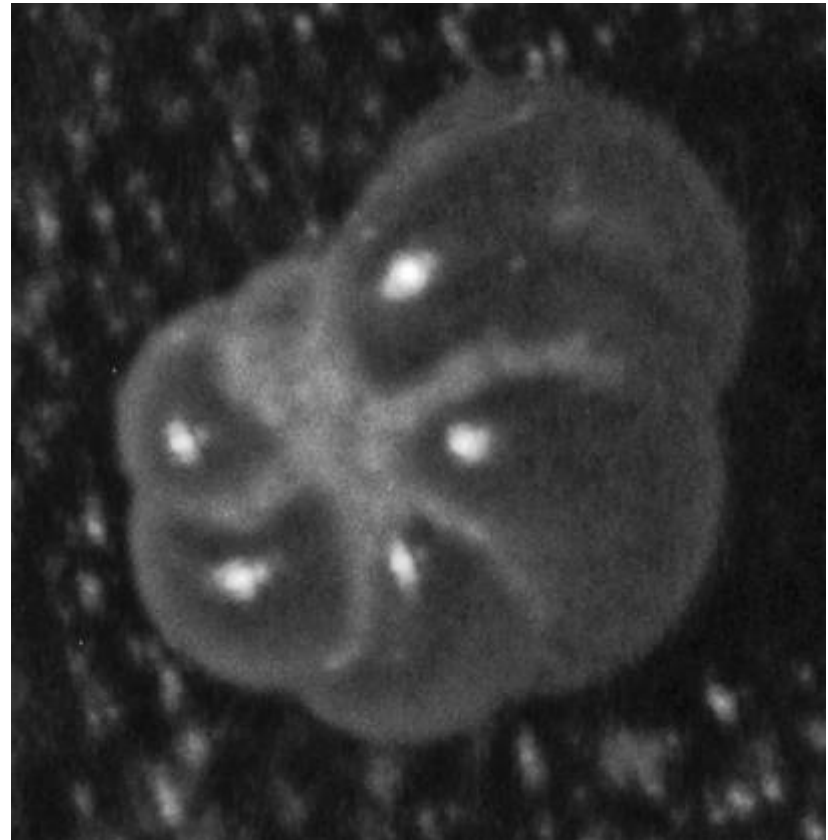
***Spirillina denticulata***

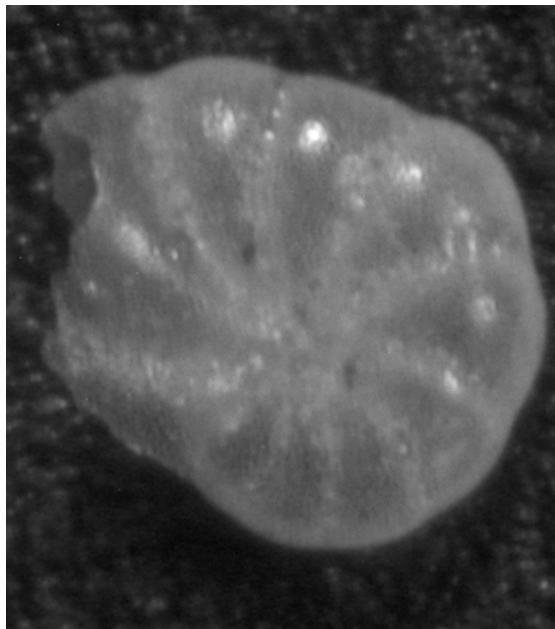
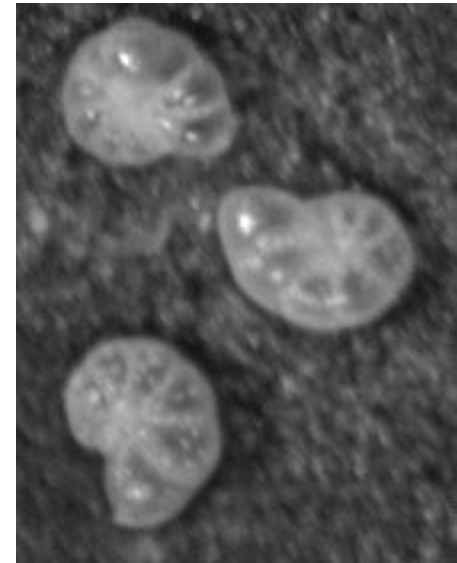
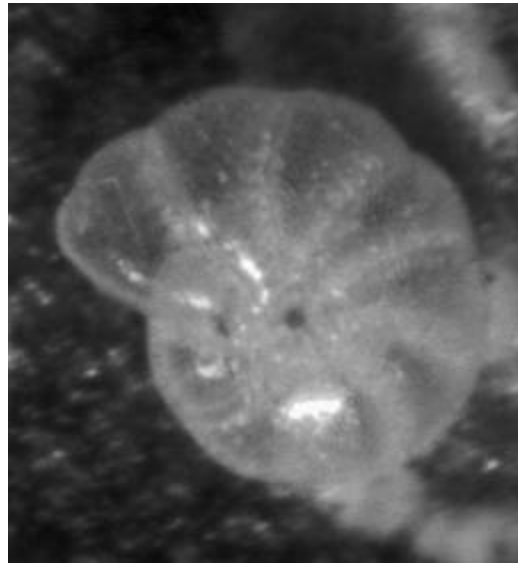
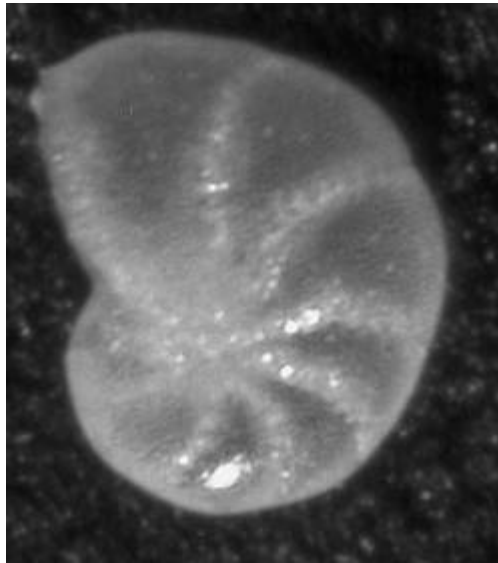




*Nonion grateloupi*

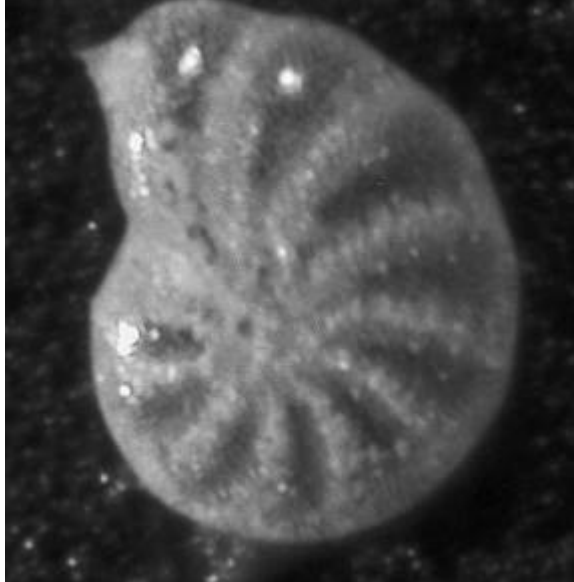
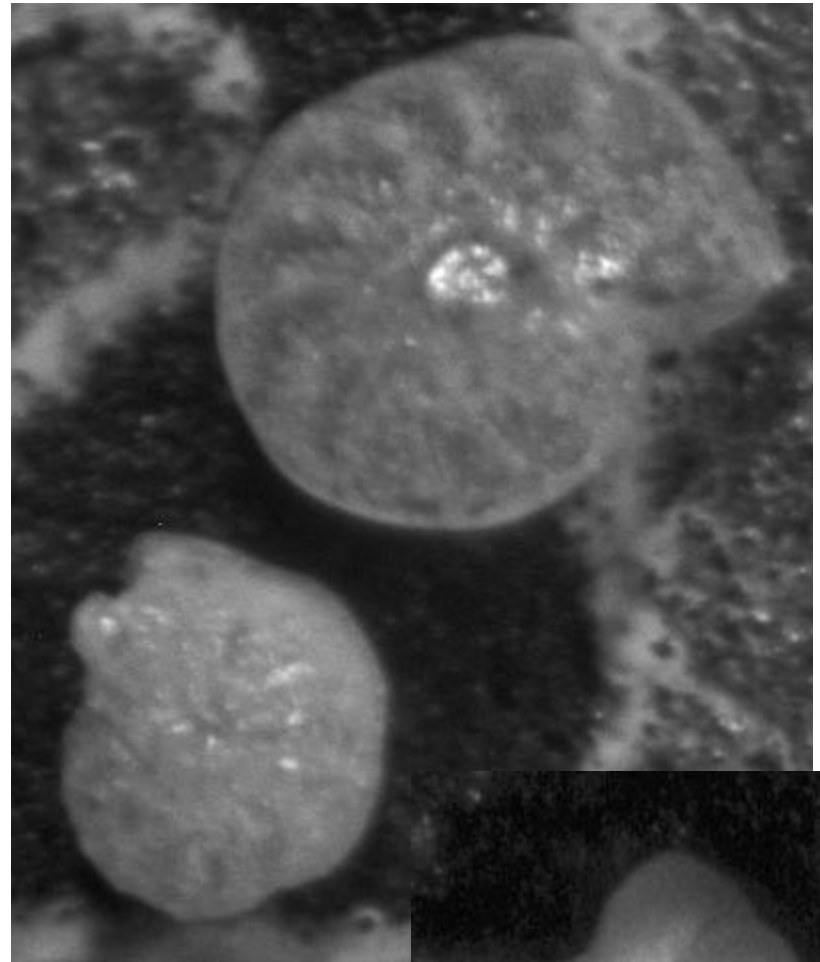
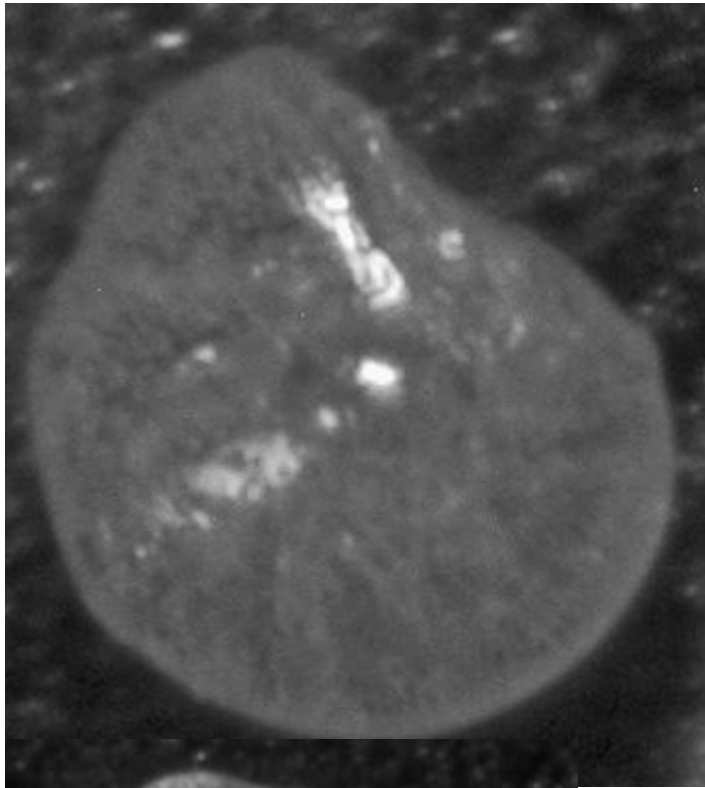
*Nonion depressulum*





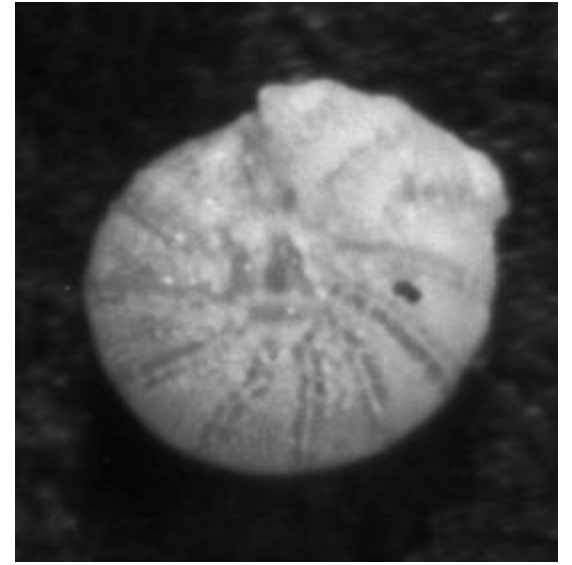
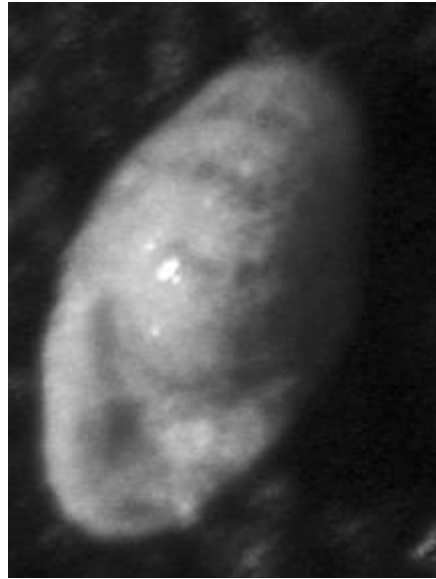
***Elphidium***  
**(=*Cribroelphidium*)**  
***poeyanum***



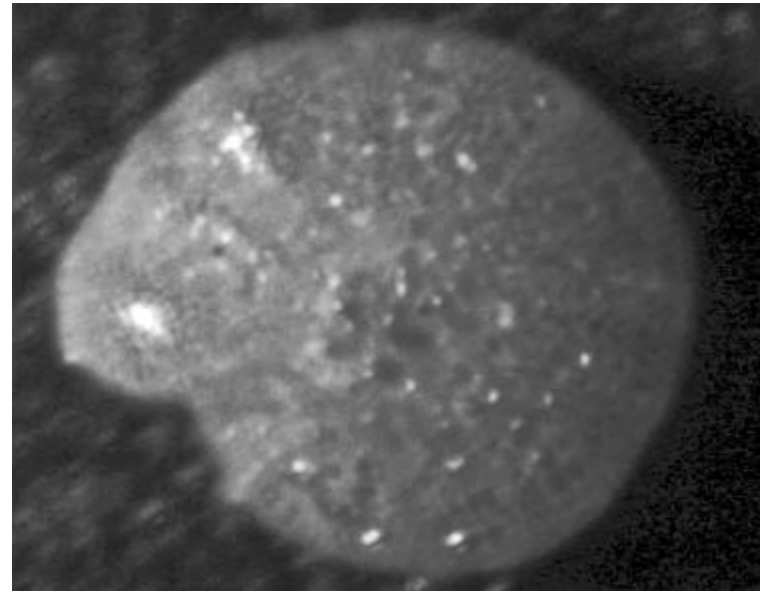
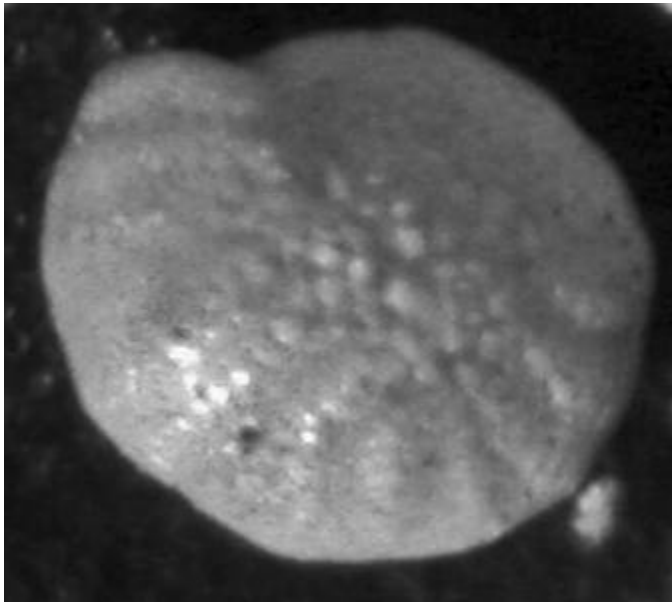


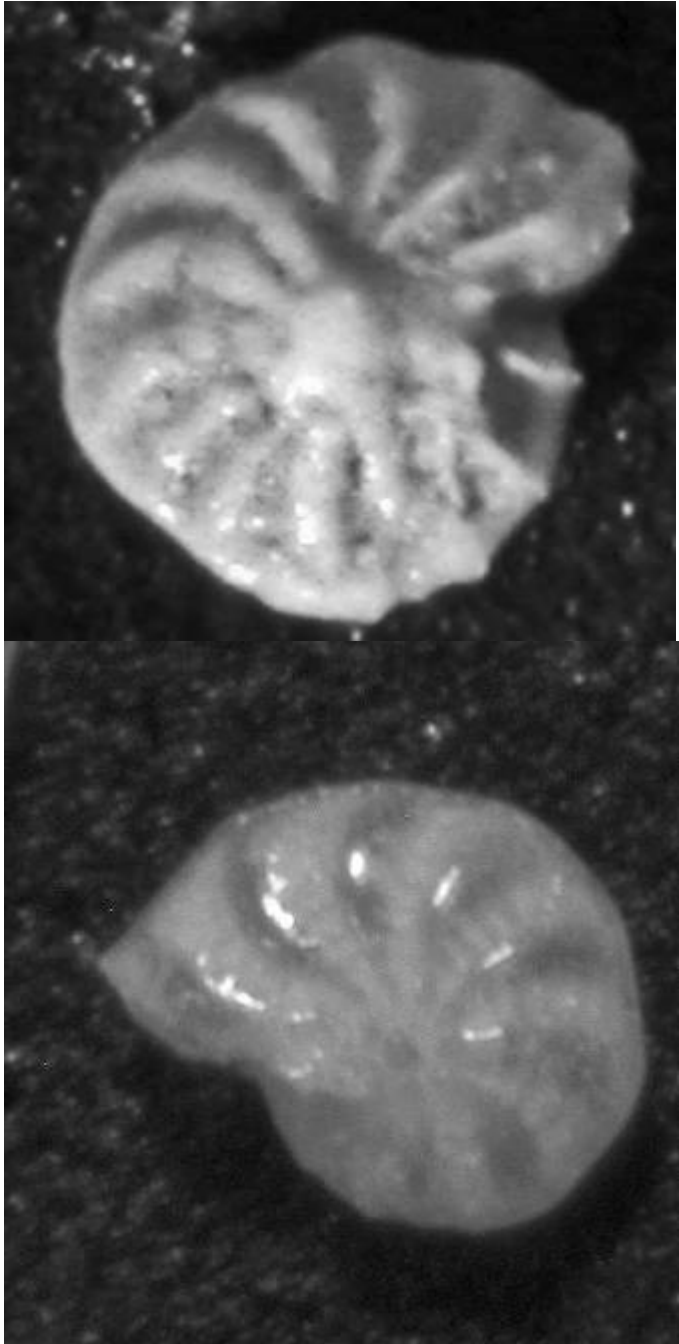
*Elphidium discoidale*





*Elphidium gunteri*

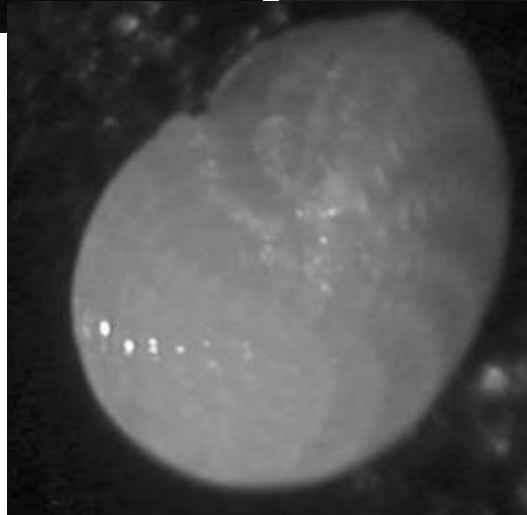
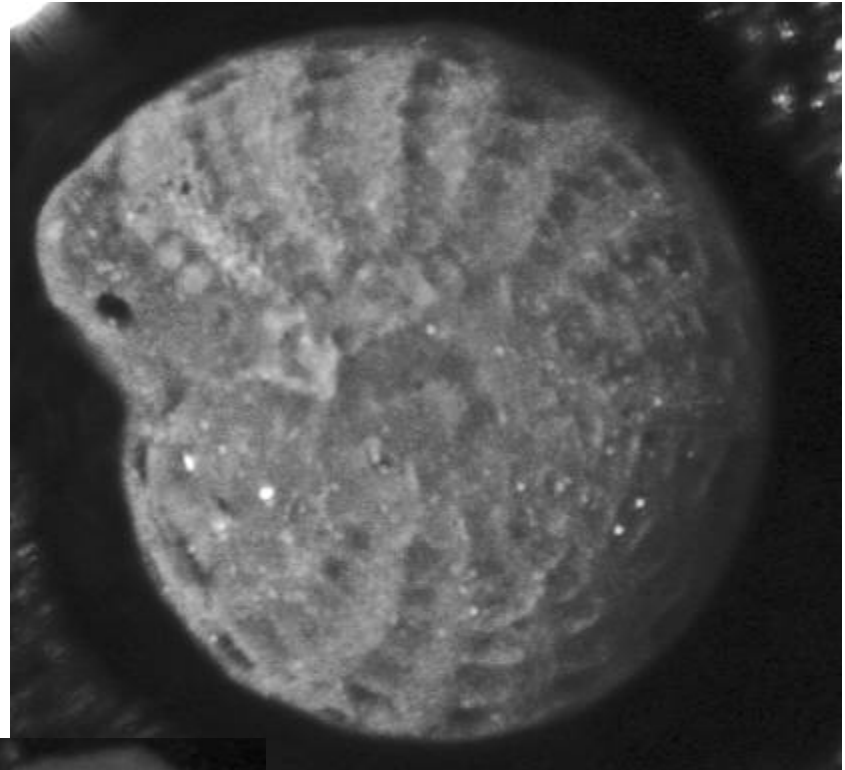
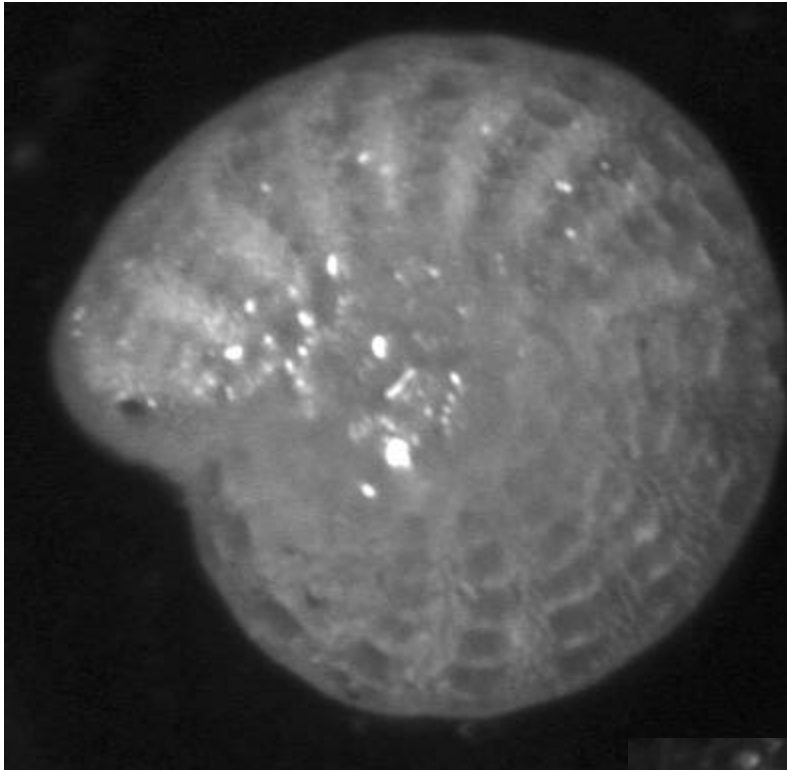


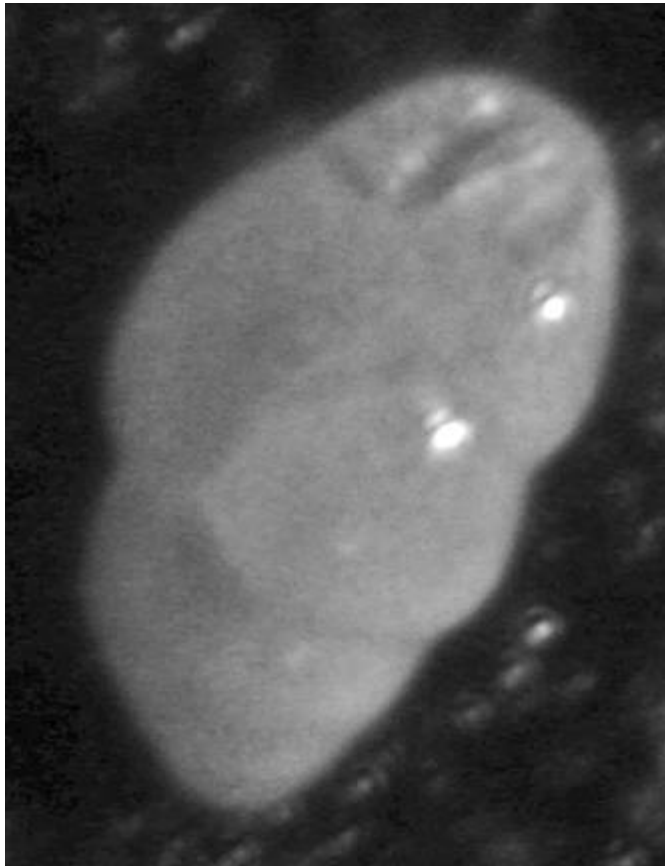


*Elphidium fimbriatum*

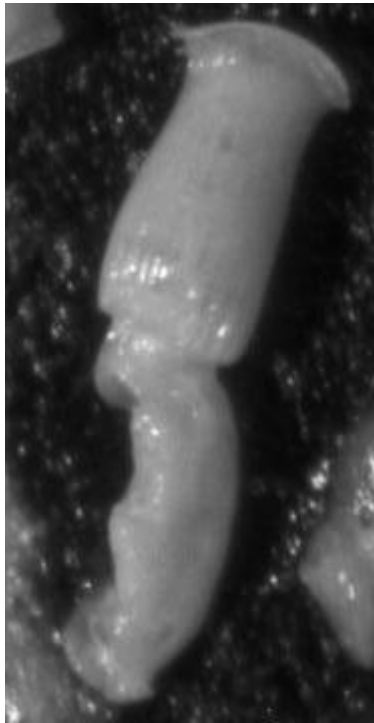


*Elphidium sagram*

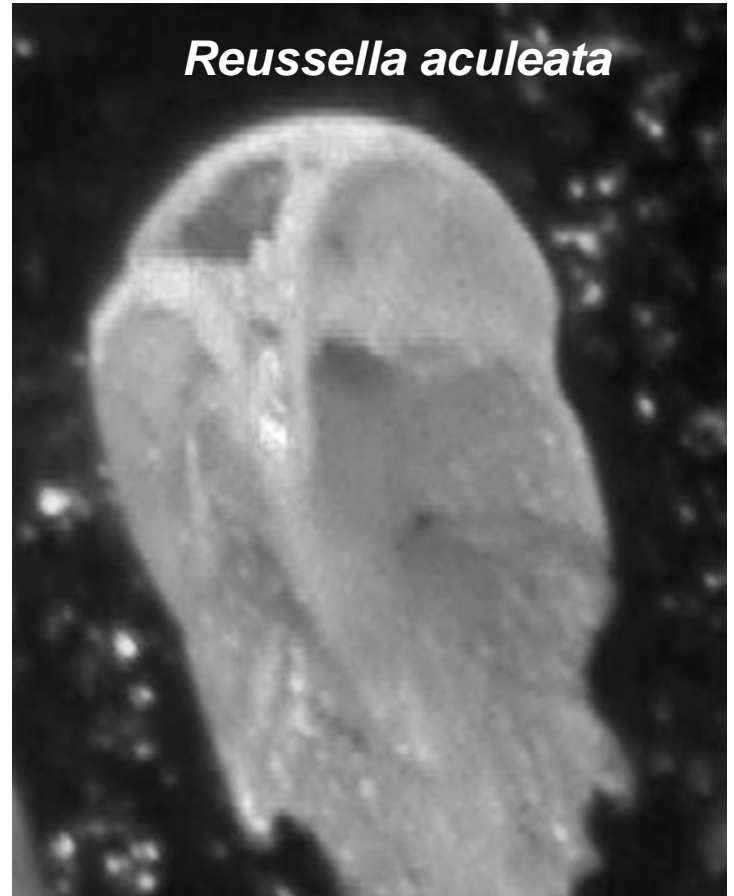




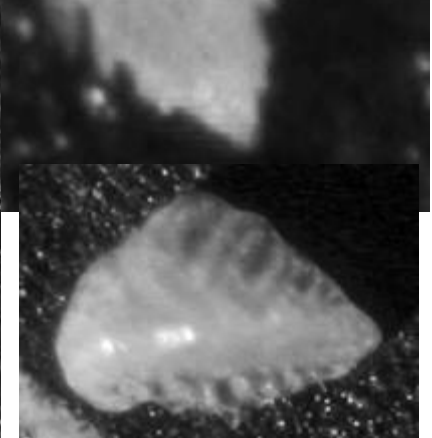
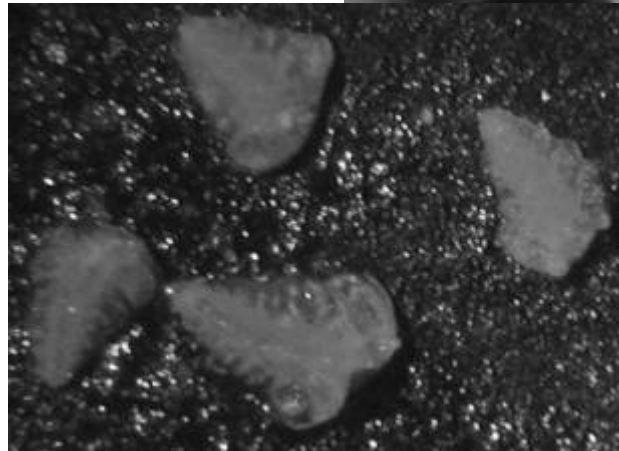
*Bulimina sp.*



*Articulina  
lineata*

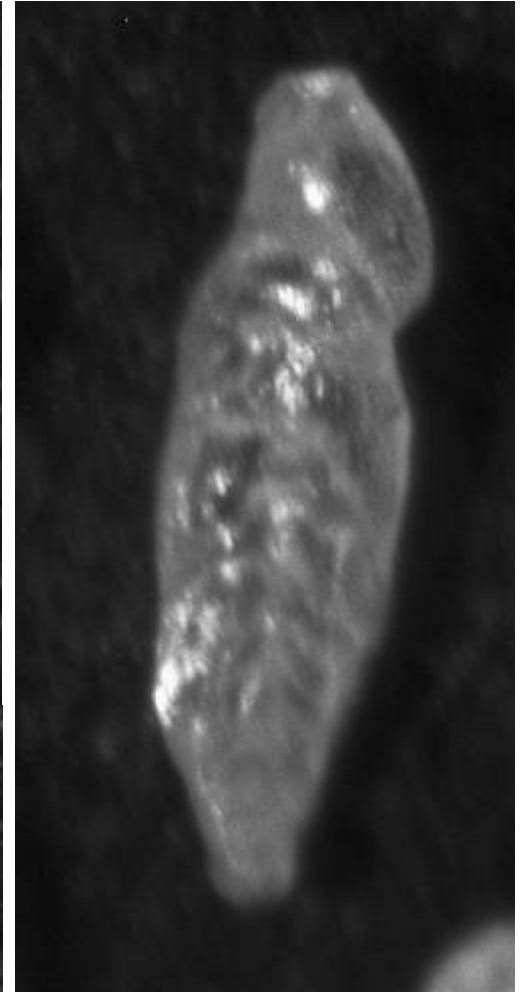
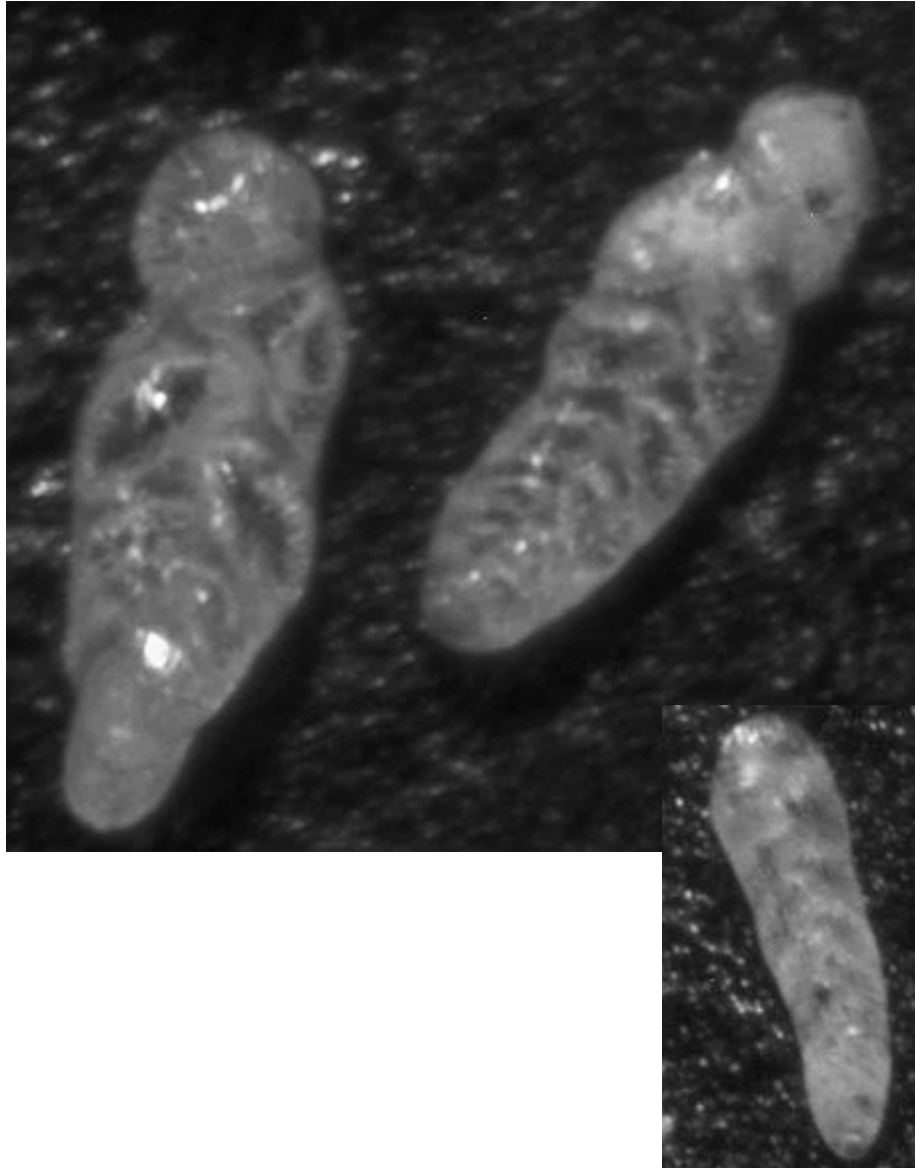
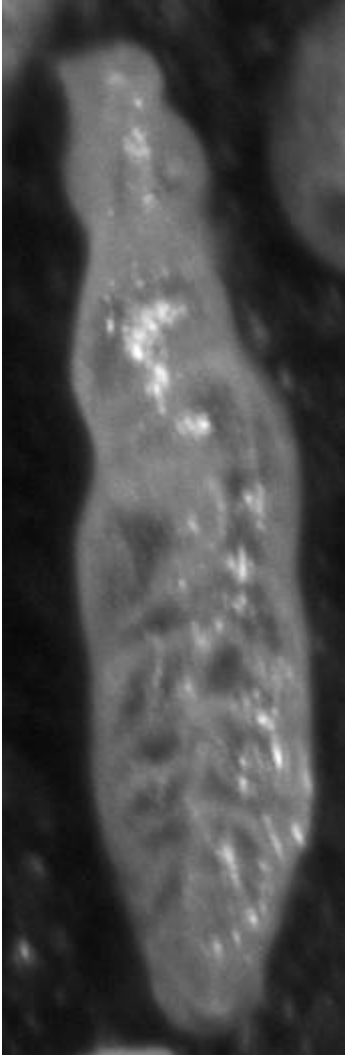


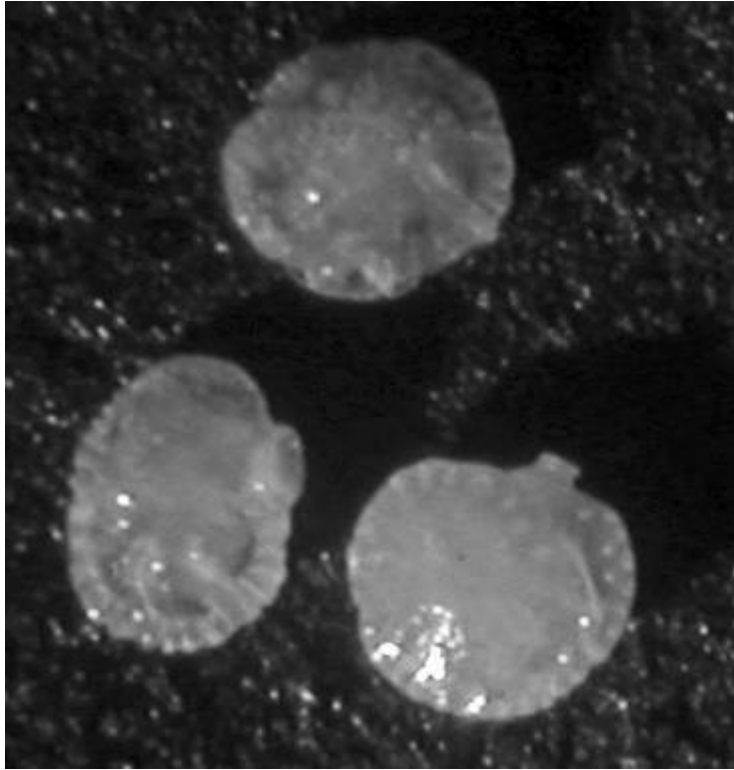
*Reussella aculeata*





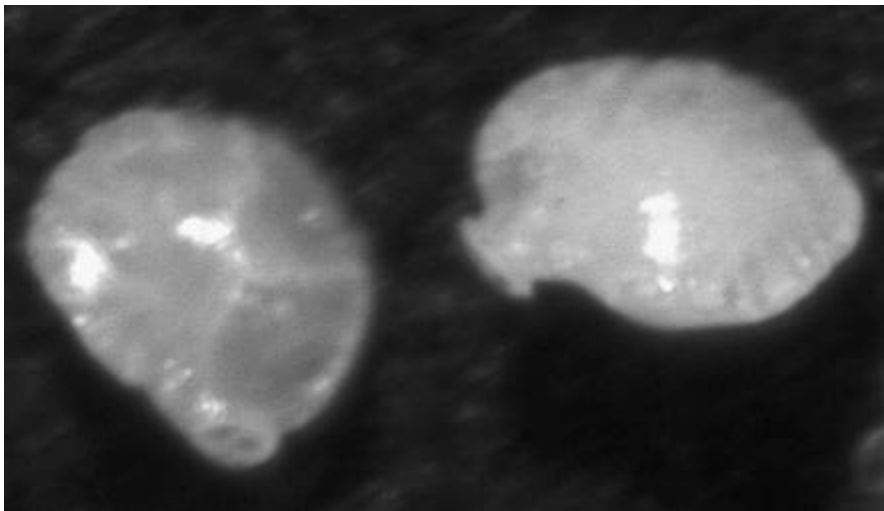
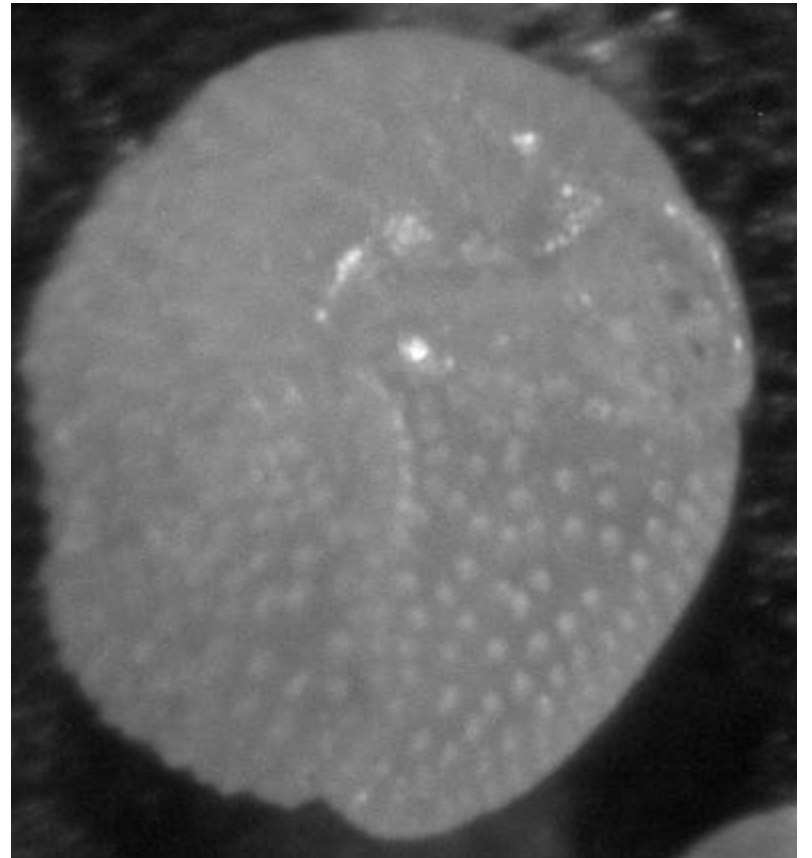
***Brizalina lanceolata***

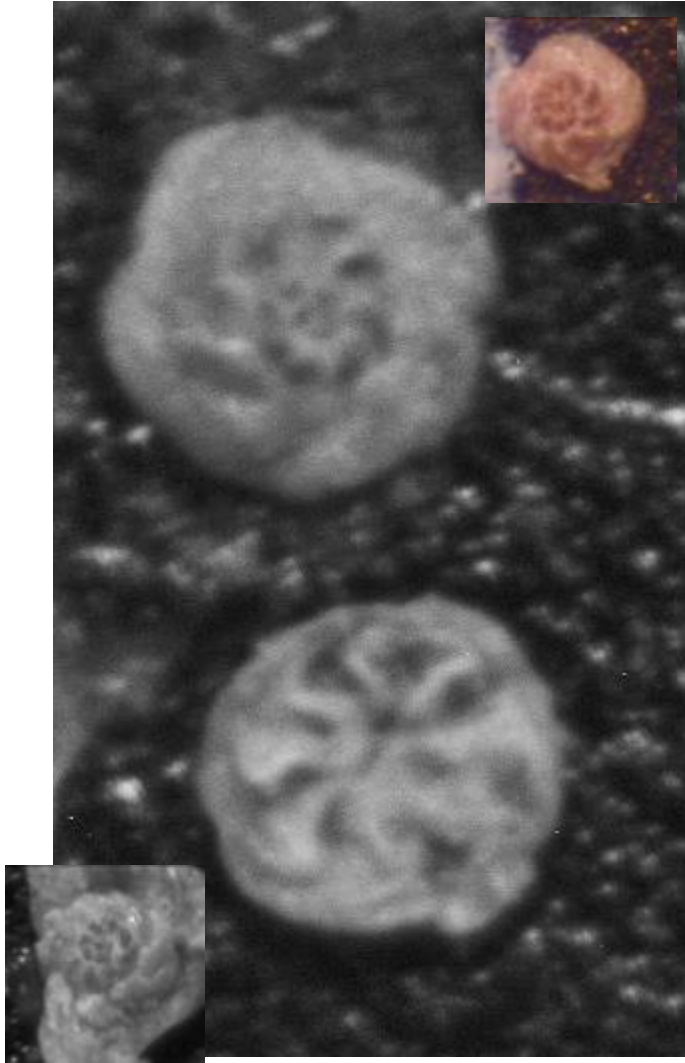




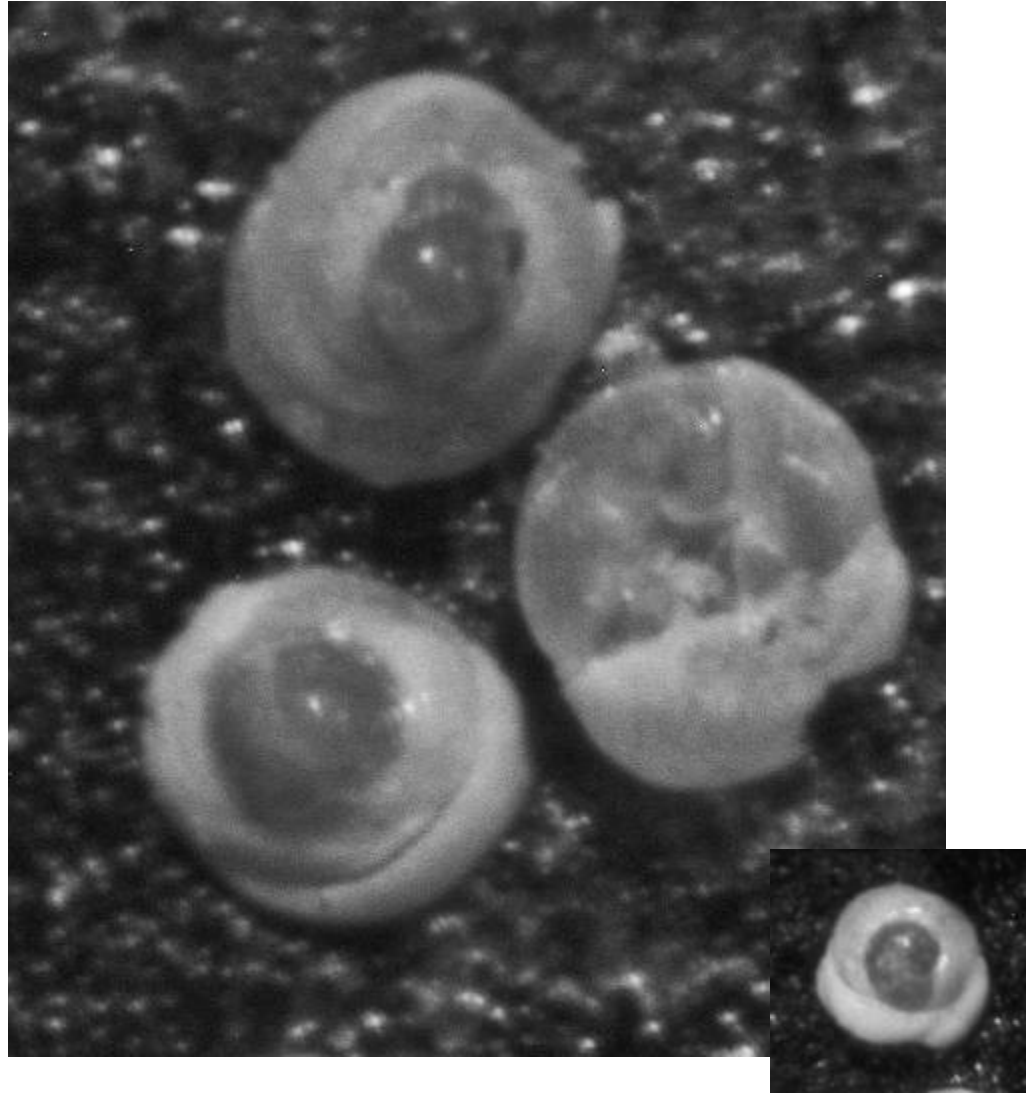
***Siphonina reticulata***

***Siphonina pulchra***



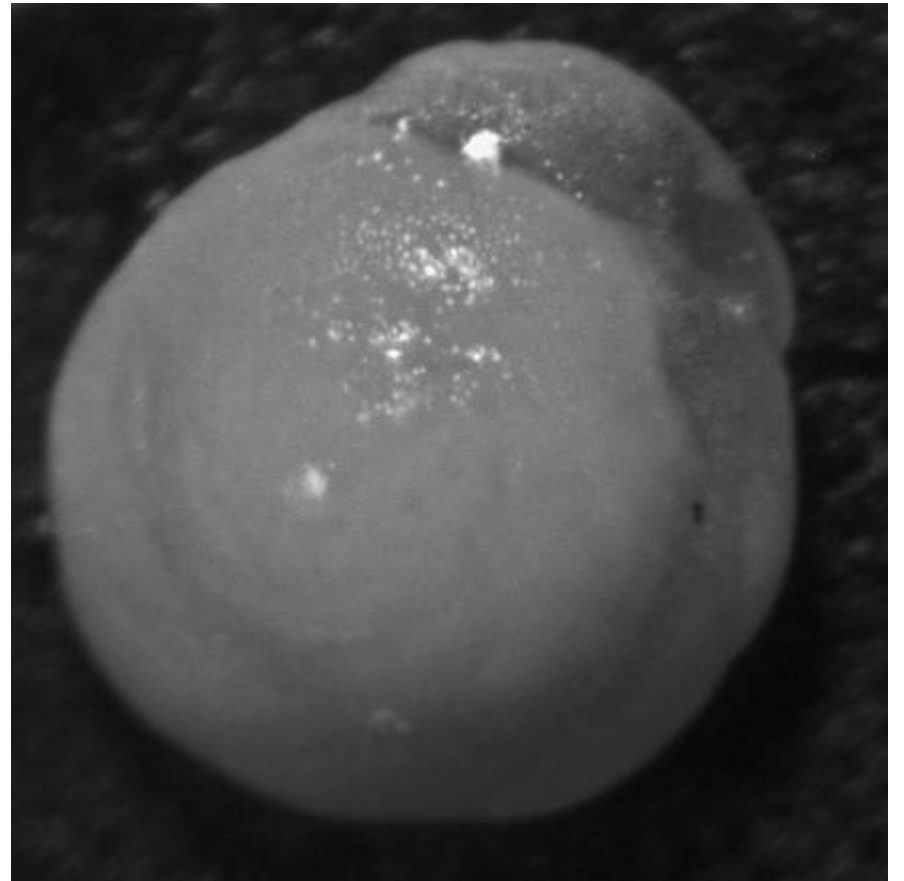
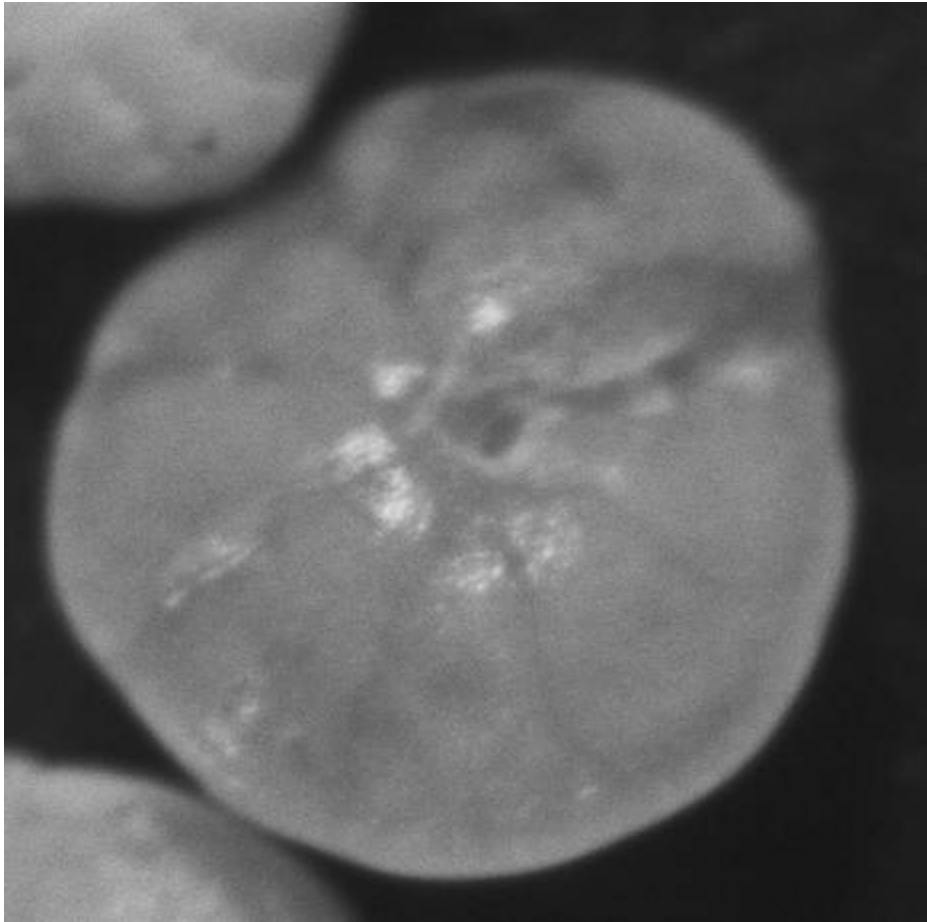


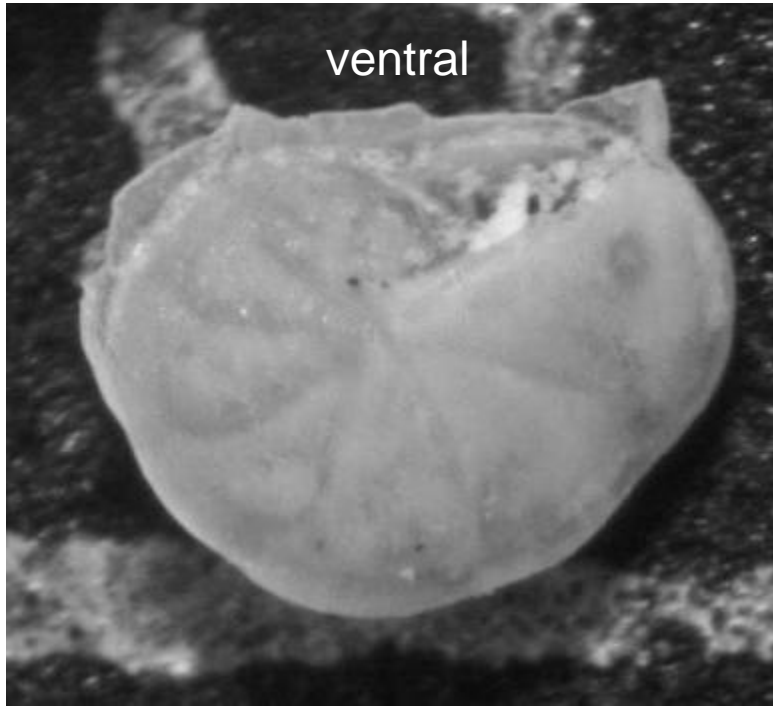
***Lobatula sp. indet.***



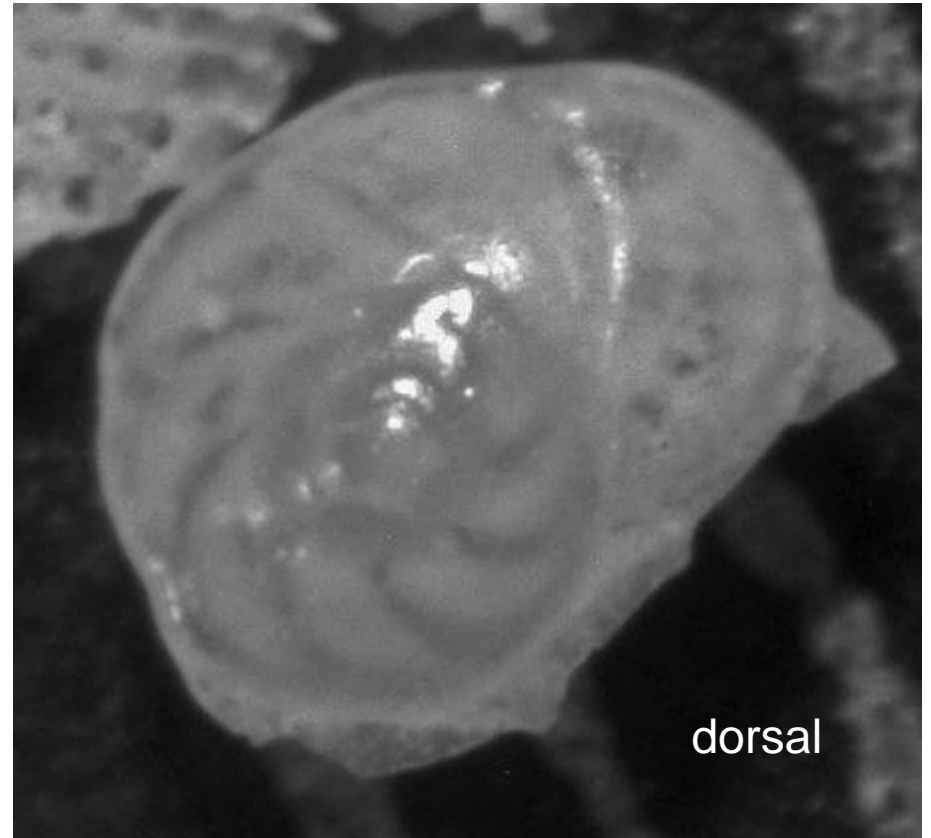
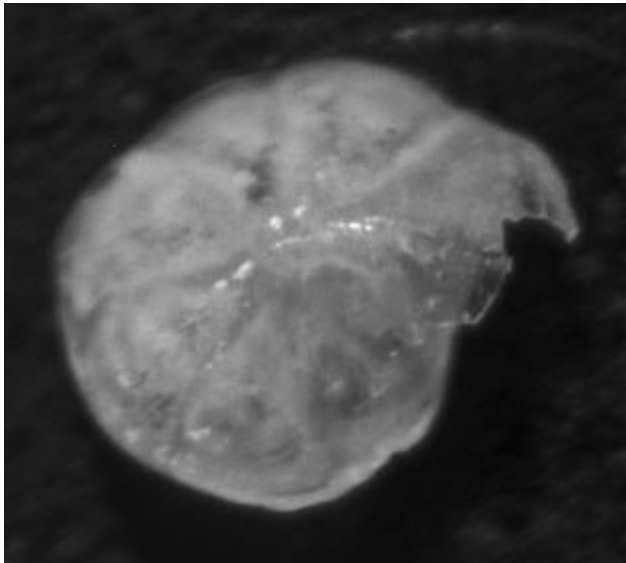
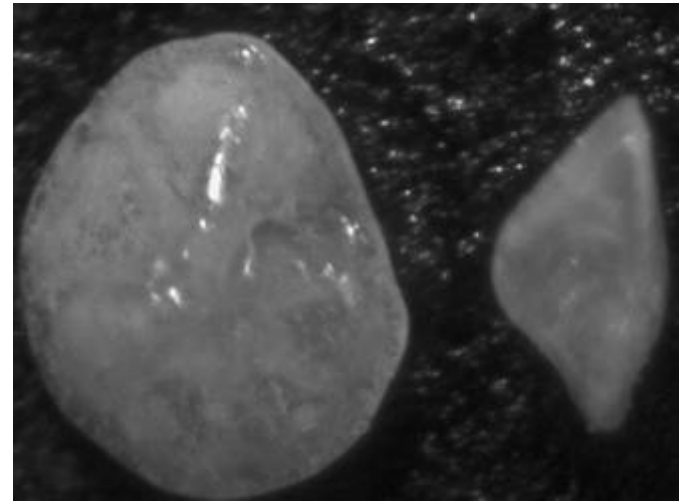
***Rosalina concinna***

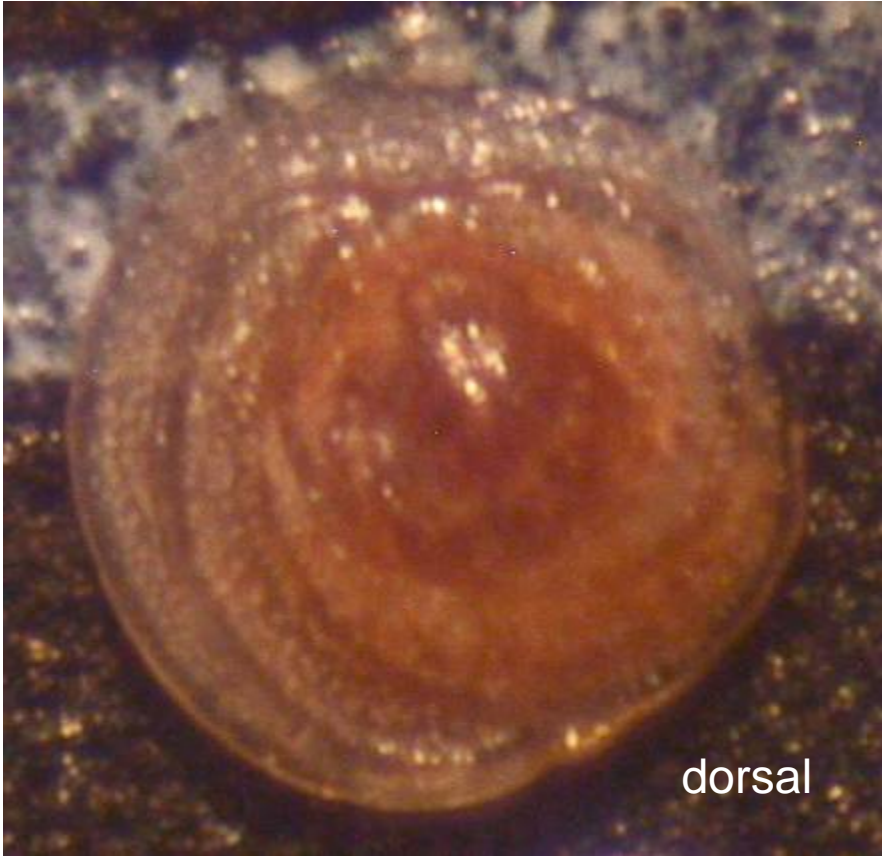
*Eponides antillarum*





*Hoeglundina  
elegans*



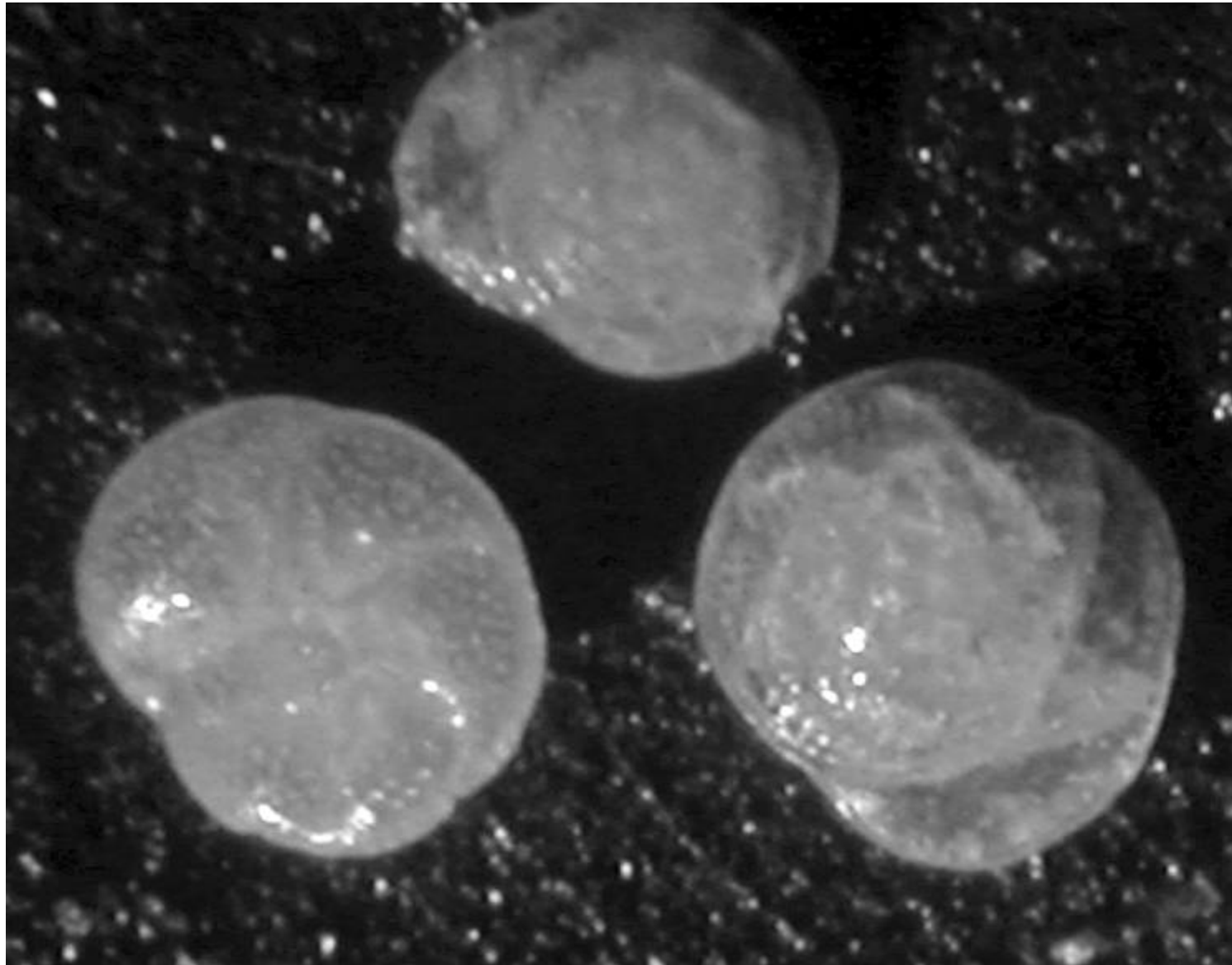


dorsal

***Neonorbina  
orbicularis***



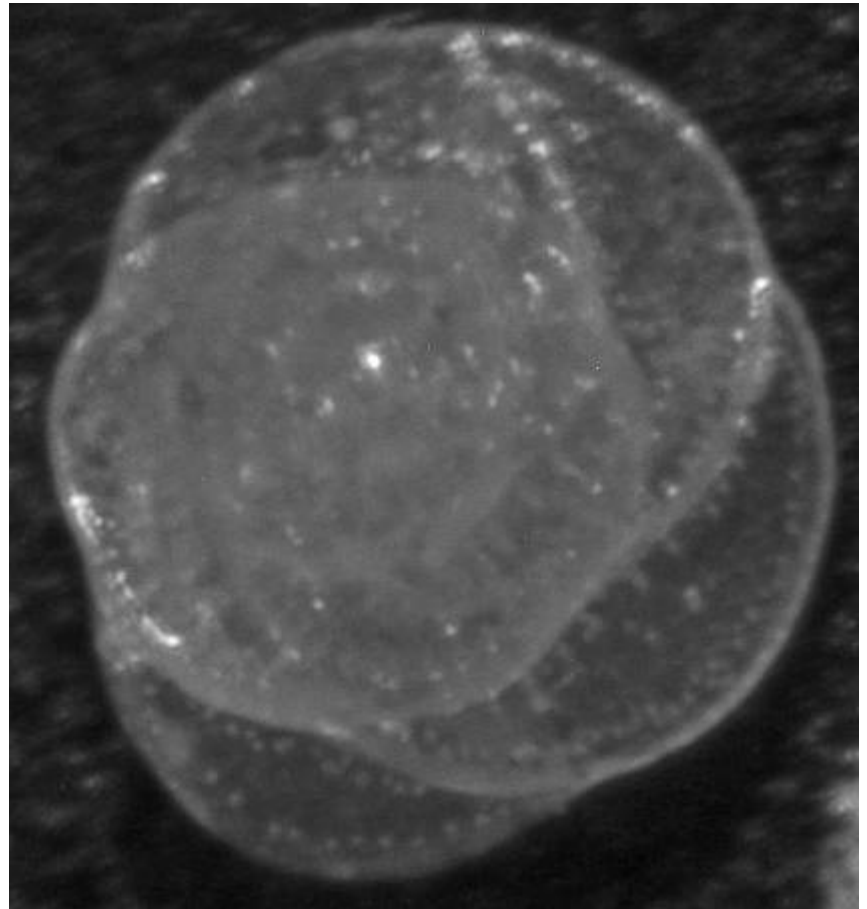
ventral



*Eponides repandus*

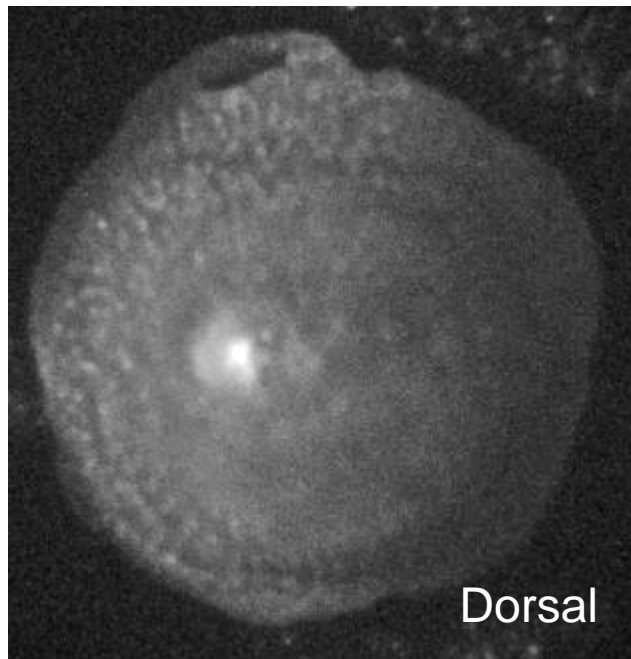
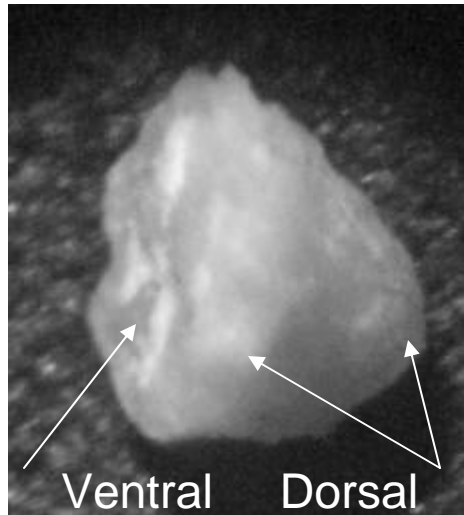


*Eponides repandus*

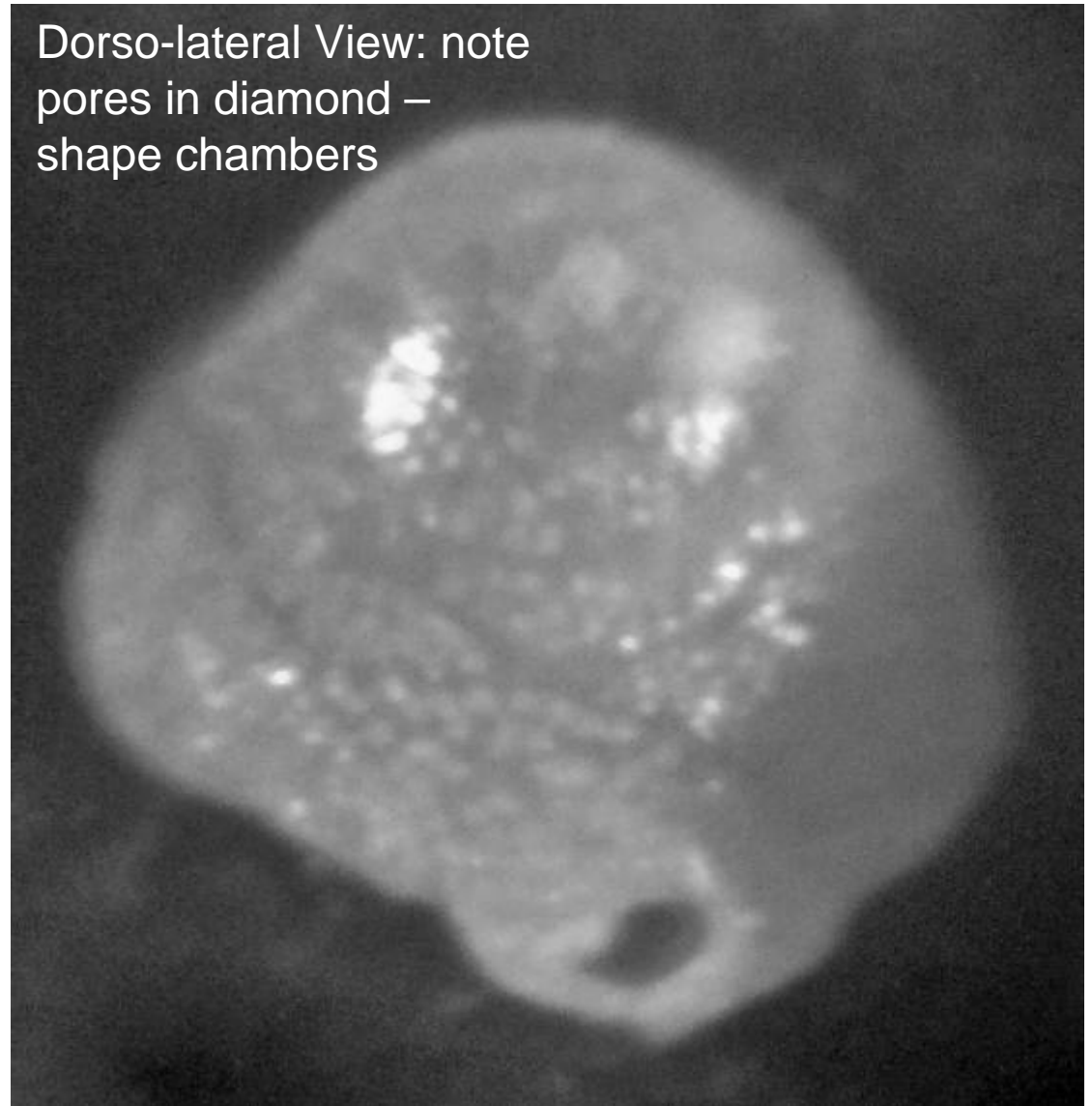


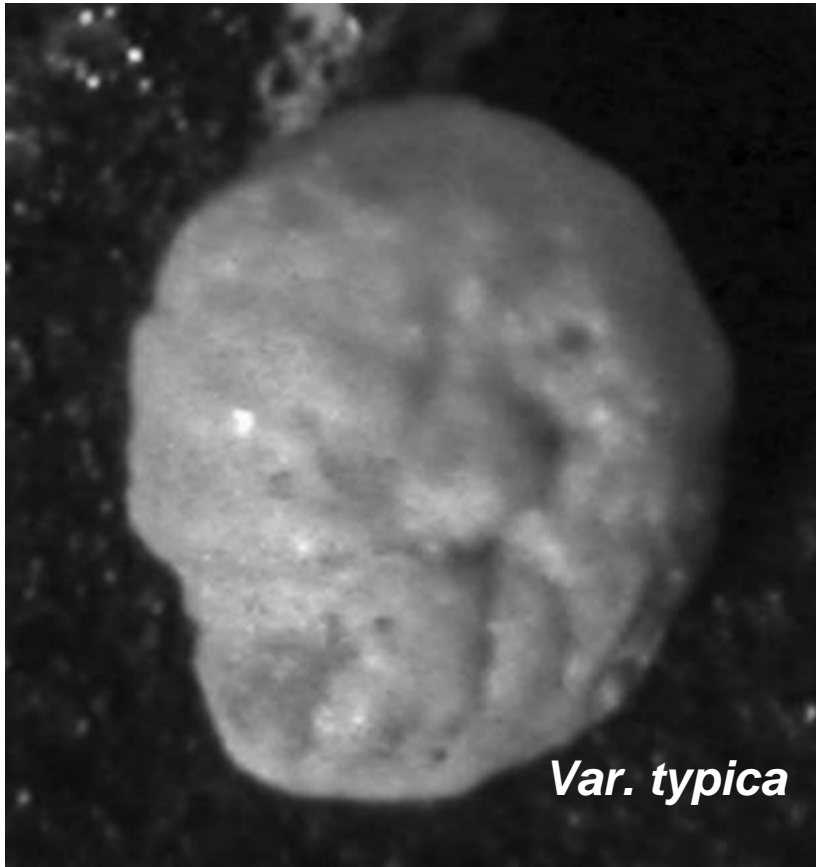


*Cymbalopora squamosa*

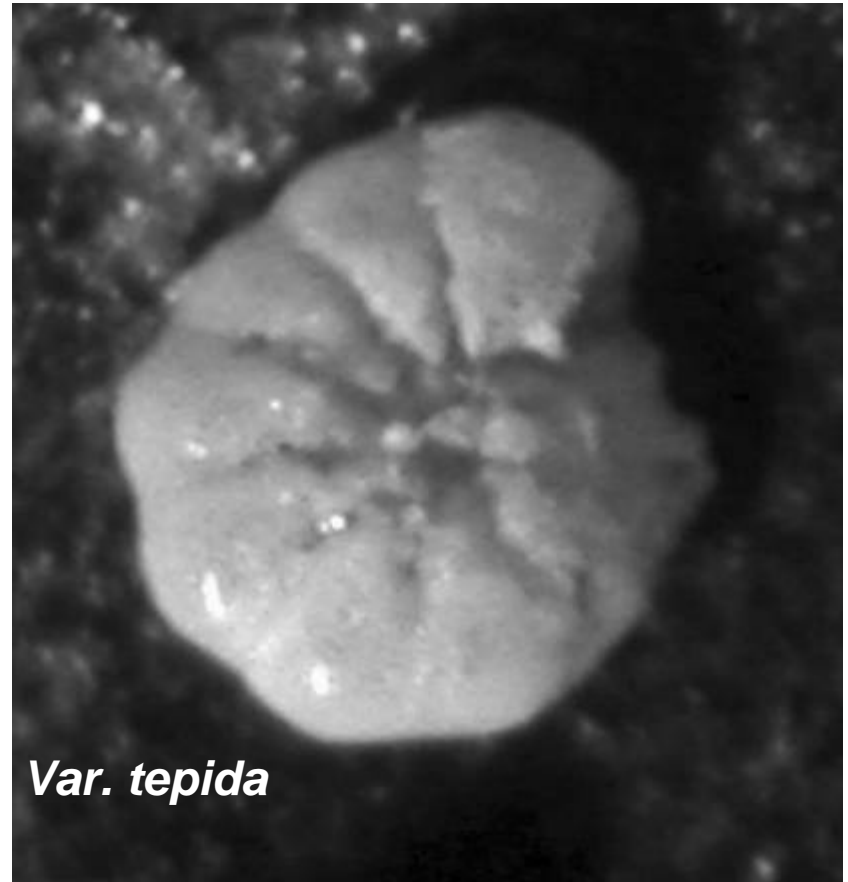


Dorso-lateral View: note  
pores in diamond –  
shape chambers



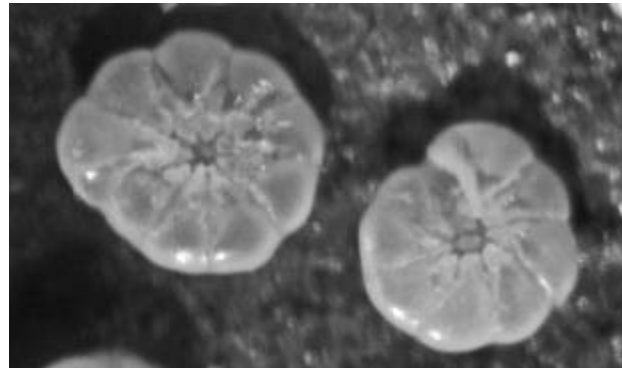
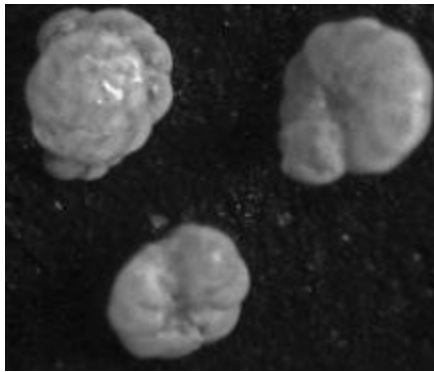


*Var. typica*



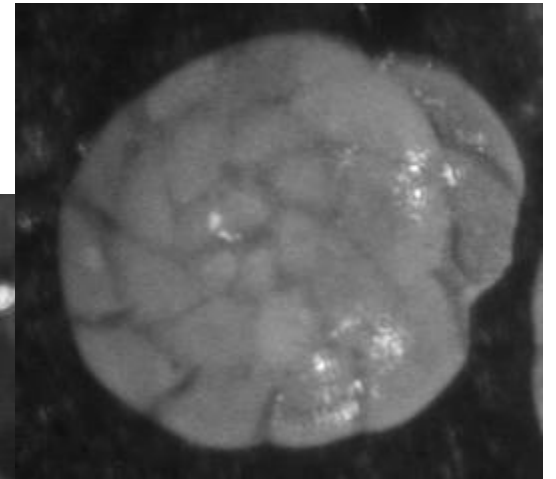
*Var. tepida*

***Ammonia parkinsoniana***

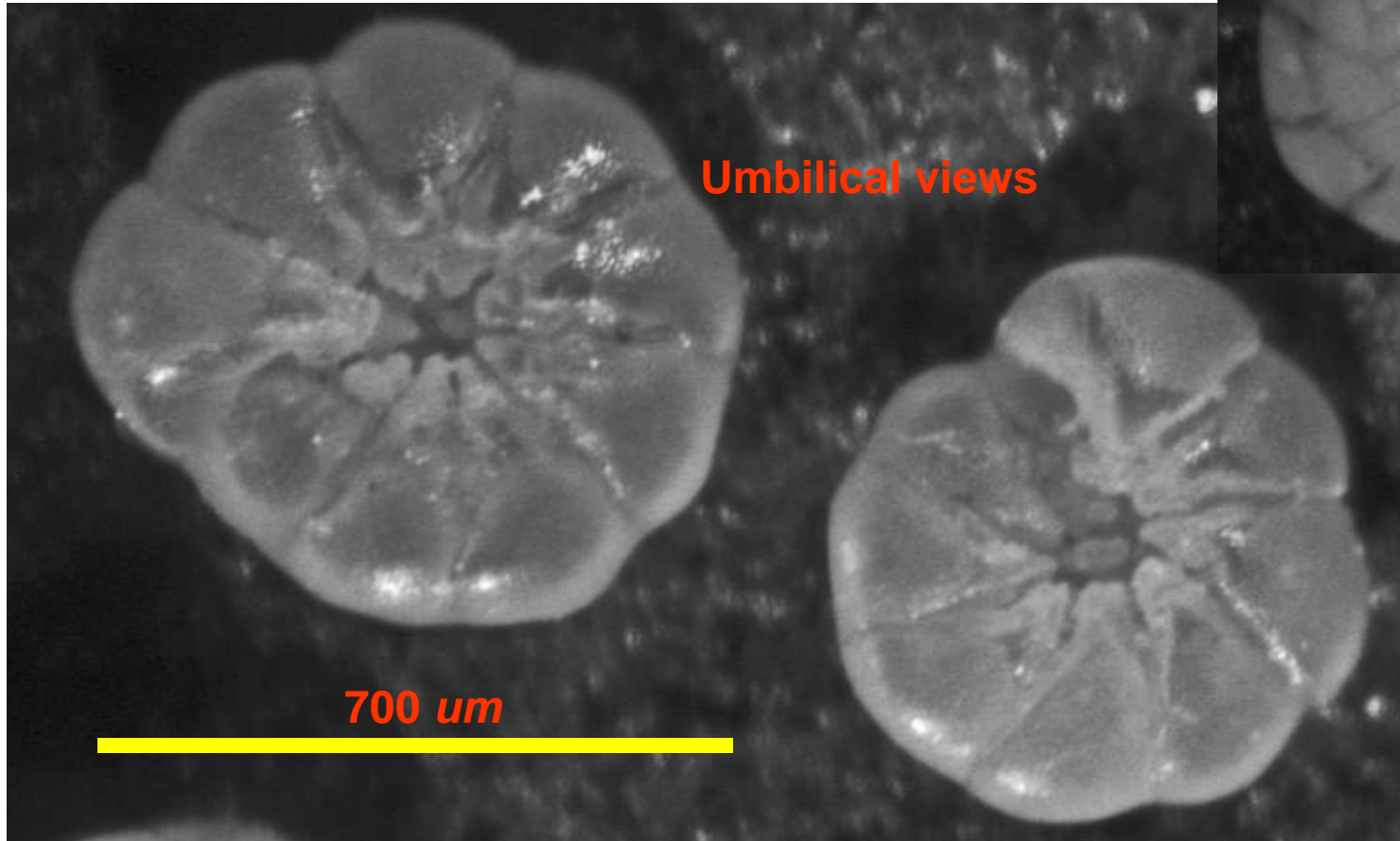


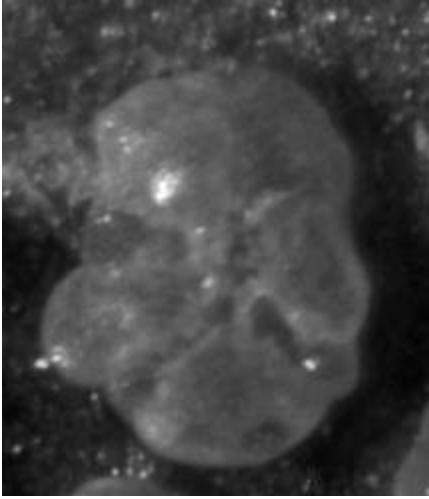
# *Ammonia parkinsoniana* var. *tepida*

Spiral view

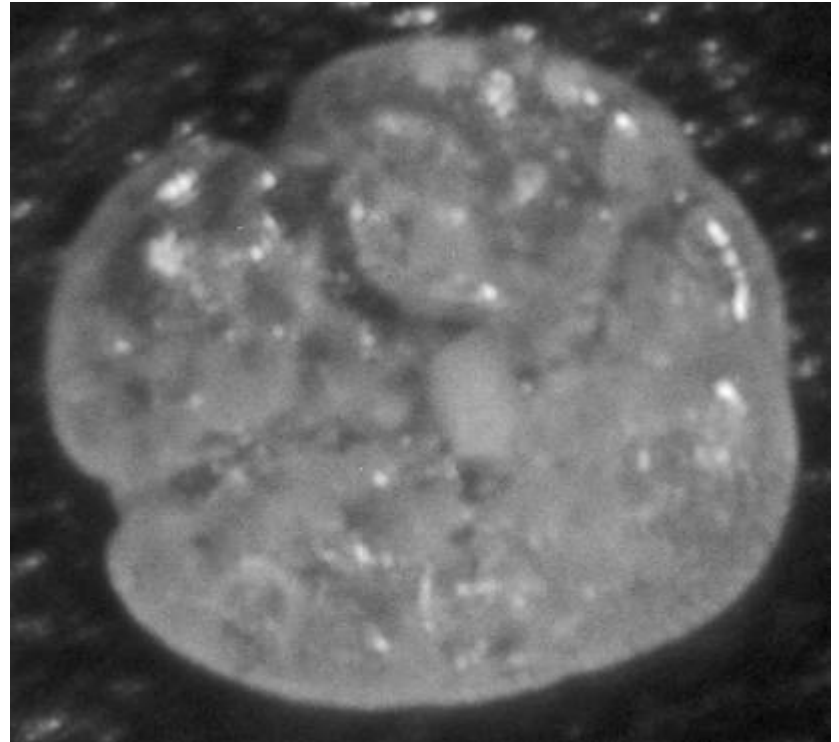
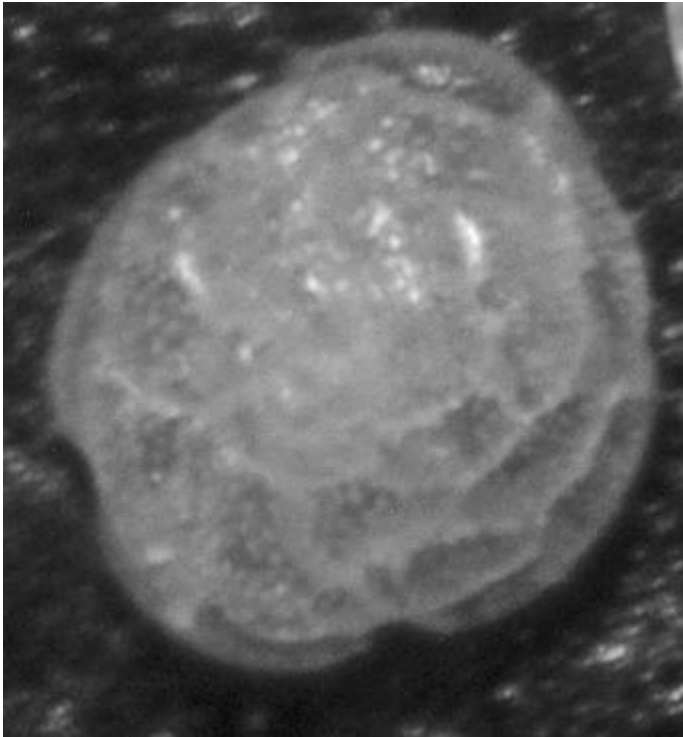
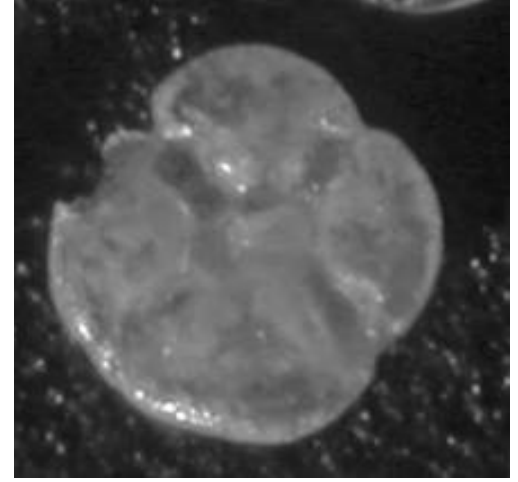


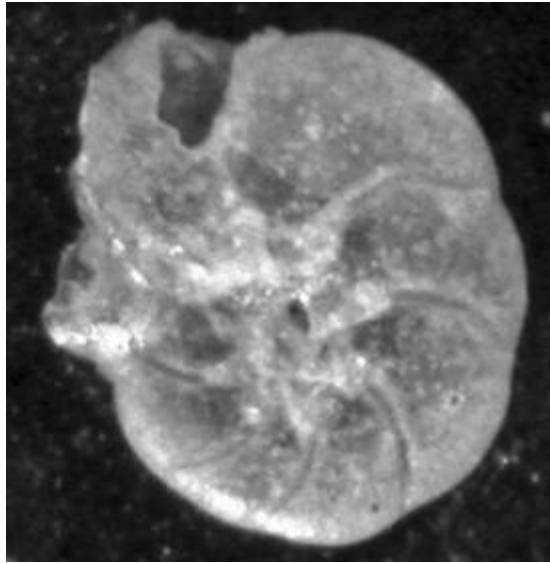
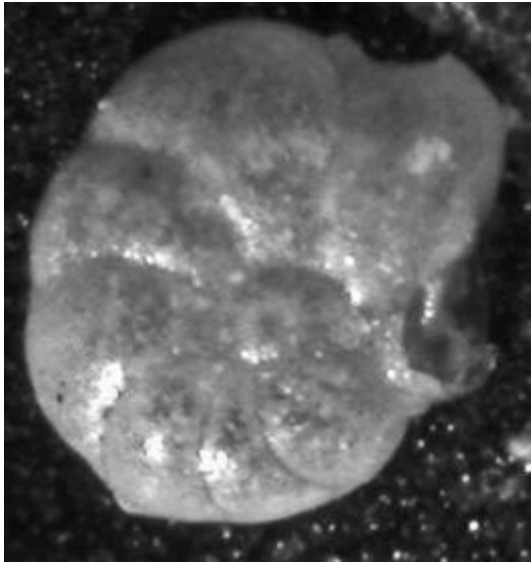
Umbilical views



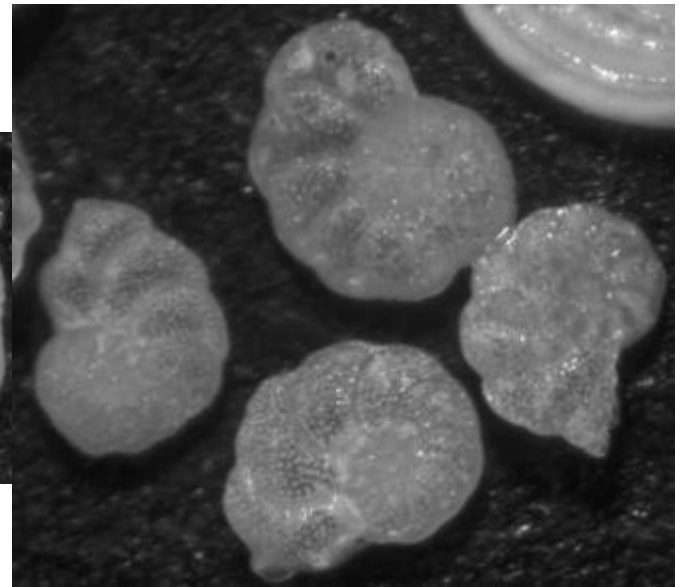
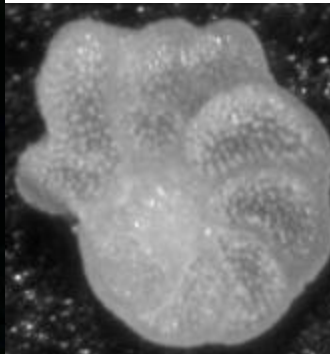
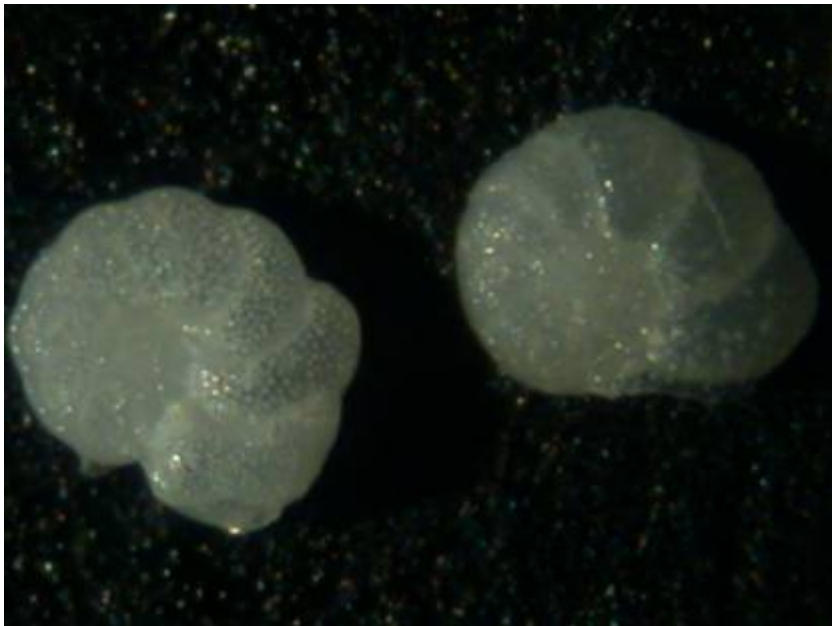
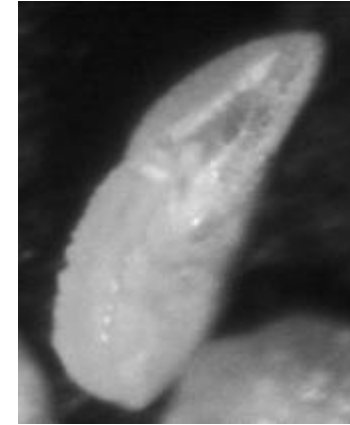


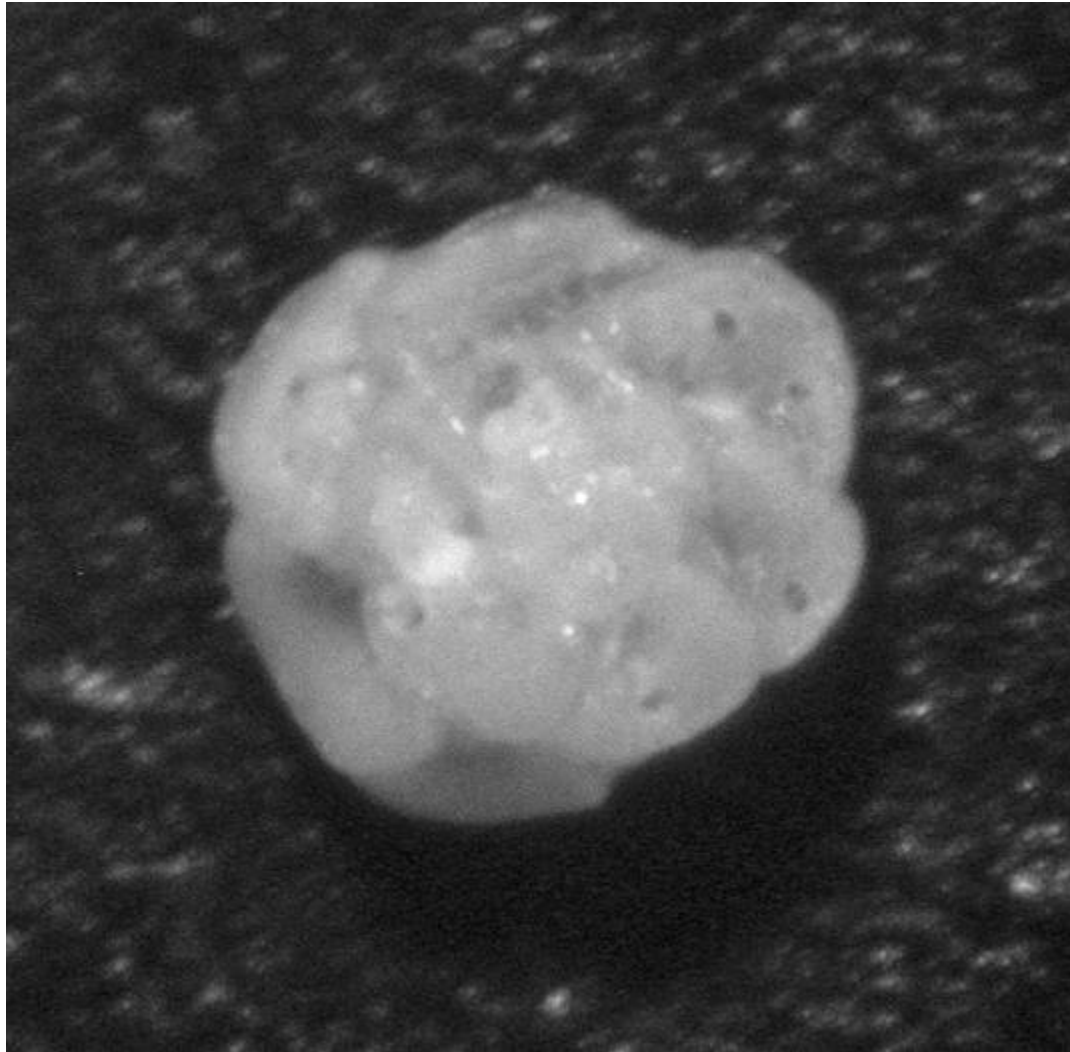
*Tretomphalus atlanticus*



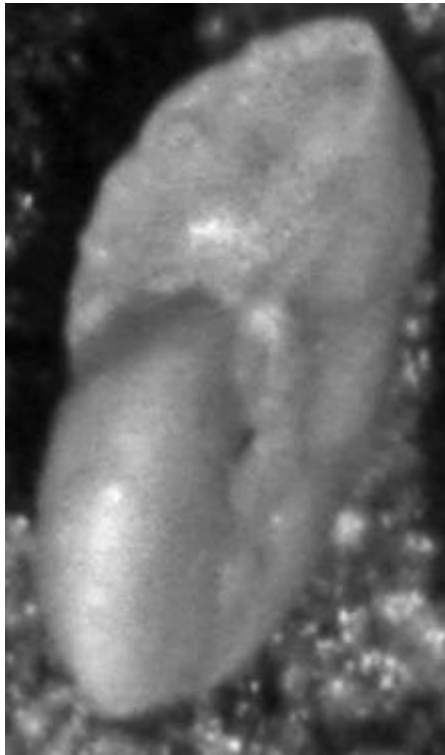
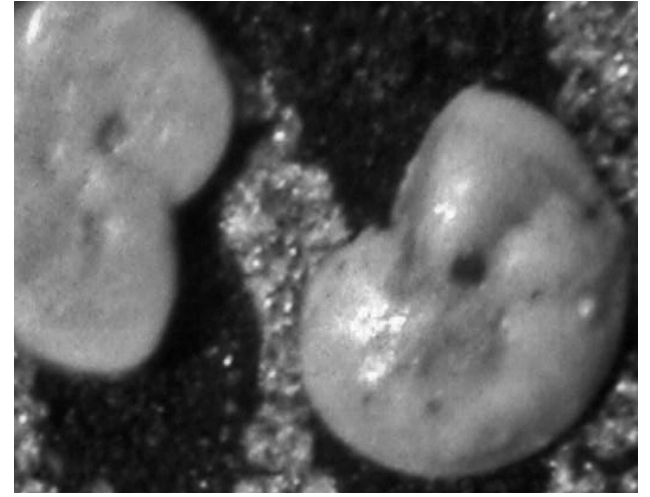
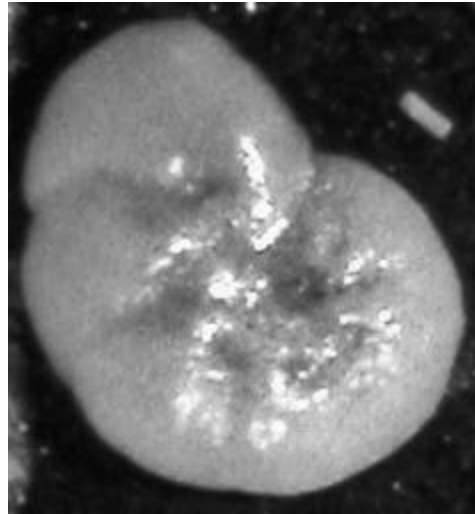
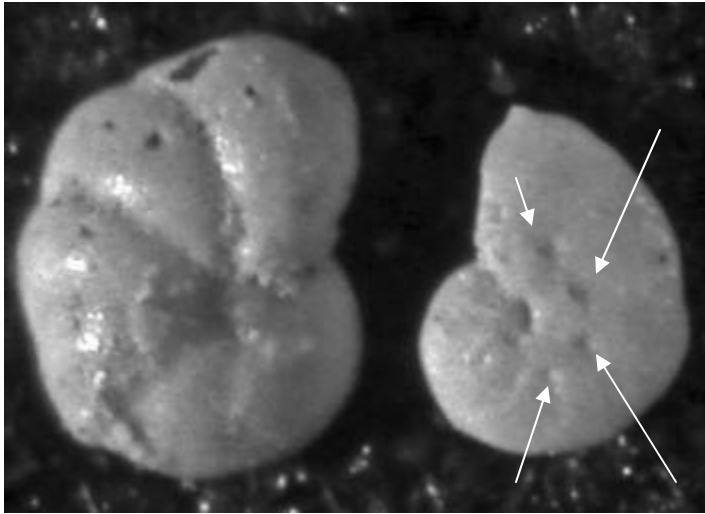


*Planulina exorna*;  
planoconvex

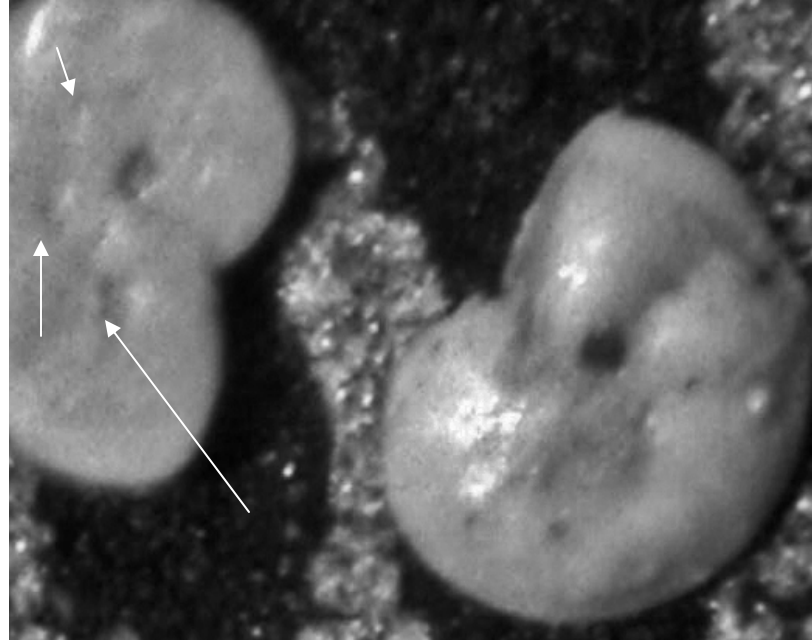




*Planulina foveolata*

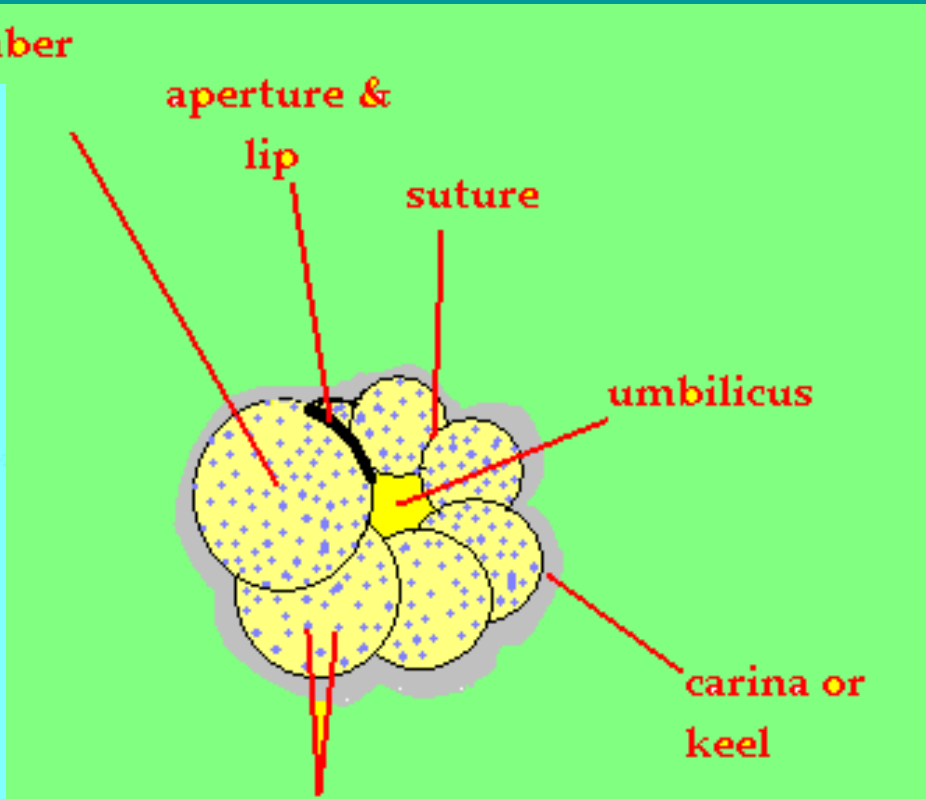
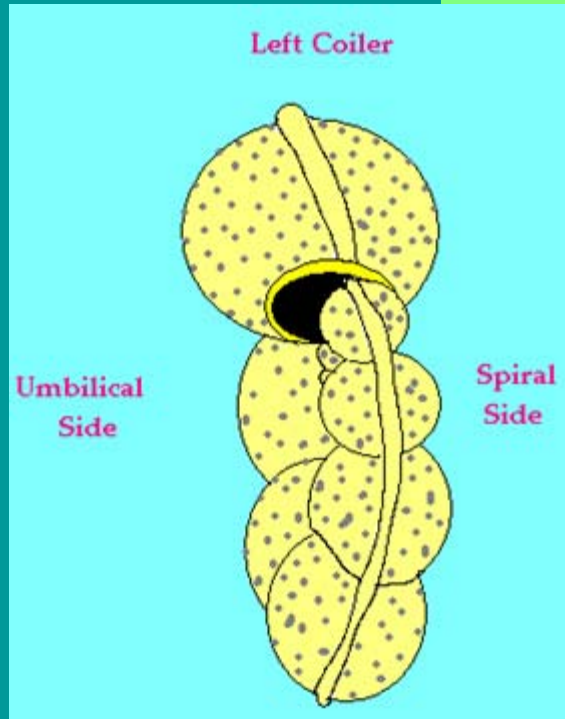


***Hanzawaia concentrica*; planoconvex**



# Basic 'Foram' Anatomy

chamber



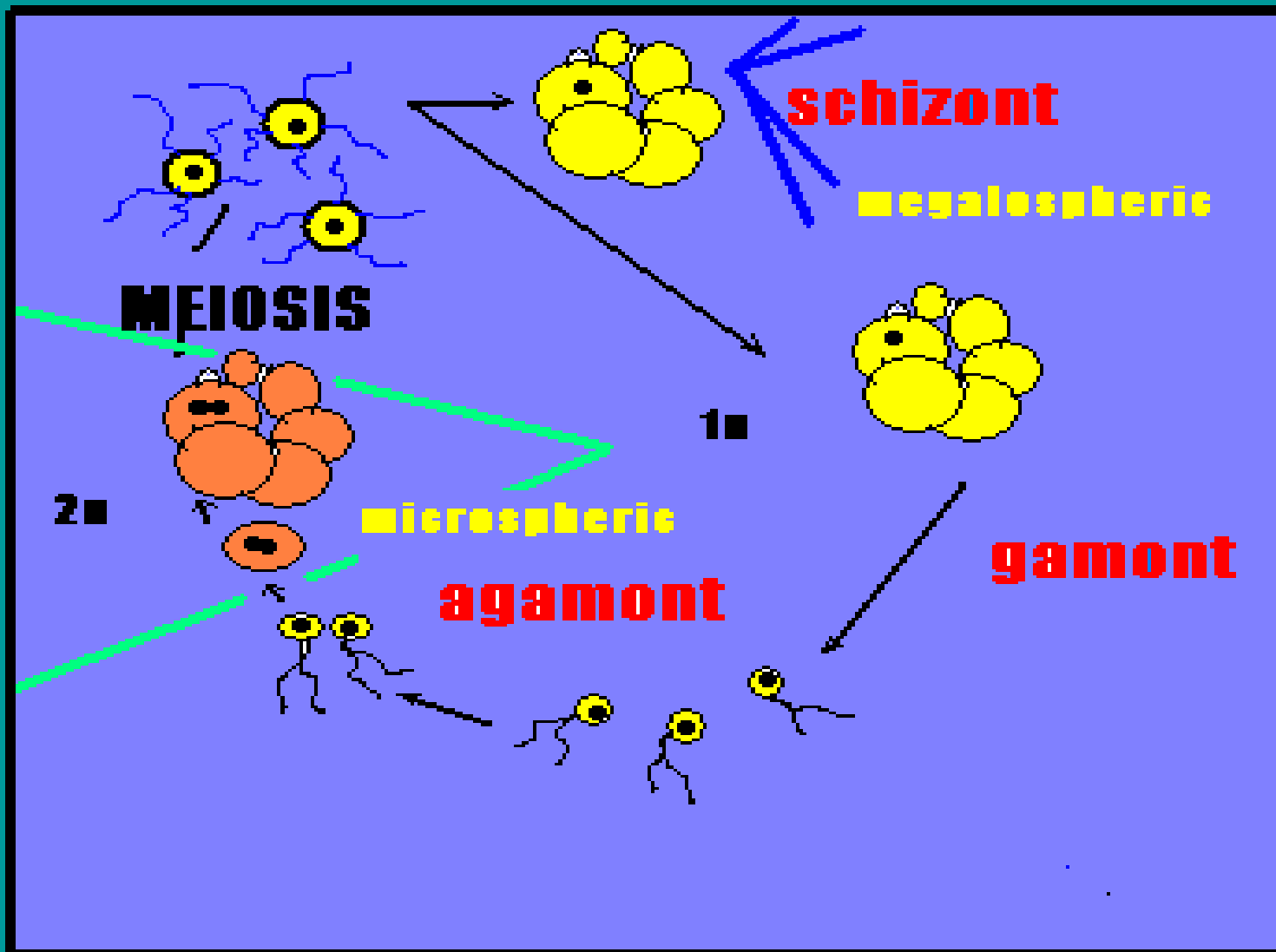


# Test Composition & Classification

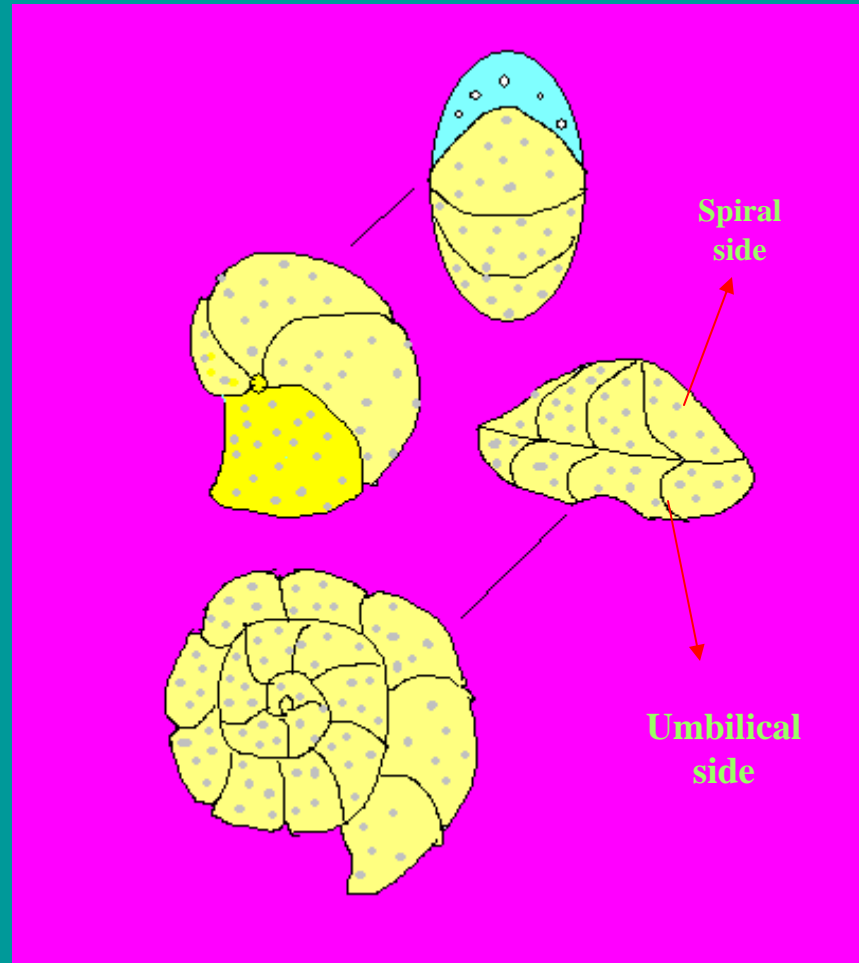
- **Organic-walled** (protein/mucopolysaccharide)-*Allogromia*
- **Agglutinated** ( particles cemented by  $\text{CaCO}_3$ )-**Textulariids**
- **Secreted**- 3 types: 1) **Microgranular-Fusuliniids**  
2) **Porcelaneous** (imperforate)-**Miliolids**  
3) **Hyaline**- new layer added to test with each new **chamber-Globigerinids & Rotaliids**



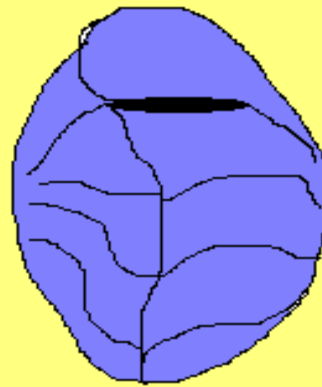
# Simple Life Cycle of FORAMINIFERA



## Forams: Planispiral v. Trochospiral, Evolute v. Involute



Apertural View

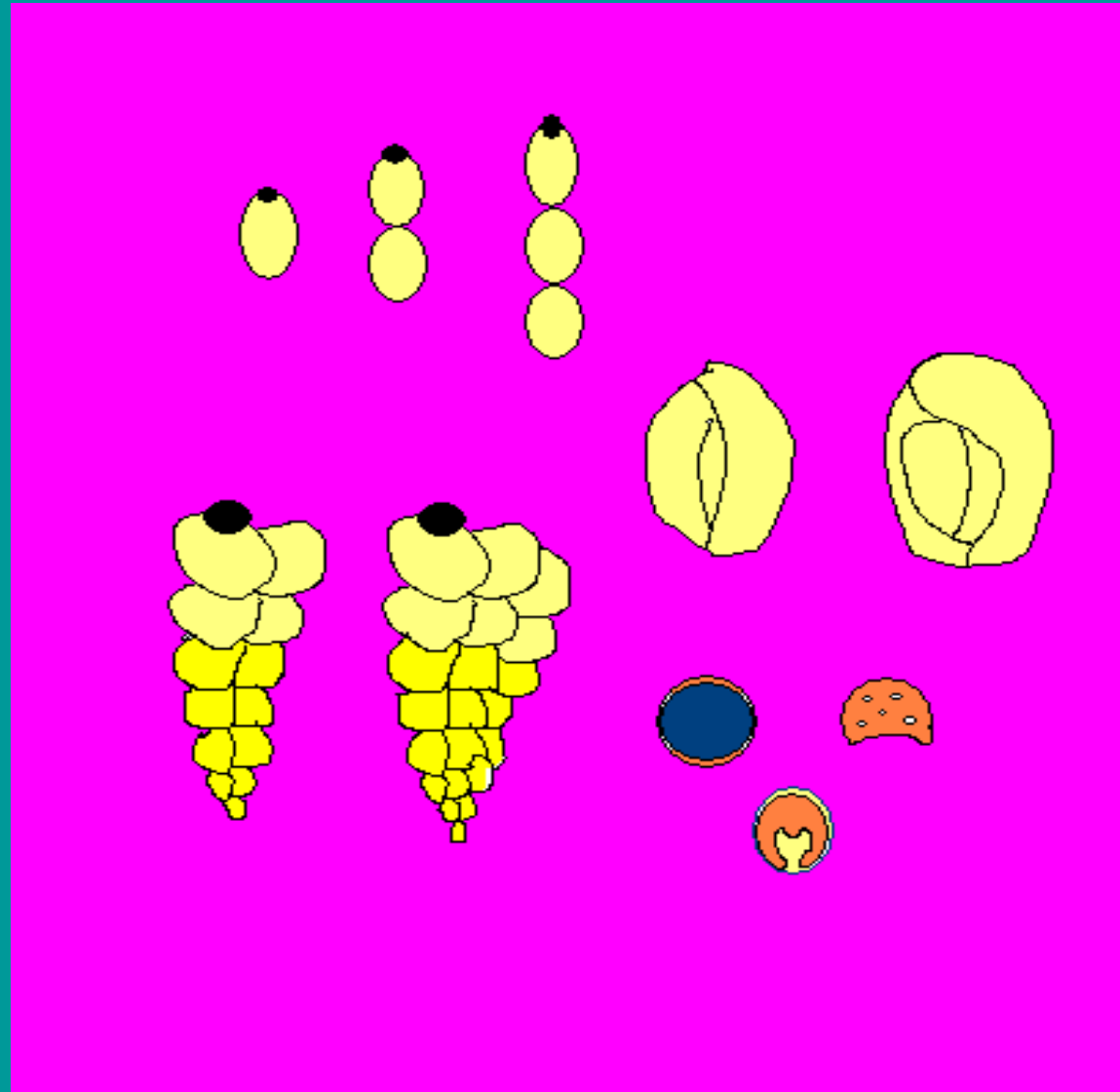


Biconvex

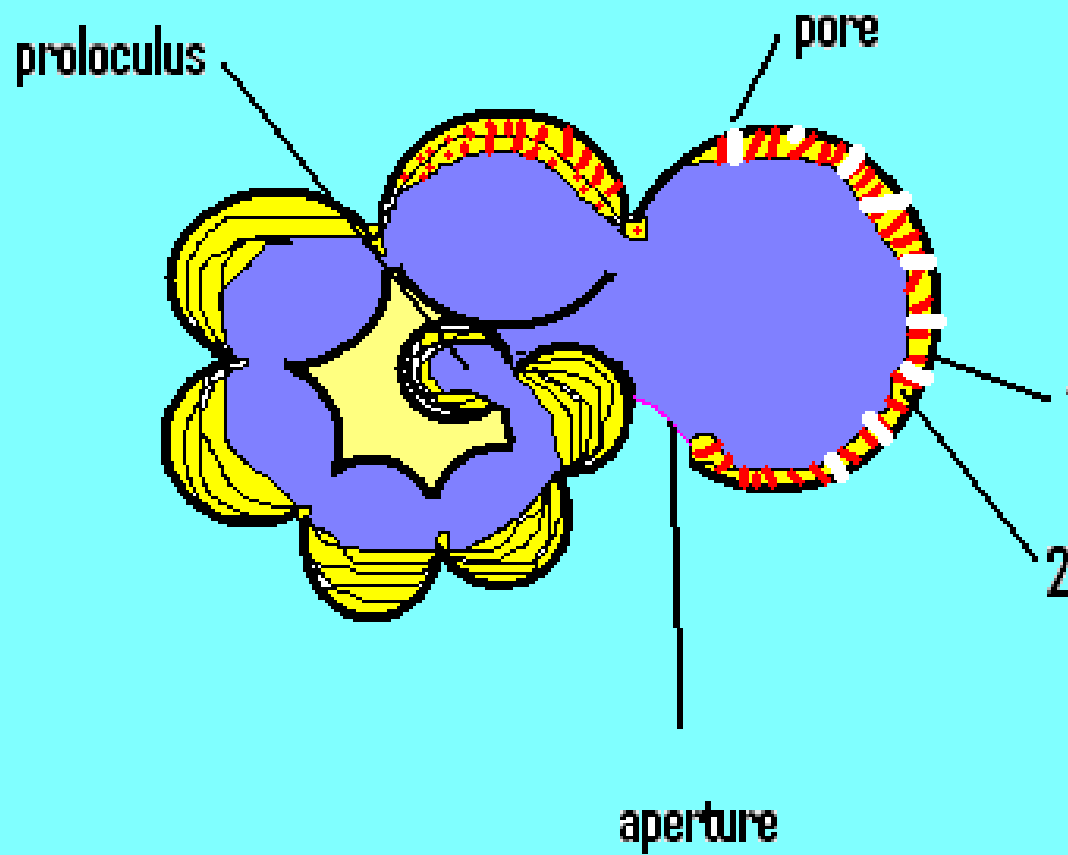


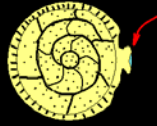
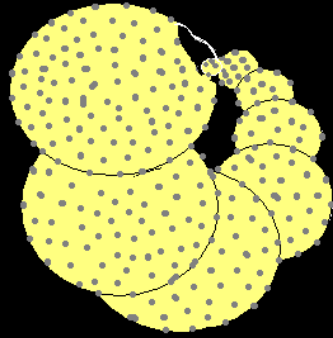
Planoconvex

**Chambers: Uniserial, Biserial, Triserial; Unilocular, Bilocular, Trilocular; Leptospiral. Apertures: Cribriform, Toothed, Lipped**

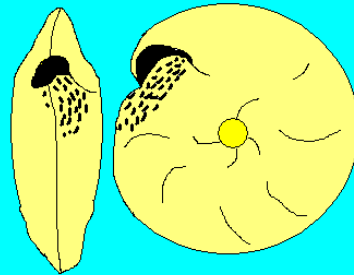
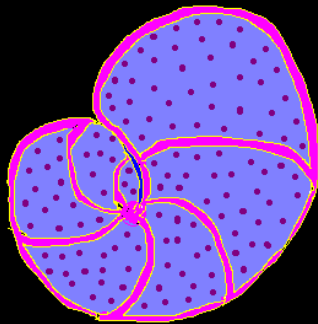
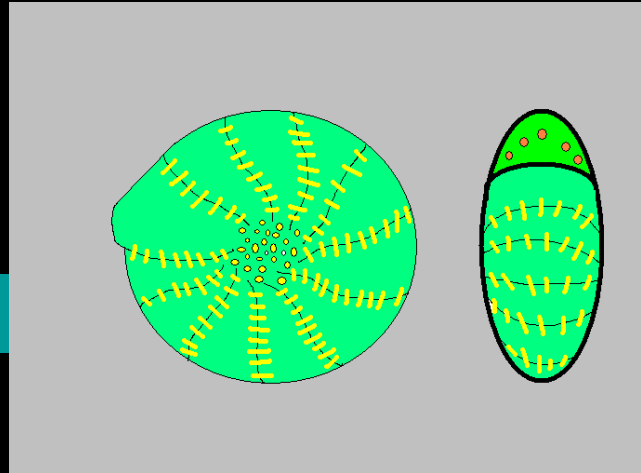
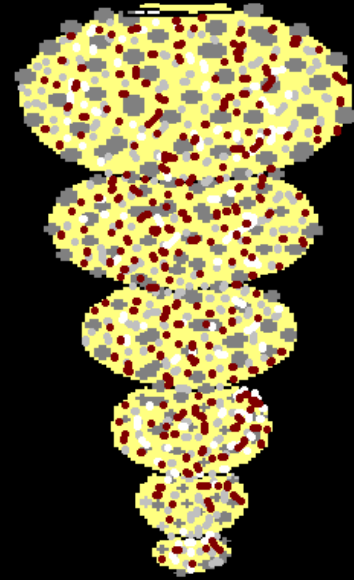
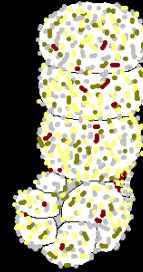


Hyaline perforate: lamellar-radial  $\text{CaCO}_3$  xls

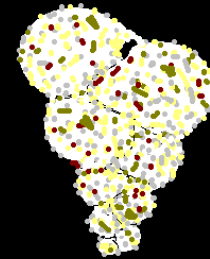




*Siphonina sp.*



*Textularia sp.*



FOR MORE INFO:

[http://www.marine.usf.edu/reefslab/foramcd/html\\_files/titlepage.htm](http://www.marine.usf.edu/reefslab/foramcd/html_files/titlepage.htm)

[http://sofia.usgs.gov/publications/reports/mgs\\_bock1971/mgs\\_bock1971.pdf](http://sofia.usgs.gov/publications/reports/mgs_bock1971/mgs_bock1971.pdf)