



Banasa
dimiata & euchlora



BMSB



Brochymena
quadripustulata



Thyanta spp.

Eggs of Pentatomidae found in the Eastern USA



Chinavia
hilaris



Chlorochroa
sp.



Sophroneura listronota



Murgantia histrionica



Trichopepla semivittata



Edessa florida



Euschistus servus



Holcostethus limbolaris



Oebalus pugnax



Meneclis insertus



Mormidea lugens



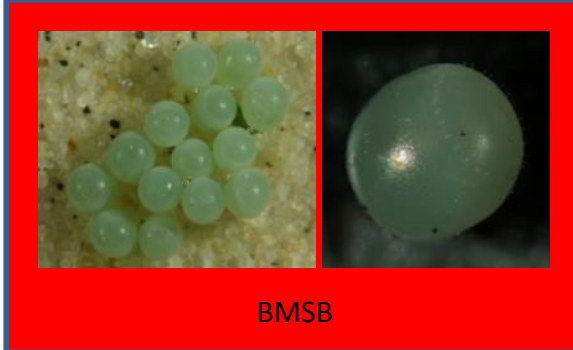
Podisus maculiventris



Stiretrus anchorago



Banasa dimiata & euchlora



BMSB



Brochymena quadripustulata



Thyanta spp.



Chinavia hilaris



Chlorochroa sayi



Cosmopepla lintneriana



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Euschistus servus



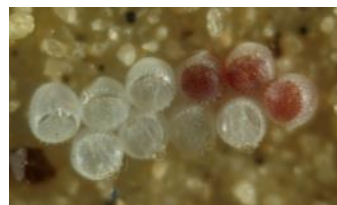
Holcosthetus limbolarius



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Podisus maculiventris



Stiretrus anchorago

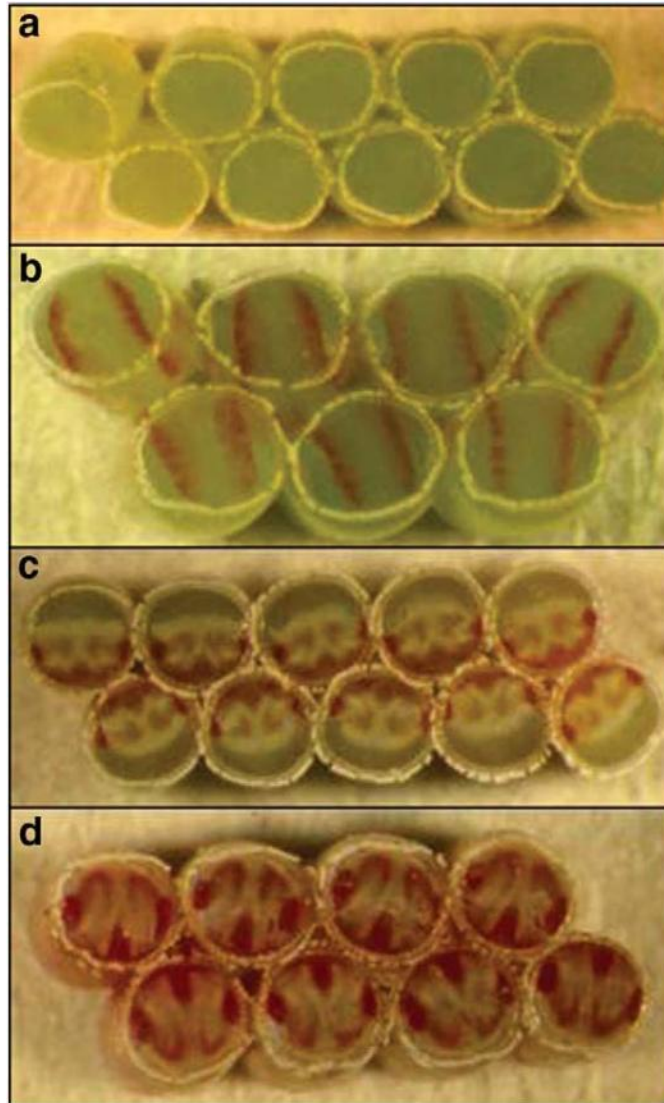
Egg characteristics – what to look out for

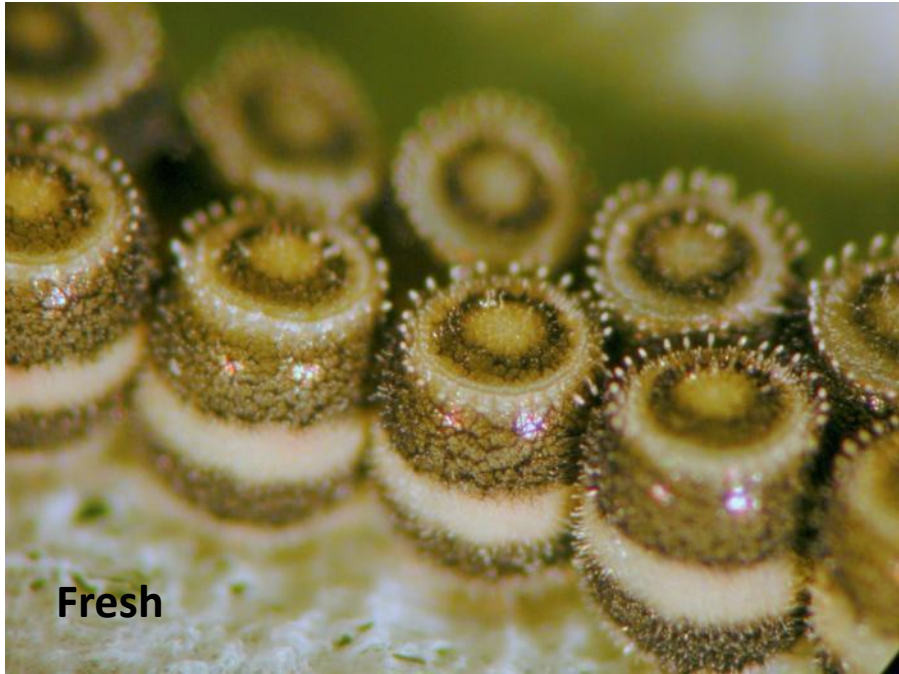
- **Chorion** - reticulate, pitted, smooth, ...
 - spines
 - translucent
- **Operculum**
- **Micropylar processes** – number, size, shape
- **Egg Shape** – ovate, globose, cylindrical, elliptical, ...

Color



Oebalus pugnax





Fresh



Hatched

Piezodorus lituratus

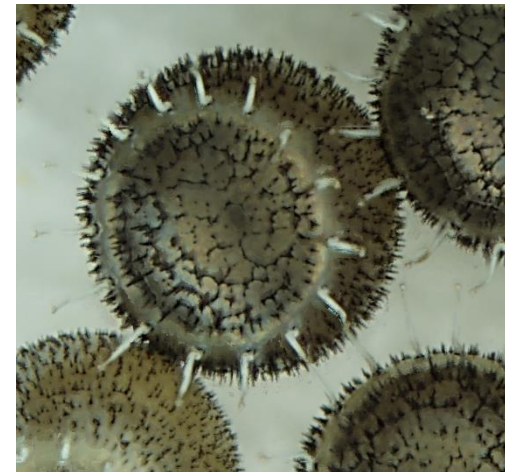
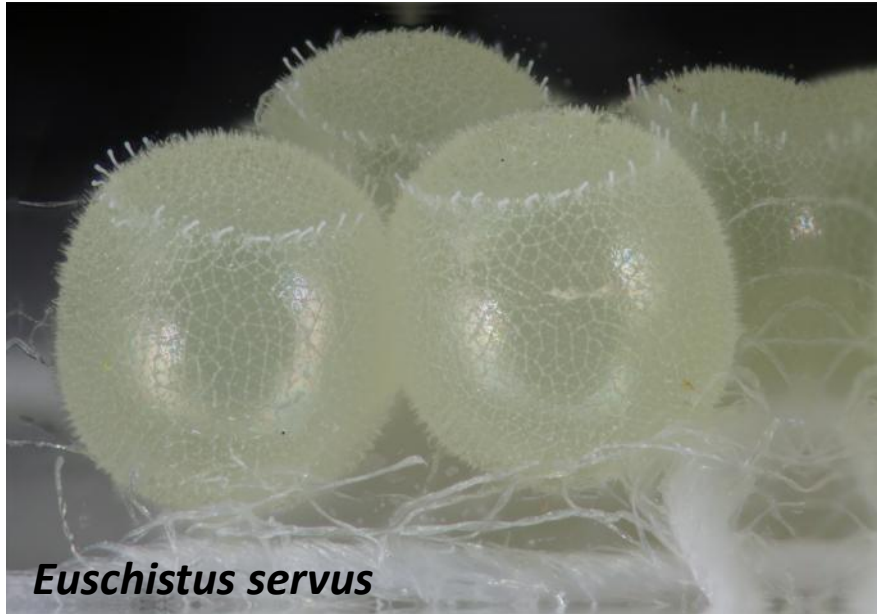


parasitized

Cannibalism



Spines vs. Micropylar processes



Banasa spp.



- Egg Shape:
 - Barrel-shaped or subcylindrical
- Chorion:
 - Pitted shallowly
 - In a comb-like, regular pattern
- Operculum:
 - Convex
 - Surrounded by a pale colored ring
- Micropylar processes:
 - 17-22 in *B. euchlora*
 - 20-26 in *B. dimiata*
 - Clavate
 - Short
 - Sitting on the outside of the pale colored ring
- # eggs per egg mass:
 - 6-19 (mean 8.86 ± 1.74) in *B. euchlora*

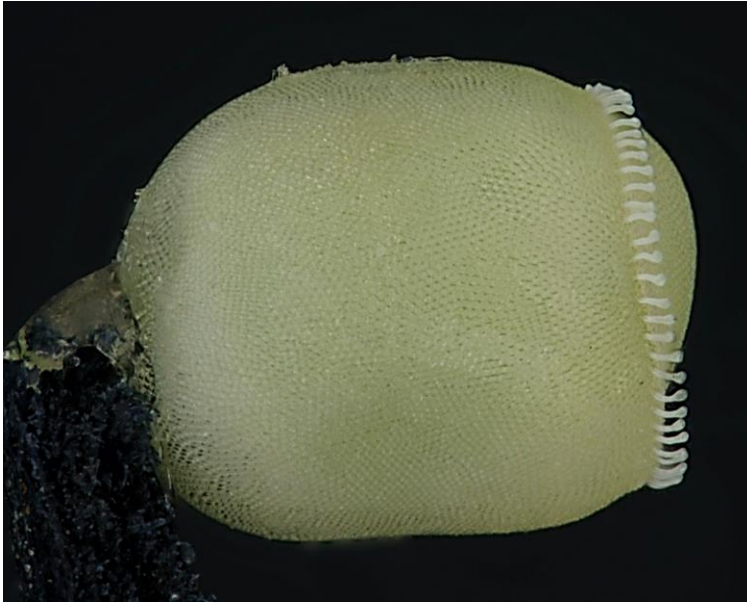


Brochymena sp.



- Chorion:
 - Pitted
- Operculum:
 - Convex
 - Surrounded by distinct ring
- Micropylar processes:
 - ~20
 - Minute
- Shape:
 - Obovate (i.e. inversely ovate)

Chinavia hilaris



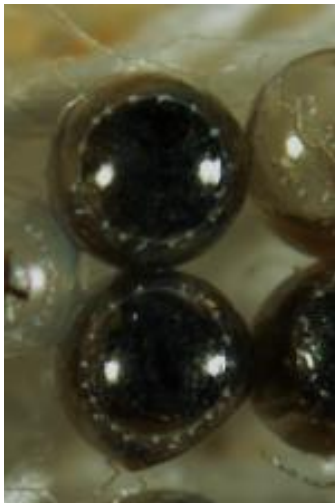
- Shape:
 - Subcylindrical with rounded edges at the top and bottom
- Chorion:
 - Pitted
 - Pits align in regular (somewhat wavy) rows running from top to bottom
- Operculum:
 - Slightly convex
- Micropylar processes:
 - 50-59
 - Clavate
 - Medium-sized
 - Curving inward
- # Eggs per Egg Mass:
 - 3-59 (mean 25.23 ± 2.62)

Chlorochroa spp.



- Shape:
 - Cylindrical to Sub-ovate
- Chorion:
 - Pitted
 - Top of egg with distinct, pale and dark-grey, alternating bands
- Operculum:
 - Slightly convex
- Micropylar processes:
 - 19-27 in *C. ligata*
 - Distinctly clavate
 - short

Cosmopepla lintneriana

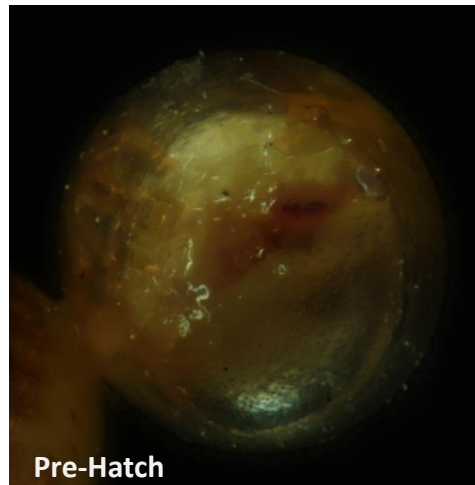


- Egg Shape:
 - Ovate
- Chorion:
 - Smooth
 - Reflecting/shiny
 - Translucent (developing nymphs visible through chorion)
- Operculum:
 - Convex
- Micropylar processes:
 - 15-19
 - Clavate and curving inward
 - Short to medium-sized
- # Eggs per Egg Mass:
 - 1-12 (mean 5.65 ± 0.41)

Edessa florida



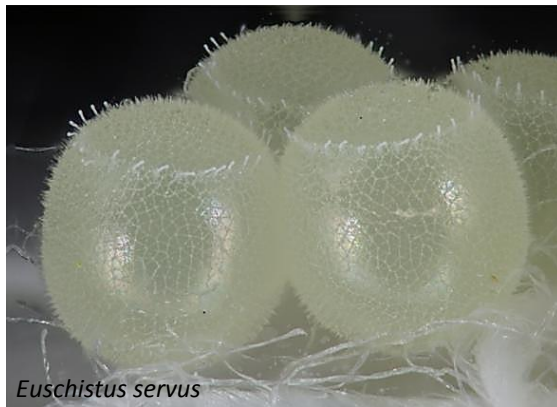
- Shape:
 - Elliptical
- Chorion:
 - Smooth with irregularly arranged shallow welts (looks like rain drops on a window)
 - Clear
- Operculum:
 - Convex
- Micropylar processes:
 - 20-25
 - Short
 - Clavate
 - Inconspicuous
- # Eggs per Egg Mass:
 - 3-18 (mean 11.90 ± 0.45)



Euschistus spp.



- Egg Shape:
 - Globose
- Chorion:
 - Reticulated; triangles forming a fracture-like pattern
 - Spines; not webbed together
 - Translucent
- Operculum:
 - Convex
- Micropylar processes:
 - 20-28 in *E. servus*; 29-36 in *E. tristigmus*
 - Slightly clavate
- # Eggs per Egg Mass:
 - 1-54 (mean 14.92 ± 0.64) in *E. servus*;
 - 2-33 (mean 13.60 ± 0.38) in *E. tristigmus*



Halyomorpha halys



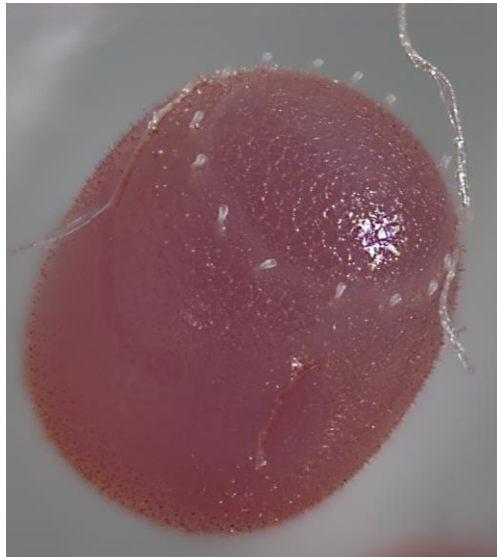
Egg with egg breaker

- Egg Shape:
 - Elliptical or barrel-shaped
- Chorion:
 - Reticulate
 - Impressions shallow
 - Triangular pattern, only weakly defined
- Operculum:
 - Convex
- Micropylar processes:
 - 28-36
 - Clavate
 - Length: 2-3x the diameter of the micropylar head



Feeding tubes

Holcostethus limbolarius

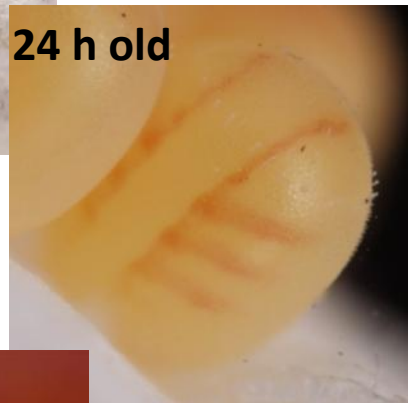
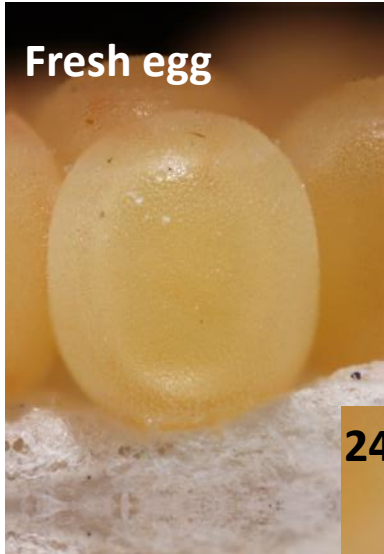


- Egg Shape:
 - Elliptical
- Chorion:
 - Reticulated; triangular pattern
 - Spines (at intersections of triangles)
 - Translucent
- Operculum:
 - Convex
- Micropylar processes:
 - 15-20
 - Clavate
 - Short (about 2x as long as wide)
- # Eggs per Egg Mass:
 - 2-14 (mean 7.54 ± 1.12)

Meneclis insertus



- Egg Shape:
 - Oval
- Chorion:
 - Reticulated
 - Irregularly arranged triangular pattern
 - Spines at the edges of triangles; not webbed together
- Operculum:
 - Convex
- Micropylar processes:
 - 21-29
 - Short to Medium-sized
 - Slightly clavate
- # Eggs per Egg Mass:
 - 11-14 (mean 12 ± 1)



Mormidea lugens



2-4d old



- Egg Shape:
 - Subcylindrical
- Chorion:
 - Reticulated
 - Triangular weblike pattern
 - Spines; not webbed together
 - Translucent
- Operculum:
 - Convex
- Micropylar processes:
 - 24-32
 - Slightly clavate
- # Eggs per Egg Mass:
 - 1-17 (mean 8.18 ± 0.59)

Murgantia histrionica



- Egg Shape:
 - Cylindrical
 - Top and bottom edges slightly smoothed
- Chorion:
 - Pitted
 - Black-and-white horizontal coloration (occasionally all-white/creamy colored eggs are laid)
- Operculum:
 - Slightly convex
 - Yin/Yang-like pattern on top
- Micropylar processes:
 - 25-30
 - Minute
- # Eggs per Egg Mass:
 - 1-37 (mean 9.22 ± 0.09)



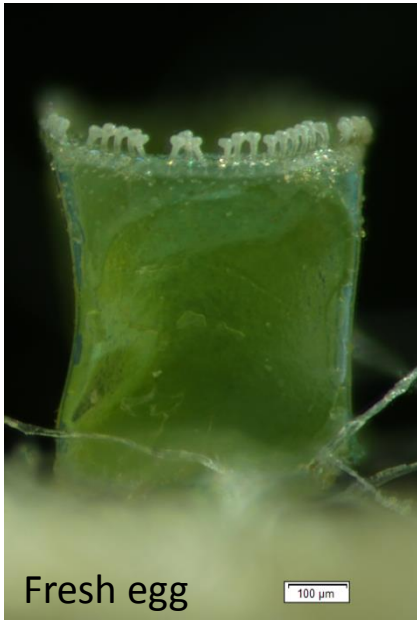
Usual coloration



Stripe-free eggs



Oebalus pugnax



- Egg Shape:
 - cylindrical
- Chorion:
 - Smooth
 - Translucent (color changes over time with nymphal development; orange-reddish coloration shortly close to hatch)
 - With small welts (under high magnification)
- Operculum:
 - Flat (or nearly so)
- Micropylar processes:
 - 58-63
 - Aligned densely around the operculum
 - Clavate
- # Eggs per Egg Mass:
 - 2-32 (mean 13 ± 3.11)

Podisus maculiventris



- Egg Shape:
 - Globose
- Chorion:
 - Reticulated
 - Spines (usually) darker than underlying chorion; irregularly aligned
 - Metallic
- Operculum:
 - Convex
- Micropylar processes:
 - 11-18
 - Long
 - Wave-like/Sigmoid
- # Eggs per Egg Mass:
 - 1-161 (mean 17.47 ± 0.15)



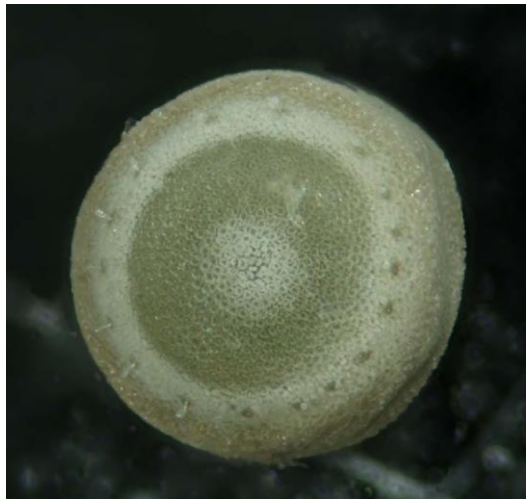
Stiretrus anchorago



- Egg Shape:
 - Oval
- Chorion:
 - Reticulated
 - Spines strong and irregularly aligned, darker than underlying chorion
- Operculum:
 - Convex
- Micropylar processes:
 - 14-20
 - Long
 - Clavate and curved inward
 - Each micropyle sitting on a single spine
- # Eggs per Egg Mass:
 - 1-18 (mean 5.11 ± 1.32)



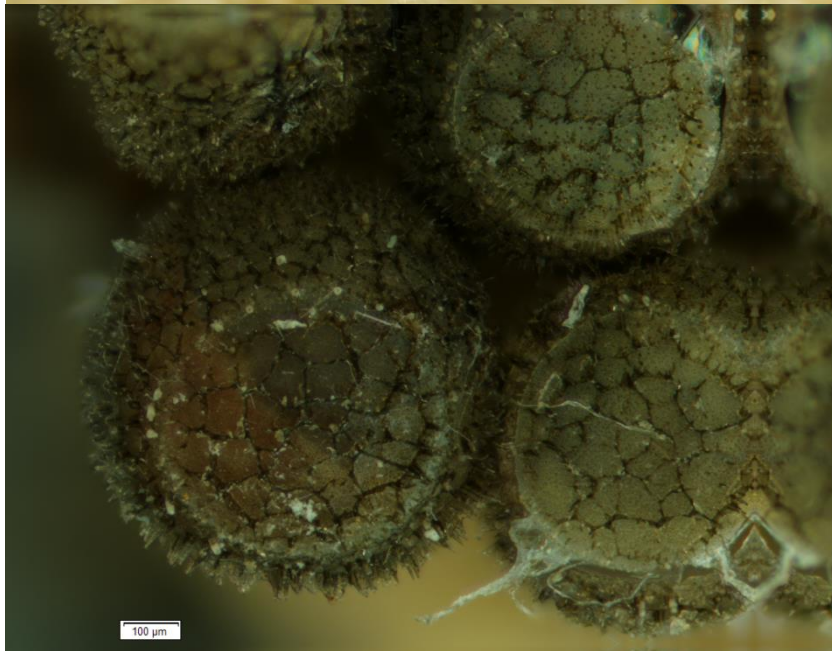
Thyanta spp.



- Egg Shape:
 - Cylindrical
- Chorion:
 - Pitted
 - Alternating pale and dark bands
- Operculum:
 - Convex
 - Pale spot in the middle
 - Surrounded by pale ring
- Micropylar processes:
 - 16-20 in *Thyanta custator*
 - Slightly clavate
 - Short
- # Eggs per Egg Mass:
 - 2-41 (mean 22.70 ± 1.36) in *T. custator*;
 - 2-52 (mean 19.84 ± 3.05) in *T. c. accerra*

Trichopepla sp.

Eggs post-hatch



- Egg Shape:
 - Elliptical
- Chorion:
 - Reticulated
 - Spines; webbed together
- Operculum:
 - Convex
- Micropylar processes:
 - 13-19
 - Not clavate (or only slightly so)