

Egg masses of Pentatomidae in the Eastern U.S. – A key for identification

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1a) Chorion hyaline and smooth (or at most with convex raindrop-like sculpturing) ... 2

1b) Chorion different (e.g. pitted, reticulate, spinose) ... 4

2a) Micropylar processes > 40, aligned in a tight contiguous circle. Cylindrical shape with a flat operculum ... ***Oebalus sp.***

2b) Micropylar processes <40 and usually spaced out along the outside of the operculum. Shape not cylindrical, at the most sub cylindrical ... 3

3a) Micropylar processes short (almost inconspicuous) and ranging between 20 and 30. Eggs usually laid in 2 or more straight, parallel rows and rather large in individual egg size (comparable in size to BMSB eggs). Chorion translucent and with a rain drop texture pattern (best seen under high magnification) ... ***Edessa sp.***

3b) Micropylar clavate, short to medium-sized, curving towards center of the operculum, on average <20. Chorion translucent and shiny. Eggs often arranged in loose clusters and small in size ... ***Cosmopepla sp.***

4a) Chorion reticulate and with or without spines ... 5

4b) Chorion pitted ... 12

5a) Spines absent. Eggs ovate and operculum convex. Micropylar processes clavate, about 3x as long as their widest diameter, and range between 30 and 40. Chorion matte and with a shallow reticulation (i.e. web like structure; best seen under high magnification). ... ***Halyomorpha halys***

5b) Spines present ... 6

6a) Spines light colored, usually white or appearing white, at the most of a brownish coloration ... 8

6b) Spines dark grey to black ... 7

7a) Micropylar processes long and sinuate, not sitting on top of individual spines, <20. Spines on operculum often longer and more densely clustered than spines on the sides of the egg. Eggs oval and with a convex operculum. Chorion with a metallic shine ... ***Podisus sp.***

7b) Micropylar processes sitting on individual spines, distinctly clavate, pointing inwards, medium-sized, and <20. Spines distinct, often webbed together to ridge-like patterns giving the chorion a rugged appearance ... ***Stiretrus sp.***

8a) Micropylar processes <20 ... 9

8b) Micropylar >20 ... 10

9a) Micropylar processes clavate. Spines arranged in regular pattern, at the most as long as micropylar processes, and of a light coloration. Egg shape elliptical with a convex operculum ... ***Holcostethus sp.***

9b) Micropylar processes not clavate or only very weakly so. Spines arranged in an irregular pattern giving the egg chorion a rugged appearance, at least as long as the micropylar processes, and of a brownish coloration. Operculum only weakly convex ... ***Trichopepla sp.***

10a) Egg shape globose. Distinct triangular web-like structure covering the chorion, spines located at the intersections where triangles meet. Micropylar processes slightly clavate ... ***Euschistus sp.***

10b) Egg shape different. Chorion not covered with distinct triangular pattern. If pattern similar then triangles not regular in size and shape ... 11

11a) Egg shape oval or ellipsoidal, sides (slightly) convex. Micropylar processes slightly clavate and rather inconspicuous. Spines especially in fresh eggs rather inconspicuous as egg content light yellow in coloration ... ***Meneclis sp.***

11b) Egg shape sub cylindrical with sides straight, top and bottom edges slightly rounded. Reticulation irregular. Eggs small ... ***Mormidea sp.***

12a) Micropylar processes minute ... 13

12b) Micropylar processes at least short and usually easily discernible ... 14

13a) Egg shape obovate. Operculum convex and bordered by a distinct, swollen-looking ring ...

Brochymena sp.

13b) Egg shape cylindrical, top and bottom edges slightly rounded. Chorion often with a distinct black-and-white banded coloration. Operculum slightly convex ... ***Murgantia sp.***

14a) Micropylar processes medium sized, 3-4x as long as wide, and curved towards the center of the operculum. Egg shape sub cylindrical. Operculum convex. Pitted structure of the chorion forming a regular pattern ... ***Chinavia sp.***

14b) Micropylar processes shorter, usually no more than 2x as long as wide. Chorion often with some form of distinct coloration or discernible bands ... 15

15a) Chorion with a distinct dark, wide band around the sides. Egg shape cylindrical, top and bottom edges smooth. Micropylar processes, short, ~20 on average, and slightly clavate ... ***Thyanta sp.***

15b) Chorion without a dark, wide band ... 16

16a) Egg color uniform with the exception of a pale ring surrounding the operculum. Eggs barrel-shaped. Micropylar processes between 20 and 30, clavate, and sitting on the outside of the pale ring ... ***Banasa sp.***

16b) Egg at the top with alternating light and dark colored concentric rings. Micropylar processes ranging between 20 and 30, short, and distinctly clavate ... ***Chlorochroa sp.***