ON SOME OSTRACODA, MOSTLY NEW, IN THE COLLECTION OF THE UNITED STATES NATIONAL MUSEUM.

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The Ostracoda herein recorded are from collections made in the Mississippi Valley in the States of Illinois, Wisconsin, and Nebraska, from Massachusetts, and from Barbados, British West Indies.

The specimens from Wisconsin were originally sent to the U. S. National Museum for identification by Miss Effie J. Rigden, of the University of Wisconsin. They were collected from aquaria at the university greenhouse, and the suspicion naturally arises that they were introduced with some exotic water plants.

The specimens from Nebraska were kindly sent to the writer for identification and study by his friend, Prof. A. S. Pearse, of the University of Michigan. Those from Barbados were recently sent to the National Museum by the Imperial Department of Agriculture for the West Indies, and were collected by the entomologist of the department, Mr. Henry A. Ballou, on May 1, 1909.

Genus CYPRIS O. F. Müller, 1792.

Subgenus CYPRIS O. F. Müller, 1792.

CYPRIS (CYPRIS) GLOBULOSA, new species.

Dimensions.—Length of female, 0.77 mm.; breadth, 0.58 mm.; height, 0.52 mm. Male, unknown.

Characters.—An unusually small member of this genus, very much resembling *Cypridopsis*-like forms, not alone in size, but in shape. Indeed, the individuals are so plump that instead of lying on their side, as is so common among Ostracods, they usually remain dorsal or ventral side up. The shells of preserved specimens show no especial markings of any sort.

Seen from the side (fig. 1*a*) the shell is two-thirds as high as long, with the highest point in the middle; dorsal margin slightly humped; ventral margin sinuate in the middle. Seen from above (fig. 1*b*) the shell is broadly egg-shaped, but pointed anteriorly, where the right shell overlaps the left; shell sparsely hairy, with the greatest

breadth just posterior to the middle; natatory setæ of the second antennæ reaching well beyond tips of terminal claws; the two spines of the first maxillary process stout and toothed; terminal segment of second foot beak-shaped (fig. 1*d*), and bearing a large hook-shaped spine, and a seta which is about two and a half times the length of the spine; terminal claw of first foot about as long as rest of foot; caudal ramus smooth (fig. 1*c*), long and slender, and about eighteen times as long as wide; terminal claw very long and seta-like, fully three-fourths as long as the ramus; subterminal claw about one-half as long as terminal one, and also very slender and seta-like; terminal seta weak, scarcely evident; dorsal seta about one-third length of subterminal claw, and situated about the width of the ramus from it.

Remarks.—A number of specimens of this interesting *Cypris* were sent to the U. S. National Museum for identification by Miss Effie J. Rigden, of the University of Wisconsin. She had been studying their light reactions. Speaking of their habitat she says: "The Ostracods whose habitat you wish to know were taken from a tub in the greenhouse at the University of Wisconsin. They have been living there all winter. I have not found them elsewhere. The tub is kept filled with fresh water, and contains several water plants, and a great deal of *Vaucheria*, in which the Ostracods are generally found. I have been able to keep them for weeks in a jar in which I have placed some of the *Vaucheria*."

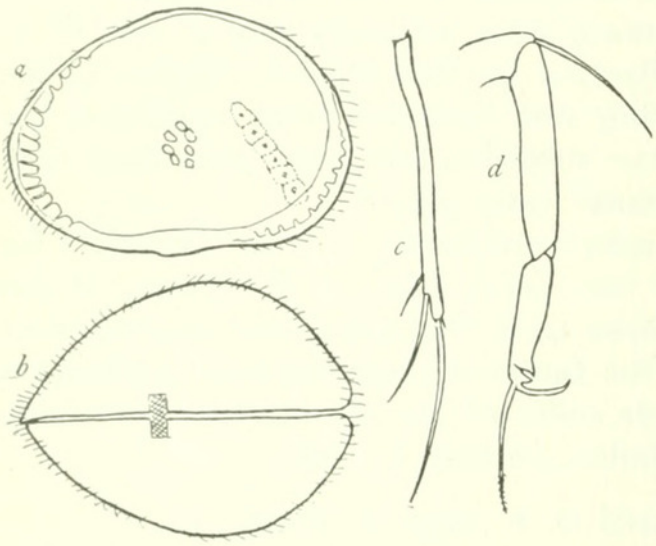

FIG. 1.—CYPRIS (CYPRIS) GLOBULUS. *a*, RIGHT SHELL FROM WITHIN, ×70; *b*, DORSAL VIEW, ×70; *c*, FURCA, ×210; *d*, SECOND FOOT, ×210.

Type-locality.—Madison, Wisconsin.

Type-specimen.—Cat. No. 39514, U.S.N.M.

Subgenus CYPRINOTUS Brady, 1886.

CYPRIS (CYPRINOTUS) DENTATA, new species.

Dimensions.—Length, 1.3 to 1.4 mm.; height, 0.5 to 0.65 mm.; breadth, 0.5 to 0.58 mm.

Characters.—Preserved specimens show no especial shell markings, and are yellowish, transparent, and smooth.

Seen from the side (fig. 2*a*) the shell margins are nearly parallel, the posterior extremity being more acutely pointed than the anterior. Right valve (fig. 2*c*), somewhat smaller than the left, its entire mar-

gin, except a small portion at the middle, being armed with a row of about sixty tuberculiform teeth, which are more prominently shown postero-ventrally; left valve with smooth margins (fig. 2*b*); ventral margin slightly flanged at the middle, and with a much nar-

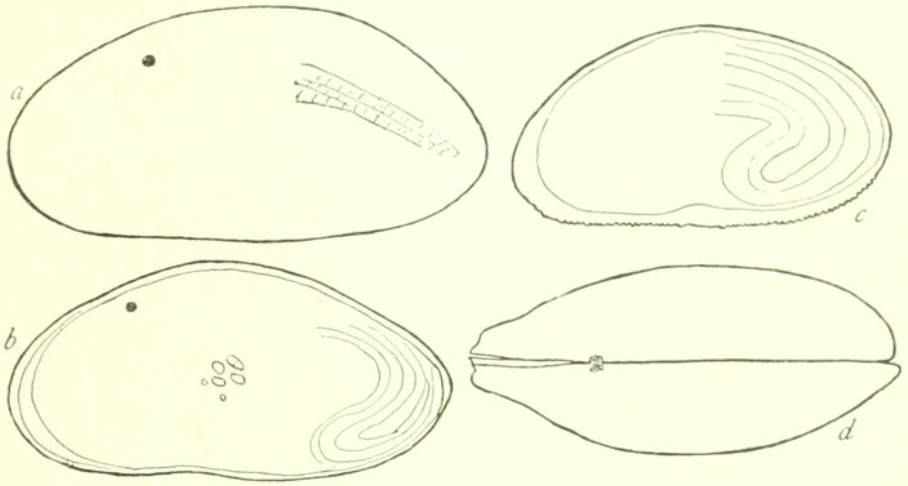

FIG. 2.—CYPRIS (CYPRINOTUS) DENTATA. *a*, LEFT SHELL OF FEMALE, ×60; *b*, LEFT SHELL OF MALE, ×60; *c*, RIGHT SHELL OF MALE, ×60; *d*, DORSAL VIEW OF MALE, ×60.

rower growing line than the right; viewed dorsally (fig. 2*d*) the left valve overlaps the right both anteriorly and posteriorly—abruptly narrowed anteriorly but yet rather blunt at the extreme tip; spines of the first maxillary process strong, blunt, and toothed; natatory setæ of the second antennæ simple, the longer reaching well beyond tips of the terminal claws; terminal claw of the second leg (fig. 3*b*) slender, decidedly curved, slightly longer than the width of terminal segment, and faintly toothed; maxillary palps of the male stout and decidedly hooked, as in figures 3 *c*, *d*; ductus in sac, and of about twenty-six whorls of spines; penis (fig. 3*e*) triangular, and with a boot-shaped branch; furca (fig. 3*a*) about sixteen times as long as wide, slightly curved, and about twice as long as the terminal claw; both claws nearly smooth, slightly curved, the shorter two-thirds the length of the longer, and situated about the width of the ramus from it; terminal seta slender, about four-fifths length of dorsal one, which is situated about width of ramus from subterminal claw, and is one-half its length.

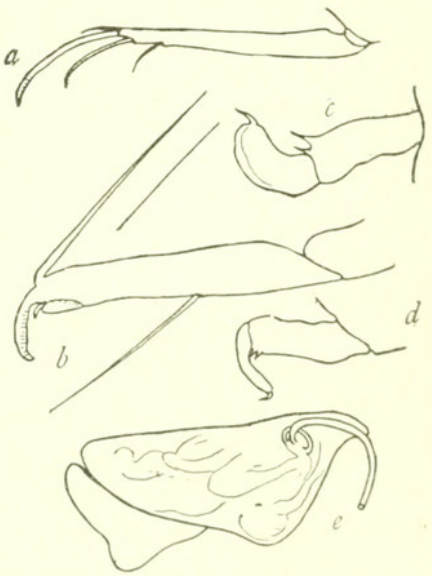

FIG. 3.—CYPRIS(CYPRINOTUS) DENTATA, *a*, FURCA, ×105; *b*, SECOND LEG, ×250; *c*, MAXILLARY PALP OF MALE, ×130; *d*, MAXILLARY PALP OF MALE, ×130; *e*, PENIS.

Remarks.—The specimens were collected by Prof. A. S. Pearse, of the University of Michigan, in a small pond near Stamford, Nebraska,

on August 2, 1902, and later kindly sent to the writer for study and identification.

Type-locality.—Fresh-water pools near Stamford, Nebraska.

Type-specimen.—Cat. No. 39513, U.S.N.M.

Genus CYPRIA Zenker, 1854.

CYPRIA OBESA Sharpe.

Cypria obesa SHARPE, Bull. Ill. State Lab. Nat. Hist., vol. 4, art. 15, 1897, p. 462, pl. 48, figs. 1–5.

Dimensions.—Average length 0.58 mm.; average height 0.3 mm. Fresh-water representatives of this species slightly larger.

Remarks.—The color of brackish water forms varies from a light transparent brown to a reddish brown. The reddish tint may be due to the fact that they are closely associated with, and feed upon, a reddish alga common in the localities in which this smaller reddish variety is found. Penis as in fig. 4*d*. In all other respects, excepting size and color this form agrees perfectly with *C. obesa*. I am therefore designating it by this name, rather than adding a varietal name, as it is well known that most Entomostraca vary in accordance with the seasons and differences in character of habitat.

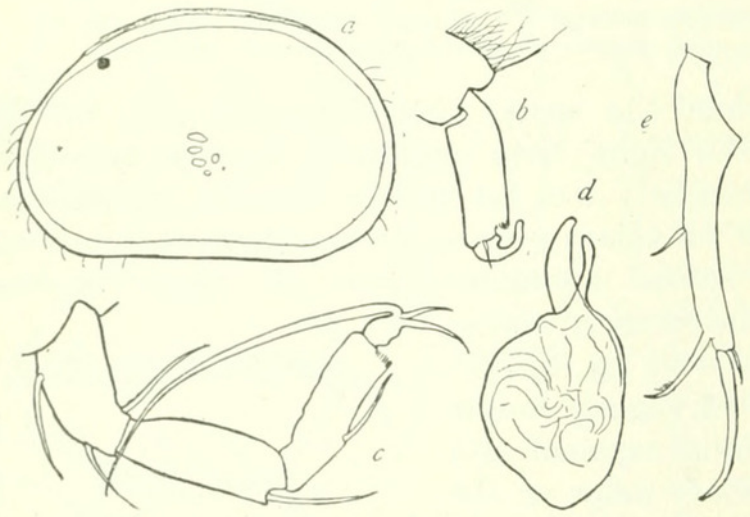

FIG. 4.—CYPRIA OBESA. *a*, RIGHT SHELL FROM WITHIN, ×70; *b*, LEFT MAXILLARY PALP OF MALE; *c*, SECOND FOOT, ×210; *d*, PENIS, ×250; *e*, FURCA, ×250.

Remarks.—This is the only Ostracod of the brackish ponds in the vicinity of Woods Hole, Massachusetts, which is also found in fresh water. It occurs abundantly, and is associated with the reddish algæ of such ponds during July and August.

Brady[a] speaks of other members of this genus as being found in the brackish waters of the British coasts. He also mentions *Cyclocypris (Cypria) lævis* as common "in fresh and brackish waters." As *C. lævis* is to be found in all sorts of stagnant and foul waters, it is not surprising that it should be found in waters that are quite brackish.

[a] Brady and Norman, Monogr. of marine and fresh-water Ostracoda, Sci. Trans. Roy. Dublin Soc., vol. 4, 1889. p. 69.

Occurrence.—Found abundantly in all the brackish ponds in the vicinity of Woods Hole, and at Naushon Island, Massachusetts, during July and August.

Distribution.—Small sandy lakes, Havana, Illinois, May to August, (Sharpe). Ponds at Jackson Park, Chicago, May.

Genus CHLAMYDOTHECA Saussure, 1858.

CHLAMYDOTHECA BARBADENSIS, new species.

Dimensions.—Male, length 3.4 mm., height 1.6 mm.; female, length 3.8 mm., height 1.8 mm.

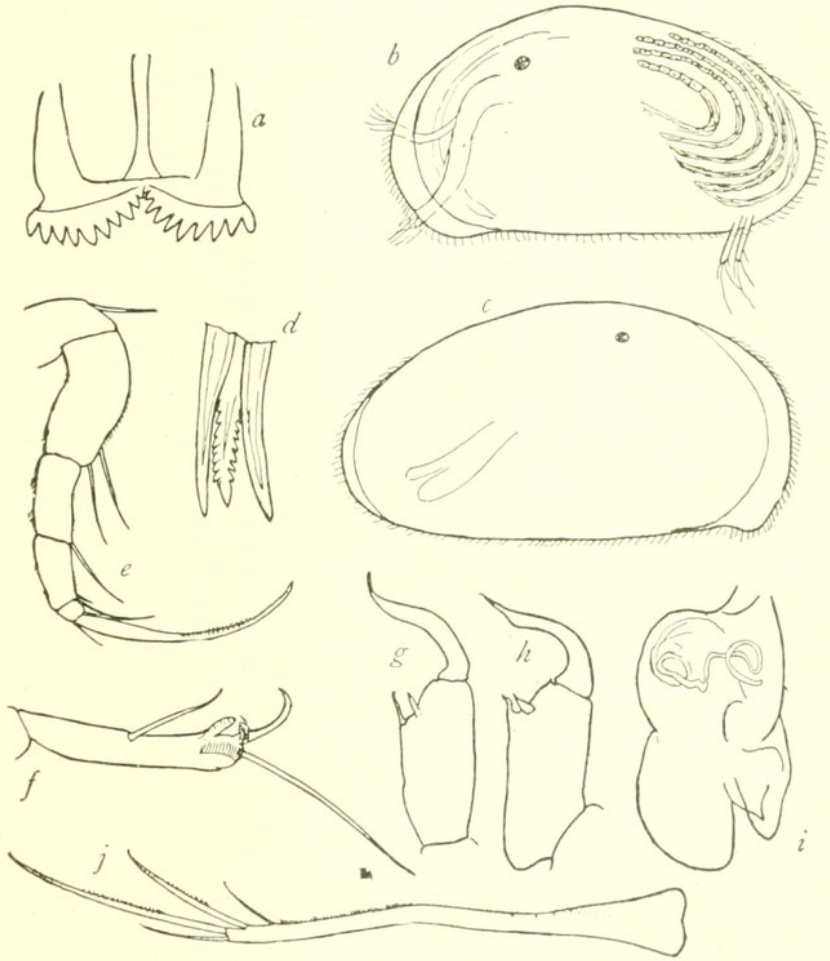

FIG. 5.—CHLAMYDOTHECA BARBADENSIS. *a*, RAKE-LIKE ORGANS OF MOUTH, ×140; *b*, LEFT SHELL OF MALE, ×20; *c*, RIGHT SHELL OF FEMALE, ×20; *d*, SPINES OF FIRST MAXILLARY PROCESS, ×120; *e*, FIRST LEG, ×70; *f*, TERMINAL SEGMENT OF SECOND LEG, ×70; *g*, *h*, MAXILLARY PALPS OF MALE, ×80; *i*, PENIS, ×60; *j*, FURCA, ×60.

Characters.—Viewed laterally (fig. 5*b*) the shell of the male is about three-fifths as high as long. The greatest height is in the anterior third, just back of the eye spot, from which the dorsal margin slopes rapidly posteriorly; ventral margin nearly straight; shells of alcoholic specimens with no especial indications of color markings, and quite pellucid, showing the internal organs quite plainly; shells of both male and female showing the anterior flanges so characteristic of the genus; shell of the female (fig. 5*c*) not quite so

arched dorsally, and somewhat larger, otherwise much as the male; natatory setæ of the second antennæ plumose, reaching almost to tips of terminal claws; the three spines of the first maxillary process (fig. 5*d*) strong, the middle one toothed; the two setæ on the second segment of the first leg almost equal in length (fig. 5*e*); terminal claw strong, about three-fourths as long as the last four segments taken together and coarsely toothed on its distal half; second foot terminating in the usual beak-shaped segment (fig. 5*f*); palps of the second maxillæ of the male as in fig. 5*g*, *h*; penis as in fig. 5*i*; furca (fig. 5*j*) about twenty-two times as long as wide, decidedly bent at about the middle, plainly toothed its distal dorsal half, more faintly the rest of the way, the spines of the distal half showing a tendency to be arranged comb-like, as shown in the figure; terminal claw nearly straight, about one-half the length of the furca, and toothed in its distal half; subterminal claw less than one-half the length of the terminal claw, and plainly toothed its distal half; terminal seta about same length as the dorsal seta, which is about six-elevenths the length of the subterminal claw.

This new species is described from two specimens, two males and two females, "taken from a small pond on Government Hill, Barbados, May 1; they are common in pools of water, more or less permanent, and reappear in ponds that have been dry for weeks at a time, as soon as the rain fills them up again." Sent to the U. S. National Museum by the Imperial Department of Agriculture for the West Indies (H. A. Ballou, collector, May 1, 1909).

Type-specimen.—Cat. No. 40524, U.S.N.M.

Remarks.—Since males were found in this collection, a circumstance not heretofore recorded to my knowledge, the generic description is hereby revised in that particular.

But few species of this genus have ever been described. The following are all that are known to the author in addition to the above:

C. azteka Saussure, Texas.

C. (*Cypris*) *braziliensis* (Dana), Brazil.

C. (*Cypris*) *herricki* (Turner), Ohio.

C. (*Pachycypris*) *incisa* (Claus), Argentina.

C. (*Pachycypris*) *leuckarti* (Claus), Argentina and Venezuela.

C. mexicana Sharpe, Mexico.

C. (*Herpetocypris*) *obliqua* (Daday), Patagonia.

C. (*Cypris*) *speciosa* (Dana), Rio de Janeiro. (Collected by Charles Darwin.)

C. subglobosa (Sowerby), Ceylon.

C. symmetrica Vavra, Falkland Islands and Straits of Magellan region.

It is interesting to note that all but one of these species are to be found in the Western Continent, and of these the majority are from South America.

C. barbadensis differs from all other species of the genus known to the writer in the following particulars: First, none other is known to be sexual; second, the quite pellucid shells of alcoholic specimens; third, the greater or less tendency of the dorsal spinules of the furca toward a comb-like arrangement (fig. 5*j*); fourth, it is the largest of any reported except *C. obliqua*, from Patagonia.

Sharpe, Richard W. 1910. "On some Ostracoda, mostly new, in the collection of the United States National Museum." *Proceedings of the United States National Museum* 38(1750), 335–341. https://doi.org/10.5479/si.00963801.38-1750.335.

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