

A FEW OHIO DESMIDS.

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During the spring of 1904 Mr. Charles B. Ames kindly made a few collections containing desmids and sent them to me for identification. These were from bodies of still water about Youngstown, Ohio. Although there is but one undescribed species and the total number of species small, the collection showed a few points of decided interest. It considerably extends our knowledge of the range of several species and varieties, certain of which are not generally known in America. It also adds to the desmid records for the state of Ohio. The following were identified from the collections:

Netrium Digitus (Ehrenb.) Itzigs & Rothe.

Length 260 μ : breadth 68 μ : breadth at apex 28 μ . Common.

In all characters the specimens of this species were typical.

Netrium Nagelii (Bréb.) W. & G. S. West.

Length 142 μ : breadth 34 μ : breadth at apex 14 μ . Occasional.

The only other record for this species in North America is that of the writer, from the White Mountain Region of New Hampshire.

Penium margaritaceum (Ehrenb.) Bréb. var. **obesum** var. nov.

Length 57 μ : breadth 22 μ . Occasional.

This has the usual characters for this species but is very much shorter and stouter than typical specimens.

Closterium striolatum Ehrenb.

Length 305 μ : breadth 44 μ : breadth at apex 11 μ . Frequent.

Closterium Dianae Ehrenb., var. **arcuatum** (Bréb.) Rabenh.

Distance between apices 110 μ : breadth 18 μ . Occasional.

Closterium moniliferum (Bory) Ehrenb.

Length 250 μ : breadth 37 μ : breadth at apex 8 μ .

A somewhat small form but the size is constant through the species as represented in this collection.

Closterium Lunula (Mull.) Nitzsch.

Length 540 μ : breadth 96 μ . Occasional.

Specimens of this species were of the typical form.

Closterium decorum Bréb.

Length 345 μ : breadth 25 μ : breadth at apex 5 μ . Frequent.

Specimens of this species, like those of *C. moniliferum*, of less than the usual size although in other ways they were typical.

Pleurotaenium coronatum (Bréb.) Rabenh., var. **nodulosum** (Bréb.) West.

Length 527-560 μ : breadth at base 47-65 μ : breadth at apex 25-46 μ .

Common. Specimens of this variety were longer than those usually met with and they vary considerably in size, in breadth of apex and in the number of the crenulations.

Pleurotaenium Trabecula (Ehrenb.) Nag., forma **clavata** (Kutz.) West.

Length 288 μ : breadth at base 34 μ : breadth at apex 19 μ

Common in the collections.

var. **rectum** (Delp.) West.

Length 280 μ : breadth at base 18 μ : breadth at apex 13 μ . Common.

Cell wall smooth.

Tetmemorus laevis (Kutz.) Ralfs. Forma.

Length 210μ : breadth 34μ . Frequent.

Although from the measurements given for this species it would seem to be either nearer *T. Brebissonii* or *T. granulatus*, the form is decidedly nearer that of *T. laevis* and the cell wall is smooth or very finely punctate.

Euastrum verrucosum Ehrenb.

Length 72μ : breadth 68μ : breadth of apical lobe 28μ : isthms 15μ .

Very common, a somewhat compressed form of the species.

Micrasterias Americana (Ehrenb.) Ralfs. Forma.

Length 149μ : breadth 127μ : breadth of apical lobe 59μ : breadth of isthmus 27μ . Common.

This is a peculiar form with the apical lobe spreading rapidly with its base deep sunken in the median portion of the semicell and with a peculiar arrangement of the teeth of the end lobe. The variations were constant in all specimens seen and the typical form did not appear.

Cosmarium pseudopyramidatum Lund.

Length 37μ : breadth 28μ : breadth of isthmus 6.5μ . Common.

Cosmarium cyclicum Lund.

Length 45μ : breadth=length: breadth of isthmus 12.5μ .

This species is not included by Wolle in his work and is reported by Johnson among his rarities. It seems however, to be a fairly common species in this country as it has turned up in several widely separated localities in material I have examined. In every way the specimens from Youngstown were typical.

Cosmarium Turpinii Bréb.

Length $53-58\mu$: breadth $47-53\mu$: breadth of isthmus $12.5-14\mu$: thickness 34μ . Very common at this locality. Wolle speaks of this species as "not rare." It has not yet been recorded from New England, however.

Cosmarium Broomei Thwaites.

Length 32μ : breadth 28μ : breadth of isthmus 9μ . Fairly common.

Cosmarium Amesii sp. nov.

Length 47μ : breadth 53μ : breadth of isthmus 15μ . Common.

A *Cosmarium* of the group represented by *C. binum* Nordst., *C. speciosum* Lund., etc. End broadly truncated, slightly retuse. Sides of each semicell with ten granules arranged in pairs as are also the granules of the end. From the border these pairs are repeated inward three or four times. The central basal portion of the side of each semi-cell composed of a roughly circular series of granules arranged in seven vertical rows: the central one, the longest, with six granules, at each side of this a series of four and the outer four rows each with five granules. The basal angles of the semi-cells are broadly rounded. This species is named for the collector, Mr. Charles B. Ames.

Staurastrum punctulatum Bréb.

Length 29μ : breadth 28μ : breadth of isthmus 7.5μ . Common.

Staurastrum muticum Bréb.

Breadth 34μ . Occasional.

In all, twenty-one varieties and forms were noted in the collection.
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