

Riccia ciliifera Link und Riccia Breidleri Jur.

Da die *Riccia ciliifera* Link in den Herbarien selten ist, so theile ich hier mit, dass diese Species von Herrn Lojka bei Nadays in Ungarn 1874 gefunden und Herrn Juratzka übersendet wurde; Exemplare derselben wurden mir von Dr. Winter freundlichst mitgetheilt. Soweit der kleine Vorrath reicht, stelle ich davon zur Verfügung.

Unter dem Namen *Riccia sorocarpa* Bisch. findet sich in den Hepat. von Gottsche & Rabenhorst No. 23 eine *Riccia*, welche — in meinem Exemplar — *Riccia ciliifera* ist; in No. 543 derselben Sammlung wird auf diese No. 23 Bezug genommen und daselbst gesagt: „die frühere Pflanze No. 23 unserer Sammlung ist aber viel robuster als diese rheinische Pflanze.“ — Vermuthlich findet sich unter dieser Nummer auch in anderen Exemplaren etwas Anderes. —

Ich bemerke bei der Gelegenheit, dass die von Herrn Breidler 1870 bei Schladming in Steiermark entdeckte und ihm zu Ehren von Herrn Juratzka *Riccia Breidleri* benannte Art neuerdings zu *R. sorocarpa* gezogen wurde, wohin sie keineswegs zu bringen ist; sie gehört vielmehr ebenfalls der Section der *Ciliatae* an und steht durch die Form der Frons und die wenigen kurzen Cilien der *Riccia paradoxa* De Not. nahe, wenn sie derselben nicht ganz zuzählen sein sollte, was sich nach der kurzen Diagnose in der Synopsis nicht entscheiden lässt.

F. Stephani, Leipzig.

Repertorium.

Wolle, F. American Fresh-Water Algae.

(Bulletin of the Torrey botanical Club. Vol. VIII. No. 1.)

Diese Arbeit enthält eine Anzahl neuer Arten und Varietäten von Desmidiaceen, die auf einer Tafel dargestellt sind und deren Beschreibungen wir hier folgen lassen.

Micrasterias Mahabuleshwariensis, Hobson, var. *Americana*. n. var. This plant does not quite conform to the one described by Hobson. It has similar end-lobes, but the margins of the lateral ones are more like those of *M. Americana*, Ehrb. The lobes themselves are unlike; in the one they are entire, in the other they are divided into two lobules. (Cf. Figs 1 and 2.) This may be a variety referred to by Rabenhorst in his *Flora Europaea Algarum*, Vol. III., p. 196, where he says: "*M. Americanae* forma esse videtur."

Micrasterias pseudofurcata, n. sp. *M. magna*, levis; semicellulis trilobis; lobis basalibus attenuatis, protunde incis; lobulis plus minus divergentibus, apice bidentatis; lobo polari anguste cuneato; angulis longe sub-rectis productis; apice trifurcatis. Diam. .006"—.007". Hab. Ponds, New Jersey and Florida. This form is similar to *M. furcata*, Ag., but differs in the absence of the middle lobe.

Micrasterias triangularis, n. sp. *M. permagna*, orbicularis; semicellulis quinquelobis; lobo polari triangulari, lateralibus rectis vel leviter undulatis, subaequalibus, angulis, lateris in mucronem productis; lobulis et lobis intermediis aequalibus, repetito-bilobulatis; lobulis bifurcatis, angulis cum spinis curvato-divergentibus elongatis armatis. Diam. .009"—.01". Hab. In pond on Broadtop Mountain, Pa. The lobules next the sinus, and next the polar lobe are not unfrequently a simple point, not bifurcate.

Cosmarium margaritum, n. sp. *C. parvum*, variabile, suborbiculare, modo depressum, modo ad tertiam longius quam latius; sinu anguste lineari; semicellulis suborbicularibus, ambitu undulato-crenatis, crenis lateribus plerumque triundulatis, scrobiculis basalibus modice instructis; dorso convexis nonnunquam retusis; a vertice visis ovalibus, medio ventricosis inflatis; cytodermate leve ut margarita nitente. Zygosporis sphaericis, spinis elongatis apice bifidis obsitis. Diam. .0009"—.001". Hab. Splitrock Pond, New Jersey. This plant might pass for a variety of *C. venustum*, Bréb., or *C. Naegelianum*, Bréb., had the end no central inflation. *C. phaseolus*, Bréb. possesses the inflations, but is entire.

Cosmarium Donnellii, n. sp. *C. mediocre*, plerumque fere tam longumquam latum, suborbiculare, sinu angustelineari; semicellulis subsemicircularibus, dorso plus minus depressis, margine circiter 18 margaritis ovalibus, in series singulas, composito. Diam. et lat. .0015"—.0018". Hab. Ponds, Florida. Collected by Capt. J. Donnell Smith, 1879. This species comes nearest *C. monomazum*, Lund, but is a distinct form.

Staurastrum odontatum, n. sp. *St. magnum*, tam longum quam latum; semicellulis a fronte visis, quadrangularibus angulis superioribus in cornu gracile elongatis, incurvis vel rectis, marginibus plus minus profunde serrato-dentatis in apicem furcatum productis; angulis inferioribus dentibus armatis, a vertice visis quadriradiatis. Diam. sine rad. .0008"—.001"; cum rad., .0016"—.003"; long .0016"—.0018". Hab. Splitrock Pond, New Jersey, July, 1880.

This plant has much in common with some varieties of *St. gracile*, Ralfs, but is more robust, has quadrangular semi-cells, is larger, and is furnished with teeth near the sinus.

Staurastrum botrophilum, n. sp. *St. mediocre*, paulo longius quam latius, distincte granulosum; granulis in series regulares ordinatis; a fronte, semicellulis triangularibus, angulis inferioribus rotundatis subito in dorsum late truncatis, a lateribus, late ellipticis divergentibus, a vertice, triangularibus. Diam. .0015"—.0016". Hab. Swampy places near Bethlehem, Pa. This form belongs to a class like *St. pygmaeum*, Bréb., *St. punctulatum*, Bréb., *St. rugulosum*, Bréb., etc., but is separated by the *Cosmarium*-like, truncate form as seen in front view.

Staurastrum Pringlei, n. sp. *St. parvum*, distincte granulatum, tam longum quam latum, medio plus minus constrictum; sinu acutangulo ampliato; semicellulis subtriangularibus, lateribus rotundatis, dorso subplanis, medio convexis, subapice retusis, angulis acutis; a vertice visis trivel tetragonis; in forma trigona lateribus fere rectis; in forma tetragona retusis, angulis acutis. Diam. .0011"—.0013". Hab. Nebraska Notch, Vt. Collected by C. G. Pringle. The form nearest to this is *St. Kjellmani*, Wille, collected in Nova Zembla, but it differs in size and in proportions of length to breadth; in having the angles acute, not rounded, and turned upward in the direction of the sides, not straight; in having triangular, not elliptical semi-cells; and in its back being straight, elevated in the centre, and retuse, not rounded.

Staurastrum Donnellii, n. sp. *St. parvum*, duplo longius quam latius, oblongo-quadratum; cytiodermate punctato et sulcato; semicellulis quadratis, angulis basalibus rotundatis, lateribus leviter sinuato-retusis; angulis superioribus (quatuor) in cornu breve obtusum divergenter productis; a vertice visis, quadrangularibus. Diam. .0006". Hab. Florida. Collected by Capt. John Donnell Smith. The form nearest this plant is *St. pileolatum*, Bréb., but it differs in having the ends furnished with three conical processes, and in being triangular in end-view.

Staurastrum pentacladum, n. sp. *St. mediocre*, granulato-asperum; semicellulis ventre inflatis, dorso rotundatis, angulis in cornu apice distincte trifurcatum productis; a vertice visis quinque-radiatis: radiis substrictis, margine serrato-dentata. Diam. .0015". Hab. Splitrock Pond, New Jersey, July, 1880. *St. gracile*, Ralfs, comes near this form, but its end-view is triradiate. N. Wille, of Norway, has published a variety, *nanum*, which is quadriradiate.

My plant has five arms, and the membrane is unusually rough; and, in addition, the points on the ends of the arms are very prominent and divergent.

Staurostrum Heleneanum, n. sp. *St. parvum*, granulato-asperum; granulis in series transversas ordinatis; semicellulis subellipticis, dorso modice convexis, ventre tumidis; angulis in cornu productis; a vertice triradiatis; radiorum basis inflatis, marginibus prominentibus apice furcatis vestitis. Diam. .0012"—.0015". Hab. Splitrock Pond, N. J., frequent. 1880. There is a similarity between this desmid and *St. vestitum*, Ralfs; but, while the latter has two slender forked spines at the middle of each side, mine has stouter forked processes on the inflated base of each arm; and, in addition to this, the plant is only about half the size of *St. vestitum*.

Euastrum attenuatum, n. sp. *E. mediocre*, diametro duplo longiore; semicellulis pyramidalibus, basi dilatatis utroque margine laterali semel sinuatis, in lobum polare rectum truncatum attenuatis; apice crenato-rotundatis; lobo polari uno et lobo basali duobus vel tribus tumoribus instructo; cytiodermate subtilissimo punctato. Diam. et lat. .0013", long. .0026". Hab. Ponds near Bethlehem, Pa.

Docidium spinulosum, n. sp. *D. validum spinulosum* subcylindricum undulatum octies—decies longius quam latius, medio valde constrictum; semicellularum stricturis margine 3—4 plus minus prominentibus, modice attenuatis; cytiodermate dense spinifero; spinulis apicis rotundatis duplo majoribus aliis. Diam. .0016"—.0018". Hab. Pond, Dennisville, N. J., July, 1880.

Pleurotaenium nodulosum, Bréb., *Docidium hirsutum*, Bailey, and *D. nodosum*, Bailey, have features in common with this form. I separate it because of the armor of spines with which it is clothed. These are not hairs—not gelatinous contractions, but decided spines, and those of the ends of the cells are longer and stronger than those on the body of the cell.

Eingegangene neue Literatur und Sammlungen.

28. Bericht über die IV. Versammlung des westpreuss. Botan.-Zool. Vereins zu Elbing 1881. Enthält: Janzen, Die Moos-Flora Elbing's. — Lützow, Bericht über die botan. Untersuchung des Neustädter Kreises.

29. Berkeley and Broome, Notices of British Fungi. (From the Annals and Magazine of Natural History 1882. March.)

30. Boehm, J. Ueber Schwefelwasserstoffbildung aus Schwefel und Wasser. (Sitzb. d. k. Akad. d. Wissensch. 1882.)