

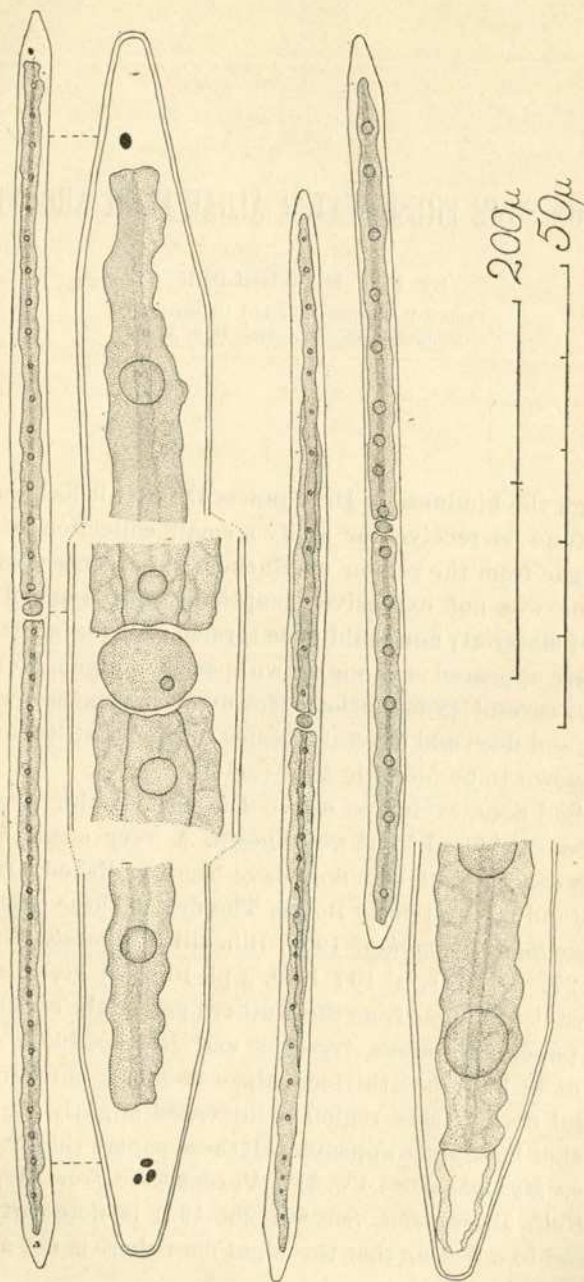
A NOTE ON SOME FRESH-WATER ALGAE FROM ARGENTINA

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Through the kindness of Dr. Francis Drouet, it has been my good fortune to receive for study a small collection of fresh water algae from the region of Buenos Aires, Argentina. The collections was not extensive, comprising only a dozen small bottles of material; nor could it be termed rich, for in nearly all cases there appeared only one or two species of algae, even after the most careful examination. However, it was not without interest, and does add several species to the short list of these plants known to be found in that region.

The algal flora, exclusive of the Diatoms, of the Argentine cannot be considered to be well known. A very small number of papers dealing with this flora have been published. Of these, the outstanding are two by Borge. The first of these (*Süsswasser-algen aus Sud-Patagonian*. 1901. Bih. till K. Svenska Vet-Akad. Handl. 27. Aft. III, n° 10: 1-40. 2 pl. 10 figs.) gives a fairly extensive list of algae from the southern part of the country: the second paper (*Algen aus Argentine und Bolivia*. 1906. *Arkiv f. Bot.* 6: n° 4: 1-13) lists thirteen algae from the northern part. The algal flora of this region is increased slightly by the few papers that have since appeared. Of these papers that F. Drouet (*Notes on Myxophyceae I-IV*. III, *Myxophyceae from Argentina*. 1938. *Bull. Torrey Bot. Soc.* 65: 285-192) is noteworthy. All these lead to a feeling that the algal flora there is not an abundant one.



Closterium polystichum Nygaard var. *patagonicum* n. var.

The present collections, all made in the region of Buenos Aires, contain exactly two dozen species, exclusive of *Myxophyceae*. Of these, eight species do not seem to have been recorded from the country before. Only two of the eight species could be described as of frequent occurrence. The eight species are:

Stichococcus subtilis (Kütz.) Klecker. One bottle, labeled « Floating in fish tank, Laguna Chascomús, 11 Nov., 1936 » contains a small amount of a narrow filamentous alga. The filaments are quite short, 5-6.2 μ in diameter.

Oedogonium crassum (Hass.) Wittr., was a very common alga in a collection labeled « Fish tank, Laguna Embalse Río III, Almafuerde, 18 Dec., 1936. » Many of the specimens were in good fruiting condition, allowing determination of the species. Rather frequently, one found specimens infected with the parasite *Myzocyttium proliferans* Schenk, kindly determined for me by Dr. D. H. Linder.

Oöcystis crassa Wittr., collected from « Laguna Blanca Grande. 14 Jan., 1936. » The few specimens found were 15-22 μ long and 11-16 μ broad.

The remaining five species were all desmids and each appeared only in small numbers.

Closterium Ralfsii var. *hybridum*. Rabenh. gathered in « Australian tank, Estancia La Lola, Dufaur. 13 Jan., 1937. »

Closterium polystichum Nygaard. var. *patagonicum* n. var. This, much the most interesting alga in the entire collection, occurred sparingly among large numbers of *Closterium aciculare* T. West in a collection made at « Laguna los Chilenos, near Dufaur, 11 Jan., 1937. » *Closterium polystichum* is known only from Nygaard's description of specimens collected from the Vaal River in South Africa. A variety, *Nordstedtii* (Chodat) Krieger with cells only half the length of the species and with fewer pyrenoids, has been found in lakes in the foothills of the Alps. About a hundred specimens have been examined in the present collection. They were straight or slightly bent, and varied in length from 480-690 μ and in maximum diameter from 16-24 μ , being therefore rather longer and much broader than the South African specimens, in which the greatest length recor-

ded was 585 μ , and diameter 11 μ . The diameter of the semi-cell gradually decreases, becoming 13-18 μ at the point where the apex suddenly narrows. In many specimens the apex is slightly asymmetrical. The number of pyrenoids in each semi-cell varies from seven to twenty-two, compared with 12-16 in Nygaard's specimens. The chloroplastids are axial and have three to five (generally four) longitudinal ridges. The terminal vacuoles are rather small and in most of the specimens are very indistinct. In a few cases the included granules could be found. There were one to three granules in each vacuole. The most distinctive feature is the greater diameter, which seems enough to justify designating this as a distinct new variety.

The three remaining species occurred in a collection from «Laguna Blanca Grande, 14 Jan. 1937.» Only a few cells of each species were found. They were *Cosmarium Phaseolus* Bréb., with cells 40 μ long, 38 μ broad and 22 μ thick and the isthmus 12 μ broad; *Cosmarium tenue* Archer, with cells 12-12.5 μ long, about as broad, and with the isthmus 3.5 μ broad; and *Cosmarium tumidum* Lun., with cells 35 μ long, 30 μ broad, 22 μ thick, and the isthmus 9 μ broad. *Cosmarium tenue* seems much the rarest of the three species here, only eight specimens having been found in all.

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