

Sterols and Polysaccharides in Freshwater Algae *Spirogyra* and *Mougeotia*

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Several species of freshwater green algae belonging to the order Zygnematales (*Spirogyra crassa* (Ktz.) Czurda, *S. condensata* (Vauch.) Czurda, *S. longata* (Vauch.) Ktz., *S. juergensii* Ktz., *S. olivascens* Rabenh. and *Mougeotia viridis* (Ktz.) Wittr.) were shown to have specific sterol content and characteristic monosaccharide composition of the biomass. Polysaccharide fractions were obtained by stepwise extraction of *S. condensata* and characterised by a determination of monosaccharides liberated after acid hydrolysis. Action of amyloglucosidase was used to prove the presence of starch in algal biomass. The main polysaccharide seems to be a complex mucilage composed of rhamnose, arabinose, xylose, galactose, and uronic acid, and the structure of this mucilage needs further investigation.