

that the difference between *canadensis* and *lanata* are so great that both deserve specific rank. The latter supposition was borne out by Mr. J. M. Macoun, who stated that in British Columbia, where both are frequently growing together, the differentiating characters seem to be perfectly constant.

Dr. Malte also exhibited specimens of *Viola rostrata* Pursh, from Chats Falls, Ont., collected by Mr. J. M. Macoun and himself last spring, and explained that this was the second time the species had been found in the Ottawa district. It was growing with *V. conspersa* Rchb. Perfectly typical hybrids representing the combination *V. conspersa* x *rostrata*, found among the parents, were shown. They were intermediate in all respects as to morphological characters and had over 90% of the pollen undeveloped and unfit for fertilization. The speaker further exhibited a number of species of *Juncus* primarily with the object of demonstrating the ease with which many plant species which to the unexperienced student may seem difficult and puzzling, can be identified. With the use of a Zeiss binocular microscope, kindly placed at the Club's disposal by the Topley Company, characters on the seed only, sufficient for the correct identification of such species as *J. articulatus* L. *J. brevicaudatus* (Engelm) Fernald, *J. canadensis* J. Gay, etc., were explained. In this connection a completely sterile form, collected at Bridgetown, N.S., was exhibited. This form was found to represent the combination *J. articulatus* x *canadensis*.

Mr. Uhlemann, a visitor, spoke briefly on the Zeiss binocular microscope, stating that this instrument is probably one of the best of its kind in the world.

J. R. F.

December 20th, 1913, at the home of Mr. J. M. Macoun, the following members being present: W. T. Macoun, L. H. Newman, Geo. H. Clark, N. Criddle, Mr. Honeyman, Dr. Malte, Dr. Blackadar, A. Eastham, T. W. Dwight, A. E. Attwood, R. B. Whyte, J. M. Macoun, C. J. Tulley and J. R. Fryer.

Mr. C. J. Tulley and Dr. Malte were the speakers for the evening. Mr. Tulley first reviewed the evolutionary steps in reproductive processes in some of the lower plant forms. Commencing with the unicellular plant forms, the speaker briefly compared their cytological features with those of the simplest animal form, Amoeba, and explained that the reproductive method in unicellular plants is one of continuous cell multiplication, one individual becoming two by cell division. This method of reproduction was designated *Cell Division*, as distinguished from the other two methods, *Asexual* and *Sexual*. In plants