

during the previous season and elaborated in the following spring. The girdle made it impossible for sap from below to ascend.

Mr. J. M. Macoun showed specimens of *Aquilegia Canadensis* and *A. coccinea* and expressed the opinion that the latter would be found in the Ottawa district. The ripened fruit is the best distinguishing feature of the two species. On *A. Canadensis* the follicles have spreading tips while in *A. coccinea* the follicles are straight and about $\frac{1}{3}$ longer. The flowers of *A. coccinea* are much larger than those of *A. Canadensis* and the spur is twice as long. Specimens of *Spiraea latifolia* were also exhibited which showed this species to be quite distinct from *S. salicifolia*; both species are found near Ottawa. The crucial test of a species was, after some discussion, decided to be the continuous reproduction, without variation, of plants from seed.

Prof. Macoun strongly recommended more specialized work on the part of the members and several expressed their willingness to assume responsibility in particular phases of botanical work: Dr. Fletcher, Violets and Carices; Prof. Macoun Fungi; Dr. Guillet, Phenological observations; T. E. Clarke, Ferns of the Ottawa district; W. T. Macoun, Shrubs, with special reference to the genus *Spiraea*; A. E. Attwood, Trees and noxious weeds.

The fourth meeting was held at the residence of A. E. Attwood.

A number of twigs of shrubs and trees were identified and discussed. It was demonstrated that with a little study and care, trees can be determined as readily from twigs and buds as from flowers and fruits.

Dr. Fletcher read an interesting article from "Science" on the effect upon animals of eating "Sleepy Grass." He also spoke of the serious mechanical injury caused to the stomachs of sheep by their eating of the so-called prairie crocus (*Pulsatilla hirsutissima*). This anemone is the first green thing found on the prairies in spring and is freely eaten by sheep. The hairs of the leaves and stem are indigestible and become felted together in the animal's stomach frequently causing death.

The remainder of the evening was spent in listing the localities at which the different species of orchids growing in this region had been found.