NOTE ON SCIRPUS DEBILIS AND SCIRPUS SMITHIL. BY WM. SCOTT, B.A., VICE-PRINCIPAL OF THE TORONTO NORMAL SCHOOL.

(Read March 13, 1897.)

These two species were found by me last season. This is the first record of these plants being found in Canada. S. debilis. Pursh, was found growing in a ditch on the railroad near Queenston Heights, and S. Smithii, Gray, was growing on Toronto Island.

Regarding these two plants, N. L. Britton and A. Brown in their "Illustrated Flora," say of S. Smithii: "Perhaps only a form of the preceding, S. debilis." A careful study leads me to the conclusion that they are entirely distinct species:

- (1) Their mode of growth is very different. S. Smithii grew in detached plants, and tillered from the root like grain. S. debilis grew in clumps. Many plants were clustered together. Careful search on various occasions was made, but no isolated plants could be found in the one case and no clustered ones in the other.
- (2) The involucral leaf is almost a prolongation of the culm in Smithii; in debilis it is very divergent. It is almost always turned at right angles to the culm.
 - (3) In Smithii the scales are oblong; in debilis they are oval or elliptical.
- (4) In Smithii the seeds are brown obovate, flattened, and have no glossy appearance. In debilis they are black, broadly obovate, rounded and are glossy. Under a lens they are as easily separated as barley and wheat with the naked eye.