

5. CALLIERGON LONCHOPUS.

Allied to *C. molle*, Dicks. Leaves large, suboval obtusate, often apiculate, denticulate above, not curved, more or less densely crowded; alar cells small and well-defined, other cells narrow linear; costa long and double. Perichetial leaves acute, very short-acuminate, generally entire; costa double very long. Capsule not large, pedicel 3.5 cm. long. Tufts green, decolorate below, about 10 cm. high. Stem weak, dioecious? (Male flowers not seen).

In allied European species the pedicel is only 8-10, rarely 12-15 mm. long.

On Sulphur Mountain at Banff, Alta., September, 1904. Nos. 351 and 355.

6. PLAGIOTHECIUM UNDULATUM * *P. SUBNECKEROIDEUM*.

Differs in the leaves being less crowded, rather distant, and long-decurrent (as in *P. neckeroideum*); also leaves obtusate, mostly obtuse. Capsules not seen. In *P. undulatum* and *neckeroideum* the leaves are acuminate or at least acute.

On earth, Newcastle Island, Departure Bay, Vancouver Island, B.C., July 10th, 1908. Coll. John Macoun.

7. CAMPTOTHECIUM NITENS VAR. MICROTHECA, KINDB. N. VAR.

Capsule small. Perichetial leaves hyaline, not filiform-pointed. Stem not or (rarely) sparingly tomentose. Resembles the arctic form "atrichum, Kindb." in not often having a tomentose stem.

Collected in a bog along Hunker Creek, near Dawson, Yukon, July 27th, 1902. No. 267.

8. CAMPTOTHECIUM NITENS VAR. LEUCOBASIS, KINDB. N. VAR.

Upper leaves green, lower decolorate (dusky); basal, also the alar cells hyaline. Stem not tomentose.

Collected in a bog by Hunker Creek, near Dawson, Yukon, July, 1902. No. 349.

9. ISOTHECIUM AGGREGATUM (MITTEN) KINDB.

Specimens probably belonging to this species, insufficiently described by Lesq. and James, were found near New Westminster, B.C., by Mr. Albert Hill in 1903 and 1904, com. by Messrs. Brotherus and Cufino. This species differs from the others named by me "*Myura*," in long-decurrent leaves.

10. EURHYNCHIUM GLACIALE (BRYOL. EUR.) KINDB., VAR. ANGUSTIFOLIUM, NEW VARIETY.

Leaves narrower, ovate-oblong or ovate-lanceolate; costa short. Otherwise not differing. Pedicels faintly rough.