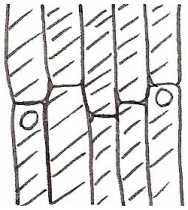
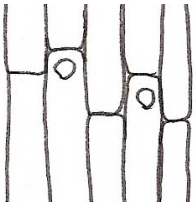
KEY TO THE *SPHAGNUM* SPECIES OF VANCOUVER BOG USING MICROSCOPIC FEATURES

KEY TO SECTIONS:

1a Cortical cells of stem with fibrils……Section *Sphagnum*, pg 4



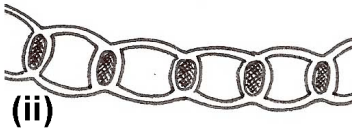
1b Cortical cells stem without fibrils……...2



2a Chlorophyllose cells of branch leaves exposed more broadly on the concave (inner) surface……...Section *Acutifolia*, pg 2

2b Chlorophyllose cells of branch leaves exposed more broadly on the convex (outer) surface (i) or equally on both surfaces (ii)…….3

(i)



(ii)

3a Branch leaves not distinctly squarrose……Section *Cuspidata*, pg 3

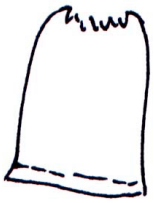
3b Branch leaves squarrose……..Section *Squarrosa*, pg 4

KEY TO SPECIES OF SECTION *ACUTIFOLIA*

1a Stem leaves fringed……...……2

2a Stem leaf fringed along most of margin……...*Sphagnum fimbriatum*

2b Stem leaf fringed along apex……..…..*Sphagnum girgensohnii*



1b Stem leaves not fringed (sometimes toothed at tip)……..3

3a Stem leaves oblong-lingulate, broad-bordered at base……...4

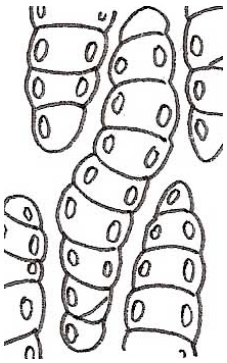
4a Plants brown (stem "wood" distinctly brown)…..…… *Sphagnum fuscum*

4b Plants red…….…….. *Sphagnum rubellum*

3b Stem leaves oblong to oblong-triangular, not broad-bordered at base …
……. *Sphagnum capillifolium*

KEY TO SPECIES OF SECTION *CUSPIDATA*

1a Branch leaves with numerous pores along the commissures……..…... *Sphagnum mendocinum*



1b Branch leaves with fewer pores along the commissures…….….2

2a Small plant, stem and branch leaves similar in size, shape, and structure……..…....*Sphagnum tenellum*

2b Stem and branch leaves not similar in size, shape, and structure…..3

3a Stem leaves less than 0.8mm long, small capitulum……..….*Sphagnum angustifolium*

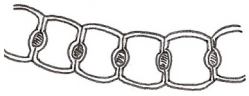
3b Stem leaves more than 0.8mm long ……..4

4a Branch leaves more elongate at distal end, branch leaves not recurved when dry……..….*Sphagnum cuspidatum*

4b Branch leaves not more elongate at distal end, branch leaves recurved when dry ……...…….. *Sphagnum pacificum*

KEY TO SPECIES OF SECTION *SPHAGNUM*

1a Chlorophyllose cells of branch leaves completely enclosed…….*Sphagnum magellanicum*

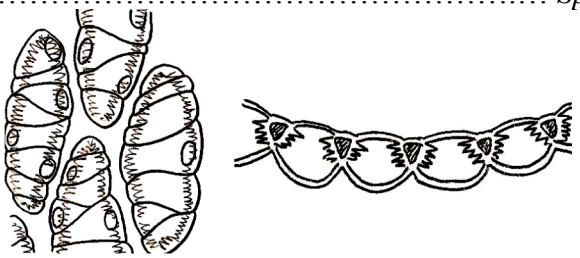


1b Chlorophyllose cells of branch leaves not completely enclosed …… 2

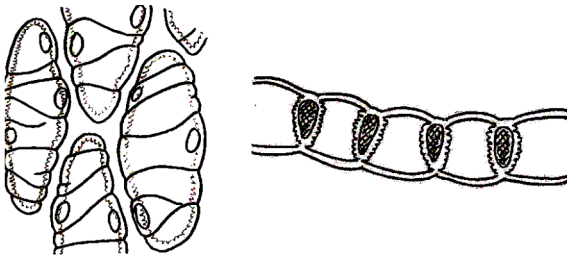
2a Hyaline cells of stem leaves not divided……*Sphagnum palustre*

2b Some hyaline cells of stem leaves divided…….3

3a Inner cell walls of branch leaf hyaline cells with ridge-like comb-fibrils… ……..… *Sphagnum austinii*



3b Inner cell walls of branch leaf hyaline cells papillose…*Sphagnum papillosum*



KEY TO SPECIES OF SECTION *SQUARROSA*

Sphagnum squarrosum