

Key to genera (with sporophytes)

- 1. Plants with umbrella-like branches.....3. *Microdendron*
- 1. Plants without umbrella-like branches.....2
- 2. Capsules oblate-ovoid.....2. *Lyellia*
- 2. Capsules globose, cylindrical, or cylindrical with several obtuse keels..... 3
- 3. Leaf margins bi-toothed; capsules cylindrical, slightly curved.....1. *Atrichum*
- 3. Leaf margins entire or single-toothed; capsules thickly cylindrical, not curved.....4
- 4. Leaf ventral lamellae in less than 10 rows; costa slender; calyptrae almost smooth..... 4. *Oligotrichum*
- 4. Leaf ventral lamellae usually in more than 15 rows; costa rather broad; calyptrae densely ciliate..... 5
- 5. Capsules oblong-cylindrical to cylindrical, not angled.....5. *Pogonatum*
- 5. Capsules cubic or prismatic, clearly angled.....6
- 6. Mouths of capsules closed by fleshy membrane.....6. *Polytrichastrum*
- 6. Mouths of capsules closed by thin membrane.....7. *Polytrichum*

Key to genera (without sporophytes)

- 1. Plants with umbrella-like branches above.....3. *Microdendron*
- 1. Plants without umbrella-like branches above.....2
- 2. Ventral lamellae of leaves only on narrow costa, less than 10 rows.....3
- 2. Ventral lamellae of leaves on rather broad costa, more than 15 rows.....4
- 3. Leaves thin, delicate, usually crisped when dry, leaves almost equal width throughout, undulate, with spines numerous on the back.....1. *Atrichum*
- 3. Leaves rather thick, only slightly twisted when dry, leaves clearly broader below the midleaf, not undulate, only with a few spines on the back..... 4. *Oligotrichum*
- 4. Lamellae usually 6 or more cells high.....5
- 4. Lamellae 1–6 cells high.....6
- 5. Leaf apices aristate or narrow; leaf margins involute, marginal cells linear; apical cells of lamellae usually not papillose .....7. *Polytrichum*
- 5. Leaf apices not aristate, mostly lanceolate; leaf margins not involute, marginal cells shorter; apical cells of lamellae smooth or papillose.....6. *Polytrichastrum*
- 6. Leaves crisped; marginal teeth single; marginal cells of lamellae single..... 2. *Lyellia*
- 6. Leaves usually twisted only, rarely crisped; marginal teeth double or single; marginal cells of lamellae twin or single, rarely differentiated..... 5. *Pogonatum*