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Leaves sheathing and channelled, denticulate, crisped when dry; basal cells, at least the inner ones, hyaline; costa not excurrent. Dioecious, rarely fruiting.

B. Peristome cancellate at base, divided above in filiform, more or less cohering branches.

V. Cinclidotece. Leaves without lamellæ, often smooth; borders thick. Dioecious.

• 120. *Dialytrichia*. Capsule terminal on the stem; pedicel long; teeth faintly twisted. Leaves papillose, obtuse.

121. Cinclidotus. Capsule placed on small lateral branches, often nearly immersed; pedicel short; teeth not or scarcely twisted. Leaves generally smooth, often acute.

Fam. 25. Calymperaceæ.

122. Calymperes. Capsule oval; pedicel short. Leaves not sheathing, suboblong, entire and convolute, rigid when dry, often with propagula; basal cells, at least the inner ones, hyaline. Dioecious. Habit of Syrrhopodon.

Fam. 26. Encalyptaceæ.

123. Encalypta. Leaves very papillose above. Peristome variable or wanting.

124. Merceya. Leaves smooth or indistinctly papillose. Capsu's unknown.

Fam. 27. Orthotrichaceæ.

l. Orthotricheæ. Capsule terminal, often immersed; peristome generally double; segments usually ciliiform; calyptra mitriform. Leaves usually papillose, often crisped; inner cells not seriate; alar cells sometimes subquadrate; costa not excurrent. Stem generally erect and sparingly branching, seldom decumbent. Tufts often pulvinate.

125. Orthotrichum. Calyptra generally plicate and hairy.

II. *Macromitrieœ*. Capsule lateral, not immersed; calyptra subcampanulate. Leaves indistinctly papillose; cells obliquely seriate, the alar not defined. Stem creeping; branches numerous.