

ENCALYPTACEAE

The Encalyptaceae contain two genera and about 20 species primarily distributed in the Northern Hemisphere, in the tropics confined to montane regions.

Encalypta (Fig. XX)

Six species in tropical Africa; 19 species primarily of the Northern Hemisphere.

Plants medium sized, forming tufts, dark green to yellowish-brown. **Stems** erect, solitary or few branched; central strand absent or weak. **Leaves** contorted and incurved when dry, erect-spreading when wet, ovate-oblong, oblong-elliptic to obovate, 1.8-5.0 mm long, occasionally undulate, apex broadly acute to obtuse, \pm cucullate, mucronate or apiculate; margins plane, erect or inflexed distally, usually reflexed below; costa single, usually strong, subpercurrent to percurrent or short excurrent, back usually projecting; upper and median cells subquadrate, strongly pluripapillose, papillae branched; lower and basal cells large and short rectangular, smooth, walls dark brownish-orange; basal margin cells usually differentiated. **Autoicous** (gonioautoicous). **Perichaetia** terminal, leaves little differentiated. **Seta** elongate, (1-) 2-10 mm long, erect to \pm flexuose, rather stout, smooth, often distally twisted. **Capsule** erect, urn usually long cylindrical, 1.2-4.0 mm long, smooth to furrowed and \pm twisted; stomata present and superficial at base of urn; annulus undifferentiated.

Operculum rostrate from a plano-convex base. **Peristome** absent or present, teeth vertically-striate papillose, often fragile and deciduous. **Calyptra** mitrate-long cylindrical, apex constricted and rostrate, base fringed and lobed or not. **Spores** variously ornamented.

HABITAT. On soil, rock crevices and on rocks in open high montane areas, 2900-4800 m.

DISCUSSION. *Encalypta* is recognized by the cylindrical-campanulate calyptra and oblong-rectangular laminal cells at the base, smooth with cross walls thickened, and upper cells pluripapillose; the two former features may assist in separating various Pottiaceae from *Encalypta* with which it is likely to be confused. Of the six African taxa, *Encalypta vulgaris* Hedw. is most frequent in southern Africa and *E. ciliata* Hedw. is found in montane areas in eastern and southern Africa. Three species are known only from Ethiopia/Eritrea. Two of our species (*E. cuspidata* and *E. hedbergii*) are treated as 'problematical' in the revision by Horton (1983). A full revision of the family has been published by Horton (1982, 1983) and Horton (1983) includes keys and illustrations.

LITERATURE. **Horton, D.G. 1982.** A revision of the Encalyptaceae (Musci), with particular reference to the North American taxa. Part I. Journal of the Hattori Botanical Laboratory 53: 365-418. **Horton, D.G. 1983.** A revision of the Encalyptaceae (Musci), with particular reference to the North American taxa. Part II. Journal of the Hattori Botanical Laboratory 54: 353-532 [keys, illustrations, maps].