

AULACOMNIACEAE

(B.J. O'Shea)

A monotypic family.

Aulacomnium Schwaegr. (Fig. XX)

Probably only two species in our area: *A. palustre* (Hedw.) Schwaegr. from Ethiopia, Kenya and Uganda, and *A. turgidum* Wahlenb. from Kenya; a mostly north temperate genus of seven species.

Plants medium sized to somewhat large, forming loose to dense tufts, yellowish-green or -brown. **Stems** erect, few branched, densely tomentose; in cross-section central strand present. **Leaves** imbricate to contorted and twisted when dry, erect-spreading when wet, narrowly lanceolate to oblong-lanceolate to obovate, 4-5.2 mm long, to 1 mm wide, apex short acuminate or acute to obtuse, base weakly decurrent; margins recurved, crenulate and distally serrulate to entire; costa single, strong, ending below apex, flexuose; basal cells inflated, 2-3-stratose, thick-walled, reddish-brown; median cells rounded, rounded-hexagonal or quadrate, lumens rounded to \pm stellate and collenchymatous, unipapillose, papillae over cell lumen, to not or scarcely papillose. **Propagula** often present, clustered terminally on nearly naked elongate stems with a few scale-like leaves. **Dioicous**. [**Sporophytes** terminal. **Seta** elongate, 25-40 mm long, smooth. **Capsule** inclined to horizontal, urn oblong or ovoid-cylindrical, 2.5-4 mm long, asymmetric and curved, plicate and constricted below urn mouth when dry; annulus revoluble. **Operculum** conic to short-rostrate and oblique. **Peristome** double, exostome teeth 16, papillose, endostome basal membrane high, segments 16, keeled and perforate, cilia 2-4. **Calyptra** cucullate, naked and smooth. **Spores** spherical, smooth.]

HABITAT. Boggy or moist ground, or on wet rocks, 3600-4500 m.

DISCUSSION. This genus is characterized by the recurved leaf margins, stellate and papillose or rounded and smooth laminal cells, reddish-brown, thick-walled, enlarged basal cells. Sporophytes have not been reported from Africa, and are comparatively rare worldwide. *Aulacomnium abyssinicum* Schimp. ex Paris, *nom. nud.*, reported for Ethiopia, is likely to be a synonym of *A. palustre*. *Aulacomnium turgidum* has leaves imbricate when dry, ovate to obovate, almost smooth laminal cells with star-shaped lumens, whereas *A. palustre* has leaves usually crisped or twisted when dry, more or less lanceolate, with more strongly papillose cells with rounded lumens.