

Anacamptodon mexicanus sp. nov. (Figs. 31-36)

A. cubensis foliis latioribus et brevioribus, costa brevi, a *A. splachnoides* foliis et cellulis brevioribus et a speciebus totis *Anacamptodontis* peristomio albescenti aetate recedit.

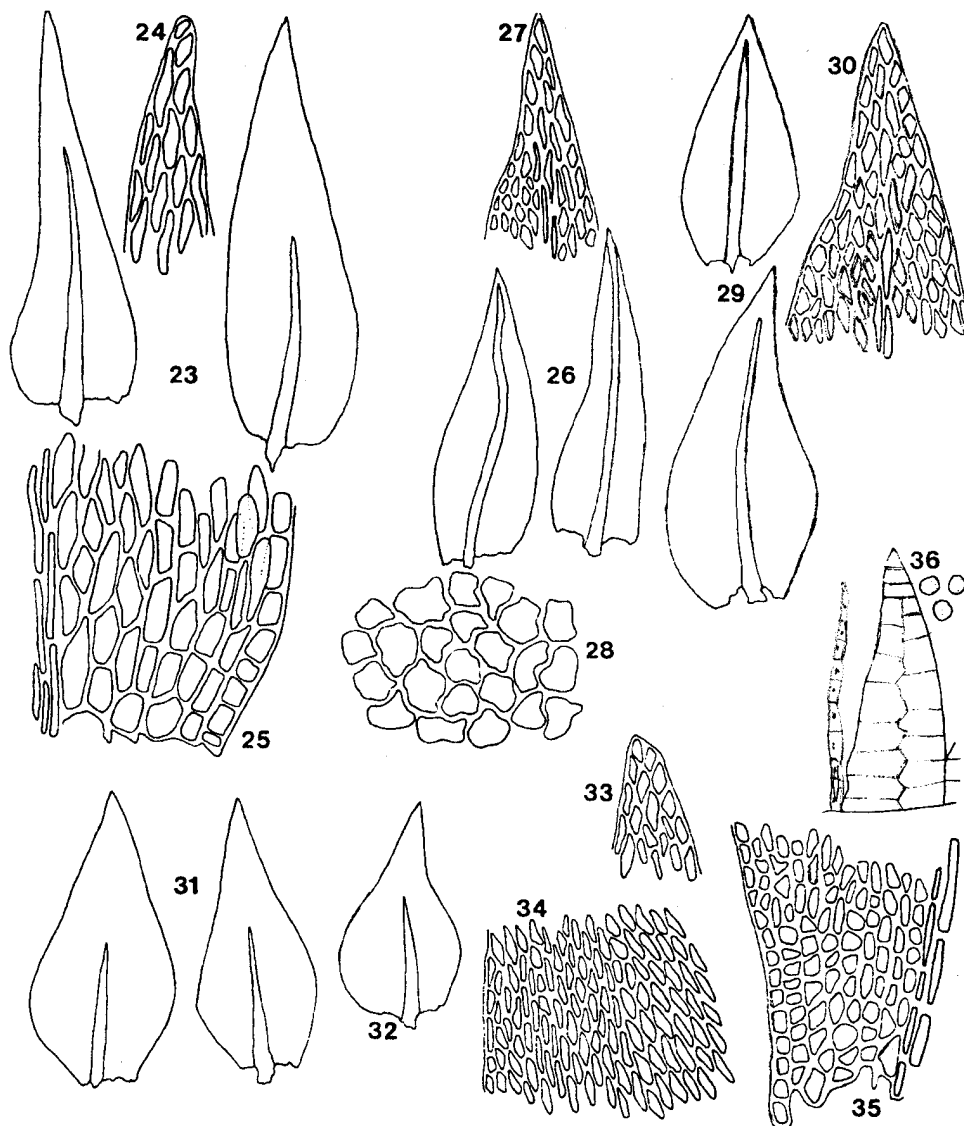
Plants small, in dull, yellow-green to shiny, bronze mats. Stems creeping, freely and irregularly branched; branches of greatly varying lengths, \pm ascending. Leaves erect and \pm homomallous when dry; stem leaves mostly ovate-lanceolate, 0.38-0.52 mm long, (0.15) 0.20-0.30 mm wide, acuminate, serrulate above; margins plane or sometimes recurved below; costa ending just above the midleaf; upper cells irregularly elliptic to rhomboid-hexagonal, 20-27 μ m long, mostly 4:1; alar cells quadrate to subquadrate, 9-13 μ m long. Branch leaves oblong-ovate to oblong-lanceolate, 0.37-0.59(0.64) mm long, 0.17-0.26(0.35) mm wide, slightly concave, acute; margins entire; costa mostly ending slightly below midleaf; upper cells

elliptic to oblong-hexagonal, 15-28 μ m long, mostly 3-4:1; alar cells quadrate to subquadrate, 8-10(15) μ m long, extending up the margin in 6-12 rows and up the costa in 2-4(8) rows.

Autoicous. Perichaetial leaves oblong-lanceolate, long-acuminate, 0.85-1.30 mm long, 0.25-0.35 mm wide, serrulate above; costa faint, ending somewhat below midleaf; cells lax and broad from the tip of the costa to the base, narrower and thicker-walled above. Perigonial bracts all pointing in one direction, ovate, shortly acute, ca. 0.35 mm long; 0.15 mm wide, ecostate. Setae erect, curved at base, reddish-brown, slender, 4-5 mm long; capsules erect and symmetric, oblong-cylindric, ca. 1 mm long, strongly contracted below the mouth and at the distinct neck when dry; exothecial cells \pm square, somewhat wavy-walled; stomata few, at base of urn; annulus of 1-2 rows of thin-walled cells, persistent; operculum unknown; peristome inserted below the mouth of the urn, double, exostome teeth fused in pairs at their bases, light-brown at base, becoming white with age above, broadly lanceolate, 162-187 μ m long, 42-63 μ m broad at base, gradually tapered, with a zig-zag median line, densely papillose on both surfaces throughout; endostome segments 8, golden, arising independently (not from a membrane) between pairs of teeth, 1/2-3/4 the length of the teeth, linear, keeled, perforate, slightly roughened. Spores spherical, 10-12 μ m in diameter, finely papillose. Calyptrae unknown.

Holotype: MEXICO. 40 km W of El Salto, Durango, 8850 ft, in hollowed-out place near base of madroño, 30 December 1944, A. J. Sharp 1874 (MICH). Additional material seen: MEXICO. Estado Michoacán, Lake Patzcuaro, near north shore of Lake, on old oak tree, 17 May 1939, T. C. Frye & E. M. Frye 2784 (MICH).

A distinctive plant, easily recognized by the white peristome. The homomallous perigonial bracts are a curious feature.



FIGS. 23-36. *Anacamptodon*. Figs. 23-25, *A. splachnoides* (drawn from Reese 11314, Louisiana, MICH). Figs. 26-28, *A. cubensis* var. *cubensis* (drawn from the type). Figs. 29 and 30, *A. cubensis* var. *latifolius* (drawn from the type). Figs. 31-36, *A. mexicanus* (31 and 33-36 drawn from the type, 32 drawn from Frye & Frye 2784). Fig. 23, leaves, x 67. Fig. 24, leaf apex, x 222. Fig. 25, leaf base, x 222. Fig. 26, leaves, x 67. Fig. 27, leaf apex, x 222. Fig. 28, exothecial cells, x 465. Fig. 29, leaves, x. 67. Fig. 30, leaf apex, x 222. Figs. 31 & 32, leaves, x 67. Fig. 33, leaf apex, x 222. Fig. 34, leaf middle, x 222. Fig. 35, leaf base, x 222. Fig. 36, peristome, x 200.