

FIG. 1. a-d. *Sphagnum lapazense*. a. Branch leaves, X20. b. Upper cells of branch leaf, outer surface, X390. c. Upper cells of branch leaf, inner surface, X390. d. Upper marginal cells of branch leaf showing marginal resorption furrow, X390. e-g. *Sphagnum crispatum*. e. Branch fascicle, dry, X5. f. Branch leaves, X20. g. Stem leaves, X20. h-k. *Sphagnum luetzelburgii*. h. Branch leaves, X2. i. Upper cells of branch leaf, outer surface, X390. j. Upper cells of branch leaf, inner surface, X390. k. Stem leaves, X20.

**Sphagnum** [sect. *Cuspidata*] **crispatum** H. Crum, sp. nov.-TYPE: PERU, Cajamarca: Hualgayoc, Las Lagunas to the west of Cajamaraca, 07°10'S, 78°15'W, 3900 m, 25 May 1973, *P. Hegewald & E. Hegewald* 6213 (holotype: MICH!: isotype: MO!).

Plantae parvae, luteae, laxe caespitosae. Caules pallido-luteoli. Folia caulina 1.4-1.6 mm longa, triangulo-lingulata, concavo-acuta; cellulae hyalinae superne fibrillosae, 0-3-septatae, poris nullis vel superficie dorso poris paucis. Rami 2-3-fasciculati (2 patentes). Folia ramulina sicca subtubulosa et val de crispata, 1.5-2 mm

longae. oblongo-ovata, concava, marginibus integris; cellulae hyalinae superne non septatae, superne fibrillosae, poris ut in foliis caulinis, superficie interiore poris nullis; cellulae chlorophylliferae sectione transversali triangulo-trapezoideae, superficie exteriore latiore expositae.

Plants small and slender, 2-5 cm long, in lax, yellow patches. Stems yellowish; cortex 2-layered, without pores at the surface; wood cylinder pale yellow. Stem leaves 1.4-1.6 mm long, triangular-lingulate, concave-acute, narrowly bordered; hyaline cells fibrillose in the upper half, undivided or some leaves on the same stem with some cells 1-3-septate, on the outer surface with pores none or very few, small, round, at or near side corners, on the inner surface with pores none. Branches in fascicles of 2-3 (2 spreading, 1 short, weak, and pendent or lacking). Branch leaves when dry subtubulose, spreading and strongly crisped, when moist erect with curved-spreading, ± homomallous tips, 1.5-2 mm long, oblong-ovate and concave-tapered to a narrowly truncate, dentate apex, bordered by thickwalled, linear cells in 3-5 rows; hyaline cells fibrillose in the upper 1/2 or less, undivided, otherwise similar to those of stem leaves; green cells in section triangular to trapezoidal, with exclusive or broader exposure on the outer surface, the hyaline cells bulging on both surfaces, somewhat more so on the inner.

The plants are small as compared with those *S. cuspidatum* Ehrh. ex Hoffm., and they have some resemblance to that species, although the branch tips are not particularly tapered and the habitat, aquatic or not, is unknown. The most striking difference is seen in the spreading, strongly crisped branch leaves, when dry. Both stem and branch leaves are fibrillose above and have few or no pores. The hyaline cells of most leaves are undivided but, even on the same stems, some leaves have a few cells that are obliquely divided one to three times.