

**A new species of Fissidens  
from Tanzania**

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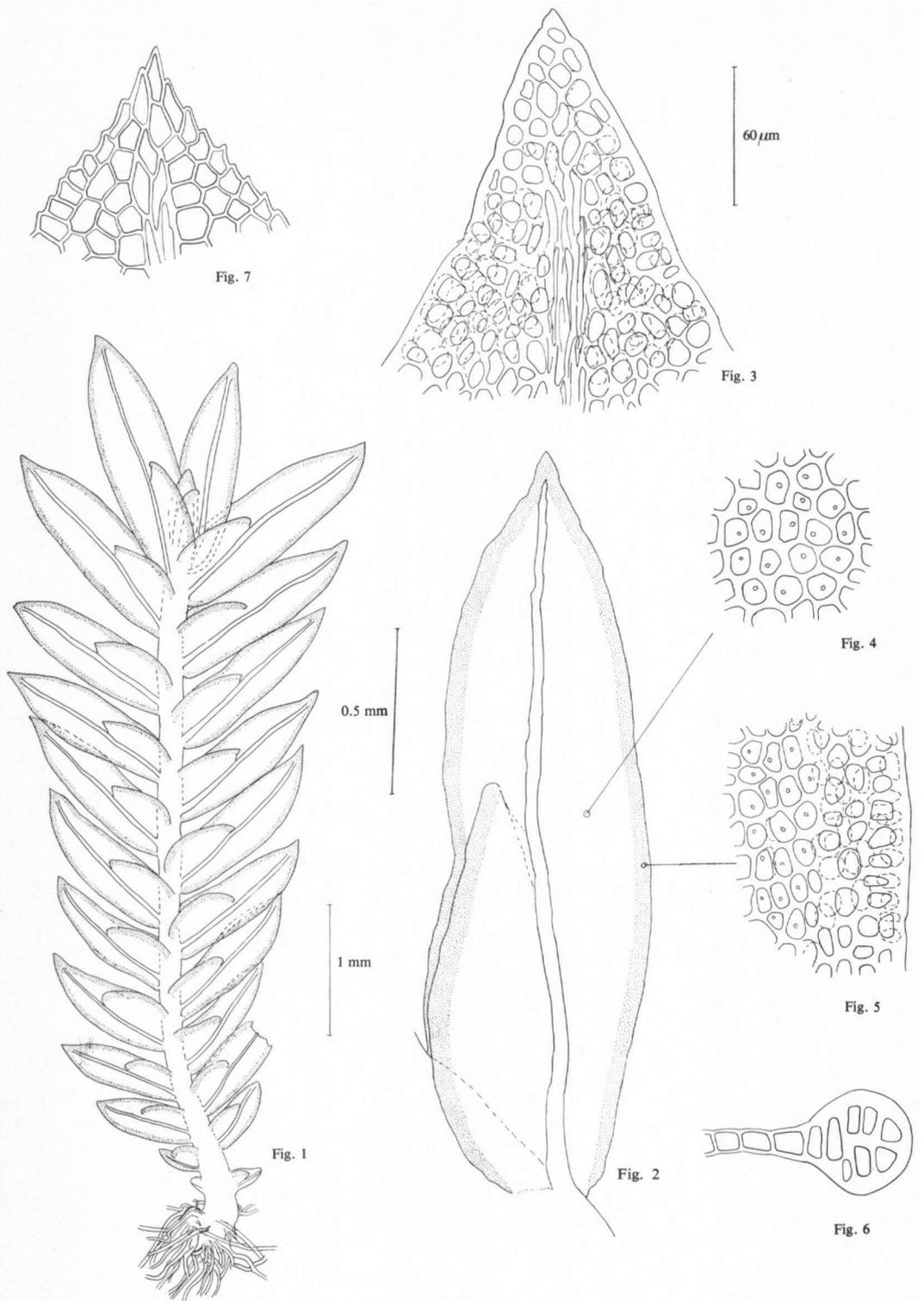
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**Fissidens splendens** Brugg.-Nann. – *nov. spec.* – Type: Pócs 6289 Z (herbarium Bizot: holotype; U). – Fig. 1-7.

Species lamina vera semi-aperta vel raro, aperta et limbo folii tumido e cellulis parenchymaticis composito instructa facilliter distinguenda. A *F. nitente* s.l. limbo cellulis prosenchymaticis carente differt.

This beautiful species is easily recognized by its large size, the *semi apert*, rarely *apert*, *lamina vera* and by the *swollen marginal zone* which is composed of *parenchymatic* cells with thickened walls. Under low magnification this appears as a dark green zone around the paler green inner leaf.

*Plants* up to 2 cm long, with up to 30 leaf pair. *Leaves* oblong, less often ovate or elliptical, (1.1) 1.5–1.9 mm long and 0.45–0.6 mm wide; ratio length leaf/width leaf 3–4; ratio length leaf/length lamina vera 2–3. The lobes of the lamina vera united at a point well inside the margin (semi apert) or at the nerve (apert). Apex indistinctly and long acuminate to acute, with the nerve ending a few cells below the apex and the thickened marginal zone reaching it. Leaves not or very slightly decurrent, the thickened marginal zone reaching the insertion. Width of the swollen, often bistratose (fig. 7) marginal zone 30–44  $\mu\text{m}$ . Cells large: 11–22  $\mu\text{m}$  long and 7–13  $\mu\text{m}$  wide, in fresh specimens with a silverish droplet in most lumina. *Fertile plants*: archegonia terminal, (220) 260–290  $\mu\text{m}$  long; antheridia terminal or in axillary buds (these buds have basal rhizoids!),



**Fig. 1:** habit of *Pócs 6289 T.* – **fig. 2:** leaf. – **fig. 3:** leaf apex. – **fig. 4:** cells from the middle of the dorsal lamina. – **fig. 5:** marginal zone in the middle of the dorsal lamina. – **fig. 6:** section of the marginal zone. – **fig. 2–6:** type collection (*Pócs 6289 Z.*). – **fig. 7:** apex of juvenile leaf from *Jones & Pócs 6343 L/4.* – **fig. 3–7** are drawn at similar magnification.

175–280  $\mu\text{m}$  long. Perichaetial leaves 2.0–2.2 mm long. Sporophyte unknown.

*Distribution*: So far this species is known from Tanzania only. It has been collected in the Uluguru and Usambara Mountains and on the Kilimandjaro.

*Specimens examined*: TANZANIA: Uluguru Mountains: Pócs 6289 H, P, T and Z. Usambara Mountains: Jones & Pócs 6374 BB. *Aberrant sample*: Jones & Pócs 6343 L/4 from the Kilimandjaro. This sample is figured in fig. 6. It differs from other samples by the denticulate juvenile leaves. The sample consists of two poorly developed stems on which also a “normal” *splendens* leaf is found.

All cited samples are deposited in the herbarium of Prof. Dr. M. Bizot (Dijon, France).

*Ecology*: on rocks in woods. Found at altitudes ranging from 1600–1900 m.

*Related species*: *F. splendens* could be confused with *F. nitens* Rehm. ex Salm. s.l.\* The two differ by the structure of the border: that of *F. splendens* is completely composed of parenchymatic cells, that of *F. nitens* always has at least a few prosenchymatic cells.

NOTE: *F. splendens* does not fit in any described section. The swollen parenchymatic marginal zone points towards an affinity with the section *Serridium*, but the usually entire margin is not in accordance with this.

#### ACKNOWLEDGEMENTS

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\* I will discuss *F. nitens* s.l. in a future paper.