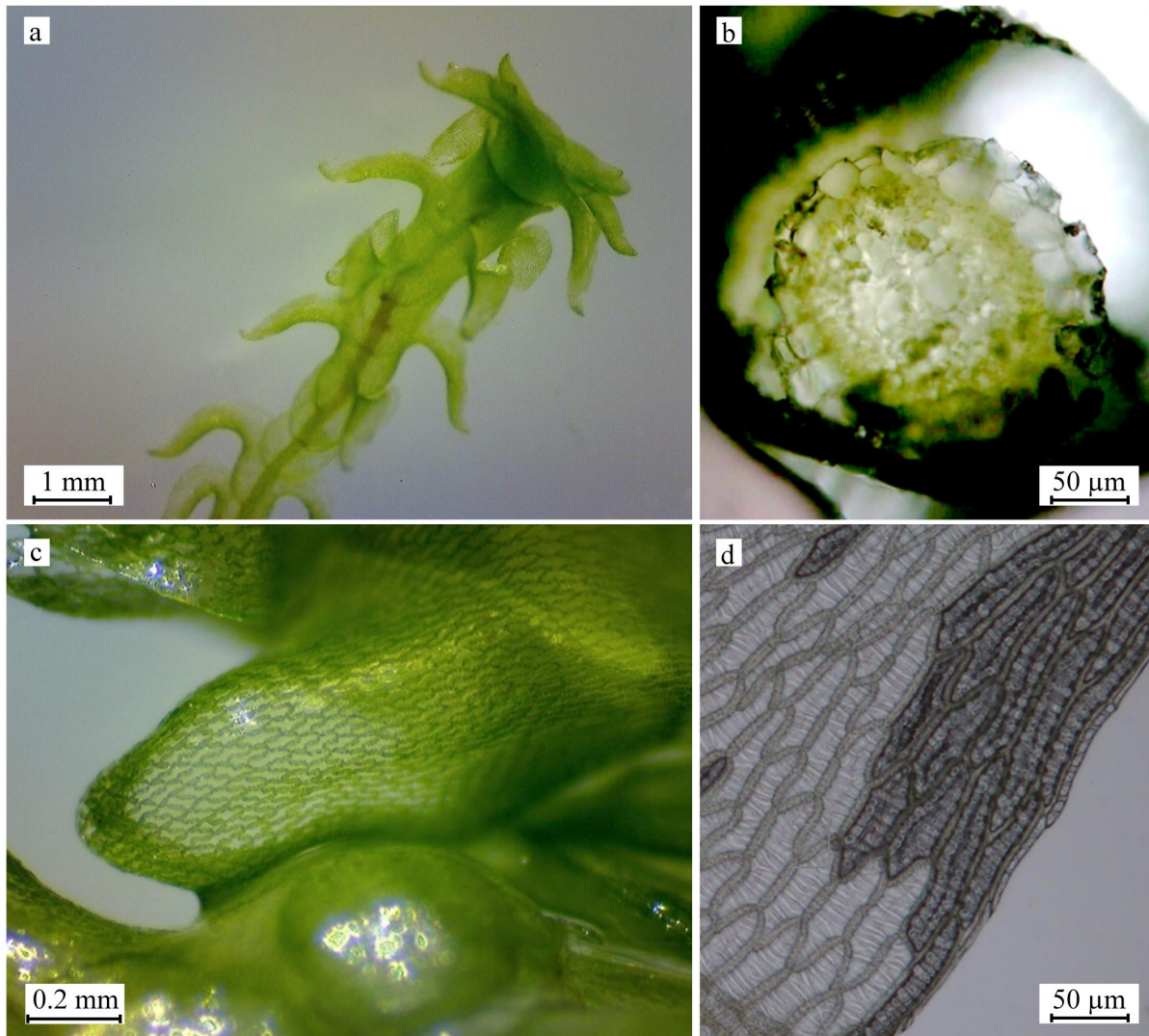




Supplementary Figure 2: The leaves of the gametophytes are not only essential for photosynthesis but also for water transport and storage. Structural organization of gametophytes. (a) Overview of the plant morphology with leaves arranged along the stem to optimize surface area for nutrient uptake. (b) Cross-section of the stem revealing internal tissue organization, including dense parenchyma and surrounding leaf sheaths. (c) Leaf anatomy showing a single-layer structure with characteristic hyalocyte patterning. (d) Rehydration behavior of dried leaves, demonstrating the rapid water uptake of hyalocytes. Microscopic images for comparison can be found in [26].