



Perennial wetland homosporous clubmoss. Procumbent, dichotomously branched, non-flattened sterile stems up to 20 cm long. Erect, fertile stems (8–10 cm long) with sporangium-bearing leaves weakly differentiated into apical cones, leaves spirally arranged. Procumbent stems dying back quickly behind. Non-branched roots bear numerous root hairs.

### Distribution and ecology

Mainly suboceanic Europe and N. America. Scattered rarely in all CE countries, from lowlands to uplands. Wet barren sandy or peaty soils, old shallow sand-pits, margins of peat bogs and fens, very often transiently as a pioneering species after sand or fen extraction on opened, disturbed areas, sometimes also slightly submerged. A strict heliophyte, competitively very weak, quickly retreats due to overgrowing by other herbs. Prefers slightly acid substrates. Ecological requirements mostly unknown.

### Anatomy of the stem

The stem has a diameter of 1.5–2 mm (1, 2). Secondary growth is absent.

The stem is composed of a central cylinder, a large cortex and an epidermis (1).

The central cylinder is a plectostele, consisting of irregularly radial arranged tracheids and radial extended phloem groups (1, 2). Tracheids of the xylem are angular (2). Their walls are laterally perforated by scalariform intervessel-pits (3).

Phloem groups contain unligified sieve elements and parenchyma cells. The plectostele is surrounded by a layer of living unligified parenchyma cells (round nuclei) and a layer of thin-walled, lignified cells (2). The very large cortex is composed of large unligified parenchyma cells, large intercellulars (4) and large mucilage conducting ducts (1).

