Allseed





Annual wetland miniature herb. Extremely slender stems (2–6 cm long) much branched, opposite ovate to elliptic leaves. Numerous tiny flowers with white corolla. Fruit is a rounded capsule.

Distribution and ecology

European temperate distribution. Scattered irregularly to rarely in all CE countries except CH, in lowlands to uplands. Bare acid sandy or peaty wet soils, margins of fishponds, fields or abandoned meadows, old sand-pits, woodland rides, mainly in fishpond areas. Strict heliophyte, competitively very week, pioneering species on disturbed areas.

Anatomy of the root collar

Round stem with a diameter of <1mm. Maximum age 1 year. The root collar consists of poorly lignified pith, a dense totally lignified xylem belt, a small phloem and a large cortex (1, 2, 5). Vessels are arranged solitary and in short radial rows. They have a diameter of 10–15 μm and a length of approximately 100 μm (3). Intervessel pits are small, round (4) and perforation plates are simple (4). Fibers are living (5) and thick-walled (2) with septate fibers. Parenchyma is paratracheal and apotracheal (5). Rays are absent (2, 5).

Phloem and cortex are separated by a small endodermis (5). The phloem consists of groups of sieve tubes, parenchyma cells and a few solitary fibers (5). The large cortex consists of large round to oval, unlignified thin-walled parenchyma cells (5). The phellem is absent (1).

