



Perennial wetland, amphibious plant, erect flower stems 0.6–1.5 m tall, leaves usually slightly shorter. Linear erect leaves grow from rhizome in a basal rosette, leaves triangular in cross-section. Pink or purplish flowers in terminal umbel, submerged form known.

Distribution and ecology

Euro-Siberian temperate element; widely naturalized outside its native range. Scattered irregularly to frequently in all CE countries, lowlands to uplands. Shallow standing and slow-streaming rivers, fishponds, lakes, ditches, canals, backwater pools, sometimes introduced. Prefers shallow waters (10–20 cm), tolerates full submergence. Prefers nutrient-rich soils but not strongly eutrophic habitats. Facultative heliophyte.

Anatomy

Circular flower stalk with a diameter of 7 mm (1).

A distinct aerenchymatic cortex surrounds a large central cylinder. The central part of the flower stalk consists of a net-like aerenchyma containing few vascular bundles and a dense parenchymatic, peripheral part with many circular arranged vascular bundles (1, 4).

A centripetal air duct dominates vascular bundles (2). The xylem of well-developed bundles consists of arc-like arranged ves-

sels and parenchyma cells and the phloem group is composed of a large sieve tubes and small companion cells (2). The xylem is absent in poorly developed vessels. The cortex is characterized by irregular small and large intercellulars (3). Crystals are absent.

Round rhizome with a diameter of 10–12 mm (5).

Loosely dispersed collateral vascular bundles form the inner part of the rhizome (5). Poorly lignified groups of vessels and unlignified parenchyma cells form the xylem (6). The phloem consists of groups of sieve tubes and companion cells (6). Vessel walls have scalariform intervessel pits or ring link structures. Air ducts are absent. The boundary between the cortex the central part is characterized by a layer of cells with prismatic crystals (7). The cortex consists of round and oval cells with tangentially large intercellulars (8). A few vascular bundles occur in the cortex (5). Crystals are absent.

