3. *Hordeum vulgare* L. (barley)

Pl. 187g–i; Map 760

Plants annual. Flowering stems 50–120 cm long. Leaf sheaths usually glabrous, often glaucous. Leaf blades 5–30 cm long, the broadest leaves 5–18 mm wide, glabrous or hairy, with a pair of conspicuous auricles to 6 mm long at the base. Inflorescences 6–10 cm long (excluding the awns), erect, the inflorescence axis not shattering at maturity (spikelets not readily disarticulating until threshed for harvest). Spikelet clusters with the spikelets usually all fertile. Glumes with the body 6.5–20.0 mm long, flattened and linear elliptic, the tip either broadened into a small, flattened, 3-lobed appendage or more commonly tapered into a relatively stout, straight, erect or ascending awn 3–20 mm long. Lemma of the fertile florets with the body 6.5–12.0 mm long, elliptic, shiny, the tip either broadened into a small, 3-lobed appendage or more commonly tapered into a relatively stout, straight, erect or ascending awn 30–150 mm long. Anthers 2.0–2.5 mm long. Fruits 5–8 mm long. $2n=14$, 28. April–June.

Introduced, uncommon in various parts of the state (cultigen of Asian origin, now cultivated nearly worldwide, mostly in temperate regions; escaped sporadically in the U.S.). Pastures, roadsides, railroads, and open, disturbed areas.

Barley is an important world crop. Its grain provides food for humans and livestock. The germinated fruits are called malt and are used in brewing and distilling. In some parts of Europe, the straw is used as pulp for paper making. A large number of cultivars have been developed. Among these, the two recorded as escapes in Missouri thus far are the standard, 6-rowed barley, with well-developed awns, and the beardless or pearl barley (sometimes treated as var. *trifurcatum* (Schldl.) Alef.), in which the awn is reduced to a threelobed appendage. Other cultivars, including one with the two lateral spikelets of each cluster reduced and sterile (2-rowed barley, *H. distachyon*), may be found as escapes in the state in the future. None of the escapes persists for very long in the wild.