

137. ELEUSINE Gaertner, Fruct. Sem. Pl. 1: 7. 1788.

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Annuals or tussocky perennials. Culms compressed. Leaf sheaths strongly keeled; leaf blades linear, usually folded; ligule membranous, usually with a ciliate fringe. Inflorescence of digitate or subdigitate spike-like racemes clustered at the top of the culm; racemes with closely imbricate, biseriate spikelets, terminating in a fertile spikelet. Spikelets laterally compressed, florets several, disarticulating between the florets (except the cultivated species *E. coracana*); glumes shorter than lemmas, persistent, 1–3(–7)-veined, keeled, awnless; lemmas membranous, 3-veined, glabrous, strongly keeled, keel thickened with 1–3 closely spaced additional veins, obtuse or acute. Grain ellipsoid to subglobose, trigonous in section, ornamented, pericarp free.  $x = 9$ . Fl. and fr. Jul–Sep.

Nine species: mostly in E and NE tropical Africa, one species a pantropical weed and one cultivated as a cereal; two species (one introduced) in China.

*Eleusine*, *Acrachne*, and *Dactyloctenium* form a group of closely related genera, remarkable for their unusual, ornamented grains enclosed within a free pericarp, which is easily removed when soaked in a drop of water.

- 1a. Racemes slender, 3–5 mm broad, straight; spikelets disarticulating at maturity; grain oblong or ovate, not exposed when ripe ..... 1. *E. indica*  
1b. Racemes stout, 8–15 mm broad, incurved; spikelets not disarticulating at maturity; grain globose, exposed in the gaping floret when ripe ..... 2. *E. coracana*

1. **Eleusine indica** (Linnaeus) Gaertner, Fruct. Sem. Pl. 1: 8. 1788.

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*Cynosurus indicus* Linnaeus, Sp. Pl. 1: 72. 1753.

Annual. Culms tufted, erect or geniculate at base, 10–90 cm tall. Leaf sheaths glabrous or tuberculate-pilose; leaf blades flat or folded, 10–15 × 0.3–0.5 cm, glabrous or adaxial surface tuberculate-pilose; ligule ca. 1 mm, membranous, at most sparsely ciliate. Inflorescence digitate, racemes (1–)2–7, linear, ascending, 3–10 × 0.3–0.5 cm, one raceme often set below the rest. Spikelets elliptic, 4–7 mm, florets 3–9; glumes lanceolate, scabrid along keel; lower glume 1-veined, 1.5–2 mm; upper glume with small additional veins in the thickened keel, 2–3 mm; lemmas ovate, 2–4 mm, keel with small additional veins, acute; palea keels winged. Grain blackish, oblong or ovate, obliquely striate with fine close lines running vertically between the striae. Fl. and fr. Jun–Oct.  $2n = 18$ .

Disturbed places, roadsides. Anhui, Beijing, Fujian, Guangdong, Guizhou, Hainan, Heilongjiang, Henan, Hubei, Hunan, Jiangxi, Shaanxi, Shandong, Shanghai, Sichuan, Taiwan, Tianjin, Xizang, Yunnan, Zhejiang [tropics and subtropics].

This pantropical, annual weed is a forage grass and is used for Chinese medicine.

2. **Eleusine coracana** (Linnaeus) Gaertner, Fruct. Sem. Pl. 1: 8. 1788.

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*Cynosurus coracanus* Linnaeus, Syst. Nat., ed. 10, 2: 875. 1759 [“*coracan*”].

Annual. Culms tufted, robust, erect or ascending, usually branched, 50–120 cm tall. Leaf sheaths glabrous; leaf blades flat, 30–60 × 0.6–1.2 cm, pilose or glabrous; ligule 1–2 mm. Inflorescence subdigitate, racemes 5–20, stout, often incurved at maturity, 5–10 × 0.8–1.5 cm, hairy at base. Spikelets very closely imbricate, ovate, 5–9 mm, florets 6–9, not disarticulating at maturity; glumes lanceolate-oblong, scabrid along the winged keel; lower glume 3-veined, 1.5–3 mm; upper glume with additional veins in keel, 1.8–5 mm; lemmas triangular-ovate, 2.2–4.7 mm, keel 3-veined, scabrid and narrowly winged, subacute; palea narrowly ovate, keels scabrid, winged. Grain yellowish brown, globose, finely striate-punctate. Fl. and fr. May–Sep.  $2n = 36$ .

Cultivated cereal crop. Anhui, Fujian, Guangdong, Guizhou, Hainan, Henan, Hubei, Jiangxi, Ningxia, Shandong, Sichuan, Taiwan, Yunnan, Zhejiang [widely cultivated in tropical and subtropical regions of the Old World].

This species is used for cereal, forage, papermaking, and soil-retention.

Flora of China 22: 481–482. 2006.