

Botanic name: *Echinochloa crus-galli* (L.) P. Beauv. -- Ess. Agrostogr. 53. 1812 (IK)

Common name: Barnyard grass, panic grass, billion dollar grass, California watergrass, chicken panic,

Family: Poaceae (Gramineae)

Habitat: Terrestrial

Distribution: Possibly native to parts of Europe and Asia; throughout the tropical, subtropical and warmer temperate. A problematic summer weed found in rice fields

Description: Annual, tufted grass with fibrous, rather shallow roots; stems stout, erect to decumbent, Plant branching from the base, rather tall, 80 -150 cm, first leaves are dull or grayish green, with the stem purplish tinged, the youngest leaf is rolled; leaf blades are glabrous, hairless, elongate, 5-20 mm wide, 8-60 cm long, with a white midrib; culms erect to decumbent; inflorescence racemose; panicle erect or nodding, green or purple-tinged, 9 - 12 racemes, long, spreading, ascending, sometimes branched; spikelets crowded, about 3 - 4 mm long excluding the awns, first glume 1/3 as long as the spikelet; second glume and sterile lemma with short bristly hairs. Awnless or on the nerves with awns, mostly 5 - 10 mm long; fruit caryopsis, small

Phytochemicals: Alkaloids, glycosides, carbohydrates, flavonoids, phytosterols / terpenes, proteins, and saponins (grains). Phenolic compounds include 5,7-dihydroxy-3',4',5'-trimethoxy flavone, tricin, quercetin, flavone, apigenin-8-C-sophoroside, 2-methoxy-4-hydroxy cinnamic acid, *p*-coumaric acid and quercetin-3-O-glucoside.

Medicinal/ Economic uses: Antidiabetic, anticancer, antioxidant, antimicrobial, anti-obesity, hypolipidemic, hepatoprotective, gastro-protective. Preventative and tonic, this is a folk remedy for treating carbuncles, haemorrhages, sores, spleen trouble, cancer and wound. Traditionally, seeds are cooked whole or ground into a flour and used in porridges, macaroni, dumplings etc., as preventative and tonic, for carbuncles, hemorrhage, sores, spleen trouble, cancer and wounds. Roots are applied as a styptic to wound Used in mixed forage. Often a feed for birds and millet for humans. Having a good flavor, seeds can be used in porridges, macaroni, dumplings etc. Roasted seed is a coffee substitute in some countries of East Asia.