

PANICUM REPENS L.

Poaceae (Gramineae)/Grass Family

Common Names: Torpedo grass, quack grass, bullet grass

Synonymy: *Panicum littorale* Mohr ex Vasey

Origin: Old World

Botanical Description: Perennial grass to 1 m (3 ft) tall, from sturdy, vigorous, widely creeping or floating rhizomes with overlapping brownish to white scales and rigid sharp-pointed (torpedo-like) growing tips. Aerial stems erect or leaning, lower portions often wrapped in bladeless sheaths. Upper leaf sheaths glabrous or hairy, usually at least with hairs on upper margins; ligule a short-ciliate membrane; leaf blades stiff, linear, flat or folded, to 26 cm (10 in) long and 5.3 mm (0.3 in) wide, glabrous or sparsely hairy below, usually long-hairy above, especially near base behind ligule; blade surfaces often with a whitish waxy coating (“bloom”). Inflorescence a loose open terminal panicle, 7-22 cm (3-9 in) long, with branches erect or ascending. Spikelets 2-3 mm long and about 1 mm wide, glabrous, the first glume (outermost spikelet bract) short, truncate, loose, nearly encircling the base of the other spikelet bracts.

Ecological Significance: Reported as a weed of 17 crops in 27 countries, considered one of the most serious grass weeds (Holm *et al.* 1977). Introduced into Gulf Coast of United States before 1876, being first collected that year near Mobile, Alabama (Beal 1896). Seed introduced for forage crops in the South from 1926 (Tarver 1979). By 1950, planted in nearly every southern Florida county and in a few central and north-central counties (Hodges and Jones 1950). Quickly forms monocultures that displace native vegetation, particularly in or near shallow waters (Shilling and Haller 1989). Occurred in 70% of Florida’s public waters by 1992, with the largest infestation in Lake Okeechobee, displacing nearly 5,670 ha (14,000 acres) of native marsh (Schardt 1994). Also reported from parks and preserves throughout Florida (EPPC 1996). Has cost an estimated \$2 million a year for its management in flood control systems (Schardt and Schmitz 1991). Has seriously infested citrus groves and golf courses throughout Florida (Baird *et al.* 1983, Fleming *et al.* 1978).



Rhizome

Distribution: Now found in the tropics and subtropics from approximately 43° North latitude to 35° South latitude (Holm *et al.* 1977). Occurs from Florida to Texas in the Southeast (Godfrey and Wooten 1979), northward along the Atlantic Coast to North Carolina (C. Jacono, U.S. Geological Survey, 1998 personal communication), and in California (Small 1933) and Hawaii, where it is a pest in sugarcane (Holm *et al.* 1977). Occurs naturalized in 75% of Florida's 67 counties (Wunderlin *et al.* 1995).

Life History: Tolerant of drought and partial shade, and can grow on heavy upland soils, but thrives in moist to wet sandy or organic soil (Hodges and Jones 1950, Holm *et al.* 1977). Stimulated in its spread by tilling and fertilization (Hodges and Jones 1950). Reproduces principally by rhizome extension and fragmentation (Holm *et al.* 1977). Flowers nearly year-round, but variable in its seed abundance and viability (Whyte *et al.* 1959, Peng and Twu 1979, Wilcut *et al.* 1988).

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Panicle

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Ligule, hairs on blade

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Monoculture in St. Johns Marsh