

Polypogon interruptus HBK. (Poaceae)
Ditch Polypogon, Ditch Beard Grass

Description. Tufted perennials, sometimes flowering the first year, stems 1-8 dm tall, erect, often bent at the base, rooting at the lower nodes, glabrous to minutely scabrous. Leaves alternate; ligules 3-10 mm long, clearly veined, apices obtuse to truncate, slightly erose; auricles absent; sheaths glabrous to minutely scabrous; blades linear, flat, 2-10 mm wide, scabrous. Inflorescence 3 to 10 cm long, a terminal, interrupted panicle composed of several densely clustered spikes. Spikelets composed of 1 floret, the glumes 1.5-3 mm long, subequal, 1-nerved, keeled, puberulent, the apices acute, abruptly short-awned, sometimes minutely bilobed, awns 1-3 mm long; lemma 1-1.5 mm long, narrowly lanceolate, smooth, shiny, often transparent, the apex minutely toothed or awned, the awn up to 2 mm long. In California, flowering from May to September. (Arnow 1987, Clapham et al. 1962, Conley 1993, Hitchcock 1944, Holmgren and Holmgren 1977, Munz 1959, Sutherland 1986, Tutin 1980).

The related annual, *P. monspeliensis*, rabbitfoot grass, has glumes with apices that are bilobed, obtuse, and with awns 3-10 mm long.

Geographic Distribution. A native of South America, ditch Polypogon has become widely naturalized in western North America, and has been reported as a waif east of the Rocky Mountains. It apparently has not been introduced elsewhere. The related *P. monspeliensis* is native to Great Britain and Europe, and has become naturalized throughout much of temperate North America, Australia, Japan, southern Africa and Hawaii (Chapman 1991, Clapham et al. 1982, Fernald 1950, Gibbs Russell et al. 1955, Gleason and Cronquist 1991, Holmgren and Holmgren 1977, Koyama 1987, Montenegro et al. 1991, Sutherland 1986, Munz 1959, Tselev 1984, Tutin 1980, Wagner et al. 1990).

Polypogon interruptus was first reported (probably as *P. lutosus* and *P. littoralis*) as widespread, presumably by the mid 19th century, by Watson (1880). *Polypogon monspeliensis* was first reported from California (San Francisco) by Bolander (1870). It had become widespread before the end of the 19th century, especially in rice fields of northcentral California (Robbins 1940).

Polypogon interruptus occurs on Santa Cruz, Santa Rosa and San Miguel islands (Junak et al. 1997) and is distributed throughout California (Anonymous 1998, Conley 1993, Munz 1959). *Polypogon monspeliensis* is known from all the northern California Channel Islands (Junak et al. 1997).

Reproductive and vegetative biology. Like most species of grasses, *Polypogon* is probably wind-pollinated; close relatives in *Agrostis* are mainly self-pollinated (Proctor et al. 1996). No literature was found that discussed aspects of its reproductive biology. Mamood et al. (1996) reported decreasing levels of seed germination of *Polypogon monspeliensis* with increasing salinity. Inderjit and Dakshini (1995) reported allelopathic effects by *Polypogon* straw on cultivated crops in India.

Ecological distribution. Both *Polypogon interruptus* and *P. monspeliensis* are found in moist sites along streams, ditches, irrigation canals, waste areas, and abandoned fields (Conley 1993,

Munz 1959, Robbins et al. 1970, Stromberg 1995). Kuhn and Zedler (1997) documented invasion of southern California coastal marshes by *Polypogon monspeliensis* resulting from the influx of fresh water. In the Nile Delta, *Polypogon monspeliensis* has invaded similar areas formerly occupied by native chenopods (el-Din 1993). It also has become an important element in Sonoran Desert riparian ecosystems (Stromberg 1995).

Weed status. No species of *Polypogon* are considered noxious weeds in agricultural or horticultural practice, at least at a global level (not listed by Holm et al. 1977), nor are they considered noxious by the State Dept. of Food and Agriculture (Anonymous 1996). They are not listed for the United States in Lorenzi and Jeffery (1987).

Microbial pathogens. *Polypogon monspeliensis* is known to be a host of the rust fungus, *Puccinia polypogonis* (Baka and Gjaerum 1996). In Australia, *Polypogon monspeliensis* is host to a bacterium, *Clavibacter toxicus*, which causes a disease in cattle after ingesting infected spikelets. (Bertozzi and McKay 1995, McKay et al. 1993). Both *P. interruptus* and *P. monspeliensis* can be hosts to mycorrhizal fungi (Lugo et al. 1997).

Insect pathogens. No literature was found that reported *Polypogon* species as hosts of deleterious insects.

Herbicide control. No literature was found that reported herbicide control of any *Polypogon* species.

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