

**Schismus arabicus Nees (Poaceae)**  
**Mediterranean Grass**

**Description.** Annuals, 0.5-3.5 dm tall, low-growing, tufted, stems ascending to somewhat prostrate, glabrous. Leaves alternate; ligules less than 1 mm long, irregularly lacerate to densely long-ciliate; auricles absent; sheaths glabrous to minutely scabrous or with scattered soft hairs; blades narrowly linear, involute, 5-10 cm long, 0.5-2 mm wide, glabrous to minutely scabrous. Inflorescence 1-5 cm long, a dense, ovate to elliptic, terminal panicle. Spikelets 4-8 mm long, compressed, becoming reddish, composed of 3-8 florets, the glumes 5-7 mm long, lanceolate, subequal, 5-7-nerved, apices acute, margins scarious; lemmas 2-3.5 mm long, obovate, 9-nerved, the back keeled, short-soft-hairy, the apex rounded with 2 acute lobes, the lobes 0.5-1 mm long. In California, flowering from February to May. (Arnow 1987, Hitchcock 1944, Holmgren and Holmgren 1977, Munz 1959, Tutin 1980).

The closely related *S. barbatus* (L.) Thellung differs by having glumes 3.5-6 mm long, minutely lobed (less than 0.5 mm) lemma apices, and lemma hairs restricted to the lower back and margins.

**Geographic distribution.** According to Tutin (1980), both species are native to southwestern Europe. However, other authorities, including Tselev (1984), indicate a wider distribution in Eurasia. Both species have become naturalized primarily in the southwestern United States, Australia, and southern Africa (Allred 1993, Arnold and de Wet 1993, Arnow 1987, Chapman 1991, Conert and Turpe 1974, Gibbs Russell et al. 1955, Holmgren and Holmgren 1997, Tselev 1984).

*Schismus arabicus* was first reported from central California by Hoover (1936). *Schismus barbatus* was apparently first reported from southern California by Munz (1959), but probably had become established earlier (Robbins et al. 1970). Both species are reported from Santa Cruz Island; *S. arabicus* is also known from Santa Barbara Island (Junak et al. 1997). Both species occur in all southern California counties and in the San Joaquin Valley (Anonymous 1998, Munz 1959).

**Reproductive and vegetative biology.** *Schismus* is self-compatible and strongly self-pollinating (Conert and Turpe 1974). Seeds stored under dry conditions germinate readily only after heat treatment, consistent with its desert habitat, but germination is enhanced by dark, relatively warm conditions (Gutterman 1996a, 1996b). Flowering in *S. arabicus* can be induced during the late winter by long days (Gutterman 1996a).

**Ecological distribution.** *Schismus arabicus* and *S. barbatus* have been reported from roadsides, waste areas, fields, and dry river beds (Munz 1959, Robbins et al. 1970, Allred 1993). Both species have become important components of the winter-early spring annual vegetation of the Mojave and Sonoran deserts, especially in disturbed or open areas among shrubs (Brooks 1995, Pake and Venable 1995, Vasek and Barbour 1990). Although low in nutritional quality, the leaves of *S. barbatus* are utilized by desert tortoises (Barboza 1995, Nagy et al. 1998) and seeds are eaten by desert rodents (Brooks 1995).

**Weed status.** Neither species 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 listed for the United States in Lorenzi and Jeffery (1987). However, *S. arabicus* has been considered as potentially weedy, especially in desert habitats by the State Dept. of Food and Agriculture (Anonymous 1996).

**Microbial and insect pathogens.** *Schismus arabicus* has been reported as a host to the smut fungus, *Sporisorium aegypticum* (Vanky and Ershad 1993). No literature was found that reported *Schismus* as a host of deleterious insects.

**Herbicide control.** No literature was found that reported the use of herbicides in controlling *Schismus*.

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