***Baccharis pilularis* DC.** coyote brush
ASTERACEAE

Synonyms: None

General Description—Coyote brush, also known as chaparral broom, is a shrub to 3 m tall, with glabrous, sticky, oblanceolate to obovate leaves 8 to 55 mm long, with toothed or entire margins. It may either be spreading or ascending in form (Sundberg 1993).

Range.—Coyote brush occurs from Oregon to northern Mexico. In California it ranges from the northwestern coast south, including the peninsular and transverse ranges and the Channel Islands, and eastward to the Sierra Nevada foothills (Sundberg 1993).

Ecology.—Coyote brush is found on coastal bluffs and oak woodlands from sea level to 1500 m. It sometimes occurs on serpentine soils (Sundberg 1993). Coyote brush may invade stabilized dunes in northern California, especially after yellow bush lupine has established (Pickart and Sawyer 1998). It has been very invasive in grassland areas near Oakland, California, apparently as a result of decreased grazing and fire, and appears to favor areas of bare soil (McBride and Heady 1968). It may be a seral stage leading to oak and bay woodlands in the San Francisco Bay area (McBride 1974). The annual grass *Bromus mollis* L. has been found to interfere competitively with *Baccharis* seedlings, especially in dry conditions (Da Silva and Bartolome 1984). In coastal regions of central California, a cecidomyiid midge, *Rhopalomyia californica* Felt forms terminal galls on coyote brush, and the midges are in turn preyed upon by various parasites (Latto and Briggs 1995).

Reproduction.—Flowers are headed in leafy panicles, with staminate heads 3.2 to 5 mm long, and pistallate heads 3.5 to 5 mm long. Phyllaries (involucre bracts) are in five to six series, linear-lanceolate, hairy, and glandular, with convex receptacle. Staminate flowers are 19 to 26, with 4 to 7 mm corollas and 3.5 to 4.5 mm pappus. Pistillate flowers number 19 to 43, with 2.5 to 3.5 mm corollas. Seeds are glabrous, 1 to 2 mm long with 8 to 10 ribs and a 5.5 to 9 mm pappus (Sundberg 1993). Seed dispersal begins in November, with germination in winter and early spring (McBride and Heady 1968). Coyote brush is sometimes propagated horticulturally from tip cuttings.

Fire Effects.—Coyote brush has been observed to burn readily in coastal California, despite the fact that it is sometimes marketed as a fire-resistant species. Coyote brush seedlings and young plants are susceptible to fire damage, but older plants quickly resprout from their base after fire (McBride and Heady 1968).

Growth and Management.—Coyote brush seedlings are adversely affected by grazing and trampling by livestock, although grazing animals may also foster its spread by decreasing grass cover (McBride and Heady 1968). However, Williams and others (1987) found no proximal link between decreased grazing and fire and coyote brush invasion. Mowing of specimens used as ground cover is effective in controlling height without long-term detrimental effects (Hodel and Pittenger 1994). Coyote brush may be removed by burning and then pulling out the roots.

Benefits.—Although several cultivated varieties are often sold as a landscaping shrub or ground cover, some growers caution that it is neither an especially attractive plant, nor as fire-proof as sometimes stated. It is of low value as livestock forage (McBride and Heady 1968). Coyote brush was used by Native Americans as a tea for use on poison oak rash (Timbrook 1987). It is considered problematic in recreation areas due to its impenetrability and frequent association with poison oak (*Rhus diversiloba* T. & G.) (McBride and Heady 1968).

References

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