

Veronica anagallis-aquatica L. (Scrophulariaceae)
Water Speedwell

Description. Aquatic, herbaceous perennial, 1-8 dm tall; stems erect to ascending, simple to branched, glabrous. Leaves 2-8 cm long, 0.5 to 3 cm wide, glabrous, lower ones obovate to oblanceolate, subsessile, upper ones elliptic to ovate, clasping, margins entire to serrate or sharply crenate, apices acute to obtuse, the bases rounded to cordate. Inflorescence a raceme, terminal or in the upper axils. Flowers bilateral, pedicellate, the pedicels 4-8 mm long, calyx 3-6 mm long, lobes four, distinct, lanceolate; corolla 3-10 mm wide, bilateral, with 3 large lobes and 1 (lower) small lobe, blue; stamens 2, all fertile, exerted; ovary superior, style 1, stigma capitate. Fruit a capsule, 3-4 mm long, globose; seeds few. In California, flowering from April to August. (Fernald 1950, Gleason and Cronquist 1991, Holmgren 1984, 1986, Munz 1959, Pennell 1951, Walters and Ebb 1972, Webb et al. 1988, Welsh et al. 1987, Wetherwax 1993).

Veronica anagallis-aquatica produces iridoid glycosides, which are known to render plants unpalatable to certain insects (Komorowski and Swiatek 1982, Lahloub et al. 1993).

Geographic distribution. A native of Eurasia and northern Africa, water speedwell has become naturalized throughout North America, South America, Australia, New Zealand, and southern Africa. (Arnold and de Wet 1993, Chapman 1991, Holmgren 1984, 1986, Montenegro et al. 1991, Munz 1959, Pennell 1921, Silvestre 1981, Webb et al. 1988).

First reported from northern California (Brewer et al. 1876), water speedwell was treated by Jepson (1925) as “rare”, without comment on nativity. It was not considered naturalized by Robbins (1940). Pennell (1921, 1951) and Munz (1959) apparently were the first to report it as an alien species. It has been reported from Santa Cruz Island (Junak et al. 1997), and is widely distributed on mainland California (Anonymous 1998, Wetherwax 1993).

Reproductive and vegetative biology: Apparently, the reproductive biology of water speedwell has not been studied. In Europe, other species of *Veronica* (*V. beccabunga*, *V. chamaedrys*) are self-compatible and pollinated by hoverflies (Proctor et al. 1996). No other literature regarding its reproductive or vegetative biology was found.

Ecological distribution. Water speedwell is generally an emergent that occurs on sand bars, ditches, in slow-moving streams, and in wet meadows (Fernald 1950, Gleason and Cronquist 1991, Holmgren 1984, 1986, Munz 1959, Pennell 1951, Walters and Webb 1972, Webb et al. 1988, Welsh et al. 1987).

Weed status. *Veronica anagallis-aquatica* is not considered a noxious weed in agricultural or horticultural practice, at least at a global level (not listed by Holm et al. 1977), nor is it listed for the United States in Lorenzi and Jeffery (1987). It is not considered a noxious weed by the State Dept. of Food and Agriculture (Anonymous 1996).

Microbial and insect pathogens. No literature was found that reported microbial or insect pathogens of water speedwell.

Herbicide Control. No literature was found that reported herbicide control of water speedwell.

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