

Field Bindweed

Field bindweed, *Convolvulus arvensis*, was first documented in California in 1884. By the first quarter of the twentieth century, field bindweed was proclaimed the worst weed in California. Field bindweed has been given many names including perennial morningglory.

Mature field bindweed plants have arrowhead-shaped leaves that can be 1/2 to 2 inches long. The flowers are trumpet shaped, white to pink, and 1 to 1 1/2 inches wide.

Drought tolerance is a characteristic of field bindweed. Field bindweed is one of the most persistent and difficult-to-control weeds in landscapes. It has a vigorous root and rhizome system that makes it almost impossible to control. Its seed has a long dormancy and can last in soil for up to 60 years. In addition, rhizomes have the ability to penetrate through fabric, plastic, and other barriers.

Control of field bindweed isn't easy, and it can't be accomplished with a single treatment or in a single season. Application of herbicide can also be part of an integrated pest management program.

Cultivation or hoeing has been partially effective in reducing established stands of field bindweed. Cultivate about every 2 to 3 weeks and repeat whenever necessary. In conjunction with cultivation, withholding water to dry the site might help to reduce the perennial population in a summer season, assuming the roots have not tapped into deep moisture.

Landscape fabrics and other mulches such as black plastic or cardboard have been effective for bindweed control if no light is allowed to reach the soil and the plant. The edges of the fabric must overlap so that the bindweed stems can't grow between the sheets and into the light. If holes are made in the fabric or plastic for plants, however, bindweed can also grow through these holes. A landscape fabric placed over soil then covered with bark or rock will likely keep field bindweed from emerging. It might take more than 3 years of light exclusion before the bindweed dies. Once landscape fabric or other mulch is removed, new bindweed plants might germinate from seed in the soil.

Herbicides have been relatively effective for suppression of bindweed, but not for eradication. If herbicides are used, supplementing them with appropriate preventive and cultural controls has the most success in eradication.

For control, preemergent herbicides will reduce perennial shoots and control the germinating seedlings, but they won't kill established bindweed plants. In open areas where there are no desirable plants, glyphosate using a 2 percent solution is effective when bindweed plants are actively growing with no moisture stress. Glyphosate takes 2 to 3 weeks, to kill the top growth, but it is effective, even though eradication isn't always possible. Glyphosate doesn't have residual activity, so repeated applications are necessary.