

Field Bindweed (wild morning glory), *Convolvulus arvensis*.



Young field bindweed plant growing from rhizome.



Flowers of field bindweed.



A seedling plant.

IDENTIFICATION

The first two leaves (cotyledons) of a field bindweed seedling are nearly square with a shallow notch at the tip. [Plants that arise from rhizomes](#) (underground stems) lack these seed leaves. The first true leaves are arrowhead shaped and have petioles (leaf stems) that are flattened and grooved on the upper surface.

Mature field bindweed plants have arrowhead-shaped leaves that can be 1/2 to 2 inches long, depending on environmental conditions. Mature leaves at the base of the stem are larger than the young leaves at the stem terminal. The [flowers](#) are trumpet shaped, white to pink, and 1 to 1 1/2 inches wide.

Field bindweed is a prostrate plant unless it climbs on an object for support.

The root system has both deep vertical and shallow horizontal lateral roots. The vertical roots can reach depths of 20 feet or more. However, 70% of the total mass of the root structure occupies the top 2 feet of soil. Most of these lateral roots are no deeper than 1 foot. Experiments on bindweed have shown that its root and rhizome growth can reach 2 1/2 to 5 tons per acre.

In contrast to field bindweed, the ornamental annual [morningglory](#) (in the genus *Ipomea*) has a larger (2-inch wide) and more showy [flower](#) that can be white to blue or purple; it also has a thicker stem that is sometimes hairy and heart-shaped leaves that are 1 1/2 inches wide and 2 inches or more long. The two species are easy to distinguish from each other.

LIFE CYCLE

Field bindweed is a hardy perennial. It spreads from an extensive rootstock and from seed. Most parts of the bindweed roots and rhizomes can produce buds that can create new roots and shoots. Roots capable of budding are found to depths of 14 feet.

Fragments of vertical roots and rhizomes as short as 2 inches can form new plants. Lateral roots serve another important function. About 15 to 30 inches from the parent plant, a lateral often turns downward, becoming a secondary vertical root, and sends out both roots and shoots from the turning point. By this means a single field bindweed plant can spread radially more than 10 feet in a growing season. This extensive underground network allows for overwintering without foliage, and it can persist for many years in the soil.

One to four dark brown seeds are produced in round, smooth, 1/4-inch capsules. An average plant produces about 550 seeds. Within one month after forming, the seed coat matures and becomes impervious to water. Seed that is 60 years old has been found to be viable. Once the seed coat is weakened, the seed will germinate at temperatures of 41° to 104°F.

Drought tolerance is a characteristic of field bindweed. When water is withheld, bindweed competes better than most other plants.

MANAGEMENT

Control of field bindweed isn't easy, and it can't be accomplished with a single treatment or in a single season. Effective control requires prevention of seed production and constant vigilance in removing top growth.

Courtesy of: <http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn7462.html>