

## WEED MANAGEMENT FOR ROSES IN LANDSCAPE PLANTINGS

John Karlik

University of California Cooperative Extension, Kern County

Roses have been used in landscape plantings since antiquity. The legends of Persia and India mention these plants, and they appear on coins of ancient Rhodes. The Romans made the rose a part of pageantry, perfumes and parties. At one occasion petals were so deep some guests suffocated, probably after drinking too much rose wine.

Roses are the most popular woody shrub in residential plantings in the U.S., present on the grounds of about 27% of households. In addition to their use in the garden, the ease of care, color and versatility of roses are strong recommendations for their use as flowering shrubs in landscape plantings. A wide range of colors and plant forms is available, and roses can contribute flowers to the landscape palette throughout the growing season. However, landscape managers may have reservations about using these plants more widely or in commercial settings because of a perceived need for frequent attention and pest control, including weed management.

It is possible to grow roses with a minimum of attention by following a systems approach. Variety selection is the first consideration in minimizing pest problems, including weeds, in a rose planting. Maintaining a suitable growing environment is the second consideration followed by appropriate treatment of pest problems, should they occur.

### Variety Selection

Genetic improvement leading to the development of new varieties specifically for use in landscape plantings is reason to reconsider the place of roses. The heights, colors and forms now available suggest that roses be thought of as floriferous shrubs, with fits in the landscape palette surpassing their uses in garden settings.

Landscape roses refer to cultivars developed for use as floriferous shrubs and groundcovers. Landscape roses are sometimes called shrub roses, a term which refers to plants of intermediate size with an emphasis on constant flowering and attractive habit. The Meidiland Series of C.P. Meiland and the Florascape Series of Bear Creek Corp. contain examples of landscape roses. Rose varieties developed for landscape use usually require less maintenance, including weeding, than most garden varieties because their vigor and growing characteristics may help suppress weeds. Planting sites may have full sun to semi-shade but roses prefer four or more hours of sun. Spacing in the landscape will depend on mature size, but groundcover varieties can be planted 4-6 feet on-center, and hedge varieties 4-6 feet apart. Plant height and width will be affected by climate; roses in warmer climates will be taller and wider than those in cooler regions.

Because landscape varieties are own-root plants, they can resprout from the ground true-to-variety if tops are killed. There are selections available especially bred for cold hardiness, with the added benefit that cold hardy varieties often have outstanding disease resistance. Most landscape varieties are listed to -30°F, and therefore will be adaptable throughout California.

### *Colors and Forms of Landscape Varieties*

Colors available in landscape varieties include red, fluorescent red, pink, white, orange, yellow, lavender and color blends and stripes. Forms available include uprights, mounding shrubs and groundcovers.

Upright plants grow as medium-to-large shrubs with uniform foliage and bloom. These varieties can be used as border plantings, screens, or for accents on vertical lines. Multiple plantings can be maintained as an informal hedge. Upright varieties include:

'Sevillana'--A variety five feet in height with a width of four feet. Orange-red flowers.

'Pink Meidiland'--Three to four feet in height. Single two-and-a-half inch salmon flowers.

'Simplicity'--Four to seven feet in height. Single pink two-to-three inch flowers.

Mounding shrub roses are more rambling than upright varieties. Uses include borders and mass plantings. Mounding shrubs include:

- 'Flutterbye'--Clusters of flowers on a vigorous plant. Canes may reach 10 feet in mild climates, four feet in the North. Flowers progress in color as they age, opening yellow, then peach, coral and pink.
- 'Lady of the Dawn'--Clusters of ruffled blooms in soft cream edged in pink. Plants reach four feet with an arching growth habit.
- 'Lavender Dream'--Single two-inch lavender flowers in loose clusters on a six-by-six foot plant, fine textured wood.
- 'Scarlet Meidiland'--Semi-double one-inch flowers in clusters on a three-to-four foot mounding plant.

Groundcovers are low-growing varieties useful in covering banks, along walkways, or as a cascade over walls. Some varieties reach two-and-a-half feet in height. Groundcover varieties include:

- 'Alba Meidiland'--Two-and-a-half feet in height, six foot spread. Small creamy-white clusters of semidouble slightly-fragrant flowers.
- 'Baby Blanket'--Light pink blooms. Plants are three feet tall with a five foot spread.
- 'Carefree Delight'--Two-and-a-half to three feet in height, spread of four to five-and-a-half feet. Medium-pink one-and-one-half inch single flowers.
- 'The Fairy'--One-and-one-half feet in height, three foot spread. Pink one-inch double flowers.
- 'Flower Carpet'--Perhaps one foot in height, two to three foot spread. Pink.
- 'Ralph's Creeper'--Three feet in height, five foot spread. Red-yellow bicolor semidouble flowers.
- 'Red Ribbons'--Four feet in height, two-and-a-half foot spread. Clusters of bright red, semidouble flowers.
- 'Red Meidiland'--Two feet in height with a spread of five feet. Single flowers two-and-a-half inches in diameter.
- 'Sea Foam'--Like 'The Fairy' but with white to cream flowers.

### Environmental Management

The environment around rose plants will affect pest pressure. About two-thirds of the U.S. supply of rose plants is produced in the southern San Joaquin Valley, and it is obvious in the field that roses grow very well in full sun, with sufficient irrigation. However, roses do not grow well if over-irrigated. Too much water leads to chlorosis, leaf drop and sometimes marginal necrosis of leaves, and may favor shallow-rooted weeds. In the landscape, roses grow well when irrigated with drip systems, which, by limiting distribution of water tend to reduce summer weed populations.

Mulches may be used in rose plantings to suppress weed growth and have added benefits such as conserving soil moisture. Wood chips or bark are especially beneficial at depths of 2-4 inches. Rock mulches are less desirable because sunburn to canes may result from reflected solar radiation.

### Herbicides For Use Around Landscape Roses

Many herbicides have been evaluated over the years for use in rose production fields. For landscape plantings, several herbicides may be used, if labels permit, to reduce weed populations around roses. In tests, the pre-emergent herbicides oryzalin (Surflan), pendimethalin (Pendulum), fluazifop-p-butyl (Fulisade, Ornamec), sethoxydim (Poast) and clethodim (Select) did not injure plants when applied at label rates over-the-top of plants just emerging from dormancy (early February). Similarly, when applied over-the-top of growing plants in early summer (late May), fluazifop-p-butyl, sethoxydim and clethodim did not injure rose plants.

However, injury occurred to growing rose plants from over-the-top applications of herbicides containing phenoxy herbicides or analogs (e.g. Trimec) or herbicides containing

glyphosate (Roundup). Injury was moderate when application of phenoxy compounds or glyphosate was made over-the-top as roses began emerge from dormancy. Early summer application of these herbicides caused severe injury. Roses are quite sensitive to glyphosate, which may be absorbed through green stems in addition to leaves. Low rates of glyphosate may not kill plants immediately but injury may be apparent the following season.

Isoxaben (Gallery) may be useful because of its weed spectrum and is probably not phytotoxic if used at low rates, although isoxaben has not been evaluated by us in landscape rose plantings.