



DAVIS ARBORETUM R E V I E W

OUR 67th YEAR

No. 40 FALL 2002

Container Gardening in the Central Valley

G

rowing plants in containers is a popular way to bring the beauty of the garden closer to our daily lives. Even the smallest patio, porch or windowsill can be used as a growing area to provide color and fragrance within arm's reach. Large containers can be used to create lush and colorful effects and

to focus the high water-using plants in a concentrated area. Container plantings offer another benefit—mobility. This allows the gardener to move plants to where they are most needed, either to brighten an area of the garden with accent and color or to move plants out of sight during a less attractive season.

PLANTING YOUR CONTAINERS

Beautiful container plantings depend upon a pleasing combination of plant and pot. Plastic, clay, glazed ceramic and wood are the most commonly used materials for pots. Pots come in many shapes and sizes. Whatever container you select, it needs to have a drainage hole in the bottom, be large enough to hold sufficient soil and water to supply your plant between irrigations, and be able to stand up to contact with moist soil for a prolonged period. Avoid treated lumber and metals which might release compounds toxic to plant roots and thin plastics which

break down rapidly. Plastic and glazed materials will lose less moisture through the sides of the pot than clay. Thicker-walled pots will help keep the plant's roots cooler during the extreme heat of summer, and reduce your need to irrigate.

Once you have selected the container you prefer, you can select your plants. Some people prefer simple plantings, such as a kumquat and ground cover, while others desire colorful and complex plantings with a variety of plants. When combining plants be sure they

have similar light and water requirements. Look for shade plants for shady areas and heat- and sun-tolerant plants for containers that will be in full sun.

Consider a variety of textures and colors. Combine fine-textured grasses with upright forms, broad bold leaves on rounded plants, and trailing plants with silver foliage or maroon foliage. Select long-blooming varieties such as *Verbena* which will provide color during the long hot summer and bold,

evergreen foliage for structure in winter.

Pay attention to flower and foliage colors and find the combinations that you enjoy the most. Succulents can be combined for attractive and colorful plantings which are tough and heat-tolerant.



A single, large urn is joined by a cluster of containers featuring plants with varied foliage color and texture. See this and other container plantings at the Arboretum Terrace. Photo by Ellen Zagory.

While we have used mainly perennials in our containers at the Arboretum Terrace, annuals can be added to brighten any container. Avoid high water-using annuals such as coleus unless you can irrigate every day during our hottest summer days and provide shade from the hot sun.



SOIL AND WATER ARE IMPORTANT

Container plantings differ from landscape plants in their need for irrigation. Limited root volume does not allow roots to spread far in search of moisture and nutrients. For Valley gardeners the combination of high summer temperatures and sometimes fierce north winds can dry out containers and stress newly-installed plants. Roots in containers are also exposed to high temperatures, especially in mid-morning and mid-afternoon when the sun shines directly on the side of the pot. Irrigating during these times will help cool the roots and reduce heat damage.

When filling your container with soil, leave an inch or more at the top of the pot so that you can fill it with water over the entire surface of the container. Water applied to only one side will wet the roots on only one side—and leave your other plants high and dry. Always apply water until you see water drain from the bottom of the pot. This “leaching” will help prevent the buildup of minerals and salts that can damage your plants. Do not allow water to stand in saucers below the pots.

The type of soil that you use in a container is important. Avoid soils from your back yard, which can carry weeds and disease organisms and tend to shrink away from the sides of the container, creating channels that prevent water from reaching the plant roots. There are many good potting soils available from local nurseries—ask nursery staff to recommend the best one. These soils hold moisture while at the same time providing good drainage and oxygen necessary for root growth. Container soils need to be looser and have larger particle size than native soils because of a unique phenomenon: the bottom of a container has an area of soil saturated with water

whose depth depends upon the particle size. The smaller the particles, the deeper the saturated zone—an area without oxygen where roots cannot grow.



Fertilize your container garden each season with complete fertilizers

containing the three major nutrients, nitrogen, phosphorus and potassium, following the label recommendations. Do not over-apply fertilizer or you may burn your plants. Slow-release fertilizers are available that require less frequent application.

— Ellen Zagory
Arboretum Garden Manager

Salvia officinalis 'Tricolor' (above left) has been a successful container plant in the Arboretum Terrace Garden. Above right, low-growing, rounded *Echeveria 'Imbricata'* is set off by the sword-like leaves of *Neomarica caerulea*.

Selected Container Plants for the Central Valley

These plants have done well in containers at the Arboretum Terrace home demonstration garden.

CORAL ALOE

Aloe hybrid

Liliaceae

Hardy succulent with showy coral-orange blooms in early spring. Attractive to hummingbirds. Prefers sun and regular watering but is drought-tolerant. "Pups" forming at the base can be separated and shared with friends.

HENS AND CHICKS

Echeveria 'Imbricata'

Crassulaceae

This adaptable succulent has beautiful blue foliage attractive for use in the front of the container. Tolerates sun or partial shade and produces attractive yellow and pink blooms in spring and summer. Easily propagated and useful for ground cover under taller plants.

MEXICAN BUSH SEDUM

Sedum praealtum

Crassulaceae

A shrubby succulent to 2-3 feet tall, this plant has apple green leaves and showy bright yellow flowers in spring. Easy to grow; will spread to 3-4 feet wide if left unpruned.

LEBANESE OREGANO

Origanum libanoticum

Lamiaceae

Many ornamental oreganos are now available in various sizes, flower colors and forms, and all make excellent candidates for container gardens. The Lebanese oregano is a cascading form with showy pink and green bracts which spill over the container edge and add attractive hanging elements to the planting. Prefers sun and is somewhat drought tolerant.

LICORICE PLANT

Helichrysum petiolare

Asteraceae

This tender plant is frequently used in containers because of its silvery-silky foliage, rapid growth and sprawling habit. An excellent accent to many plants; especially attractive with purple and lavender plants. Likes sun or part shade and needs regular watering.

ORANGE NEW ZEALAND SEDGE

Carex testacea

Cyperaceae

A grass-like, fine textured plant useful for contrast with bold foliage and flowers. In winter foliage glows, forming an attractive 1-2 foot orange-bronze puff of foliage. Flowers are insignificant and plants will color better in sunny exposures. Prefers regular water.

JOUBERT PASS EVERLASTING

Helichrysum "Joubert Pass"

Asteraceae

A new introduction from the Denver Botanic Garden, this South African native has attractive pure white cascading foliage, excellent for use in container plantings. Rayless yellow flowers are not significant. Likes full sun and regular watering.

SUNDOWNER FLAX LILY

Phormium 'Sundowner'

Agavaceae

One of many available variegated flax lilies. These colorful hybrids perform well in containers and provide an attractive spiky vertical form useful for accent. Use dwarf forms, as species flax lilies will quickly outgrow most containers. Likes shade in the afternoon and regular irrigation.

KANGAROO PAW

Anigozanthos flavidus

Haemodoraceae

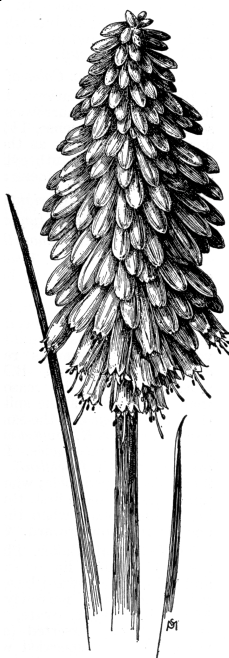
This Australian native has spiky foliage and produces colorful, fuzzy flowers shaped like little "paws". Needs full sun, regular water, and protection from sub-freezing temperatures. Red-flowered and dwarf forms also available. Makes a good cut flower.

HOT POKER PLANT

Kniphofia, dwarf forms

Liliaceae

Narrow vertical foliage produces long spikes of yellow or orange flowers in spring. Species produce plants too large for most containers, but new dwarf forms are excellent in containers to provide height and a spiky form. Flowers in columns at the end of bare stalks provide an exotic accent and can be used as cut flowers. These South African natives need sun and regular water to bloom well.



Kniphofia

MOSS VERBENA

Verbena tenuisecta selections

Verbenaceae

Verbenas are heat- and sun-loving plants that produce flowers all spring and summer. They hug the ground and will cascade down the outside of the pot. Available in purple, white, lavender and pink, this species is resistant to leafminer insects which plague other species of verbena.

DEEP BLUE LILY-OF-THE-NILE

Agapanthus 'Ellamae'

Liliaceae

One of the most common perennials in California, agapanthus are frequently used in urban landscaping, although in hot Valley summers the blue flowers fade. This deep-blue selection holds its color during our hottest days, making it a valuable addition to the summer garden. Protect from afternoon sun to avoid leaf burn.