# Don't plant a pest!

# Give them an inch and they'll take an acre...



Suggested alternatives for invasive garden plants
More alternatives listed at the California Invasive Plant Council website: www.cal-ipc.org

Southern California Version

# **Gardening Responsibly**

California is a gardener's dream. Our mild climate allows us to have fantastic gardens, showcasing a wide variety of ornamental plants from all around the world. Unfortunately, some of these plants from other parts of the world have become serious invasive plants, threatening California's biodiversity and economy. That's because some of our garden plants don't stay in our garden. They "jump the fence" when seed, root or stem fragments spread to our natural areas. Once established in our natural areas, these plants grow so fast that they crowd out native vegetation, block streams causing flooding, and produce so much

biomass that they become serious fire hazards. They also increase landscaping maintenance costs and contribute to the loss of recreational opportunities in our natural areas. Once invasive plants spread and take over natural areas, public resources are required to restore these lands.



Pampas grass invading a natural area in Carlsbad, CA, where it has become a fire and flood hazard.

Gardeners don't plant invasive or fire prone species intentionally. Like other Californians, gardeners have a deep respect for our state's rich natural heritage. The good news is that most garden plants behave perfectly well in their intended roles. By choosing suitable replacements for the few problem plants, we can save ourselves and our neighbors trouble and expense while helping to protect California's natural landscape from invasive plants. Not to mention reducing the risk of flood and fire damage to our homes and property!

Invasive plants are by nature a regional or local problem. A plant that jumps out of the garden in one climate and habitat type may behave perfectly in another. The problem plants listed here have escaped from gardens throughout the Southern California area. They are invading natural areas (see www.cal-ipc.org for photos of escaped plants). Because of their aggressive and rapid growth, some invasive non-native plants have also increased the flood and fire risk of our natural areas.

#### How to use this brochure:

This brochure features the most common invasive non-native pest plants that are sold in nurseries, and suggests safe alternatives for these plants. For a more extensive list of invasive non-native plants that are sold in nurseries and suggested alternatives, visit www.cal-ipc.org or CNPS websites listed on the back of this brochure. The alternatives listed are acceptable for vegetation management zones because they can be pruned to decrease the accumulation of deadwood.

When you are buying new plants, consider these alternatives, or ask your local nursery for other non-invasive, non-fire hazard plants. If one of the invasive or fire prone plants is already in your yard, especially if you live near a natural area, we recommend that you remove it and replace it with a suggested alternative. Invasive plants that spread aggressively by seed should be removed from all areas.



part shade



♠ medium water







Think about why you might plant one of the problem plants in the first place. If it is for appearance, finding a replacement is often easy - some of the alternatives listed here are selected especially for their similar appearance. If you need a plant to fill a functional role, such as a groundcover that grows well in a shady place, or a border plant that likes full sun, the alternatives listed here thrive in the same environments as problem plants. Care has been taken to suggest both California native plants, for those wishing to rediscover some of California's unique native plant heritage, as well as non-invasive non-native alternatives. Many of these alternatives are readily available, though others may be easiest to find in specialty or native plant nurseries.

Both native and non-invasive non-native plants have been recommended as alternatives in this brochure. When landscaping adjacent to natural lands or preserves, we recommend you use locally native California plants. Care has been taken to ensure that none of the recommended non-natives are invasive or a fire hazard. However, plants can adapt over time, and there is no guarantee that some of these plants will not themselves become pests in the future. If the recommended alternatives are not watered or pruned, they too may become a fire hazard over time. If you notice one of these alternatives invading natural areas, notify Cal-IPC. Pay close attention to plant names, since a few of our recommended plants may have invasive relatives - even in the same genus or family.

Invasive plants such as pampas grass (Cortaderia), fountain grass (Pennisetum), and broom species have many cultivars and varieties. Until these cultivars and varieties can be independently tested and verified, they are not recommended as substitutes.

# **GROUND COVERS**

#### **DO NOT PLANT!**

#### DO NOT PLANT!

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iceplant or hottentot fig (Carpobrotus edulis)

This vigorous groundcover forms impenetrable mats that compete

directly with native vegetation, including several rare and threatened plants. Small mammals can carry seeds of iceplant from landscape settings to nearby natural areas. Pieces of the plant can be washed into storm drains and into natural areas where they become established.



English ivy, Irish ivy, and Algerian ivy (Hedera helix, H. hibernica, H. caneriensis)

Some ivy species in the Hedera genus are a problem in California. They can smother

under-story vegetation, kill trees, and harbor non-native rats and snails. It's difficult to distinguish problem species from less invasive ones. Do not plant ivy near natural areas, never dispose ivy cuttings into natural areas, and maintain ivy so it never goes to fruit.

Photo courtesy Missouri Botanical Garden



periwinkle

(Vinca major) This aggressive grower has trailing stems that root wherever they touch the soil. Their ability to resprout from stem fragments enables periwinkle to

spread rapidly in shady creeks and drainages, smothering the native plant community. Also avoid: cape ivy/ German ivy (Delairea odorata). Photo by Richard Old www.xidservices.com

Photos of these plants invading natural lands and open spaces can be viewed at www.cal-ipc.org

#### TRY THESE GROUND COVERS INSTEAD

wall germander (Teucrium chamaedrys, T. lucidrys) 💢 🐞 💍





This plant can be sheared into a neat groundcover or allowed to grow to full height (about one foot), and produces lavender flowers in the spring. Compact cultivars are available.

Photo courtesy Missouri Botanical PlantFinder

San Diego marsh elder (Iva hayesiana)



This fast growing native is widely used for slope coverage and erosion control. Grows 1'-2' tall and 4'-6' across with inconspicuous flowers.

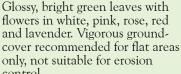


Summer watering will help maintain a more lush appearance. Prune annually to encourage new growth.



ivy geranium

(Pelargonium peltatum)



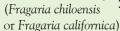
Also try: elijah blue fescue (Festuca cinerea 'Elijah Blue')

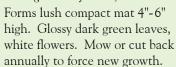


ivory star jasmine or asian jasmine (Trachelospermum species)

Evergreen, vining groundcover up to 20' across. Has glossy, dark green leaves and pale yellow, pinwheelshaped flowers with a jasmine scent.

beach strawberry



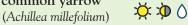






common yarrow

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Perennial groundcover from 1'-4' high. Can be used as a lawn substitute, will tolerate foot traffic. Produces white flowers and should be pruned or mowed annually.

Also try: California wild grape (Vitis californica or V. girdiana), yerba mansa (Anemopsis californica), bear's foot hellebore (Helleborus foetidus), California honeysuckle (Lonicera subspicata var. denudata) or winter saxifrage (Bergenia cordifolia and hybrids)

# ORNAMENTAL GRASSES

#### DO NOT PLANT!

#### **REMOVE**

#### DO NOT PLANT!



#### fountain grass

(Pennisetum setaceum and all cultivars and varieties) Spreads aggressively by seed into natural areas by wind, water, or vehicles. Fast grower, impedes the growth of locally native plant species and eventually takes over natural areas. Also raises fuel loads and fire frequency in natural areas. Cultivars and varieties of this species, Pennisetum setaceum, should also be avoided.



#### pampas grass

(Cortaderia selloana, C. jubata 🙆 and all cultivars and varieties)

Wind can carry the tiny seeds up to 20 miles. The massive size of each pampas grass plant with its accumulated litter reduces wildlife habitat, limits recreational

opportunities in natural lands, and creates a serious fire and flood hazard. Sharp blades are hazardous to people, and plants harbor pests such as rats and snakes. 'Sterile' varieties of this plant have not been independently verified or tested and are not recommended as substitutes.

Photos of these plants invading natural lands and open spaces can be viewed at www.cal-ipc.org

#### TRY THESE GRASSES AND GRASS-LIKE PLANTS INSTEAD



Photo courtesy GardenSoft

blue oat grass (Helictotrichon sembervirens)

Evergreen, bright blue-gray, narrow leaves in fountain-like clump, 2'-3' high and wide.



#### deer grass

(Muhlenbergia rigens)



Clumping perennial grass growing up to 3' tall with 2' plumes rising above the plant. Native to California, Native Americans used it for making baskets.

#### California fescue (Festuca californica)



Native bunch grass grows 2'-3' tall, flower stalks reach 5' tall, blue-green leaves.

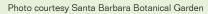


Photo courtesy Santa Barbara Botanical Garden

#### San Diego sedge (Carex spissa)



This large sedge has a form similar to that of an ornamental grass. Produces gray leaves to 5' tall and yellow, grasslike flowers in the spring.







#### lavender

(Lavandula species)



With their purple flowers, lavenders can easily replace fountain grass. There are many species and varieties of lavender.

Sweet lavender is able to tolerate a wide range of conditions including heat, humidity and cold. Other popular varieties of lavender are goodwin creek gray, French, and English lavender. They are fragrant and grow to about 1 1/2' - 2' tall and bloom with bright lavender flowers which can be dried for lavender fragrance.

Also try: purple needle grass (Nassella pulchra), purple three awn (Aristida purpurea), or alkali dropseed (Sporobolis airoides)



giant wild rye (Leymus condensatus)



Large clumping grass 4'-5' across and reaches 6'-8' tall in bloom. Distinct silver-gray foliage, prune annually to encourage new growth.

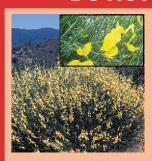
Also try: Bigelow's bear grass (Nolina bigelovii)

# **SHRUBS**

#### **DO NOT PLANT!**

#### **REMOVE**

#### DO NOT PLANT!



broom (bridal, French, Portuguese, Scotch, Spanish)

(Retama monosperma, Genista monspessulana, Cytisus striatus, Cytisus scoparius, and Spartium junceum)

Brooms have invaded over one million acres in California. The flowers produce thousands of seeds that build up in the soil over time,

creating dense thickets that obliterate entire plant and animal communities. Grows quickly, easily creating a fire hazard in residential landscapes. 'Sterile' varieties of these plants haven't been independently verified or tested and are not recommended as substitutes.

Photo courtesy Joseph M. DiTomaso



acacia or western coastal wattle (Acacia cyclops)

Coastal wattle has invaded many natural areas in southern California including wetlands and dry hillsides. It grows fast, quickly out competing any surrounding native plants and produces large amounts of seed,

ensuring its success. It grows so fast it's sure to take over your garden as well. Also avoid green wattle (*Acacia decurrens*) and golden wattle (*Acacia longifolia*).

Photos of these plants invading natural lands and open spaces can be viewed at www.cal-ipc.org

#### TRY THESE SHRUBS INSTEAD



bush marigold (Tagetes lemmonii)

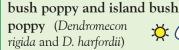
Perennial shrub that can grow up to 6' tall. Evergreen leaves with yellow flowers that bloom in winter and spring.

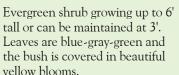


pineapple guava (Acca sellowiana or Feijoa sellowiana)

This evergreen shrub has scarlet and white flowers, as delicious as they are beautiful, and waxy blue-green fruits with a minty-pineapple flavor. It is easily shaped into a small tree.

Photo copyright 2003 by Floridata.com







lemonade berry (Rhus integrifolia)



California native evergreen shrub with white to pink flowers and red berries. Makes a great hedge or screen. Areas with frost may have better luck with its sister plant sugar bush (*Rhus ovata*).



Cleveland sage (Salvia clevelandii)

A California native with graceful silvery-green leaves, arching branches, and whorls of purple flowers in spring and summer. Grows up to 4' tall.

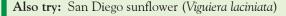
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coffeeberry (Rhamnus californica)



Attractive native California shrub, 6'-8' high. Bears black berries and tolerates all soil types. Ideal as a background or screen plant.

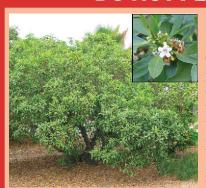


Also try: holly-leaf cherry (Prunus ilicifolia ssp. ilicifolia)

# **SHRUBS**

# **PALMS**

#### **DO NOT PLANT!**



myoporum (Myoporum laetum)

Grows aggressively and produces many seeds, creating dense stands which displace surrounding native vegetation. Seeds are also spread by birds. The outside of the plant is lush and green but the interior of large

plants accumulates many dead branches, making the plant a potential fire hazard.

#### DO NOT PLANT! REMOVE



Mexican fan palm and Canary Island date palm

(Washingtonia robusta and Phoenix canariensis)

Did you know that palm trees are not native to coastal southern California? Most palms are good garden plants but these two species of palms are extremely invasive- quickly becoming a pest in your garden and natural areas. Birds spread the fruits of these two palms into areas

where they grow quickly, displacing native trees and other plants, decreasing the biodiversity of our natural areas. Dense groups of palms with untrimmed fronds harbor rats and snakes and can be a fire hazard.

Photos of these plants invading natural lands and open spaces can be viewed at www.cal-ipc.org

#### TRY THESE SHRUBS INSTEAD



toyon or Christmas berry (Heteromeles arbutifolia)



This California native is an evergreen shrub that produces delicate white flowers and large clusters of brilliant red berries that birds love. Can be pruned into a small tree.

#### sandankwa viburnum

(Viburnum suspensum)



This evergreen shrub produces tight clusters of small, waxy, pinkish-white flowers that give way to bright red berries. Several compact varieties are available.
Photo courtesy Mark Shelby, University of Florida-IFAS Extension





spiny redberry (Rhamnus crocea)



Medium evergreen California native shrub. Grows 4'-10' tall, equally high as wide. Produces beautiful red berries in springtime.

Photo courtesy www.californiachapparal.com

Also try: Pacific wax myrtle (Myrica californica)

#### TRY THESE PALMS INSTEAD



king palm

(Archontophoenix cunninghamiana)





Can grow up to 50' tall, with beautiful clustered amethyst flowers. Recommended for frost-free areas.

#### pindo palms, jelly palms

(Butia capitata)



Can grow up to 20' tall. Grey-green foliage with red flowers and edible fruits. Tolerates frost, heat, aridity, and poor soils.





blue hesper palm (Brahea armata)



Blue-gray fronds with showy creamy yellow infloresences. Can grow up to 45' tall. Grows well in coastal, inland, valley and desert areas

Also try: Mediterranean fan palm (Chamaerops humilis), Guadalupe palm (Brahea edulis), Chilean wine palm (Jubaea chilensis), California fan palm (Washingtonia filifera)

# **TREES**

#### **DO NOT PLANT!**

#### DO NOT PLANT!

Brazilian pepper (Schinus terebinthifolius)



Pepper trees are not from California, they are from South America. Seeds are transported by birds and mammals into natural areas. The aggressive growth of peppers enables them to displace native trees and form dense

thickets in natural areas. They can also take over your yard and become a maintenance nightmare. They produce undesirable suckering and sprout countless unwanted seedlings throughout any landscape.



eucalytpus, blue gum, and red gum

(Eucalyptus globulus, E. camaldulensis)

Grows aggressively, displacing surrounding native plants. Excessive leaf litter and shade eliminates understory plants. Fire departments throughout Southern California recommend against using eucalyptus trees for landscaping.

Also avoid: tree of heaven (Ailanthus altissima), bailey acacia (Acacia baileyana), Tamarisk species (Tamarix spp.), and Peruvian or 'California' pepper (Schinus molle)

Photos of these plants invading natural lands and open spaces can be viewed at www.cal-ipc.org

### TRY THESE TREES INSTEAD



strawberry tree (Arbutus unedo)



A gorgeous evergreen tree or large shrub, grows 8'-35' tall. It produces masses of beautiful white flowers, and textured, strawberry-like fruits. Photo courtesy Bob Perry



Australian willow (Geijera parvifolia)



Evergreen tree reaches a height of 25'-30' tall, with 3"-6" long, narrow, medium green colored leaves. Its main branches sweep up and out, while the smaller branches tend to hang down.



pods! Grows 20'-30' tall. Photo courtesy Bob Perry



coast live oak (Quercus agrifolia)

Evergreen tree that can reach 40' tall and 20' wide. Native to California, drought tolerant and attracts many birds and butterflies to your garden.

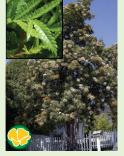








(Podocarpus gracilor) Evergreen tree, grows 20'-60' tall. Makes an excellent street tree or individual specimen in a park setting. One of the most pest-free trees, able to tolerate a variety of soil conditions and temperatures. Can also be used as a hedge or screen plant. Many species and varieties are available in nurseries.



Catalina ironwood and fernleaved Catalina ironwood

(Lyonothamnus floribundus and L. floribundus ssp. aspleniifolius)

Medium to large slender, 🌣 🌣 💍 upright tree with glossy green leaves. Grows 30'-60' tall. Photo courtesy Bob Perry

Also try: California sycamore (Platanus racemosa), canyon live oak (Quercus chrysolepis), Engelmann oak (Quercus engelmannii)



## Don't Plant a Pest - Alternatives to invasive garden plants

Based on a brochure by the California Invasive Plant Council



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