

# Questions

When is the right time to plant daylilies?

## North

In the North, spring planting is normally preferred. Fall planting in colder climates can prove fatal for daylilies because they often do not have adequate time to form new roots and to begin to anchor themselves before winter comes. Experienced gardeners, however, can plant in the fall provided they:

- Know the hardiness of the plants
- Take some preventative measures such as mulching.
- Learn the time of the year after which it is not safe to plant in their location

## South

In the far South, early spring or very late fall are the most desirable planting times. Please be aware that daylilies planted in July, August, or September when temperatures and humidity are extremely high (i.e., over 90°), face a high probability of rotting.

Where is the best place to plant daylilies?

You need to consider four things in determining where to plant your daylilies:

## Sun or Shade

Most daylilies do best in full sun. They will tolerate part-shade conditions, but require a minimum of six hours of direct sun per day.

- Light yellow cultivars, many shades of pink, and delicate pastels need full sun to bring out their lovely colorings.
- Many red and purple cultivars benefit from partial shade in the hottest part of the day because dark colors absorb heat and do not withstand the sun as well as lighter colors.

## Type of Soil

Like most plants, daylilies show maximum performance in soils with good aeration, fertility and microbial activity. The ideal soil holds sufficient moisture to sustain the plants, yet is at the same time well-drained. These characteristics can be improved in soils that have too much sand or clay by amending with compost.

## Drainage

For maximum performance, daylilies should be planted in well-drained soil. In some regions raised beds may be beneficial where drainage is a problem. However raised beds should be

approached with caution in cold winter regions as being elevated can make the plants more vulnerable to temperature extremes and fluctuations. Note also that raised beds generally require more irrigation during the summer.

### **Compatibility with Other Plants**

Daylilies may not do well near or under trees that compete for moisture and nutrients. They are often reported to do well under pine trees, however, and each situation should be assessed individually. Plants that must compete with tree roots often do better if supplied with extra waterings.

How do I plant my daylilies?

When you receive your new daylilies, use the following technique for planting them.

### **All Plants Are Received**

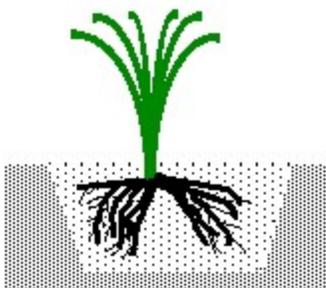
New daylily plants received bare-root by mail may be “parked” in damp sand or other suitable media until they can be planted. Many daylily enthusiasts like to soak the roots for a few hours or overnight in a bucket of water, however others do not agree with this practice. Some gardeners also include a weak fertilizer in the soaking water, but this isn’t necessary and, if too strong a solution, may actually be detrimental.

### **Before Planting**

Make sure that your daylilies are clean and healthy before planting them.

### **Prepare the Soil**

The soil where you intend to plant your daylilies should be worked into a good loose condition to a depth of at least 1 foot.

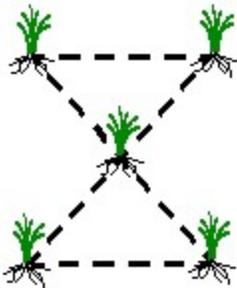


- Dig a hole larger than the root mass.
- Make a mound in the center of the hole.
- Set the plant in place with the roots spread on all sides of the mound.
- New plants should be planted about as deep as they grew originally. The original depth can be determined easily by the band of white at the base of the foliage which indicates the part of the plant which was underground.

- Do not set the crown (i.e., the point where foliage and roots join) more than 1 inch below the surface of the soil.
- Work the soil around and between the roots as you cover the plant.
- Firm the soil and water well.
- Make sure that there are no air pockets; this can cause the plant to grow poorly.
- When all the water has soaked in, finish filling in the soil, leaving a slight depression around the plant.

## Spacing

Daylilies should be spaced no less than 18 to 24 inches apart on each side.



## Labeling

Label each of your daylilies with some type of permanent marker so as to identify them. A plant loses much of its value when its identification is lost.

How do I care for my daylilies?

The wise daylily gardener will apply a proper cultural program which includes watering, fertilizing, mulching, possibly spraying, grooming, controlling weeds, and sanitation.

## Watering

Water is essential for good daylily performance.

- Water, supplied in sufficient amounts, almost certainly increases the number and size of daylily blooms.
- For daylilies, watering is most important in spring when the plants are making scapes and buds, and in the summer during the bloom season.
- Daylilies benefit more from deep watering, which reaches 8 to 10 inches into the soil, than from a succession of brief, surface waterings.
- Caution 1: Overhead watering during the heat of the day will cause any open blooms to spot and/or wilt.
- Caution 2: Watering in the evening can also cause spots on the next day's blooms.
- Caution 3: Be careful not to over water.

## Fertilizing

Daylilies grow in a wide range of soils and conditions.

- To determine the nutrient needs of your soil, take a soil sample and have it analyzed. Contact your local county agricultural agent for instructions.
- Daylilies can do well over a relatively wide soil pH range and adjustment of pH need only be considered if the plants appear to be doing poorly. A soil test as recommended above should always be conducted before amending with sulfur or lime.
- In the average home garden, a single fertilizer application in the spring is usually sufficient, although even that may not be necessary every year.
- In extremely poor soils or on light or sandy soils which tend to leach badly, more frequent application may be required. Consult with your local agriculture office for recommendations suitable to your soil and climate.

### **Mulching**

Mulching, although not essential in every area, generally does contribute to better daylilies by improving the soil and helping retain moisture.

### **Grooming**

Keep your garden neat and tidy.

- Many gardeners remove the day's blooms at the end of the day to give their gardens a pristine appearance.
- If you hybridize, expect to leave the pollinated blooms on the plants until the blossom sheds and the tiny seed pod is formed.

### **Controlling Weeds**

The most effective weed control measures for the home garden are mulching and hoeing.

### **Sanitation**

Proper sanitation measures lead to healthier daylilies.

- In the spring, dead foliage and debris should be cleared away from around your daylilies.
- During the growing season, damaged or diseased foliage should be removed.
- At the end of the bloom season, cut off the bloom scapes to within a few inches of the ground unless you are hybridizing.

What pests affect daylilies?

Daylilies do have some pests, but many do only minor damage. Some diseases also affect daylilies, they too are listed below.

### **Aphids**

Daylilies have their own specific aphid which feeds only on daylilies.

- Aphids are most active in cool weather – spring and fall in temperate zones, and all winter long in the subtropics.
- Controlling daylily aphids is not as easy as with other kinds of aphids, which are usually vulnerable to such soft controls as soaps.
- In order to reach daylily aphids inside the fans, a pesticide with at least a mildly systemic action is needed.
- Do not use the pesticide Kelthane, which is known to harm daylilies.

### **Spider Mites**

Spider mites are among the most common daylily pests.

- Spider mites are most active in hot, dry weather.
- You can get some control of spider mites just by hosing them off as needed.
- Again, do not use the pesticide Kelthane; it is known to harm daylilies.

### **Thrips**

Several species of thrips are known to infest daylilies.

- Control thrips by starting early in the growing season with a pesticide having either a systemic or long residual action.
- To repeat, do not use the pesticide Kelthane.

### **Slugs and Snails**

Slugs and snails feed on the young, tender tissues, causing ragged edges and holes.

- They feed at night and hide during the day in cool, moist places, such as in mulch, under rocks and bricks, and in dead foliage.
- Sanitation helps to control slugs and snails. Otherwise, control requires using pesticides which are targeted specifically at these pests.

### **Other Pests**

There are other pests that attack daylilies.

- Other insect pests which have been reported affecting daylilies include cutworms, tarnished plant bugs, cucumber beetles, wasps, Japanese beetles, grasshoppers, and periodical cicadas.
- Bulb mites may be involved in the transmittal of crown rot.
- Deer will sometimes eat daylily flower buds.

What diseases affect daylilies?

Most gardeners with a mix of different plants intermingled in their gardens should have little trouble with diseases in daylilies. However, large collections with many plants of a single genus are more likely to encounter problems, especially if those plants are acquired from a large number of different sources.

Environmental conditions and gardening practices inevitably play a role in the development of diseases. Some cultivars may also be less adaptable to different conditions/climates, or less resistant to certain diseases, than are other cultivars.

Older, inexpensive daylily cultivars that remain in wide circulation may be a better starting choice for the inexperienced gardener/daylily enthusiast than more recent introductions not yet tested under a wide range of conditions in many different gardens.

Some daylily diseases and disorders are relatively easy for the home gardener to identify. Others, such as the various forms of crown and root rots, are more difficult and if these become a concern it is advisable to seek a professional laboratory diagnosis. It is important also to know what is normal, for instance a new daylily collector may mistake “summer dormancy” for plant death or disease.

The major daylily diseases and disorders of concern are:

### **Daylily Rust**

- Caused by a fungus (*Pucciniahemerocallidis*)
- Orange-yellow powdery spots on leaves and scapes
- Orange-yellow spores mark white tissue when leaves wiped
- Leaves may die back but the plant as a whole should survive
- Some cultivars more susceptible than others, but since this is a new disease in North America this information is currently being collected
- Provide good air circulation and planting distances and minimize overhead watering
- Avoid excessive nitrogen and inadequate potassium nutrition
- Unlikely to persist where all foliage dies back in winter (or roughly Zone 6 and colder) although may be able to do so where there are plants of the alternate host, patrinia
- Appropriate fungicides may be used

### **Crown and Root Rots**

- Plant yellows and may collapse, leaves may pull out easily, affected tissue is often mushy and plant may die. Signs of a fungus may be visible, e.g. “shoestrings” for Armillaria rot, and “mustard seeds” for southern blight (*Sclerotium rolfsii*), otherwise exact diagnosis requires submission to a diagnostic laboratory
- Foul smell may, or may not, be present
- May involve a combination of factors such as nematodes, bulb mite or other pest damage, fungal and/or bacterial pathogens (disease causing agents), weather conditions, gardening practices, soil aeration and moisture conditions
- Some cultivars may be more susceptible than others
- Of particular concern in warmer climates but may also occur elsewhere

- Ensure adequate soil aeration and drainage
- Avoid or correct areas of poor air circulation
- Avoid too much or too little water and don't over-estimate water needs in periods of high humidity (check soil moisture before watering)
- Avoid over-fertilizing-Avoid over-amending with high water-retentive organic materials
- Remember that high temperatures increase transplanting stress and try to avoid if possible
- Don't plant too deep
- Let wounds from dividing air-dry in the shade before re-planting
- Remember that plants in pots are subject to more extreme root/crown temperatures (and therefore stress) than those in the ground
- Treatment differs according to causative agent/s so get laboratory diagnosis of persistent rot problem

### **Leaf Streak**

- Caused by a fungus (*Aureobasidiummicrostictum*)
- Brown spots, yellow streaking, and die-back of foliage but not death of plant
- May require injury such as pest or frost damage in order to infect
- Appropriate fungicides may help

### **Spring Sickness**

- Foliage is twisted, bending, stunted and discolored on some fans in early spring
- Affected fans may, or may not, recover and bloom normally that season
- Exact cause is unknown
- Probably not a disease
- Not caused by cold damage following shoot emergence
- May involve a combination of contributing factors possibly including, but not necessarily limited to, bulb mites and the leaf streak fungus.