

## LILACS

Lilacs have been in cultivation at least five hundred years. Twenty-eight species have been crossbred and hybridized to produce hundreds of different varieties. Lilacs are deciduous shrubs, three to twenty feet tall, with showy, fragrant panicles of spring blooms. The flowers may be white, pink, lavender, purple and yellow with single or double florets.



Lilacs belong to the genus, *Syringa*, belonging to the olive family. The name “Syringa” is derived from a word meaning “pipe”. An old common name for lilac was pipe-tree. *Syringa* has also been used when referring to mock orange shrubs (actually in the genus *Philadelphus*) because shepherd’s pipes used to be made from the pithy stems.

**HARDINESS:** Plant lilacs with confidence--they are reliable plants. Look how they survive in homesteads that have been abandoned for generations. Treatment can be rough and still lilacs respond. They are definitely recommended for the beginning gardener. Very few other plants have the reputation of surviving 50° below zero temperatures. In fact, most lilacs must have a dormant season to bloom well.

**PLANTING:** Lilacs can be planted spring, summer or early fall. The ideal time is in the early spring while lilacs are still dormant.

Lilacs need to be planted where there is lots of sun (six hours minimum, but more is better) and good drainage. If the site is clay or compacted, amend the entire lilac bed, not just the planting hole. Use bagged steer manure, aged manure, compost or other organic materials.

The planting hole should be wide enough to spread roots without crowding and deep enough to allow the lilac to be set no more than 1-2 inches deeper than original setting. If a plant is set deeper the plant will be slow to establish or may even die from rot at the base. Leave at least one foot of cleared space around newly planted lilacs.

Soil moisture the first year is critical. Drought stress, even for a short time, will restrict growth and may even retard plant establishment. Do not fertilize the first year. Don’t add plant starter mixes to planting hole.

**FERTILIZER:** Lilacs respond vigorously to regular, liberal amounts of fertilizer. Fertilize established (second year and after) lilacs in early spring, March or early April, with 5-10-5, 5-10-10, 10-10-10 or 20-20-20. Apply before growth has begun. Broadcast directly on soil over root zone. Slow release or organic fertilizers can be applied a little later in the season when soil has warmed. Avoid high nitrogen fertilizers, since you will get foliage at the expense of flowers, and you may encourage some diseases.

**PRUNING:** The buds containing the flower clusters are formed in the fall toward the tips of branches. Therefore, any extensive cutting during the dormant season will reduce the floral display the following spring. Dormant pruning is usually restricted to removal of dead wood, suckers, weak spindly wood, and disease-infected branches.

For flower show competition, you may want to deliberately reduce the number of flower buds, thus throwing more strength into remaining flowers. Light pruning to promote symmetry can be done as soon as the flowers begin to fade. Spent flowers can be cut off for good looks, but it is not absolutely necessary. Suckers may be cut off anytime, preferably under the soil line.

**SEVERE PRUNING:** For older plants that need complete renovation prune to within one foot of the ground. It must be recognized that severe pruning results in the loss of blooms for one to three years. For these reasons, a wise pruning program aims to avoid severe and drastic cuts by giving the bushes annual attention.

**PROPAGATION:** Lilacs may be propagated by seeds, cuttings, suckers, layering, and by budding and grafting.

**SELECTING VARIETIES:** In limited space *S. meyeri* 'Palibin' grows slowly and rarely over 4 feet. Blooms around June 1. Pale lilac to lilac purple.

Earliest blooming - *Syringa x hyacinthiflora*, which include Annabel-pink; Mt. Baker-white; Esther Staley-bicolor.



Midseason - *Syringa vulgaris* varieties: Charles Joly-magenta; Katherine Havemeyer-mixed pink and lilac; Ludwig Spaeth-single purple; Ellen Willmott-double white; President Grevy-double blue; Vestale-single white; Sensation-single purple with white edging; President Lincoln-single blue.

Late blooming - *Syringa prestoniae* varieties: Donald Wyman-purple; James MacFarlane-rosy pink; Miss Canada-red pink. These bloom around June 1 and need more space than other types of lilacs.

Very late blooming (early July) - Japanese Tree Lilacs

## PESTS

**Scale:** The most common is oyster shell scale, which is brownish or grayish in color and curved like an oyster shell. When full grown, the scale is about 1/8 inch long. In the fall, clusters of white eggs are deposited and the scale-like covering conceals them through winter until they hatch in late spring or early summer. At this time, very small, yellowish insects (called crawlers) move out from under the parent scale and settle in suitable spots where they become fixed and insert their beaks into the wood for absorption of food. In the summer, very badly infested branches should be cut out and destroyed. Scale insects are best controlled by dormant sprays of light-medium horticulture oil in late winter or early spring. Follow up with insecticidal soaps or Othene in June if crawlers are active. (You can see them with a magnifying glass or hand lens.) Follow label recommendations.

**Lilac Borer:** The lilac borer is the larval stage of a moth which appears late May or early June. In a short time, eggs are laid in cracks in the bark and soon hatch out into tiny larvae. They bore their way into tender stems, gradually increasing in size, feeding on woody tissues of the plant. The most effective control is pruning out infested branches. This is best done in early spring or late summer.



**Lilac Leafminer:** The adult is a small, brownish moth. Green larvae mine and roll leaves toward tips. Leafmining results in large, brown blotches. Rake up and destroy fallen leaves. Future problems can be avoided by clean garden practices. A chemical control may be necessary if the plant is suffering serious defoliation. Orthene is recommended for control. Read the label and spray when blotches are first noticed, or at least before the larvae roll the leaves. Repeat applications may be necessary.

**Root Weevils:** Root weevils are small beetles that live in the soil and feed on the edges of leaves at night. The black adult beetle is about 2/5 inch long and appears May through June. They evenly notch leaf edges. Leaf damage is mostly cosmetic and does not harm the health of the plant. However, if it is extensive, it is an indication that larval feeding may be injuring the roots.



For adult control, apply insecticide when the first signs of notching on new leaves are noticed (late May to June). Make applications towards evening since root weevil adults are nocturnal feeders. Control of the larval stage should be done in the fall. Orthene is recommended for both stages.

## DISEASES

**Powdery Mildew:** In the late summer or fall, leaves are likely to be more or less covered by a whitish fungal growth. Later in season, small dark, spherical fruiting bodies of the fungus appear. Prune shrubs for good air circulation. Do not try to grow lilacs in the shade. If mildew has been serious in previous years, apply a fungicide as soon as symptoms are first noticed. Several are labeled for mildew control on outdoor shrubs.

### **Lilac Blight (*Pseudomonas*)**

This bacterial blight appears most often in the spring when there are fluctuations in spring temperatures, along with frosts, cold rains and poor air circulation. Lilacs growing in shaded and overcrowded locations are especially liable to attacks.

It begins with brown blotches on new leaves. Later they begin to wilt and turn black. Leaves will drop and new green shoots have a sickly dark look to them. Affected areas may turn black rapidly and resemble Fireblight. Buds and blossoms will turn black as if hit by a severe frost.

Once infection has set in, immediate pruning is of no real value if weather continues to be cold and wet. Wait until warmer weather arrives, then prune out stems at least six inches below the infected area. Cut off all dead and blackened areas, then rake and discard or burn all cuttings. Disinfect pruners in 75% rubbing alcohol or strong bleach (1 part bleach to 3 parts water) between cuts, since the disease enters the plant through wounds. If adverse weather conditions continue, avoid using high nitrogen fertilizers in the spring, spray in the fall with Microcop Fungicide or Bordeaux mixtures that contain Copper Sulfate. The blight overwinters in diseased twigs, so spray again in spring before bud break. Read and follow label directions.

A lilac that is kept properly pruned in an open shape will be less susceptible to these bacteria. Use a liquid fertilizer (10-10-10) if needed to stimulate new growth after pruning.

### **Summer Blights (very difficult to distinguish from environmental problems):**

Diseases can attack drought-stressed lilacs. Often the disease is present but only becomes active after drought stress. Keeping lilacs healthy and growing vigorously is the best defense. Attention to the following will help:

1. Maintain optimum moisture in soil at all times. Do not water until the soil becomes saturated.
2. Keep a mulch layer of 2-3 inches.
3. Apply fertilizer in fall when plants lose their leaves.

**Symptoms of Drought:** Pale green to yellow leaves develop, defoliation may occur, sometimes followed by dieback. Plants wilt and growth is stunted.

**Symptoms of Waterlogging:** Leaves turn lighter-colored or yellow, plants wilt, especially the lower leaves. Improve soil structure for better drainage.

**Symptoms of deficiencies:** Deformed leaves usually result of nutrient deficiencies. Nitrogen and Magnesium shortages can resemble diseases.

**Soil acidity:** Get a soil test to check pH. Lilacs prefer alkaline soil of 6.5 to 7. Adding peat moss, compost or manures can lower the soil pH. Adding wood ashes can raise the pH to a more alkaline soil. When pH is raised from acid to basic, minerals become more available to the plant and lilacs grow better.

**Leaf Spot Disease:** Lilacs are subject to a number of leaf spot diseases. Plants in poor health, overgrown, or

growing in unfavorable locations are much more susceptible. The majority of leaf spots are caused by fungi (tiny black fruited bodies appearing as small dark dots near center of spots). Bacteria will have a water-soaked appearance.

For control, spray three times at 10-day intervals with Bordeaux-mixture fungicides. Read labels of the different types.

**Viral Diseases** are systemic, passing to all parts of the plant. There is no practical cure.

Virus yellows - foliage shows an even yellowing and loss of green coloring

Mosaic virus - foliage is mottled with green & yellow

Ring-spot virus - yellow rings on foliage

Other common viruses cause distortion of foliage, stunting of growth, warty or gall-like growths and development of witches' brooms. Control of insects like aphids and leafhoppers is very important, as they are disease carriers.

*Always read and follow label directions for any pesticide product.*

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Revised January 2005