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U.S. DEPARTMENT OF AGRICULTURE

GROWING *Magnolias*

GROWING Magnolias

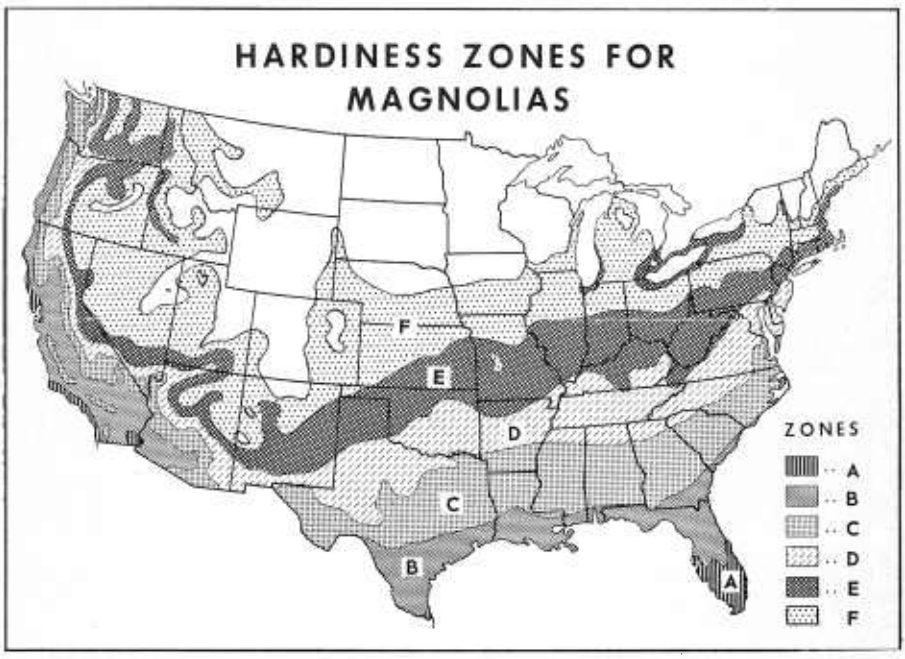
Magnolias are trees or shrubs that are grown principally for their showy flowers. They grow well where temperatures do not usually go below 10° F. They do best in soil that is slightly acid and well-drained.

You can grow magnolias successfully if you—

- Buy species and varieties that are adapted to your area.
- Get balled and burlapped plants or plants growing in a can.
- Plant in early spring, in mildly acid soil that is high in organic-matter content.
- Maintain a mulch around them during the growing season.
- Water them during dry periods.
- Brace the trees until the root system has become well established.
- Protect the bark from mechanical injury.

VARIETIES

Magnolias commonly grown in the United States are of two kinds—native and Asian. Native magnolias bloom from late spring to summer; they have white, yellowish, or green flowers. Asian mag-



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Saucer magnolia.

nolias bloom in early to late spring; they have white, pink, or reddish-purple to purple flowers.

Native magnolias are evergreen or deciduous (leaf shedding); Asian magnolias grown in cultivation are deciduous.

Some of the more commonly grown varieties of magnolias follow.

Native

Southern magnolia (*Magnolia grandiflora*) is an evergreen tree that grows 30 to 50 feet tall. It is hardy to the warmer parts of zone D (see plant hardiness zone map). Southern magnolia is the most popular of all native varieties. Its fragrant white flowers are 6 to 10 inches across. Its leaves are shiny and 3 to 5 inches wide.

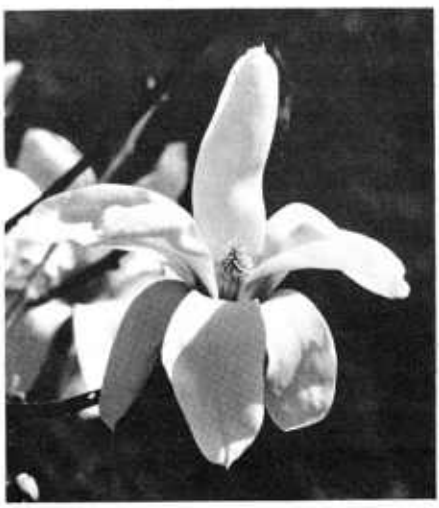
Cucumber tree (*M. acuminata*) is a deciduous tree that grows 40 to 60 feet tall. It is hardy to zone F. Its flowers are about 2 inches across and have three sets of petals—yellow, greenish yellow, and green. Its leaves are 6 to 10 inches long and 3 to 5 inches wide. Cucumber tree grows rapidly and is used as a shade tree.

Yellow cucumber tree (*M. cordata*) is a deciduous tree that grows 20 to 30 feet tall. It is hardy to zone E. Its flowers are bright canary-yellow and about 2 inches across. Its leaves are 4 to 6 inches long and 3 to 4 inches wide.

Sweetbay (*M. virginiana*) is a deciduous shrub or tree that grows 30 to 50 feet tall. It is hardy to zone E. It grows as a semi-evergreen in zone C. Sweetbay leaves are shiny green, 3 to 6 inches long, and 1 to 3 inches wide. Its fragrant flowers are waxy white and 2 to 3 inches across.

Asian

Lily magnolia (*M. liliflora*) is a shrubby species that is hardy to warmer parts of zone E. It has red-purple flowers, 4 to 5 inches long, which grow erect on slender stems. Its leaves are about 3½ inches long and 2 inches wide. This species can grow up to 12 feet high.



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'Verbanica' flowers are lavender pink.

BN–30711

Southern magnolia.

A variety of this species is purple lily magnolia (*M. liliflora* 'Nigra'). It has dark-purple flowers, 4 to 5 inches across.

Yulan magnolia (*M. denudata*) is a tree that is hardy in zone E. It has white flowers that bloom before the leaves appear. The flowers are 6 to 8 inches across and are saucerlike when fully open.

When fully grown, yulan is about 40 feet tall and has a widely spread and rounded top.

Star magnolia (*M. stellata*) is a large shrub or small tree that has white flowers. Its height and top spread are 10 to 20 feet. Star magnolia is hardy to zone E. Its flowers are about 3 inches across. The pink variety of the star magnolia is *M. stellata* 'Rosea'; the red is *M. stellata* 'Rubra'.

Sprenger magnolia (*M. sprengeri* 'Diva') is a tree that grows 35 feet tall and has a top spread of 25 feet. It is hardy to warmer parts of zone D. Its flowers are crimson, often 8 inches across.

Saucer magnolia (*Magnolia* × *soulangiana*) is a small tree or large shrub, hardy to zone E. Its height and top spread are 15 to 25 feet. Its flowers are 4 to 6 inches across.

Some varieties of saucer magnolia are—

'Lennei', a large, vigorous shrub. Its saucer-shaped flowers are deep reddish purple.

'Rustica', a large, vigorous spreading shrub. Its saucer-shaped flowers are rosy red.

'Verbanica', a small tree. Its chalice-shaped flowers are lavender pink.

'Alba', a small tree. Its saucer-shaped flowers are white and purple.

'Lilliputian', a small shrub that has pink flowers.

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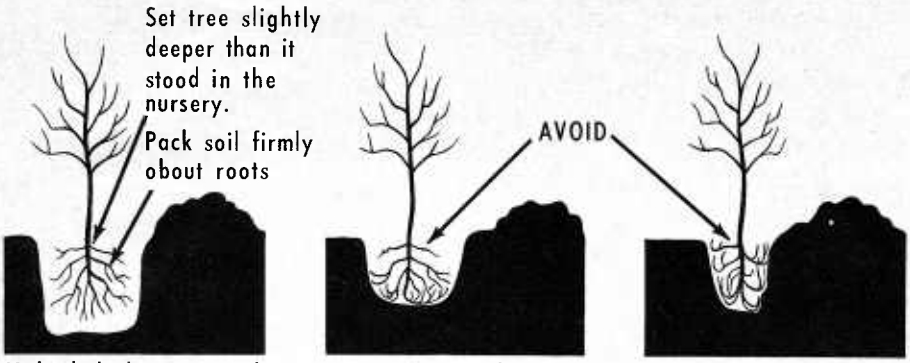
Southern magnolia has fragrant white flowers.



BUYING PLANTS

Some magnolias do not survive cold temperatures. When buying magnolias, therefore, be sure to select varieties adapted to your area.

You can ask a reputable nurseryman in your locality to recommend species or varieties; generally, the plants he has for sale are adapted to your area. You also can ask neighbors which kinds have done well for them. Or you can ask your county agricultural agent or your State agricultural college to recommend species that are adapted to your area.

Ordinarily you can buy 2-year-old trees planted in cans or older trees that are balled and burlapped. If fat woolly buds are visible on the older trees, you can expect a few blooms the year you plant. Magnolias that have a ball of soil around the roots do not dry out readily, and they are easily established. Do not buy bare-root magnolias.

PLANTING

The best time to plant magnolias is in early spring, before new leaves start to grow.

The planting site should be about 12 feet on each side. Magnolias thrive in full sun, but they flower satisfactorily under the high shade of neighboring trees. Dig a planting hole at least 18 inches deep and twice the diameter of the rootball.

If the roots are balled and burlapped, do not remove the burlap before setting the tree in the hole. After you plant the tree, cut the twine around the top of the rootball and fold back or cut off exposed parts of the burlap.

Plant the magnolias so that the top of the rootball is slightly higher than it was in the nursery. Then refill the hole with a mixture of equal parts of soil and organic matter—peat moss, well-decayed manure, or leaf mulch. Press the soil mixture firmly around the rootball and scoop loose soil away from the top of rootball to form a basin for holding water. Water the plant thoroughly.

CARE

Mulching

After planting, cover the soil under the branches with a mulching material—peat

moss, oak leaves, or forest litter. Apply a layer about 3 inches deep. Add new mulching material periodically to maintain the mulch.

A mulch helps to keep the soil moist near the surface, where magnolia roots are most active. It also helps to prevent the growth of weeds. And as the mulching material decays, it releases nutrients for use by the magnolia tree.

Be careful if you use a hoe or other weeding tool around magnolias, you may harm the shallow roots.

Watering

Rainfall ordinarily provides enough moisture for mulched magnolias. They need about 1 inch of moisture every 14 days. In some areas, rainfall will provide sufficient moisture. In dryer areas, and during dry periods, soak the roots at weekly intervals. But be careful that you do not drown trees growing in poorly drained soil.

Fertilizing

If magnolias are planted in reasonably fertile soil that is well supplied with organic matter, they seldom need fertilizing.

Trees growing in lawns benefit from fertilizers used on the lawn. But if you want to stimulate the growth of magnolias, or if they show signs that the soil is infertile, apply lawn fertilizer in late fall or early spring.

Signs of low soil fertility are small, sparse, pale leaves and short twig growth.

Use 2 pounds of fertilizer per inch of trunk diameter. Spread the fertilizer in a band 2 to 3 feet wide under the ends of the branches. Do not let the fertilizer touch the trunk. After applying fertilizer, water it into the soil.

Pruning

The best time to prune magnolias is in late spring, so that the pruning wounds will have time to heal during the growing season. Coat the wounds that are an inch or more in diameter with a good grade of asphalt paint or with tree-wound dressing.

DISEASES AND INSECTS

Magnolias seldom suffer serious damage from diseases and insects. A few diseases and insects affect magnolias, however.

Inspect magnolias frequently for signs of diseases and insects described in this section.

See your county agricultural agent or State agricultural experiment station for information on how to control diseases and insects.

Diseases

Nectria Canker

Nectria canker (European canker) ordinarily does not kill magnolias, but it disfigures them. A few cankers on the branches do little harm.

Cut out diseased bark and apply shellac to the wound. Then coat the wound with a tree-wound dressing.

Dieback

Freezing injury may cause dieback at the tops of magnolia trees. Late season growth is especially susceptible to dieback. Prune dead branches and twigs back to healthy wood. Treat cuts with a tree-wound dressing.

Trunk Decay

Fungi that cause trunk decay can enter magnolia trees through wounds made by bumping the trunk with a lawn mower. If damaged trees have multiple stems, remove the damaged stems and then select young shoots to replace them. Paint cuts with a tree-wound dressing.

If you find decay in the trunk, cut out the diseased wood. Slope the bottom of the cut downward so water can drain away, and apply shellac to the wound.

Leaf Spots

Several leaf-spot diseases attack magnolias. These diseases often mar the appearance of magnolias and can cause defoliation at times.

Glomerella leaf spot is common in the South; the spots are dark brown and have pale-yellow borders around them. Another leaf-spot disease is magnolia scab, which mottles the leaves a pale gray.

Powdery Mildew

Powdery mildew sometimes develops on magnolia leaves of some varieties. Infected leaves are covered with a thin, cottony growth and may appear to have been powdered.

Insects

Tulip Tree Scale

Adult tulip tree scales are oval, dark-brown insects about ⅓ inch across the back. They usually crowd together on young stems, often near the ground. Their eggs hatch in August or September. Young scales are dull brown; they overwinter on the bark of magnolia trees.

Scales suck the sap from the trees and thus cause branches to die and sometimes kill trees. The insects often coat the leaves with a clear sirupy liquid called honeydew. A black sooty mold then grows on the coating and the leaves thus are unsightly. Black sooty mold forms on the leaves.

Japanese Beetles

Magnolia grandiflora and other summer-flowering species may attract Japanese beetles. Adult beetles have shiny, metallic-green bodies and coppery-brown wings. They are about ½ inch long.

Japanese beetles attack magnolia flowers in June and July. They feed on the petals and stamens. The edges of the petals first become ragged, then the flowers turn brown and curl.

Florida Wax Scale

Florida wax scales have a thick, white and waxy covering on their reddish-brown bodies; they sometimes are tinted pink. Scales are about 3/16 inch wide. They live on the stems of magnolias. Infested plants become stunted; heavily infested branches die. The insect has only one generation a year; the young scales hatch from eggs about July 1 and settle on new growth.

Prepared from information supplied by
Corps Research Division
and
Entomology Research Division
Agricultural Research Service.

Some other publications on trees (or shrubs) published by the U.S. Department of Agriculture are listed below. They may be purchased at the prices shown from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402.

Color It Green With Trees: A Calendar of Activities for Home Arborists (20¢)

MP 1056 Guide to Natural Beauty (55¢)

G 117 Trees for Shade and Beauty: Their Selection and Care (10¢)

G 80 Home Propagation of Ornamental Trees and Shrubs (10¢)

G 95 Reducing Salt Injury to Ornamental Shrubs in the West (10¢)

G 71 Growing Azaleas and Rhododendrons (5¢)

G 86 Growing Camellias (10¢)

G 88 Growing the Flowering Dogwood (5¢)

G 135 Growing Flowering Crabapples (10¢)

G 83 Pruning Shade Trees and Repairing Their Injuries (10¢)

G 104 Protecting Shade Trees During Home Construction (5¢)

G 130 Growing Hollies (10¢)

G 120 Growing Boxwoods (10¢)

G 81 Maple Diseases and Their Control (5¢)

Trees, 1941 Yearbook of Agriculture ($2.75)

Consumers All, 1965 Yearbook of Agriculture ($2.75)

Washington, D.C. Issued January 1968

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402 - Price 5 cents

U.S. GOVERNMENT PRINTING OFFICE: 1967 O—268-195