

American Horticulturist

The NATIONAL
HORTICULTURAL
MAGAZINE



This lovely woodcut appeared on the cover of *The National Horticultural Magazine*, the forerunner of *American Horticulturist*, some 50 years ago, in January 1927.

Gardener's Check List

September is here, and for some gardeners, the end of the growing season is near. All those little promises that we made to ourselves in April, May, June, July, and August have withered into long-lost dreams. Now we are faced with lots of work that needs to be done.

- Now is the time to think about ordering bulbs. If you labeled your hardy bulbs when they were flowering in spring, you'll find it easy to order new bulbs this season. Check with your local garden center, or write me at the American Horticultural Society, and I'll try to locate the bulbs you want.

- As fall approaches, house plants will have to be moved indoors to their original locations. However, they must be re-introduced to the indoor environment slowly, by acclimation. This is done by gradually reducing their exposure to light. For example, plants that are now exposed to sunlight should be moved to progressively darker areas, where the light exposure matches that of the plants' permanent place indoors (e.g., indirect or filtered sunlight). This process may take from two weeks (for smaller plants) to six weeks (for larger plants), and will re-



September is the time to think about ordering spring bulbs.

duce the chance that the plants will suffer leaf drop or other problems resulting from shock. (You should reverse this process if you've just bought a new plant from a greenhouse or nursery.)

It is also important not to subject plants to a sudden change in temperature; otherwise, they may drop some or all of their leaves. As with light intensity, be sure to check the temperature indoors and try to match it with the temperature outdoors. If it is still very hot when you decide to bring your house plants inside and the air conditioner is running at full capacity, raise the temperature slightly in the house or wait awhile longer for the temperature to cool down outside.

If you are not sure which kind of natural lighting is best for your house plants, write to us and we'll send you a copy of "Plants for Every Window," a key to some common house plants and the type of light, water, temperature, soil, humidity, and fertilizer they require. Send \$1 for postage and handling to: House Plants, American Horticultural Society, P.O. Box 0105, Mt. Vernon, VA 22121.

- By checking plants for insects before bringing them indoors, you can prevent many problems in the months to come. The following are a few of the insects you will want to watch for:

Spider mites. Minute yellow, green, or red insects that look like specks and can be seen if a white sheet of paper is held underneath the plant. Infested leaves look yellow, stippled, and dirty, and may eventually dry out and die. Sometimes webbing is present between leaves, on flower buds, and on the undersides of leaves.

Scale. An insect that appears in white, cottony, cushion-like masses, or forms brown, gray, or reddish scaly bumps on nodes (where leaves and buds are attached to the stem), stems, and leaves. Infested leaves are covered with a sticky or shiny substance.

Aphids. Small green-colored insects grouped in masses along stems and leaves. Infested leaves do not reach their full size, and are discolored and curled.

Mealybugs. White, cottony (or waxy) insects that feed on the undersides of leaves, stems, and nodes.

American Horticulturist

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ASSOCIATE EDITORS: Brian C. Little and Lynn M. Lynch.
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They cause severe growth damage and can eventually kill the plant if present in large numbers.

Greenhouse whiteflies. Minute white, winged insects that feed on the undersides of leaves and cause yellowing and mottling. Insects can be seen fluttering around the plant when it is disturbed.

Fungus gnats. Dark, slender, 1/8-inch-long insects that are often found near a window, usually on the leaves or in the soil. Wilting sometimes results from root damage, and seedlings may die.

Most of these insects can be controlled by spraying infested plants with a general house plant insecticide, whitefly and mealybug killer, or, in the case of the fungus gnat, Diazinon®. However, before using these insecticides, you should contact your local extension agent (listed in the White Pages under "Local County Government") for information on pesticide regulations.

• If you're a real perennials lover or garden "workaholic," you probably have a lot to do, since fall is the best time for planting, transplanting, dividing, and rejuvenating. Even though some plants have reached maturity this time of year, the roots continue to grow. Most plants that are placed in the ground in the fall begin re-establishing their root systems immediately, and some will continue to set roots well into the season.

Deciduous trees and shrubs should be transplanted as soon as their leaves have begun to shed. Move evergreen trees and shrubs early in the fall; if you delay this chore, there will not be enough time for the plants to re-establish themselves.

Perennials should be transplanted after the first killing frost. (Wait until spring to transplant less hardy perennials.) Mulch immediately after planting to help the soil retain warmth and moisture.

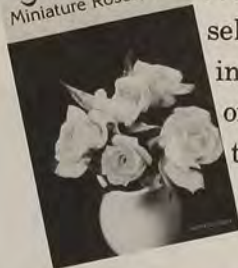
Last but not least, stake tall plants to prevent damage from winter storms.

Write the Society's Gardener's Information Service this winter and tell us what you have learned from your gardening experiences. All of your suggestions are welcome.

—Brian C. Little
Gardener's Information Service

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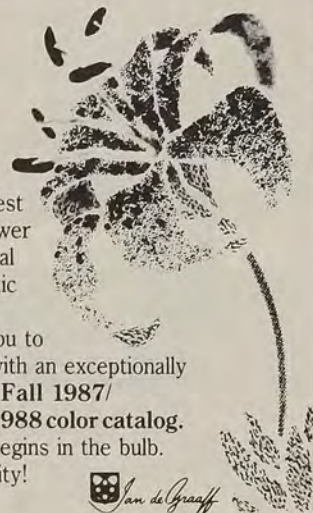
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What's Happening



River Farm

After a long, hot summer at River Farm, we're looking forward to the Indian summer days of autumn. Autumn is a particularly beautiful and busy time around our national headquarters, and River Farm provides the perfect setting to ring in the fall gardening season!

The following special events are scheduled for September and October:

Dahlia Day. Saturday, September 12, 10 a.m.-4 p.m. Admission is \$1 for AHS members, \$2 for non-members, and free for children under 12.

Dahlia experts will be present to answer questions about these beautiful plants, which bear flowers of vibrant red, orange, yellow, and purple. The spectacular blooms resemble those of anemones, water lilies, or even cacti, and range in size from a single flower with eight petals to a flower with over 100 petals, and from a one-inch pompom to 10 inches wide. The plants vary in height from two to 10 feet. Many of

the cultivars shown in our gardens have not yet been released to the general public. They are evaluated annually by experts from the American Dahlia Society and are not introduced to the horticultural market unless they pass rigorous American Dahlia Society standards.

Autumn Festival. Sunday, October 4, 11 a.m.-4 p.m. Admission is \$2; children under 12 are admitted free.

During the Autumn Festival, the chrysanthemums and dahlias will be in spectacular bloom, with roses, annuals, and late-season perennials also displaying lovely color. Other features will include bulbs and flowers for sale; exhibits by plant societies; and hard-to-find gardening books, garden items, and crafts for sale.

For more information, please write or call the Public Relations Department, American Horticultural Society, P.O. Box 0105, Mount Vernon, VA 22121, (703) 768-5700.

—Sharon Barnes
Public Relations Director

Sweet Corn Gets a Quicker Start

Horticulturists at the University of Minnesota have identified two easy techniques for speeding sweet corn germination, especially for plantings in cold (50 to 60° F) soils. The key to both techniques is the fact that the response of corn seed to low soil temperatures depends strongly on seed moisture content at time of planting. Low-moisture seeds (around six percent water) are highly susceptible to chilling injury; high-moisture seeds (around 14 percent water) are much less susceptible to such injury. Thus, germination can be improved by boosting the moisture content of the seeds just before they are planted.

Three moisturizing methods were tested in Minnesota using three sweet corn cultivars: (1) seeds were soaked in distilled water at 77° F for 16 hours, then dried at room temperature for eight hours before planting; (2) seeds were mixed with about two ounces of vermiculite, to which about 2½ ounces of distilled water had been added; then the mixture was sealed in a plastic bag and stored for 20 hours at 77° F before planting; (3) seeds were treated with polyethylene glycol (PEG). The first two methods resulted in both earlier emergence and better uniformity of

emergence. The PEG-treated seeds emerged more slowly than did untreated control seeds.

Moisturizing seems to be the way to go if you want to get your sweet corn into the ground—and growing—early.

—*Plants and Gardens News*,
Vol. 2, No. 2, 1987

Resources

The Soil Conservation Service

The Soil Conservation Service (SCS) is an agency of the United States Department of Agriculture that was set up after the Dust Bowl era in an effort to prevent similar calamities in the future. The SCS provides assistance to farmers throughout the country, but what many home gardeners don't know is that the agency provides some important services that may aid them, too. The SCS mission covers three major areas: soil and water conservation, natural resource surveys, and community resource protection and development, all on non-federal lands.

Landowners who need help in such areas as planning pond construction, determining what kind of soil is contained on their property, or choosing suitable crops for different kinds of soils should contact their local SCS conservation district representative for advice. There are nearly 3,000 locally organized and locally run conservation districts in the United States, each with its own board, district conservationist, and staff. The SCS staff includes soil conservationists, engineers, soil scientists, biologists, foresters, landscape architects, and plant and environmental specialists, among others.

To qualify for technical assistance, land users must first sign a cooperative agreement with the SCS representative from their district. If you are interested in obtaining assistance from the SCS, call the number listed in your local telephone directory in the government section under "United States Government, Department of Agriculture, Soil Conservation Service."

Dutch Elm Disease Update

Scientists in Holland have found a chemical preventive for Dutch Elm Disease (DED) that they claim is "100 percent effective." Fenpropimorph, a fungicide previously used against mildews of cereal crops, appears harmless to elm trees, but when it is injected, the invading DED fungus is prevented from releasing spores. Fenpropimorph can also be used as a remedial treatment for existing DED infections—but with somewhat lower effectiveness. The chemical is expected to be available commercially in 1988. It is not a cheap technique, because it is highly labor-intensive, but it offers the best hope of saving DED-susceptible elms.

—*Plants and Gardens News*,
Vol. 2, No. 2, 1987



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Gardener's Dateline

September 2-4 Regional Meeting on Water Management

Denver, Colorado. Sponsored by the United States Committee on Irrigation and Drainage. Information: Larry Stephens, United States Committee on Irrigation and Drainage, P.O. Box 15326, Denver, CO 80215, (303) 236-6960.

September 10-25 International Garden Tour: "Madeira & Portugal"

Sponsored by the Brooklyn Botanic Garden. Information: Elizabeth Scholtz, Vice President, Brooklyn Botanic Garden, 1000 Washington Ave., Brooklyn, NY 11225, (718) 622-4433.

September 12-13 Fall Herb & Perennial Weekend

Wrenwood of Berkeley Springs, West Virginia. Information: Flora M. Hackimer, Wrenwood, Route 4, Box 361, Berkeley Springs, WV 25411, (304) 258-3071.

September 18-20 American Begonia Society Eastern Region Convention

Washington-Dulles Holiday Inn, Chantilly, Virginia. Information: Lavinia Voss, American Begonia Society, 3805 Louise Ave., Chantilly, VA 22021.

September 18-20 Perennial Plant Symposium

Clark Kerr Campus, 2601 Warring St., Berkeley, California. Sponsored by the Friends of the University of California Botanical Garden. Information: Perennials, University of California Botanical Garden, Centennial Dr., Berkeley, CA 94720, (415) 642-0849 or 642-3343.

September 20 Rare & Unusual Plant Sale

Case Estates, Weston, Massachusetts. Information: Arnold Arboretum, The Arborway, Jamaica Plain, MA 02130, (617) 524-1718.

**September 22
Ikebana International Workshop**
Thomas Jefferson Community Auditorium, 3501 2nd Street South, Arlington, Virginia. Admission: \$15, reserved seating; \$8, non-reserved seating. Information: Mrs. Robert Klementz, 8102 Briar Creek Dr., Annandale, VA 22003, (703) 978-3961.

**September 25-27
Grow Texan Symposium**
Armand Bayou Nature Center, Houston,



Texas. Hours: 9 a.m. to 5 p.m. Admission: free. Information: Linda Kofler, Armand Bayou Nature Center, 8600 Bay Area Blvd., P.O. Box 58828, Houston, TX 77258, (713) 474-2551.

September 29-30 Garden Tour: "Pilgrimage to Private Gardens in Pennsylvania"

Sponsored by the Brooklyn Botanic Garden. Registration: Members (BBG), \$215; non-members, \$240 (double occupancy). Information: Education Department, Brooklyn Botanic Garden, 1000 Washington Ave., Brooklyn, NY 11225, (718) 622-4433.

**October 1-3
Annual Bulb & Plant Mart**
St. Philip Presbyterian Church, 4807 San

Felipe, Houston, Texas. Hours: 9:30 a.m. to 4 p.m. Information: Margaret M. Shanks, The Garden Club of Houston, P.O. Box 13216, Houston, TX 77019, (713) 524-8544 or 792-3450.

October 3-4 World's Largest Gourd Show

Morrow County Fairgrounds, Mt. Gilead, Ohio. Sponsored by the Ohio Gourd Society and the American Gourd Society. Hours: Saturday, 12 to 6 p.m.; Sunday, 9 a.m. to 5 p.m. Admission: Adults, \$1; children under 12, free. Information: O.C. Stevens, Show Chairman, 4761 Twp. Rd. 116, Mt. Gilead, OH 43338, (419) 946-3302.

**October 6-7
Symposium: "Landscaping with**

Perennials" & "Landscaping with Flowering Shrubs"

Bronx, New York. Sponsored by The New York Botanical Garden. Registration: \$70. Special Workshop: \$50. Information: The New York Botanical Garden, Education Department, Bronx, NY 10458-5126, (212) 220-8720.

October 7-8

Annual Rose Show—"Poplar Forest: Thomas Jefferson's Retreat"

Lynchburg Hilton, Lynchburg, Virginia. Sponsored by The Garden Club of Virginia, Hillside Garden Club, and the American Rose Society. Hours: Wednesday, 3 to 8 p.m.; Thursday, 10 a.m. to 1 p.m. Information: Mrs. Theodore J. Craddock, 3889 Peakland Place, Lynchburg, VA 24503, (804) 384-7606.

October 7-10

National Master Gardener Conference

Grand Hyatt Hotel, Washington, DC. Registration: \$120. Information: Pam Marshall, Co-Chair, Cooperative Extension Service, University of the District of Columbia, 4200 Connecticut Ave., NW, Washington, DC 20008, (202) 282-7410.

October 9-10

Symposium: "Landscaping with Perennials" & "Landscaping with Flowering Shrubs"

National Wildlife Federation, Vienna, Virginia. Sponsored by the New York Botanical Garden. Registration: \$70. Special Workshop: \$50. Information: The New York Botanical Garden, Education Department, Bronx, NY 10458-5126, (212) 220-8720.

October 9-11

American Rhododendron Society Western Regional Meeting

Ocean Shores, Washington. Information: Western Regional Meeting, American Rhododendron Society, 14635 S.W. Bull Mtn. Rd., Tigard, OR 97223, (503) 639-5922.

October 10

Ecological Landscaping Symposium

Rancho Santa Ana Botanic Garden, Claremont, California. Hours: 9 a.m. to 4:30 p.m. Registration: \$35. Information: Education Department, RSABG, 1500 North College Ave., Claremont, CA 91711, (714) 626-1917.

October 10-11

Orchid Show

Douglas County Fairgrounds, Roseburg, Oregon. Co-sponsored by the Willamette, Umpqua, and Pacific Orchid Societies. Admission: free. Information: Mrs. Beverly Harris, 6234 North Umpqua High-

way, Roseburg, OR 97470, (503) 673-7710.

October 13-14

Symposium: "Landscaping with Perennials" & "Landscaping with Flowering Shrubs"

Chicago Botanic Garden, Glencoe, Illinois. Sponsored by the New York Botanical Garden. Registration: \$70. Special Workshop: \$50. Information: The New York Botanical Garden, Education Department, Bronx, NY 10458-5126, (212) 220-8720.

October 15-18

National Orchid Show & Symposium

Buena Vista Palace, Walt Disney World Village, Lake Buena Vista, Florida. Hours: 9 a.m. to 9 p.m. Admission: \$5. Symposium registration: \$50. Information: Ann Mann, 9045 Ron-Den Lane, Windermere, FL 32786, (305) 876-2625.

October 16-17

Symposium: "Landscaping with Perennials" & "Landscaping with Flowering Shrubs"

The Arnold Arboretum of Harvard University, Cambridge, Massachusetts. Sponsored by the New York Botanical Garden. Registration: \$70. Special Workshop: \$50. Information: The New York Botanical Garden, Education Department, Bronx, NY 10458-5126, (212) 220-8720.

October 19-20

National Council for Therapy & Rehabilitation through Horticulture Annual Workshop

Albuquerque, New Mexico. Sponsored by the Rocky Mountain Chapter, NCTRH. Information: Dale Sokkary, P.O. Box 21037, Albuquerque, NM 87154-1037, (505) 243-1386.

October 24-25

Chrysanthemum Show

Potomac Chrysanthemum Society, Wheaton Plaza Mall, Wheaton, Maryland. Hours: Saturday, 3 to 9:30 p.m.; Sunday, 12 to 5 p.m. Admission: free. Information: Robert K. Howell, 11214 Emack Rd., Beltsville, MD 20705, (301) 937-3720.

October 25-28

International Irrigation Exposition & Technical Conference

Orlando, Florida. Sponsored by The Irrigation Association. Information: The Irrigation Association, 1911 North Fort Myer Dr., Suite 1009, Arlington, VA 22209, (703) 524-1200.

October 31-November 1

National Chrysanthemum Show

Hyatt Regency Ravinia Hotel, Atlanta, Georgia. Sponsored by the Georgia Chrysanthemum Society. Hours: Saturday, 1 to 9 p.m.; Sunday, 10 a.m. to 4 p.m. Admis-

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sion: free. Information: Daniel Schadler, Publicity Chairman, (404) 457-3704 or 261-1441.

November 6-12

Annual Meeting of the American Society for Horticultural Science & Annual Congress of the Interamerican Society for Tropical Horticulture

Hyatt Orlando Hotel, Kissimmee, Florida. Information: Dr. William J. Carpenter, Ornamental Horticulture Department, University of Florida, Gainesville, FL 32611, (904) 392-7943.

November 7

California Native Plant Sale

Rancho Santa Ana Botanic Garden, Claremont, California. Hours: 8 a.m. to 2 p.m. Information: Education Department, Rancho Santa Ana Botanic Garden, 1500 North College Ave., Claremont, CA 91711, (714) 625-8767.

November 11-13

Regional Meeting on Water Management

Sacramento, California. Sponsored by the United States Committee on Irrigation and Drainage. Information: Larry Stephens, United States Committee on Irrigation and Drainage, P.O. Box 15326, Denver, CO 80215, (303) 236-6960.

Guidelines Available

The Plant Conservation Roundtable, an *ad hoc* committee composed of individuals from various conservation organizations and government agencies throughout the greater Washington, D.C., area, has recently released a set of 16 plant conservation guidelines for scientists and teachers. The guidelines are intended to serve as self-policing rules-of-thumb for those individuals involved in the collection of native American plants for use as herbarium specimens, as research material for biochemical analysis or anatomical study, in teaching, or in experimental horticulture. These publications would be useful to anyone involved in gathering and studying plants, and would also make excellent handouts for high school and college courses dealing with plant collection.

Separate plant conservation guidelines for amateur gardeners and naturalists and for nurserymen are currently in the works, and should be

available later this year. For a copy of the scientists' and teachers' guidelines, send \$1 to cover postage and handling to Associate Editor, American Horticultural Society, P.O. Box 0105, Mount Vernon, VA 22121.

Plants Wanted

Members who are growing or who have access to any of the plants listed in this month's column are invited to help their fellow members locate seed, plants, or cuttings of their "Plants Wanted" by writing directly to the addresses listed below.

Please send your "Plants Wanted" list, including genus, species, common name, and a brief description, to "Plants Wanted" in care of the Society. Please type or print neatly. We will publish the list on a space-available basis after checking for sources in the Society's catalogue file.

● ***Carpenteria californica***, tree anemone, is a six-foot-tall, leathery-leaved evergreen shrub. Leaves are oblong and grow up to four inches long. The white flowers measure up to three inches across. Native to California. William H. Courtney, College of Agricultural Sciences, Coastal Research and Education Center, 2865 Savannah Highway, Charleston, SC 29407.

● ***Pithecellobium dulce*** (formerly *Inga dulcis*), also known as Huamuchil or opiuma, is a very spiny tree that grows to 60 feet. Two-inch-long leaves are widest in the center and rounded at the ends. Flowers are borne in deep sessile heads. The spiraled red fruit grows three to five inches long. Native to tropical regions. Mr. Frank Gregus, P.O. Box 303, West Milford, NJ 07480.

● ***Monodora myristica***, African nutmeg, grows to 100 feet. Oblong leaves are widest in the center and rounded at the ends, 20 inches long, and six to eight inches wide. Fragrant flowers on drooping stalks grow to 10 inches long. Petals are yellowish to white, with red spots. Outer petals are four inches long and one inch wide; inner petals measure up to two inches long. Fruit is globe-like and measures up to six inches in diameter. Mr. Frank Gregus, P.O. Box 303, West Milford, NJ 07480.

Rooting Success with Acidic Media

Horticulturists in Italy and in Texas have reported much better results in rooting of cuttings taken from certain fruit species when the growing media are kept acidic (with a pH of between 4 and 5). The Italian trials used apple, apricot, plum, and quince cuttings; rooting of cuttings of nearly all cultivars was found to be "markedly depressed" with a growing medium pH of 7. At the Stephen F. Austin State University in Nacogdoches, Texas, rooting of blueberry and peach cuttings was found to be improved when the growing medium was about 5, rather than about 6.5.

The connection between medium acidity and rooting success might hold for other kinds of plants, too. Additional experiments are needed to determine the limits of its applicability. In the meantime, if you are rooting cuttings of woody plants, it is probably a good idea to make sure that you use a somewhat acidic growing medium. *Note:* High-pH mist/irrigation water can cause the pH of the medium to increase over a relatively short time, so be wary of the background salt content of your water.

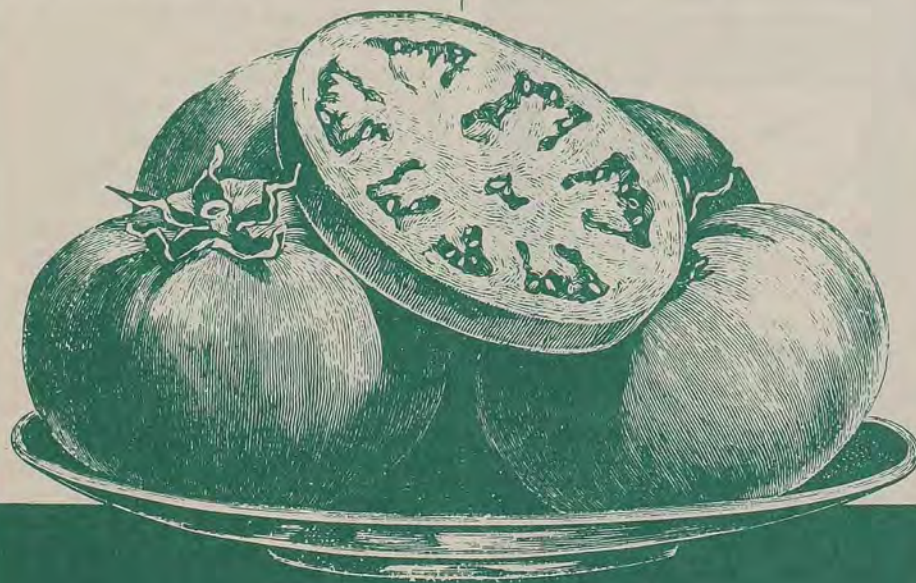
—*Plants and Gardens News*,
Vol. 2, No. 2, 1987

Redder Is Not Necessarily Better

How many times have you passed over a mature orange tomato for one that is a deeper shade of red? Most gardeners believe that the redder a tomato is, the better it is for you, nutritionally speaking. Not so, according to Edward C. Tigchelaar, a research scientist with the Department of Horticulture at Purdue University. In a paper presented at the First International Symposium on Horticulture and Human Health, held last April in Arlington, Virginia, Tigchelaar explained that a tomato that is a deeper shade of orange most likely contains a higher carotene content than one that is red.

(Carotene is an orange-yellow-to-red plant pigment that is converted to vitamin A in the liver. Deficiencies in this important vitamin cause night blindness and eye scarring, and can increase susceptibility to disease.)

According to Tigchelaar, scientists have developed a tomato juice made from high-carotene tomatoes that is orange-yellow in color. Unfortunately, most people tested preferred tomato juice that was redder in color, even though the juices taste the same. It may take a few years, but perhaps American consumers will one day be convinced that redder is not necessarily better.



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Tree for the Future

In the future, homeowners may want to consider planting a new hybrid spruce that is the product of a 20-year breeding program conducted by forestry researcher Dr. James W. Hanover, a professor at Michigan State University. Spartan spruce, which was named for the Michigan State University symbol, is actually a hybrid species, the result of a cross between blue spruce (*Picea pungens*) and white spruce (*P. glauca*). The two species have ranges that overlap only slightly (in western Montana), and both have desirable characteristics that combine to produce a superior hybrid for landscape and Christmas tree use. (Blue spruce has attractive blue foliage color and exhibits excellent drought resistance; white spruce grows very rapidly and has softer needles than does blue spruce.)

Hanover made the first successful crosses between the two species in 1967, and has made controlled pollinations annually since that time to produce superior parental stock for a second generation of breeding. The first generation (F₁) crosses between these two species are difficult to make, and each cone yields only 1.8 seeds. (Normal, intraspecific crosses yield an average of 30 seeds per cone.) By selecting F₁ parents that exhibited the desirable characteristics from both parent species, Hanover then created an F₂ generation of plants. Fortunately, crosses between the F₁ plants are highly fertile.

Spartan spruce, which has been patented under the name 'Hy-Blu' spruce, grows faster than either of the parent species, and it generally has bluer foliage color than does blue spruce. Needle sharpness and hardiness are intermediate between the two parent species. This new hybrid is as drought-tolerant as blue spruce, and much more tolerant of drought than white spruce. Spartan spruce is a single-stemmed, full-branching plant that would make an excellent landscape specimen.

A license to produce Spartan spruce has been granted to Armintrout's Nursery, Allegan, MI 49010. The tree will be available for purchase in about 1½ years.

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New Titles Added to AHS Book Service

Several new titles have been added to the ever-growing list of books offered to AHS members through the Society's Book Service. All of the following titles are available at special AHS member prices.

• *Compendium of Rhododendron and Azalea Diseases.*

Duane L. Coyier and Martha K. Roane, editors. American Phytopathological Society. 1986. 65 pages; soft-cover, \$20.00. AHS member price, \$18.00.

This booklet is the most comprehensive guide to the diseases and insect pests of rhododendrons and azaleas that is available. Part I is devoted to diseases caused by infectious agents such as fungi, bacteria, viruses, nematodes, and algae. Part II discusses insect pests such as the rhododendron borer, the black vine weevil, and various defoliators, and also includes information on starting a pest-management program. The discussion of each disease includes clear, concise descriptions of the symptoms and causal organism, as well as information on control and a list of selected references.

Part III contains excellent information on the symptoms caused by non-infectious agents, such as moisture stress, air pollution, and nutrient deficiencies and toxicities. Specific descriptions of symptoms and prevention information are included, as are lists of selected references. Part IV presents information on beneficial organisms, as well as a glossary and an index.

Compendium of Rhododendron and Azalea Diseases is illustrated throughout with black-and-white drawings and photographs, as well as several plates of color photographs illustrating specific symptoms. Although it is a small book with a disproportionately high price, this is an invaluable reference no rhododendron or azalea specialist will want to be without.

• *100 Great Garden Plants.*

William H. Frederick, Jr. Timber Press. Portland, Oregon. 1975. 214 pages; hardcover, \$27.95. AHS member price, \$23.75.

Although first published over 10 years ago, this useful book was out-of-print for years until it was re-

issued in 1986. The author is a professional landscape architect as well as a dedicated gardener, and the book includes a compendium of plants that Frederick has found to be outstanding from his own experience. Chapters on large trees, small trees, shrubs, and ground covers are included. The text on each plant includes a description of the plant, the author's thoughts on the effective landscape characteristics of the species, notes about culture, and a list of other species with which the plant can be combined effectively. Each species is illustrated with at least one color photograph.

100 Great Garden Plants is not meant to be an encyclopedia and thus does not include descriptions of every plant in cultivation. Rather, it is an interesting and very enjoyable catalogue of plants one gardener has found to be fine subjects for the garden.

• *Daylilies: The Wild Species and Garden Clones, Both Old and New, of the Genus Hemerocallis.* A. B. Stout. Sagapress. Millwood, New York. 1986. 145 pages; hardcover, \$29.00. AHS member price, \$27.55.

This is a reprint of A. B. Stout's classic work on daylilies, which was first published in 1934 and was out-of-print for many years. (A new forward and introduction have been added, and the text has been updated to some extent.) Daylily fanciers who are curious about the origins of their favorite flower will be fascinated by the information on the natural distribution of daylilies as well as the chapter on daylilies in historical retrospect. The book also contains detailed information on species of daylilies as well as cultivars that were being grown when the book was originally published. (It does not, however, contain information on the hundreds of cultivars that have been developed and released in recent years.) Chapters on uses of daylilies, culture and care, and propagation and breeding complete the text. In addition to many black-and-white photographs (many of which, unfortunately, are rather fuzzy), *Daylilies* contains reproductions of the original color plates. Apparently, the

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plates were reproduced by cutting and pasting plates from several books, because cut marks are clearly visible on many of them. Despite these limitations, however, this classic work would make a useful addition to the library of any daylily fancier.

• **Newcomb's Wildflower Guide.** Lawrence Newcomb. Little, Brown and Company. Boston, Massachusetts. 1977. 490 pages; hardcover, \$18.45. AHS member price, \$16.65.

This is an excellent field guide to the plants of the eastern United States. The book begins with an easy-to-follow plant key, which is organized by flower structure. This system makes it easy to identify new, unfamiliar plants. Excellent line drawings and a helpful introductory text complete the book.

• **Fine Preserving.** Catherine Plagemann; M. F. K. Fisher, editor. Aris Books. Berkeley, California. 1986. 132 pages; hardcover, \$17.95; softcover, \$9.95. AHS member price, \$13.45 (hardcover), \$5.45 (softcover).

This is an annotated version of Catherine Plagemann's classic book on preserves, which was first published in 1967. The book contains a wide variety of recipes for marmalade, jelly, conserves, pickles, chutney, and preserves. The author has included recipes for such diverse fruits as apples, bananas, blueberries,

lemons, mangoes, papayas, pineapples, raspberries, and strawberries, as well as for cucumbers, mixed fruits and vegetables, mushrooms, peppers, and tomatoes. An introduction briefly explains techniques and equipment needed. This book will tempt the gourmet in every gardener with unusual herb jellies such as "Rosemary Jelly with Apricot and Lemon Juices" (for use with delicately flavored meats such as veal or chicken), "Sliced, Preserved Orange Slices," and "Strawberry Pineapple Conserve," as well as more traditional concoctions such as "Peach Marmalade."

• **Guide to the Vascular Flora of Illinois.** Robert H. Mohlenbrock. Southern Illinois University Press. Carbondale, Illinois. 1986. 507 pages; hardcover, \$42.50; softcover, \$17.95. AHS member price, \$34.00 (hardcover), \$14.35 (softcover).

This is a new, updated edition of Mohlenbrock's guidebook, which was first published in 1975. An introductory chapter on the natural habitats in the state is provided, but the vast majority of the book is devoted to the 3,204 taxa of ferns, gymnosperms, and flowering plants occurring in Illinois. A glossary and indexes to common names, families, and genera are also provided. This is a book for the serious amateur or professional.

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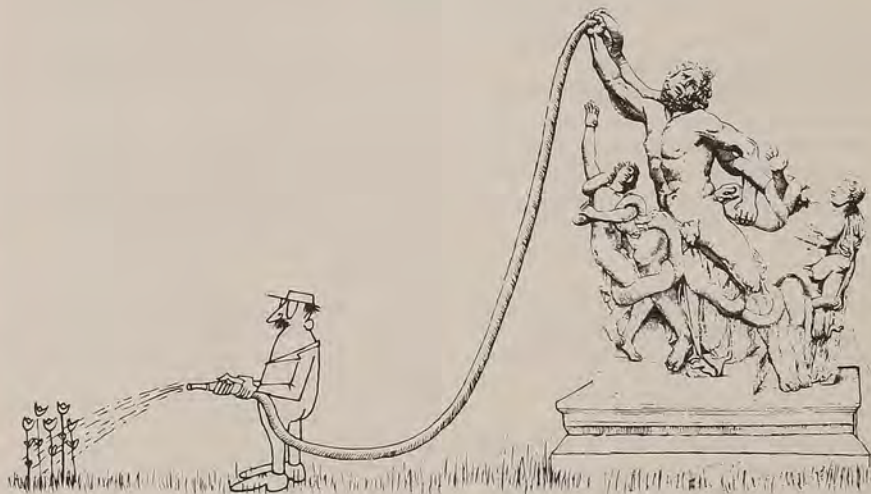
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WANTED-AUTHORS

National publisher seeks book mss on gardening and landscape design. Address queries to SA, PO Box 1831, Cameron and Kelker Streets, Harrisburg, PA 17105.

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New Publications

• **Growing from Seed.** For those of our members who are involved in our Seed Program, or who would like to be, this four-color quarterly magazine put out by Thompson & Morgan may help unravel some of the mysteries behind growing plants from seed. The authoritative and informative articles, written by expert international horticulturists and the technical staff of Thompson & Morgan, are aimed at helping you get the best out of your seed. Included are descriptions of techniques for raising both common and unusual plants from seed, as well as behind-the-scenes stories about where seed comes from. The magazine also contains a reader's column and an A-Z Seed Raiser's Directory, which includes the results of research carried out at Thompson & Morgan. *Growing from Seed* is available for \$9.95 from Thompson & Morgan, Inc., P.O. Box 1308, Jackson, NJ 08527, or 1-800-FOR-SEED.

• **The Home Fruit Planting.** Beginners who are considering planting fruit trees, grapevines, or small fruits will want to consult this basic reference before they begin ordering plants. In addition to information for the beginner who is about to order plants, this booklet also contains instructions aimed at gardeners with older, mature fruit trees and overgrown brambles and vines that need pruning and other care in order to



produce better yields. *The Home Fruit Planting* discusses site and soil conditions, climatic requirements, and planting plans, and describes cultural practices for apples, pears, grapes, raspberries, blueberries, strawberries, and currants, among

other fruits. A short section on rodent and insect control, and where to find information about controlling these pests, is also included. The booklet was written by John P. Tompkins and Gene H. Oberly, both professors of pomology at the New York State College of Agriculture and Life Sciences at Cornell University. It is available from county offices of the Cornell Cooperative Extension Service throughout New York State, or by mail from the Cornell Distribution Center, 7-HF Research Park, Ithaca, NY 14850. A charge of \$2, payable to Cornell University, covers mailing and handling costs.

Dethorned Roses: Shorter Vase Life

Experiments in Holland have shown that removal of leaves and thorns from the lower ends of cut rose stems can greatly reduce the vase life of the flowers. Such "deleafing" is now the norm among floriculturists, and allows easier handling of the flowers.

In the experiments, roses obtained from a commercial supplier had either leaves or both leaves and thorns removed from the lower six to eight inches of their stems. The roses were then kept in tap water at room temperature, with 12 hours of light per day. The average vase life of defoliated and dethorned roses was significantly less than the average life of defoliated but not dethorned roses.

(The difference amounted to between one and three days.) Thorn removal hastened the onset of "bent-neck," accompanied by petal wilting.

Scientists believe that the larger area of wounded stem tissue that results from dethorning allows quicker growth of microorganisms that cause vascular blockage and subsequent wilting. Preservatives or bactericides added to the vase water can help to offset early losses in quality due to dethorning. Therefore, if you are not using chemicals to extend the life of your cut flowers, you should try to keep stem damage to a minimum.

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