Special Flower Show Preview for AHS Members in Boston

“Yankee Gardening” is to be the theme of the Massachusetts Horticultural Society’s annual Harvest Show, and members of the American Horticultural Society who will be attending the Annual Meeting in Boston this year will have an opportunity to preview the show as special guests of the Massachusetts Society.

Following a cocktail reception given in our honor on Thursday, September 24, AHS members will be able to view displays set up throughout Horticultural Hall that stress energy-conscious gardening in New England. Energy-efficient greenhouses will be on display and will contain exhibits by area plant societies. These groups include the begonia, camellia, bromeliad and wildflower societies. Similar exhibits also will be staged by the Indoor Light Gardening Society, the Arnold Arboretum, the Amateur Horticulture Committee and The Bonsai Study Group. These last two groups are part of the Massachusetts Horticultural Society. In addition, the Garden Club Federation of Massachusetts will stage a flower arranging exhibition.

The Gardening Center and Gift Shop at Horticultural Hall will be open for AHS members’ convenience and enjoyment during this preview.

If you haven’t yet registered for the Annual Meeting, do so today. Space is limited, and by press time (July 27), well over half of the allotted rooms at the hotel had been reserved. Write to Dorothy Sowerby in care of the Society for information and registration material.

Fall Lecture Series Scheduled

Our Winter Lectures at River Farm have proved to be very popular, and this season we are happy to announce we will also be offering a Fall Series. The five lectures will be held on Thursdays from 10:00 a.m. to 1:00 p.m. October 8 through November 5. They will begin on October 8 with a lecture on “Winterizing the Garden and Planning for Spring,” followed on October 15 by “Bulbs for Winter and Spring.” On the 22nd of October Mr. H. William Merritt, a past president of the Northern Virginia Bonsai Association, will lecture on bonsai, and Suzanne Friis, Education Horticulturist at Brookside Gardens, will lecture on “Gardening in Containers” on October 29. On November 5 Mr. and Mrs. Louis H. Martin, both avid orchid hobbyists, will talk about orchids. Mr. Martin is the President of the National Capitol Orchid Society and both are studying to become orchid judges.

Members in the greater Washington metropolitan area will soon be receiving a brochure and reservation card by mail. Our fall lectures will be available as a series or on a lecture-by-lecture basis. For more information, call or write Dorothy Sowerby at the Society.

AHS Sponsors 1st Western Regional Conference

Society members on the West Coast are invited to attend the first AHS Western Regional Conference on October 3, 1981. The conference will be held at Descanso Gardens, La Canada, California from 10:00 a.m. to 4:30 p.m.

The program will feature noted speakers, a luncheon, garden tours and an address by AHS President, Dr. Gilbert S. Daniels. For complete information, write or call AHS Board Members Mrs. Georgie Van de Camp or Dr. Julia Rappaport at Descanso Gardens, 1418 Descanso Drive, La Canada, CA 91101, (213) 790-3938.

Fall Open House Scheduled

Horticulturists, gardeners and area residents interested in spending an afternoon on the banks of the Potomac are invited to gather at River Farm for our Fall Open House on October 11 from 12:00 noon to 4:00 p.m. In case of rain, the event will be postponed until the following Sunday, October 18th.

Visitors will find displays by area artists and craftsmen; sales and exhibits by local plant societies; opportunities to tour the Society’s gardens and a free gardening advice booth staffed by horticulturists. Area gardeners will be especially pleased to learn about our scheduled plant sale. White Flower Farm of Litchfield, Connecticut has agreed to make a selection of their plants available at a discount to Open House visitors. We will be taking orders for fall delivery. Please plan to join us on October 11.
River Farm Notes

In an earlier issue I described several new gardens and additions to existing gardens that we hoped to implement during this year. Happily, the majority of the projects now have been completed. In later columns I will fill in some of the details on our new wildflower meadow, the display gardens of daylilies and azaleas, our strawflower collection and the beginnings of a River Farm "home" for endangered specimens of our mid-Atlantic native flora. In this issue, however, I would like to concentrate on another of our 1981 season projects — our fruit orchard.

Andrew Jackson Downing, in his 1845 book, The Fruit and Fruit Trees of America, said "Fine fruit is the flower of commodities. It is the most perfect union of the useful and the beautiful that the earth knows. Trees full of soft foliage; blossoms fresh with spring beauty; and, finally, — fruit, rich bloom-dusted, melting, and luscious — such are the treasures of the orchard and garden, temptingly offered to every landholder in this bright and sunny, though temperate climate."

Fruit trees are something special. For this reason and also because there is a need for us to better understand this aspect of horticulture, we decided to develop an orchard here at River Farm. We hope that our orchard will become a very important educational tool, to be used by us and our visitors to learn proper growing techniques and to evaluate individual cultivars.

This project began, as do all of our proposed plantings, with research. We determined which cultivars we wanted to plant and then developed a diagram. Unfortunately, there were far more trees on our list than space in the planting site. To help resolve this problem we decided to plant only cultivars grafted onto dwarf and semidwarfing rootstocks, a very popular approach to backyard fruit tree growing these days.

Once we had arrived at a final planting list we began our efforts to acquire the actual plant material. Because of the considerable costs our 87-tree project would have incurred, this endeavor would almost certainly be on the drawing board were it not for the generosity displayed by several of this nation's finest nurseries: Southmeadow Fruit Gardens of Birmingham, Michigan; Stark Brothers Nurseries of Louisiana, Missouri; J. E. Miller Nurseries of Canandaigua, New York; and Kelly Brothers Nurseries of Dansville, New York.

Our orchard will contain 35 apple cultivars (17 dwarf and 18 semidwarf), 14 cherries, nine pears, eight plums, eight nectarines, seven peaches and six apricots. The orchard will be diverse with respect to cultivars as well. Our selections of apples, for example, includes not only the standard cultivars but also some of the newest disease resistant ones. We have even included some of the ancients — those apples that have not been devoured by hungry mouths since the days of George Washington. Our selections are exciting, and I look forward to the day when I can use this column to pass on our evaluation of 'Yellow Egg' and 'Shiro' plums, 'Stark Honeygold' and 'Stark Sunburst' nectarines, 'Fame' and 'Moonglow' pears, 'North Star' and 'New Emperor Francis' cherries, 'Early Golden' and 'Moonpark' apricots, 'Redhaven' and 'Champion White' peaches and 'Granny Smith', 'Liberty', 'Pound Sweet', 'Cox Orange', 'Pippin' and 'I Dared' apples.

—Steve Davis
Letter to the Editor
The following letter was received in response to the article, “Buying a Solar Greenhouse,” which appeared in the August issue of American Horticulturist.

As a botanist and the operator of a solar-heated greenhouse for the past five years, I have been observing a trend that I consider disturbing. The use of the term “solar greenhouse” has become distorted and confused with what most people call plantrooms, sunporches, atriums, loggias, etc. I would like to try to put these terms in their proper perspective.

A greenhouse is a building that has controllable humidity and temperature. Simply stated, if the owner wanted a night-time minimum temperature of 65°F he could regulate it, with a heat source, to maintain that temperature.

A solar greenhouse or solar-heated greenhouse or solar-assisted greenhouse should do all of the above. The only difference is that it derives some of that heat from solar energy collected during the day and stored in some form for later use. Both the “greenhouse” and “solar greenhouse” (whether free standing or attached) are designed and built for plants to allow the best growing conditions possible. The primary idea of a solar greenhouse is to offset the rising cost of fuels for operating that facility.

What is disturbing to me, and a number of people, is the way in which a number of firms are advertising “solar greenhouses” to heat homes. Admittedly, a great deal of heat is wasted in the operation of a greenhouse that could be used for home heating (I personally have one on my house and enjoy that benefit) but, when the priority of that “greenhouse” is for heating the home, the plants are placed as secondary to the running of a true greenhouse.

Instead of owners asking how much heat they could get after the plants are satisfied, people are asking what plants they can grow in that too-hot-during-the-day and too-cold-during-the-night environment. In some cases, the 120°F daytime temperature and the 32°F nighttime temperature are comparable only to a desert and suitable only for those types of plants.

My advice to any prospective buyers of a “solar greenhouse” is first to be honest with themselves and decide which they want, a heater for their house or a greenhouse. If they want a solar collector to supplement their heating bill they should be prepared for hot days and cold nights and should plan to grow low-temperature resistant plants and anticipate numerous other factors that go along with the cold climate provided by their greenhouse (fungus, mildew and disease).

If an owner is interested in adding a true solar greenhouse, he should be prepared to add sufficient heat during the night with a properly sized heater, run a dehumidifier for his house day and night and buy shading and cooling fans to keep his plants alive.

If you are thinking about a solar greenhouse ask for names and addresses of people who have that style, then write to them and ask what temperatures they can maintain, how they cool their greenhouse, heat it, etc.

Lastly, if you have a “greenhouse” you are using primarily for heating your house, do everyone that has a real greenhouse a favor and call it what it is, a solar collector. Greenhouses are very special structures where the plants come first, not last.

—Donald R. Hendricks, President, The Stanley W. Hayes Research Foundation, Hayes Regional Arboretum, Richmond, Indiana

New Source for Tyvek® Bags
Readers who are still planning to experiment with Tyvek®-bag composting this season will be pleased to learn we have located a second source for the bags. Forencio, P.O. Box 9088, Wilmington, Delaware 19809, has Tyvek® composting bags available under the brand name ‘Post Haste. ’Post Haste bags can be reused at least once. They lose strength only when left in direct sunlight for long periods of time. The prices for ‘Post Haste bags, including freight charges, are as follows: 1 bag, $1.95, 5 bags, $8.95, 10 bags, $16.95 and over 10 bags, $1.69 each.

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American Horticulturist 3
Dates to Remember

Our Annual Meeting, a lecture series, Open Houses and tours to the four corners of the globe are some of the activities scheduled for members this fall.

From September 24th to the 27th members will be gathering in historic Boston to attend the Society’s 36th Annual Meeting. For more information on the lectures and garden tours scheduled, see the itinerary and registration blank on page 13 of the July issue of American Horticulturist news. Also scheduled is a Post Congress Tour of New England for members wishing to explore this area of the country at their leisure. From September 28th through October 7th members will visit New England’s finest public and private gardens (an itinerary for this tour was inserted in the May newsletter).

England’s “East End” is the destination for members participating in the Society’s Autumn Exploration of Yorkshire and East Anglia from September 10th to the 24th. See Valerie Sanson’s article, “Autumn in England,” in the June issue of American Horticulturist for an account of this trip.

Also this fall Society members will be touring Switzerland and Northern Italy. See Dorothy Knecht’s article, “Swiss Gardens,” in the August American Horticulturist and sign up for this tour from September 24 through October 8th.

Join Us in Boston!

October will be a busy month for members and residents in the River Farm vicinity. Our Fall Open House is scheduled for October 11, rain date October 18, from 12:00 noon to 4:00 p.m. For more information on the Open House, see the article on page 1 of this issue. Our winter lecture series proved to be so popular that we have scheduled a series for the fall. Autumn Lectures at River Farm are scheduled for October 8, 15, 22, 29 and November 5. The article on page 1 of this issue provides details.

From October 21st through November 8th, participants in our Exploration of New Zealand will leave the fall behind for a few weeks and tour this island nation during their spring south of the equator. Visits to both public and private gardens, the famed wonderland of geysers at Rotorua with its boiling pools of mud and glittering silica terraces, and a traditional Maori feast are just some of the activities scheduled.

On our fall Exploration of Florida, scheduled from October 19th through November 2nd, members will have the opportunity to tour unique gardens and natural areas a bit closer to home. Visits to the Fairchild Botanical Garden, Cypress Gardens, Corkscrew Swamp Sanctuary and lovely private gardens are scheduled.

This fall members will again be given the opportunity to participate in what is perhaps the Society’s most popular tour—a visit to Japan, Taiwan and Hong Kong. The itinerary of our Autumn Exploration of the Orient includes visits to selected private homes and gardens, a privilege rarely available to tourists. Participants will also tour public and temple gardens, enjoy magnificent displays of chrysanthemums, sample Oriental cuisine and visit producers of typical handicrafts. (For more information on what this exciting tour has to offer, read “Notes from the Orient” by Leonore Borromio in American Horticulturist, October/November 1979.)

Finally, members and area residents are invited to celebrate the coming of the Christmas season at our Christmas Open House scheduled for December 17th here at River Farm. Plans are already well underway, and our guests will be treated to refreshments and a demonstration on how to make holiday ornaments. We are also planning a sale of plants that are ideal as gifts this time of year. Please plan to join us from 1:00 to 4:00 p.m.

For more information, brochures and reservation cards for any of the above activities, write to Dorothy Sowerby in care of the Society.

Slide Programs Available

If you’re in charge of your local garden club or plant society’s program committee this year, you may be interested in using the following service. The American Society for Horticultural Science has a wide variety of slide programs available, including such topics as “Angiosperms of North America,” “Cacti of the Southwest,” “Herbs, Spices and Fragrances” and “Orchid Propagation.” The sets, which contain anywhere from 30 to over 100 slides, include a script. They were produced by members and friends of ASHS. Also available is a catalogue of individual slides for plant identification.

For more information on the slide programs, write Eugene Memmler, Chairman, ASHS Slide Collection, 3287 Dunsmer Road, Glendale, CA 91206. To obtain a copy of the catalogue of plant identification slides, enclose $1.00 with your request.

Helpful Gardeners Reference

A useful reference work describing 100 of California’s most outstanding native plants is available through the Saratoga Horticultural Foundation, Inc. Selected California Native Plants contains more than 200 color photographs of the best cultivars and species available and is designed for use by professional horticulturists, homeowners, educators and environmentalists. The book is designed in an easy-to-carry size for handy field identification, includes a chart to determine flowering times and cultural preferences and lists guidelines for using native plants in the landscape. Also available is a source guide, Sources, designed to help landscape architects, planners and installers use these plants.

Both books are available from the Saratoga Horticultural Foundation, PO Box 308, Saratoga, CA 95070. To order Selected California Native Plants send $7.75, including postage and handling, to the above address. Sources is also available at the same address at a cost of $3.60, including postage and handling. Both books, if ordered together, are available at a discounted price of $10.
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Tree Peony Pruning—Added Benefits

Tree peonies will perform well for years with only minimal yearly care, but with a little extra attention to yearly pruning and fertilizing, gardeners can improve not only the appearance and performance of their plants but also their disease resistance. In a lecture delivered at the Floralies Internationales de Montreal in June, 1980, Dr. Henry Landis reviewed his personal experiences with tree peonies that, he says, “have frequently led me to opinions which differ from those of well-known tree peony specialists.”

Dr. Landis was taught the techniques of pruning tree peonies by Takahiro Somei, a Buddhist priest who has written several books on these plants in Japanese. Mr. Somei’s garden contains over 4,000 tree peonies of about 400 species and cultivars.

“The purpose of corrective pruning is to direct the plant’s energy into the production of flowers rather than leaves, and to prevent disease,” says Dr. Landis. To achieve this purpose Mr. Somei allows each plant to have only four or five main stems, and in addition to removing all other growth coming out of the ground, only three or four side shoots at the tip of each main stem are left on the plant. Any shoots that appear to be weak, and those that point to the center of the plant, also are removed. When cutting away a side shoot that is not of the current year’s growth, Mr. Somei leaves a one-half-inch stub to prevent any damage to the main stem. New shoots can be cut off flush with the main stem.

“I have substantially eliminated botrytis without spraying merely by following these techniques of corrective pruning and by removing all leaves from the tree peonies after the first frost and before they fall,” says Mr. Landis. “I have also observed a marked improvement in the production of large flowers where older plants have tended to vegetative growth rather than to producing flowers.” This year Mr. Landis used an electric saw to cut all of his older tree peonies to the ground. This way, he says, “long, willowy stems would be replaced by shorter, thicker stems, which will hold the flowers well. An old tree peony that is well-established on its own roots can be rejuvenated in this way in late fall or early spring.”

In addition to corrective pruning, Mr. Somei and Dr. Landis recommend regular feeding. Mr. Landis, who gardens in Toronto, feeds his plants three times a year. He first feeds very early in the spring, as soon after the snow has melted as possible. The second feeding is given after the plants have finished flowering, and the third in mid to late August. Mr. Somei feeds his plants four times a year. Under his climatic conditions in Japan root growth continues throughout the winter, and so a fourth feeding is given in late fall or early winter. Both men fertilize with bone meal and an organic nitrogen fertilizer such as rapeseed meal as a part of their overall feeding program. Dr. Landis recommends yearly soil tests to determine the proper fertilization program for each gardener’s own set of conditions.

Many gardeners expect flower production to decline on plants that are 10 or 15 years of age. Dr. Landis believes this view to be incorrect and “based on inadequate, hit-and-miss fertilization and the lack of corrective pruning rather than on any natural cycle in the growth of a tree peony. The result of proper fertilization and corrective pruning is long life for a tree peony. I have seen a plant in Mr. Somei’s garden which has been growing in the same location for 80 years and is in excellent condition. According to Mr. Somei, it blooms well every year.”


BBG Handbook Published

The newest addition to the Brooklyn Botanic Garden series of gardening publications will help homeowners evaluate flowering shrubs and select...
the plants that will best suit their gardening needs. Guest edited by Pamela Harper, Handbook on Flowering Shrubs discusses the best ornamentals for flowers, foliage and fall color. The 80-page booklet includes both color and black and white photographs, a hardiness zone map and information on planting, pruning and care.

To order Handbook on Flowering Shrubs, number 94 in the Brooklyn Botanic Garden series, send $2.85 to Brooklyn Botanic Garden, 1000 Washington Avenue, Brooklyn, NY 11225.

New Rooting Compound
The Ohio Agricultural Research and Development Center and the Chemistry Department of the College of Wooster, both of Wooster, Ohio, are working together to purify and synthesize a remarkably potent root-promoting compound found several years ago in willow extract by O.A.R.D.C. scientist, Professor Makota Kawase. The substance is not a plant hormone, reports its discoverer. "Alone, it seems to have the ability to stimulate rooting unmatched by any previously known rooting substance, including the plant hormones... Its root-promoting effect increases sharply when it is applied to cuttings with plant hormones." In experiments with cuttings of *Betula lutea* (yellow birch), a species that is nearly impossible to root, Professor Kawase rooted 100 percent of the cuttings treated with both willow extract and Hormodin #2. Cuttings treated with only Hormodin #2 did not root.

Gardeners interested in experimenting with this root-promoting compound can make their own willow extract. Soak several willow (*Salix* sp.) cuttings in a container of water for 48 hours, and then place woody plant cuttings in the same water to soak for 24 to 48 hours. After this, treat the cuttings with Hormodin #2 and immediately stick them in a suitable rooting medium. Professor Kawase also suggests that soaking woody plant seed and watering cuttings and transplants with willow water might be beneficial as it could stimulate germination and root development.

—Avant Gardener, December 15, 1980

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American Horticulturist
August 29
Wine Festival Vineyard Tour
Vinifera Wine Growers Association
The Plains, Virginia 22171
Hours: 9:00 a.m. to 5:00 p.m.

September 1-17
10th World Orchid Conference
Durban, South Africa
Information: The Working Committee, 10th WOC, PO Box 10630, Marine Parade, 4056 Durban, South Africa

September 8-11
National Council for Therapy and Rehabilitation Through Horticulture
9th Annual Conference
Grand Hyatt Hotel
New York, New York
Information: 701 N. St. Asaph Street, Alexandria, VA 22314, (703) 836-4609

September 12
Red Rose Rent Day
Conard-Pyle Co., Star Roses
West Grove, Pennsylvania
Ceremony at 11:00 a.m., public invited
Information: The Conard-Pyle Co., West Grove, PA 19390, (215) 869-2426

September 17-19
American Ivy Society Annual Convention
Bradenton, Florida
Information: Mr. and Mrs. Darwin Ralston, Hosts and Convention Chairpersons, 708 60th Street, N.W., Bradenton, FL 33529, (813) 792-3574

September 17-20
American Dahlia Society
48th Annual Midwest Dahlia Conference and Show and 15th Annual National Show
Sheraton-Naperville Hotel
Naperville, Illinois
Information: Mr. and Mrs. Silvo A. Moschini, 6139 South Rutherford Avenue, Chicago, IL 60638

September 22-24
Royal Horticultural Society Great Autumn Show
Westminster, England

September 24-27
American Horticultural Society 1981 Annual Meeting
Boston, Massachusetts
Information: Phone or write Dorothy Sowerby at the Society

September 25-26
Boston Fall Flower Show, "Yankee Gardening"

"Autumn in the Atrium" is the theme for this year's Fall Flower Show sponsored by the Garden Club of America. Exhibits will be on continuous display from October 13 thru October 16 at the Citicorp Building in New York.

September 26-27
National Capital Dahlia Society 46th Annual Show
Tyson's Corner Shopping Center
McLean, Virginia
Hours: Show opens 4:00 p.m. Saturday, closes 4:00 p.m. Sunday
Information: National Capital Dahlia Society, Clarence G. Phillip, Publicity, 506 North Oak Street, Falls Church, VA 22046

September 26-27
Harvest Show
Pennsylvania Horticultural Society
Memorial Hall, Fairmount Park
Philadelphia, Pennsylvania
Hours: 10:00 a.m. to 5:00 p.m., Admission: adults $2.00, children under 12 $1.50

September 27
Huntington Botanical Gardens
Seventh Annual Benefit Plant Sale
Pasadena Center Exhibition Hall (West)
300 East Green Street
Pasadena, California
Hours: 9:00 a.m. to 4:00 p.m.
For a catalogue listing the over 28,000 plants to be available, send $1.50 to Plant Sale, Department A, The Huntington, 1151 Oxford Road, San Marino, CA 91108

October 2-4
The American Rhododendron Society Western Regional Conference
Agate Beach Hilton
Newport, Oregon
Information: Betty Spady, Registrar, 9460 Sunnyview NE, Salem, OR 97301, (503) 385-2427

October 2-5
American Rose Society National Convention
Twin Bridges Marriott
Washington, D.C.
Information: Dr. and Mrs. Ben Holmes, 5532 Belfast Place, Springfield, VA 22151, (703) 236-0326

Massachusetts Horticultural Society
Horticultural Hall
300 Massachusetts Avenue
Boston, Massachusetts
Hours: 10:00 a.m. to 5:00 p.m., $2.00 per person admission
<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
<th>Location</th>
<th>Details</th>
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</thead>
<tbody>
<tr>
<td>October 3</td>
<td>First AHIS Western Regional Conference</td>
<td>Descanso Gardens</td>
<td>La Canada, California</td>
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<td>Hours: 10:00 a.m. to 4:30 p.m.</td>
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<td>Information: Write or call Mrs. Georgie Van de Camp or Dr. Julia Rappaport, Descanso Gardens, 1418 Descanso Drive, La Canada, CA 91101, (213) 790-3938.</td>
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<tr>
<td>October 3-4</td>
<td>Ohio Gourd Show</td>
<td>Morrow County Fairgrounds</td>
<td>Mt. Gilead, Ohio</td>
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<td>Hours: 12:00 noon to 6:00 p.m. Saturday, 9:00 a.m. to 5:00 p.m. Sunday</td>
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<tr>
<td>October 8, 15, 22, 29 and November 5</td>
<td>Lecture Series</td>
<td>American Horticultural Society</td>
<td>River Farm, Mt. Vernon, VA</td>
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<td>Information: Phone or write Dorothy Sowerby at the Society</td>
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<tr>
<td>October 9-12</td>
<td>Western Garden Writers Symposium</td>
<td>Honolulu, Hawaii</td>
<td>Information: Fortunato Tefo, 1778 Ala Moana Boulevard, Honolulu, HI 96815, (808) 941-2102</td>
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<tr>
<td>October 11</td>
<td>Rain Date October 18</td>
<td>Fall Open House</td>
<td>American Horticultural Society, River Farm, Mt. Vernon, VA</td>
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<td>Information: Phone or write Dorothy Sowerby at the Society</td>
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<tr>
<td>October 11-14</td>
<td>American Forestry Association</td>
<td>106th Annual Meeting</td>
<td>Santa Fe Hilton Inn, Santa Fe, New Mexico</td>
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<td>Information: American Forestry Association, 1319 18th Street, NW, Washington, D.C. 20036</td>
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<tr>
<td>October 13-16</td>
<td>Garden Club of America’s Fall Flower Show</td>
<td>Citcorp Center</td>
<td>153 East 53rd</td>
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<td>New York, New York</td>
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<td>Hours: Opens 1:00 p.m. Tuesday, October 13, Closes 2:00 p.m. Friday, October 16th</td>
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<td>Information: The Garden Club of America, 598 Madison Avenue, New York, NY 10022, (212) 753-8287</td>
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<tr>
<td>October 13-19</td>
<td>International Design Symposium and Flower Show</td>
<td>National Council of State Garden Clubs</td>
<td>Lima, Peru</td>
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<td>Information: IDS, Lima, Horticultural Hall, 30 Elm Street, Worcester, MA 01608</td>
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<tr>
<td>October 15-18</td>
<td>26th Eastern Orchid Congress and North Carolina Orchid Society Show</td>
<td>Grove Park Inn</td>
<td>Asheville, North Carolina</td>
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<tr>
<td>October 17-18</td>
<td>Descanso Gardens Guild 2nd Annual Plant Sale</td>
<td>Descanso Gardens</td>
<td>1418 Descanso Drive, La Canada, California</td>
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<td>Hours: 9:00 a.m. to 4:30 p.m.</td>
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<td>October 17-18-24-25, 31-November 1</td>
<td>Autumn Colorfest at Callaway Gardens Information: Autumn Colorfest, Callaway Gardens, Pine Mountain, GA 31822, (404) 663-2281</td>
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<tr>
<td>October 22-25</td>
<td>National Chrysanthemum Society 38th Annual Meeting and Show</td>
<td>Holiday Inn</td>
<td>260 Goddard Boulevard, King of Prussia, Pennsylvania</td>
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<td>November 4</td>
<td>Professional Grounds Management Society Annual Conference and Trade Show</td>
<td>Portland Marriott Hotel</td>
<td>Portland, Oregon</td>
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<td>November 4</td>
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<td>Information: Allan Shulder, Executive Director, Professional Grounds Management Society, 7 Church Lane, Pikesville, MD 21208, (301) 653-2742</td>
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<tr>
<td>November 6-7</td>
<td>Fourth Great Lakes Solar Greenhouse Conference</td>
<td>Hickory Corners and Kalamazoo, Michigan</td>
<td>Information: Ms. Jan Nesberg, Kalamazoo Nature Center, 7000 North Westnedge Avenue, Kalamazoo, MI 49007, (616) 381-1574</td>
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<tr>
<td>November 6-8</td>
<td>American Camellia Society Fall Convention</td>
<td>Pensacola, Florida</td>
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<td>November 7</td>
<td>California Native Plant Sale</td>
<td>Rancho Santa Ana Botanic Garden</td>
<td>Claremont, California</td>
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<td>Information: Rancho Santa Ana Botanic Garden, Claremont, CA 91711, (714) 626-1917</td>
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<tr>
<td>November 11-14</td>
<td>Holly Society of America, Inc., Annual Meeting</td>
<td>Mobile, Alabama</td>
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<tr>
<td>November 18-20</td>
<td>Second Annual Convention and Trade Show Professional Lawn Care Association of America</td>
<td>Commonwealth Convention Center</td>
<td>Louisville, Kentucky</td>
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<td>Information: Jane Stecker, Administrative Director of PLCAA, Bostrom Management Corporation, Chicago, IL 60611, (312) 644-0828</td>
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</table>

If your horticultural club or association is planning an event that may be of interest to our national audience, please send us information concerning the nature of the meeting, the dates, times and location at least three months prior to the time the meeting will take place. We will be happy to include it in our Calendar unless space limitations prevent us from doing so.
Reduced Use of Pesticides Still Healthy for Lawns

Florida homeowners can reduce their pesticide use by as much as 90 percent and still have a healthy lawn, according to Dr. Don Short, an entomologist with the University of Florida's Institute of Food and Agricultural Sciences.

Short said a two-year study has shown such savings can be accomplished by inspecting the lawn every week or 10 days and applying pesticides in a five-foot-wide band around areas where insect problems appear.

"We studied 20 lawns in Gainesville, 20 in Orlando and 20 in Ft. Lauderdale," said Short. "All the lawns we studied were of St. Augustine grass (Stenotaphrum secundatum) since more than 70 percent of Florida lawns are of St. Augustine. Half the lawns were under a normal preventive pest control program. Those lawns were sprayed entirely every eight weeks. The other half were inspected every week or 10 days and treated only in problem areas. The test lawns looked just as good as the lawns that were sprayed every eight weeks."

Short also said that too much pesticide will kill beneficial insects such as earwigs, ground beetles and big-eyed bugs, which prey on destructive insects. Taking care to mow the lawn to the proper height to prevent thatch buildup will help control two of St. Augustine's worst insect enemies, chinch bugs and webworms. Thatch makes the lawn spongy from too many horizontal runners and creates an environment where these insects thrive. Floridians should call their local county extension agent for information on the correct height and mowing method for St. Augustine grass.

Short also pointed out that many Floridians overfertilize. "It's unheard of for a South Floridian to fertilize a lawn 10 or 12 times a year. That's too often. The fertilizer just runs off the lawn into the water system and becomes a source of pollution," he said. Short recommends sparing use of slow release fertilizers because "an inorganic, or fast release, fertilizer will result in a flourish of plant growth and that will result in a flourish of insect growth."

By cutting down on fertilizer and pesticide use, homeowners save money and help save energy. The manufacture of pesticides and fertilizers requires large amounts of natural gas or oil.

Dried Magnolia Leaves Can Last for Years

Dried leaves of Southern magnolia can be used year-round in indoor arrangements. But like most dried plant materials, they tend to become brittle and crack in a short period of time. By letting the stems soak in a glycerin and water mixture, you can have leaves that are a richer brown color and more pliable than those dried naturally. The process is simple, and the leaves will last for years.

After the new growth of your magnolia has hardened (lost its flexibility), take cuttings of the branches; in most areas, this can be done in June or July. It's a good idea to cut the branches to different lengths so you'll have height variations in your arrangements. At the end of each cut branch, make two 3-inch-long cuts at right angles. These cuts will allow the stems to absorb the glycerin-water mixture more quickly.

Prepare a mixture of 1 part glycerin to 3 parts water or 1 part glycerin-base automobile antifreeze to 1 part water. Place the branches in a large container, and fill with enough of the glycerin mixture to cover the cuts at the end of the branches. As the mixture evaporates, add enough water to keep the cuts covered at all times. It may take as long as two months for the glycerin to be absorbed into the stems. At that time, the leaves should be a consistent brown color and ready to be used in arrangements.

You can arrange your magnolia leaves in a large container and place them in the opening of your fireplace when the weather is warm. Then next winter, mix the leaves with fresh evergreen foliage to use as an arrangement in an entry hall, on a sideboard, or even outside near the entrance of your home.

—Copyright by Southern Living, Inc., June 1981

New Asparagus Cultivar

'Jersey Centennial' is a new asparagus cultivar that in field trials has proved to be more vigorous, rust resistant and productive than 'Mary Washington' when grown on the fusarium-infested soils of New Jersey. 'Mary Washington' is the most commonly grown cultivar of asparagus in American gardens today. Furthermore, in a yield trial on non-infested soil in Michigan, 'Jersey Centennial' proved to be the most productive cultivar tested.

During the eight years of testing conducted in New Jersey, this new cultivar was projected to yield 38 percent more total weight than 'Mary Washington'. Because the greatest differences in yield occurred in the later years of the trial, the cultivar probably has a good potential for long term yield. The superior performance may be due, in part, to the greater fusarium resistance of 'Jersey Centennial'. For the last six years of an eight-year trial conducted in Michigan, 'Jersey Centennial' out-yielded eight other asparagus cultivars.

Roots of 'Jersey Centennial' will not be available to homeowners until the fall of 1982. Several companies are establishing parent plants from seed this year and probably will begin marketing plants at that time. For sources of seed write Research Corporation, 405 Lexington Avenue, New York, NY 10017.

—HortScience June, 1981

10 American Horticulturalist
With food prices going sky high, an old gardener found a new way to beat the high cost of grocery store produce:

**SOLAR POWERED MINI GREENHOUSES!**

**BY ELIZABETH FISHER**

I've been growing vegetables for about 25 years. When I first saw the ad that claims a family can grow their own vegetables year round with a miniature greenhouse that uses no artificial light or heat, I was very skeptical. I thought to myself—how can that be? That's impossible. It takes a big, expensive greenhouse. It takes a big setup with lots of artificial light and heat to grow vegetables in freezing cold weather. But my curiosity kept nagging me, so I sent off for the information.

My uncle is a gardener over in West Virginia. He showed me the GUARD 'N GRO literature. His first reaction was, "I don't believe it! I don't believe a small, portable greenhouse can make plants grow in freezing cold weather without any artificial light or heat."

But the more I studied it, the more it sounded like a good idea.

**FOOD PRICES CLIMB**

Another thing on my mind was the price of grocery store vegetables. We're having the biggest increase here since I can remember. Prices for store-bought vegetables are going through the roof. It's very hard on a lot of folks, but backyard gardeners are saving money by growing their own vegetables. I'd been thinking about growing more vegetables, but with the colder weather coming in, I was afraid my crops would not survive the frost and freezing cold. I decided to see if GUARD 'N GRO would protect my plants from those cold temperatures.

**EASY SET UP**

Now, when I started growing vegetables 25 years ago, I used homemade cold frames to protect my plants in cold weather. But those cold frames were bulky and a real chore to put together. Later, I switched to vinyl sheets stretched over metal hoops, but even that took a lot of work to set up. You can imagine how I felt when they delivered my GUARD 'N GRO. It was so compact, very simple. I took it out and set it up in just a few minutes.

**SAVES MY CROPS**

The first time I used GUARD 'N GRO in my garden, I was all fixed to put electric heating coils inside GUARD 'N GRO and give my plants plenty of protection. However, it was a very cold season—temperatures that fall dropped below freezing many times at night—and the first frost caught me by surprise. Almost without warning, the temperature plunged to 26° one night. It was so cold that ice formed on the pond. Well, I was sure my plants were ruined. Imagine my surprise when I looked inside my GUARD 'N GRO! Even though it was freezing cold outside, my GUARD 'N GRO plants were doing beautifully. They were not harmed by the freezing cold that killed crops outside GUARD 'N GRO! Without any artificial light or heat, GUARD 'N GRO saved my plants.

The secret is a network of thermal air cells sealed between each GUARD 'N GRO solar panel. Developed by a gardener in California, these energy-saving, thermal air cells trap and seal in solar heat to provide a constant, warm growing climate for plants. This warm climate makes plants grow faster and bigger than crops grown outside GUARD 'N GRO. From the information kit sent to me by the GUARD 'N GRO folks, I learned that GUARD 'N GRO works even in cold climates. It has produced superb results in Minnesota, Michigan, Colorado and Iowa. 16,300 GUARD 'N GRO systems are now being used by gardeners in 46 states.

**SAVES MONEY**

That winter, I picked lettuce, carrots and spinach from my GUARD 'N GRO garden on Christmas Day. This wonderful invention saved my plants from killing frost, freezing cold, hail, sleet and high winds. With GUARD 'N GRO I grew cool weather crops like lettuce, carrots, broccoli, spinach, beets, brussel sprouts, cauliflower, onions and broad beans...and did away with buying these vegetables in stores. GUARD 'N GRO let me grow vegetables in freezing cold weather...without using any artificial light or heat. And that's what it takes to save money growing your own vegetables in cold weather.

**GOOD FRESH VEGETABLES**

I believe anyone can grow vegetables with GUARD 'N GRO. Even if you just want to have a small garden, you'll save money. It's simple and easy if you just read the instructions. And the best thing about it is you get fresh, rich tasting vegetables and salad greens without all those chemicals in them, and the vegetables cost you only pennies. You certainly can't buy grocery store vegetables for that. And it's a great feeling to have all the vegetables you want—even in winter—when everyone else is paying sky-high prices for vegetables in stores.

The man who invented GUARD 'N GRO really knew what he was doing. Modern technology is a wonderful thing, isn't it?

**NOTE:** Readers of this publication can get a fact-filled, illustrated information kit on the GUARD 'N GRO including a free trial offer. The information kit is available free, without obligation. Requests should be addressed to GUARD 'N GRO, Dept. AH9, St. James, New York 11780.

**Year 'Round Gardener**

**Save Hundreds of Dollars**

WHY PAY OUTRAGEOUS PRICES for grocery store vegetables when you can grow your own vegetables almost every month of the year with GUARD 'N GRO mini greenhouses? No artificial light or heat needed. 100% solar powered. Makes plants grow big and fast even in 22° cold. Works year round. Cuts your food bill's year round. For porch, patio, backyard or small space container gardening. Folds flat for storage. Mail coupon for startling facts and FREE TRIAL OFFER.

Not Sold In Stores

GUARD 'N GRO
Dept. AH9 St. James, NY 11780

Yes! Rush me my FREE GUARD 'N GRO fact kit and details about how easily I GUARD 'N GRO. For Fall and Winter without making a penny! Understand I'm under no obligation and no salesperson will call.

Name
Address
City State Zip
Gene Splicing Breakthrough in Plants

Scientists at the U.S. Department of Agriculture and the University of Wisconsin have developed the technology for moving genes from one kind of plant to another. "This breakthrough achievement opens a whole new era in plant genetics," says Secretary of Agriculture John R. Block. "It is the first step toward the day when scientists will be able to increase the nutritive value of plants, to make plants resistant to disease and environmental stress and to make them capable of fixing nitrogen from the air." With this new technique scientists will be able to use genetic engineering to create variations of plants not now available because of sterility barriers between species and genera.

What the scientists actually did was to move a gene that directs the production of a major seed storage protein (phaseolin) from its native location in the French bean into the foreign environment of a sunflower cell. A bacterium, Agrobacterium tumefaciens, which causes crown gall in certain species of plants, was used to accomplish the genetic transfer. This bacterium has been dubbed nature's genetic engineer because it transfers a small piece of its own genetic material, T-DNA (transfer DNA) to its host plant cells where genes on its T-DNA are then expressed by the plant. These genes cause the transformed plant cells to manufacture products that serve as nutrients for A. tumefaciens. Thus, this bacterium is a naturally occurring genetic engineer, engineering the host plant cells for its own advantage.

To achieve the genetic transfer, research teams led by biochemists John D. Kemp of USDA's Agricultural Research Service and Timothy C. Hall of the University of Wisconsin-Madison turned the bacteria's exploitation of plant cells into a tool for the transfer of genes. To do this, the phaseolin-producing gene from the bean was spliced into a location of the bacterium the scientists know is responsible for transmitting crown gall disease. The bacteria's normal infection mechanism was used to transfer the bean protein gene to the sunflower plant tissue.

The bean protein is not yet being produced in the new "sunbean" plant tissues, but the scientists plan to modify their new technique until they attain high levels of protein production. The next step is to regenerate a sunflower plant from the cells in the tissue cultures. The technology to do this is not yet available, and the scientists do not know exactly what effect the phaseolin gene will have on regenerated sunflower plants.

New Seed Storage Method

Seed experts have developed a recipe for storage that significantly extends the life of seeds. The secret ingredient is powdered milk. Basically, the method involves refrigerating seed packets in canning jars. Powdered milk in the bottom of the jars acts as a dehumidifier and keeps the seeds bone dry, says James Sais, Extension horticulturist for New Mexico State University. The method is especially helpful for storing such short-lived seeds as lima beans, okra, onion, parsley, parsnip and pepper. Normally, these seeds are hardly worth planting after a year or two.

The recipe is really very simple. First, unfold four facial tissues and stack them on top of each other. Place two heaping tablespoons of powdered milk on one corner and roll up the tissues to make a small bundle. Secure the bundle with a rubber band. Be sure to use powdered milk from a freshly-opened box, or the milk won't absorb moisture as well. The facial tissue also is important, because it keeps the seed packets from touching the moist milk powder.

Put the bundled-up powder in a wide-mouthed canning jar and drop in the seed packets. Seal the jar tightly, using a rubber ring. Put the container on the lowest shelf of the refrigerator as far as possible from the freezer.

Replace the powdered milk once or twice a year to keep the seeds at their best. When you remove the seed packets be quick about it. Powdered milk soaks up moisture quickly, so recap the jar without delay. It is still important to use the seeds as soon as possible because even when they're well preserved, seeds lose their vigor as the years go by.
Miniature Daffodils to Force

Now is the time to order spring bulbs for forcing. Gardeners who have experimented with standard-sized daffodils should consider trying a few pots of one of the miniature cultivars this season. A half dozen bulbs in a three- or four-inch pot or a dozen bulbs planted in a five- or six-inch azalea pot will make a lovely splash of color in late winter.

There are not many miniature cultivars that force successfully, and, as with the standard size cultivars, earlier flowering miniatures seem to make the best subjects for forcing. In an article that appeared in the March 1981 issue of The Daffodil Journal, Peggy Macneale suggests several cultivars that make good forcers.

*Narcissus cyclamineus* 'Tete-a-tete' is perhaps the best cultivar to select. It is a rather large miniature and may require fewer bulbs per pot than some of the other cultivars. As with the other miniatures, 'Tete-a-tete' can be planted out in the garden after forcing where it will provide years of early spring bloom.

There are several other cultivars that will force successfully, including *N. jonquilla* 'Sundial', 'Baby Moon' and 'Bobby Soxer', *N. 'Little Beauty', N. 'Little Gem' and N. triandrus* 'Hawera' and 'April Tares'.

Miniature daffodils are available from White Flower Farm, Litchfield, CT 06759, catalogue subscription (five issues per year) $5, deductible; and K. Van Bourgondien & Sons, Inc., 245 Farmingdale Road, Babylon, NY 11702, catalogue free.

New Propagating Technique for Large Cacti

The shaving mug and brush technique is an unlikely name for an excellent procedure for propagating species of large columnar cacti, but this was the name of a technique submitted to a mini-symposium conducted by Desert Plants. In addition to preventing the disfiguring right angle bend that develops when these plants are rooted in a horizontal position, Frank S. Crosswhite of the Boyce Thompson Southwest Arboretum has found that his technique also greatly reduces the problems caused by bacterial and fungal rots.

Place equal parts of powdered sulphur, fungicide and commercial rooting powder into a large mug and add water to make a thin, creamy paste. Take one- to two-foot apical cuttings of the cactus to be propagated, using a pruning saw and a loop of thick cotton rope to hold the cutting in place. Make sure to cut at right angles to the plant so the cutting will stand on end.

With an old-fashioned shaving brush, spread the paste mixture onto the freshly cut end of the cutting, and place it on its side to air dry. This should take a few hours. According to Mr. Crosswhite, "The sulphur in the paste dries out the cut surface rapidly and sterilizes the wound by forming sulphuric acid on the moist surface. The fungicide kills many of the organisms which might result in necrosis. The rooting powder provides hormonal growth regulators, which induce rapid development of adventitious roots."

Store the cuttings vertically for calling in a thin layer of vermiculite spread on the bottom of a plastic nursery container. The container should be selected so the cutting will fit snugly and not wobble. A snug fit will help keep the cutting from tipping over. A nursery container is preferable to a pot since it has vertical sides that will hold the cutting in place more securely.

Store the cuttings in this position in 50 to 95 percent shade for one month before giving the plants any water. After the first watering, they can be watered at weekly intervals and then every two to three days. The cuttings can be potted in a larger pot in an appropriate soil mix as soon as they have produced a large mass of roots.

You won’t believe the difference...

A product of USDA research, AquaStor is a new soil additive that dramatically increases water holding capacity. It helps plants develop faster and grow harder, with less frequent watering.

**Protects gardens in hot, dry weather**

With AquaStor, flowering plants develop more blossoms. It helps produce greater vegetable yields in less time. All with up to 50% less water.

**A sure start for trees and shrubs**

AquaStor helps establish plants. It virtually eliminates transplant shock and encourages root development.

**Water houseplants once a month**

This remarkable powder absorbs hundreds of times its weight in water, forming swollen gel particles. These actual "pieces of water" provide available moisture throughout the soil. Plants draw water only as needed. Smaller houseplants may require water every two weeks.

The 4 oz. package of fast absorbing AquaStor 450 is enough for ten average houseplants. For outdoors order extra absorbing AquaStor 900. One 8 oz. package does 30 ten foot rows, 200 sq. feet of garden, or 12 average trees or shrubs. AquaStor will gradually biodegrade in about two years.

**We guarantee results or your money back!**
AMARYLLIS BULBS
AMARYLLIS, Imported Dutch Hybrids. Exhibition Size Bulbs 32cm./up. UNITED NATIONS, white with red stripes. LUDWIG’S GOLIATH, bright red. FIRECRACKER, vermillion. FANTASTICA, red with white stripes. LUCKY STRIKE, rich deep scarlet. BOUQUET, fine salmon. DUTCH BELLE, rosy pink. BEAUTIFUL LADY, orange. MARIA GORETTI, white. APPLEBLOSSOM, pink with white stripes. $7.50 each, 10 for $65.00. Cultural instructions included. Free color catalog. Add 10% shipping. MESSELAAR BULB COMPANY, Box 269M, Ipswich, MA 01938.

AMERICAN HIBISCUS SOCIETY
Annual membership $10.00. Quarterly publication sent to members. Seed Bank maintained. 100-page full-color book “What Every Hibiscus Grower Should Know” $7.00 including postage. Learn about hybrids. Write for free fact sheet about the O.S. PO Drawer 5430, Pompano Beach, FL 33064.

AUDUBON “FEEDER”
Special offer for large capacity squirrel-proof bird feeder complete with post direct from manufacturer. CLARKE PRODUCTS CO. INC., Box 391, West Hartford, CT 06107 (203) 236-3378.

AZALEAS & RHODODENDRONS
EXOTIC MALAYSIAN-VIREYA and Mad- dent rhododendron adapt easily from tropical mountaintops to sunny windowsills. Catalog $1.00. THE BOVEES NURSERY, 1737-C SW Coronado, Portland, OR 97219.

BEGONIAS
BEGONIAS: All types. Illustrated, descriptive catalog featuring over 500 varieties and unusual. $1.25. THE THOMPSONS, PO Drawer PF, Southampton, NY 11968 ($10) 283-3237.

BOOKS
All-color TROPICA enlarged 2nd Edition, 7,000 photos, $115.00. Pictorial Cyclopedia EXOTICA, 12,000 photos, $78.00. EXOTIC PLANT MANUAL, 4,200 photos, $37.50. EXOTIC HOUSE PLANTS, 1,200 photos, $8.97. Shipped prepaid if check with order. Circulars gladly sent. ROEHRS, Box 125, E. Rutherford, NJ 07073.

BROMELIADS—Over seven hundred species. Excellent house plants, shipping worldwide. Individual selection also available. Sunland Tropicals, 7206 North LA REINA, BEARSEABN DEL DIOS NURSERY, Rt. 3, Box 455, Escondido, CA 92025.

BULBS

CACTI AND SUCCULENTS
Cactus, Euphoriums, Lithops, Echeverias and other succulent plants, 95 page Catalog $1.00. CACTUS GEM NURSERY, Dept. H, 10092 Main Drive, Cupertino, CA 95014.

CARNIVOROUS PLANTS
WIP—World’s largest grower of exotic carnivorous plants, over 75 varieties. Now featuring rare Tropical Pitcher Plants (Nepenthes). Fully illustrated catalog 50c. WIP, Box 305C, Grant, FL 32949.


CATALOGS
96-page color catalog has many sensational values on more than 1,500 varieties. Day-lilies and irises, plus timelier tips, $2 (deductible on first catalog order). Gilbert Wild & Son, Inc., AH981 Joplin Street, Sarcoxie, MO 64862.

DIRECTOR OF HORTICULTURAL INSTITUTE
Newly established private non-profit arboretum near Flagstaff, Arizona requires director experienced in all aspects of administration. Organization is scientific/educational rather than cultural. Some propagation and sales are anticipated. Special locus is on trees, shrubs, herds of the intermountain area with exotic limits to plants from similar soil, climate, altitude, etc. $25,000.00. Shipped prepaid if check with order. Circulars gladly sent. ROEHRS, Box 125, E. Rutherford, NJ 07073.

DWARF CONIFERS
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American Horticulturist 15
New Source for Vanilla Plants
Readers who enjoyed Darlene Conley's December 1981 column, "Growing Vanilla Plants," and who tried to order plants from the source listed at the end of the article only to find that source sold out, will be pleased to learn we have located another source for these plants. Jones and Scully, Inc. lists three species of Vanilla in their 1981 Species and Hybrids catalogue, *V. imperialis*, *V. planifolia* and *V. pompona*. To obtain a catalogue, send your name and address to Jones & Scully, Inc., 2200 N.W. 33rd Avenue, Miami, FL 33142 or call toll free (800) 327-7623.

Some Styler Award Entries
Reach "Semi-Finals"
The first applicants for the Pennsylvania Horticultural Society's J. Franklin Styler Award of Garden Merit have been reviewed, and five of the eight plants considered were awarded the Certificate of Preliminary Commendation. The five winners will now be distributed for testing in botanical gardens, arboreta and private gardens in the Mid-Atlantic states for the second stage of evaluation in the two-step process leading to the award. After a period of several years, judges will evaluate each plant's performance in gardens to determine if any are deserving of this award for exceptional garden merit. The duration of the trial period and the location of the test sites will vary from plant to plant.

The five plants selected for the preliminary award are: *Coriunc 'Elizabeth Lustgarten',* a weeping form with a graceful habit and flowers that are presented so they face the viewer; *Kalmia latifolia 'Myrtifolia',* a pink flowered form of mountain laurel with a compact growth habit, superior foliage and resistance to diseases; *Magnolia 'Elizabeth',* the product of an interspecific cross between *M. acuminata*, the cucumber tree, and *M. heptapeta*, the Yulan magnolia, which has long, tapering, yellow flowers, a pyramidal form and which flowers five to six days after *M. soulangiana*; *Prunus 'Okame',* a hybrid of *P. incisa* and *P. campanulata* that bears dark-maroon buds opening to medium-pink flowers, followed by persistent red calyces that extend the display to a total of about three weeks. *'Okame'* has a yellow-orange autumn foliage; *Pyracantha 'Rutgers',* a plant with a dense, spreading habit distinctly lower than is typical with plants of this species. *'Rutgers'* is as dwarf as the cultivar 'Lowboy' but is vastly superior because of its high vigor, excellent foliage quality and heavy fruiting. It is resistant to both scab and fireblight.

For more information on the J. Franklin Styler Award see the November, 1980 issue of *American Horticulturist* news or write J. Franklin Styler Award, Pennsylvania Horticultural Society, 325 Walnut Street, Philadelphia, PA 19106. The Styler Award Committee encourages gardeners to consider making an entry this year. The deadline is December 1.

Top Exhibition Roses
This fall, rose fanciers may want to consider planting some of the American Rose Society's Top Exhibition Roses of 1980. The list was tabulated from 239 reports from rose shows held in 1980, and of the 365 different cultivars listed as winners, 147 were hybrid teas, 79 were floribundas, 24 were grandifloras and 115 were miniatures. The top five hybrid teas were, in the order of finish: *'Pristine',* *'Double Delight',* *'First prize',* *'Garden Party' and 'Paradise'.* *'Queen Elizabeth' was the first place grandiflora, followed by *'Sonia',* *'Pink Parfait',* *'Aquarius' and 'Mount Shasta'.* The floribunda classification was led by *'Europeana' followed by 'Little Darling',* *'First Edition',* *'Iceberg' and 'Cherish' and *'Sea Pearl' in a tie for fifth place. Finally, the top five miniature cultivars were *'Starina',* *'Rise and Shine',* *'Magic Carousel',* *'Dreamglo' and *'Peaches 'n Cream'.

—*The American Rose Magazine*, April, 1981