

# AMERICAN HORTICULTURIST

NEWS—SEPTEMBER 1981

## 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 wild-flower 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.

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.

## 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.

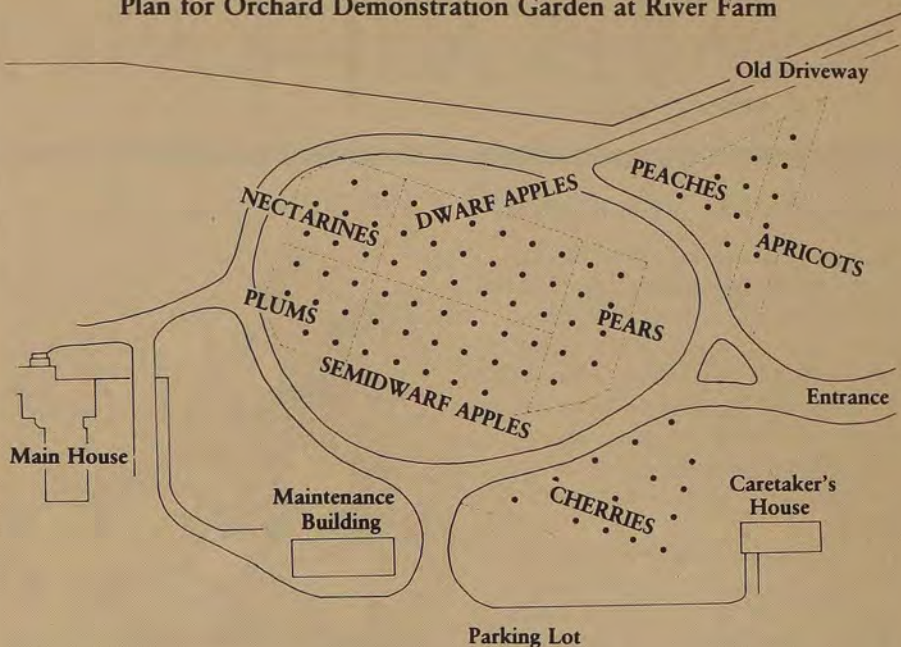
Members in the greater Washington metropolitan area will soon be

## 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

Plan for Orchard Demonstration Garden at River Farm



## AMERICAN HORTICULTURIST

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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 still 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.

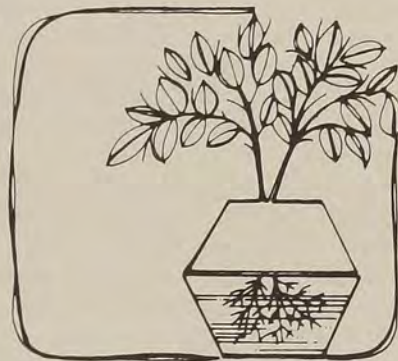
—Donald R. Hendricks, President,  
The Stanley W. Hayes Research  
Foundation, Hayes Regional  
Arboretum, Richmond, Indiana

## 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. Forenco, 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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## 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 Tour 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 Baronio 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 Dunsmere 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 de-

signed 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." —

*American Peony Society Bulletin,*  
December, 1980.

### 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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# CALENDAR

## 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  
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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. Silvio A. Moschini,  
6139 South Rutherford Avenue, Chicago,  
IL 60638

## September 22-24

Royal Horticultural Society Great Autumn  
Show  
Westminster, England  
Information: The Royal Horticultural Society,  
Vincent Square, London, England SW1P  
2PE, Telephone, 01-834-4333.

## September 24-27

American Horticultural Society 1981 Annual  
Meeting  
Boston, Massachusetts  
Information: Phone or write Dorothy Sow-  
erby 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.*

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

## 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  
Information: Daysi Miller, Public Information  
Coordinator, The Pennsylvania Horticultural  
Society, 325 Walnut Street, Philadelphia,  
PA 19106, (215) 625-8262.

## 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) 585-2427

## 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) 256-0326

**October 3**

First AHS Western Regional Conference  
Descanso Gardens  
La Canada, California  
Hours: 10:00 a.m. to 4:30 p.m.

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.

**October 3-4**

Ohio Gourd Show  
Morrow County Fairgrounds  
Mt. Gilead, Ohio

Hours: 12:00 noon to 6:00 p.m. Saturday,  
9:00 a.m. to 5:00 p.m. Sunday

Information: American Gourd Society, P.O. Box 274, Mt. Gilead, OH 43338

**October 8, 15, 22, 29 and November 5**

Lecture Series  
American Horticultural Society  
River Farm  
Mt. Vernon, VA

Information: Phone or write Dorothy Sowerby at the Society

**October 9-12**

Western Garden Writers Symposium  
Honolulu, Hawaii

Information: Fortunato Teho, 1778 Ala Moana Boulevard, Honolulu, HI 96815  
(808) 941-2102

**October 11, Rain Date October 18**

Fall Open House  
American Horticultural Society  
River Farm  
Mt. Vernon, VA

Information: Phone or write Dorothy Sowerby at the Society

**October 11-14**

American Forestry Association  
106th Annual Meeting  
Santa Fe Hilton Inn  
Santa Fe, New Mexico

Information: American Forestry Association, 1319 18th Street, NW, Washington, D.C. 20036

**October 13-16**

Garden Club of America's Fall Flower Show  
Citicorp Center  
153 East 53rd  
New York, New York

Hours: Opens 1:00 p.m. Tuesday, October 13, Closes 2:00 p.m. Friday, October 16th  
Information: The Garden Club of America, 598 Madison Avenue, New York, NY 10022, (212) 753-8287

**October 13-19**

International Design Symposium and Flower Show

National Council of State Garden Clubs  
Lima, Peru

Information: IDS, Lima, Horticultural Hall, 30 Elm Street, Worcester, MA 01608

**October 15-18**

26th Eastern Orchid Congress and North Carolina Orchid Society Show  
Grove Park Inn  
Asheville, North Carolina

**October 17-18**

Descanso Gardens Guild 2nd Annual Plant Sale

Descanso Gardens  
1418 Descanso Drive  
La Canada, California

Hours: 9:00 a.m. to 4:30 p.m.

**October 17-18, 24-25, 31-November 1**

Autumn Colorfest at Callaway Gardens  
Information: Autumn Colorfest, Callaway Gardens, Pine Mountain, GA 31822  
(404) 663-2281

**October 22-25**

National Chrysanthemum Society 38th Annual Meeting and Show  
Holiday Inn

260 Goddard Boulevard  
King of Prussia, Pennsylvania  
Information: National Chrysanthemum Society, Inc., 2612 Beverly Boulevard, Roanoke, VA 24015, (703) 774-2359

**October 24-25**

Mid-America Orchid Congress and Michigan Orchid Society Show

Tel-12 Mall,  
Telegraph and 12-Mile Road  
Southfield, Michigan

**October 25-29**

Rose Pilgrimage '81  
5th World Rose Convention  
Jerusalem, Israel

Information: Rose Pilgrimage 81, 5th World Rose Convention, P.O. Box 3054, 122 Hayarkon Street, Tel Aviv, Israel

**October 28-30**

Interior Plantscape Association Third Annual Meeting

Radisson St. Paul Hotel  
St. Paul, Minnesota

Information: IPA National Headquarters Office, 11800 Sunrise Valley Drive, Reston, VA 22091, (703) 476-8550

**October 30-November 1**

New England Apple Festival  
Worcester, Massachusetts

Information: Worcester County Horticultural Society, 30 Elm Street, Worcester, MA 01608, (617) 752-4274

**October 30-November 2**

National Junior Horticultural Foundation  
1981 Convention and National Contest Finals

Colorado Springs, Colorado

Information: Clare Harnden, Executive Secretary, N.J.H.F., 5885 West 104th Street, Fremont, MI 49412

**October 31-November 4**

Professional Grounds Management Society  
Annual Conference and Trade Show  
Portland Marriott Hotel  
Portland, Oregon

Information: Allan Shulder, Executive Director, Professional Grounds Management Society, 7 Church Lane, Pikesville, MD 21208, (301) 653-2742

**November 6-7**

Fourth Great Lakes Solar Greenhouse Conference

Hickory Corners and Kalamazoo, Michigan  
Information: Ms. Jan Nesberg, Kalamazoo Nature Center, 7000 North Westnedge Avenue, Kalamazoo, MI 49007  
(616) 381-1574

**November 6-8**

American Camellia Society  
Fall Convention  
Pensacola, Florida

**November 7**

California Native Plant Sale  
Rancho Santa Ana Botanic Garden  
Claremont, California

Hours: 8:00 a.m. to 3:00 p.m.

Information: Rancho Santa Ana Botanic Garden, Claremont, CA 91711  
(714) 626-1917

**November 8-29**

Pittsburgh Fall Flower Show  
Phipps Conservatory  
Pittsburgh, Pennsylvania

Hours: Daily 9:00 a.m. to 5:00 p.m. and  
7:00 p.m. to 9:00 p.m.

**November 11-14**

Holly Society of America, Inc.,  
Annual Meeting  
Mobile, Alabama

Information: Holly Society of America, Inc., 407 Fountain Green Road, Bel Air, MD 21014, (301) 879-0976

**November 18-20**

Second Annual Convention and Trade Show  
Professional Lawn Care Association of America

Commonwealth Convention Center  
Louisville, Kentucky

Information: Jane Stecker, Administrative Director of PLCAA, Bostrom Management Corporation, Chicago, IL 60611  
(312) 644-0828

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 not 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 flour-

ish 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

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 set up 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. I showed him 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 on, 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 these 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't 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 frosts, 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

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### 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 bills year 'round. For porch, patio, backyard or small space container gardening. Folds flat for storage. Mail coupon for startling facts and FREE TRIAL OFFER.

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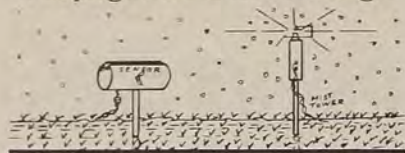
Yes! Rush me my FREE GUARD 'N GRO fact kit and details about how I may try GUARD 'N GRO this Fall and Winter without risking a penny. I understand I'm under no obligation and no salesperson will call.

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## Propagation Breakthrough



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1. AQUAMONITOR's sensor is placed in the cutting seed bed. Its automatic multi-level mist is unique and unequaled.
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8. It is rugged, durable, trouble free, safe, dependable, solid state and has little wear or upkeep. The first kits sold 11 years ago are operating today.

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Box 327-Z Huntington, N.Y. 11713

## 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.

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## 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 Tears'.

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. Ac-

cording 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 callousing 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 container in an appropriate soil mix as soon as they have produced a large mass of roots.

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# GARDENER'S MARKETPLACE

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AMARYLLIS, Imported Dutch Hybrids. Exhibition Size Bulbs 32cm./up. UNITED NATIONS, white with red stripes. LUDWIG'S GOLIATH, bright red. FIREDANCE vermillion. FANTASTICA, velvety 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.

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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 Society. PO Drawer 5430, Pompano Beach, FL 33064.

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THE BROMELIAD TREASURY, Dept. A, offers a selection of decorative species and hybrid Bromeliads at very reasonable prices. Unique 20 page DESCRIPTIVE LIST, \$1.00, refundable with first order. Also "Bromeliads for Modern Living," 80 page booklet with 135 beautiful Bromeliad color photos, \$4.00 postpaid. 639 Bend Drive, Sunnyvale, CA 94087.

BROMELIADS—Over seven hundred species. Excellent house plants, shipping worldwide. Listing one dollar. Deductible on first order. SEABORN DEL DIOS NURSERY, Rt. 3, Box 455, Escondido, CA 92025.

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Three African Pennant Bulbs (Chasmanthe) for early spring bloom, \$6.50. Postpaid, plus Rare Bulb List. WILLETTTS, PO Box 446, Fremont, CA 94536.

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Cactus, Epiphyllums, Lithops, Echeverias and other succulent plants, 95 page Catalog \$1.00. CACTUS GEM NURSERY, Dept. H, 10092 Mann Drive, Cupertino, CA 95014.

CACTI AND SUCCULENTS. Rare seeds—wholesale—retail—over 2,000 different kinds: cacti, succulents and other exotics. Send stamp for information on current listings. NEW MEXICO CACTUS RESEARCH, PO Box 787 AH, Belen, NM 87002.

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Carnivorous, woodland terrarium plants and supplies. Book, *The World of Carnivorous Plants*, \$6.50 postpaid. Illustrated catalog 25¢, Peter Pauls Nurseries, Canandaigua, NY 14424.

## CATALOGS

96-page color catalog has many sensational values on more than 1,300 varieties Peonies, Day-lilies and Iris, plus timely 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. Orientation is scientific/educational rather than cultural. Some propagation and sales are anticipated. Special focus is on trees, shrubs, herbs of the intermountain area with exotics limited to plants from similar soil, climate, altitude elsewhere. Staff is small. Structures and masterplan are still in planning stages. Cooperation with nearby university, natural history museum, USFS experimental station are important. Memberships in AHS and AABGA are important in development. Salary will be determined on basis of qualifications and experience. Send applications with vita to Transition Zone Horticultural Institute, PO Box 927, Flagstaff, AZ 86002.

## DWARF CONIFERS

Over 100 types of dwarf conifers described by size, shape, color and texture. Mail Order. Catalog \$1.00 (refundable). WASHINGTON EVERGREEN NURSERY, Box 125 AH, South Salem, NY 10590.

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COMPLETE CATALOG OF FLOWER ARRANGING SUPPLIES. Foams, containers, accessories, books and tools. Low, low prices—Send 25¢. THE FLOWER DESIGNERS BENCH, Box 839 AH, Auburn, NY 13021.

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HILLTOP HERB FARM, 24 years experience. Herb plants for collectors, Goodies from Gallaumfry Shoppe. Complete catalogue \$2.00 (refundable). PO Box 1734, Dept. AH, Cleveland, TX 77327. (713) 592-5859.

## HOUSE PLANTS

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12 of the easiest House Plants you'll ever own, all different, plus instructional brochure and giant catalog of 1,400 other varieties of beautiful bromeliads, books and supplies. \$12.50 postpaid. TROPICFLORA, 6610-44th Avenue Plaza East, Bradenton, FL 33508.

Dracaena, Philodendrons, Palms, Euphorbias, Sansevierias, Aloes, Bulbs, Haworthias, Pachypodiums, Adenia, Adenium, Testudinaria, Ipomoeas, Curcubitaceae, Cyphostemma, Raphionacme, Anacampseros, Pelargoniums, Sarcocaulons, Cotyledons, Senecios, Othonnas, Didiereaceae, Stapeliads, Sarcostemmas, Ceropegias, Encephalartos, Bowenia, Lepidozamia, Macrozamia, Cycas, Zamias, Ceratozamia, Dioons, Dischidias, Hoyas, Ferns, Bamboo, Bonsai, Flowering Bushes and Trees, Evergreen Bushes and Trees, Groundcovers, Ivy, Orchids, Orchid Cactus. Free Brochure or catalog and newsletters \$4.00. ENDANGERED SPECIES, 12571(F) Red Hill, Tustin, CA 92680.

House Plant Supplies. Full line of growing materials including books, soil, fertilizers, sprays. African Violet cuttings. Send 2 stamps for catalog. DoDe's Gardens, 1490 Saturn Street, Merritt Island, FL 32922.

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PECANS: Quart each halves, pieces, meal. Three-quart sampler \$11.95 postpaid. Tenpeco, Box 638 HO, Rutherford, TN 38369.

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ORCHIDS! ORCHIDS! ORCHIDS! Bromeliads, Staghorn Ferns, Books, Peters Fertilizer Potting Mixes, Supplies for indoor and greenhouse culture. 22 page catalog. 30¢ coin or stamps. FOX ORCHIDS, INC., 6615 West Markham, Little Rock, AR 72205.

"Dancing Dolls," "Lady Slippers," Cattleyas, Dendrobiums, "Moth" Orchids from Blooming size to seedlings. Servo—Revolutionary sugarcane base potting mix for orchids and ferns now available. Information, complete 1981 list of orchids, growing supplies—only 50¢. Greenhouse open by appointment only. (518) 882-9803, Keraseva Ltd., Dept. AH, Consaul Rd., Amsterdam, NY 12010.

#### RARE & STRANGE

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Our latest catalog features many new seeds and bulbs not previously offered. If you are a serious grower of uncommon plants, our catalog is specially for you. Catalog 25¢. The Banana Tree, 715 Northampton St., Easton, PA 18042.

WORLD'S LARGEST SELECTION of quality rare seeds from every continent. Thousands of exotic ornamentals, tropicals, houseplants, palms, flowers, bulbs, perennials, trees, rare herbs, medicinal, edible plants. Illustrated 128 page catalog \$1.00. Free vegetable catalog, with European & Oriental varieties. WORLD SEED SERVICE, Box 1058-AT, Redwood City, CA 94064.



## GARDENER'S MARKETPLACE

Reach the single most devoted group of gardeners in the country by advertising in our classified section.

Readers of *American Horticulturist* are the type who like to buy new and unusual plants as well as old favorites.

41% of our members are engaged in some type of greenhouse gardening. Over half describe themselves as "advanced" amateurs.

#### Classified Ad Rates:

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Copy must be received two months prior to publication date. Send orders to the attention of Cindy Weakland, American Horticultural Society, Mount Vernon, Virginia 22121. Or call (703) 768-5700.

Payment for all classified advertisements must be made in advance. All copy subject to the approval of the Society.

## TREE PEONIES CHINESE CONQUEST

Blue and green flowers plus many unusual specimens from Chinese dynasties never seen before. Send \$2.00 for Chinese catalog and new 1980-1981 all other peonies catalog—credited on first order. Also AMARYLLIS catalog.

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## 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: *Cornus* '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 *Prunus 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 No-

vember, 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 Carrousel', 'Dreamglo' and 'Peaches 'n Cream'.

—*The American Rose Magazine*,  
April, 1981

## AMERICAN HORTICULTURIST

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