

AMERICAN HORTICULTURIST

NEWS—JANUARY 1981

River Farm Notes

In the November issue of *American Horticulturist* we had the dismal duty of reporting to you the harsh effects of a very dry summer on our River Farm plantings. Happily, in this issue we can report that autumn was more kind. Our trees were filled with the yellows, oranges and reds that we all cherish at that time of year. Our dahlias, in their glory, boldly displayed every color combination imaginable; our roses, standing tall, gave a final, regal show before the coming of winter; our chrysanthemums weaved luscious carpets of color; the fall crocuses emerged everywhere, anxious to bring a colorful climax to another growing season; and the windflowers, so aptly named, waved gently as the last winds of autumn removed the remnants of dogwood leaves and rose petals.

Fall cannot, and should not, be forever, but what a glorious time of year it was. Winter is now upon us, though, and beneath the frozen surface of yesterday's garden sleep the bulbs, corms and perennial roots that will soon herald the coming of yet another season. In the closing paragraphs of this chronicle, let us look to spring and to the plantings we have made at River Farm to please our visitors.

Thanks to the American Daffodil Society we have been able to establish a daffodil display garden within our Ideas Garden. We planted 300 bulbs of 100 new and beautiful varieties, and we cannot wait to see them come to life. If names can be suggestive, dwell on these for a few moments: 'Artic Gold', 'Evening Star', 'Foxfire', 'Frost Kist', 'Golden Dawn' and 'Snow Gem'.

In addition to these plantings we naturalized 600 daffodils and several hundred crocuses, and we developed beds containing some 5,000 tulips. Picture hundreds of naturalized daffodils swaying quietly on the periphery of open fields; of crocuses pushing through the last remaining patches of snow; and of beds of tulips



showing racy reds, graceful yellows, the purist of whites and the most gentle shades of pink. Imagine these sweeps of color dancing in the warming breezes and make plans now to visit us this spring to enjoy what we have created for you.—*Steve Davis*

AHS Driveway Construction Completed

Good news! At last the Society's staff can report completion of the construction of the new drive and entrance way to our River Farm headquarters mandated by Fairfax County. The project, begun in 1977, has been fraught with problems and complexities, but it is now finished.

The Society must landscape the new approach, and we have established a special **River Farm Landscape Fund** to which friends and members of the Society may contribute. Proceeds from the fund will be used to plant ornamental shrubs and perennial beds. The fund has received an initial gift of \$1,500 from the Alcoa Foundation for which we are all deeply grateful. The Society needs an additional \$9,500 to make possible the completion of the landscape project.

If you would like to make a donation to this fund, please send your check to Landscape Fund, attention Tom Richards, AHS, Mt. Vernon, VA 22121.

1981 Seed Program

You will shortly receive the seed list for our 1981 free seed program, and we think you will be very pleased by this year's offerings. Here are a few of the varieties that will show up on the list: dwarf columbine, Christmas cherry, pearl everlasting, asparagus fern, maiden pinks, *Dracaena* and *Gilia*.

Have we piqued your interest? We hope so, because this program is of special importance to us all. It gives us the opportunity to provide you with the gratifying experience of growing plants from seed; it enables us to bring about the dissemination of plant varieties to parts of the country where they perhaps do not naturally occur; and it gives us the chance to solicit your help in testing new plants (products of hybridization) that are not yet on the market.

Look for this mailing soon and return your order card promptly to ensure that you get your first choices of plant varieties.

The Williamsburg Garden Symposium, co-sponsored by The American Horticultural Society, is scheduled for April 5-April 8, 1981. Look for details and a registration form inside.

Dates to Remember

Tours, a lecture series, our Spring Symposium, Open Houses. . . . these are some of the AHS activities planned for members during the next few months.

After last year's successful lecture series, we are once again planning **winter lectures at River Farm** for area gardeners who would like to take advantage of the guest experts we invite to join us for this program. The series will be on five successive Thursday mornings from February 26 through March 26. Topics will include plant propagation, pruning, home landscape design, plant diseases and pests and indoor plants.

We are already looking forward to our **Spring Open House**. The 1980 Open House was such a success (over 800 visitors) that we are making plans to expand this year's program by inviting additional plant societies and area artists to participate. It is scheduled for Sunday, May 17. In case of rain, it will be postponed until the following Sunday, May 24.

The Society is sponsoring two horticultural explorations of note in the spring of 1981. From May 21-June 2 members will be touring the **Island World of Great Britain** via the luxury cruise ship, *MTS Argonaut*. Gardens and other points of historical interest on the islands of England, Scotland, Wales, Scilly, Mull, Iona and Orkney are on the itinerary. For a brochure and reservation card, write to Dorothy Sowerby in care of the American Horticultural Society.

The second spring horticultural exploration is to **Baja California and Copper Canyon** in Mexico. One tour, departing March 21 and returning on April 5, is already full. However, we are endeavoring to organize a second tour to accommodate those whose requests for space could not be honored. Dates for this second tour are April 11-26, 1981. To register, write to Dorothy Sowerby in care of the American Horticultural Society.

Finally, another reminder to reserve the dates July 14-18, 1981 so that you may join us in Denver for our **Spring Symposium**. We will be enjoying the beauty of a Rocky Mountain alpine spring with the Denver Botanical Garden as our official host. One event already planned is an all-day trip to lovely Estes Park and the Trailbridge Road, with dinner and entertainment at the Lazy B Ranch. Watch for registration material in an upcoming issue of *American Horticulturist* news.

David Burpee Memorial

In the September issue of *News & Views* we announced plans to establish a living memorial to David Burpee, retired President of the W. Atlee Burpee Co., who died in June of this year. Because of Mr. Burpee's lifelong affiliation with the seed industry, and because the Burpee company is the site of an official All-America Selections vegetable trial and display garden, we feel that it is most fitting that we dedicate our River Farm All-America Selections vegetable garden to David Burpee.

We hope to have a memorial plaque completed and in place for this year's garden. And we hope that when you next visit us here at River Farm our AAS display garden will bring to mind the wealth of new garden plants this man gave to us all.

New Plant Listed as Endangered

McKittrick pennyroyal, *Hedeoma apiculatum*, has been proposed by the U.S. Fish and Wildlife Service for Threatened status. The proposal, F.R. 8/15/80, also includes a determination of Critical Habitat for the plant.

Hedeoma apiculatum is a member of the mint family, Labiatae, and is the second member of its genus to be listed by the Service, the first being Todsens pennyroyal, *Hedeoma todsenii* (F.R. 7/25/80). *H. apiculatum* is endemic to the Guadalupe Mountains of Texas and New Mexico. It grows on open limestone rock surfaces and outcroppings and along stream beds at elevations above 1,066 meters.

Since the majority of the known populations of McKittrick pennyroyal are accessible by hiking trails which exist on government land, increased traffic could destroy the plant's habitat. High visibility also could encourage collecting. The total population of *Hedeoma apiculatum* is estimated to be approximately 950 individuals. —*Endangered Species Technical Bulletin, September 1980*

AHS Members' Advice Sought on New Ortho Publication

Ortho Books, publisher of books such as *All About Roses* and *All About Vegetables*, has started work on an entirely new type of book, *The Ortho Problem Solver*. Designed with an encyclopedia format and arranged by symptom, it will cover the problems connected with diseases, insect and animal pests, cultural conditions and weeds that affect home gardeners. The book will be a 600-page, professional quality volume covering every major plant cultivated in the United States. The text, illustrated by over 1,200 high-clarity, color photographs, will describe and analyze each problem, give a simple and inexpensive solution and spell out care necessary to prevent its recurrence.

Ortho is asking for help in preparing their new guide. Experts, both amateur and professional, are being sought who would be able to provide information on the culture, care and problems of plants cultivated in the United States. The company also needs photographs suitable for illus-

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Member of Society of National Association Publications

trating such a work. All interested individuals should contact Maureen V. Meehan, Production Editor, The Ortho Problem Solver, P.O. Box 3744, San Francisco, CA 94119.

Flower Festival at Westminster Abbey

AHS members planning a 1981 summer trip to England may want to arrange a visit to Westminster Abbey during the flower festival hosted by the National Association of Flower Arrangement Societies of Great Britain. The Society, which has over 1,200 branches in the United Kingdom and affiliates overseas, will decorate Westminster with over 100 arrangements, many of them highlighting particular features of the abbey. The festival will be on June 10, 11 and 12.

New Edition of Forestry Directory to Be Published

The U.S. Forest Service is preparing a second edition of its *Directory of Professionals Practicing Urban Forestry in the U.S. and Canada*. This directory attempts to identify those individuals currently devoting at least 75 percent of their time to the practice of urban forestry, as well as those who, although spending less than 75 percent of their time on urban forestry, have a basic professional or program responsibility in this area. AHS members who meet the above criteria and wish to be included in the new edition should submit the following information to the company compiling the Directory before March 1, 1981. Please note that no entry will be included unless complete information is received.

Name (as you wish it to appear); Area of Specialization (select one only): Arborist, Architect, Botanist, Economist, Engineer, Forester, Geographer, Horticulturist, Landscape Architect, Parks and Recreation Specialist, Planner, Urban Sociologist; Professional Title and Professional Address (organization name and full address); Telephone Number (include area code).

Submit complete information to KC Information Services, 1320 Fenwick Lane, Suite 800, Silver Spring, MD 20901, questions call (301) 565-4227.



Railroad Right of Way a Living Plant Museum

Riders on Amtrak's *St. Clair Limited* between Detroit and Chicago may or may not be aware that they pass through a living museum. Between Kalamazoo and the Indiana border, six sections of grassland supporting the original prairie vegetation that existed in 1850 when the railroad first cut through the area have been protected and are being managed through an agreement between Amtrak and The Nature Conservancy.

Botanists have long been aware that many railroad rights-of-way protect valuable stretches of grassland remnants. Nature centers and botanical gardens have often used these areas as seed sources for demonstration prairies. Generally the railroads have controlled trackside vegetation by burning these stretches of prairie, inadvertently managing the land along sound ecological principles. A botanist collecting for the demonstration prairie at Fernwood, Inc., a nature center in Niles, Michigan, recently discovered that Amtrak had begun bulldozing and mowing trackside vegetation rather than burning it. Her discovery led to a management agreement whereby Amtrak has agreed not to plow or spray the track sections with herbicides, and the Con-

servancy has agreed to clear brush along the tracks and manage the periodic burning so essential to maintaining the stretches of prairie.

The six sections of prairie total approximately four miles of right-of-way and protect most of the plant species characteristic of dry, intermediate and wet prairies. Fifteen species of plants listed as endangered or threatened in Michigan can be found in these now protected grasslands.

These rare plants include white lady's slipper, *Cypripedium candidum*; shooting star, *Dodecatheon meadia*; meadow beauty, *Rhexia virginica*; rattlesnake master, *Eryngium yuccifolium*; and compass-plant, *Silphium laciniatum*. The more common prairie plants such as poverty-oat grass, *Hudsonia tomentosa*, beggar's ticks or bur marigold, (*Bidens* species) and cone-flowers (*Rudbeckia*) also flourish. Perhaps most importantly, the unbroken prairie sod supports lush stands of the most dominant plants in any prairie ecosystem, the grasses such as big bluestem, little bluestem and Indian grass (*Andropogon gerardii*, *Schizachyrium scoparium* and *Sorghastrum avenaceum* respectively).

— *The Nature Conservancy News*, September-October 1980

New Code of Nomenclature Published

The International Association for Plant Taxonomy has published the 1980 edition of their *International Code of Nomenclature for Cultivated Plants*, replacing the last edition of the Code published in 1969. "Though a great many detailed changes have been made in the text of the present

edition, largely to clarify meaning or add examples, the overall text is very similar to that of the 1969 edition," says the Association.

The new 31-page Code is available at a discount to AHS members. Send \$4.00 to Dorothy Sams, in care of the American Horticultural Society.

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Making Sense Out of Hardiness Zone Maps

Gardeners should be aware that a number of hardiness zone maps exist, all differing from one another. These differences are especially important when considering the hardiness of a specific plant because a zone number from one map cannot be paralleled with that of another without comparing the maps themselves. For example, a USDA Zone 4 winter low temperature is -30° to -20° F while an Arnold Arboretum (Boston, MA) Zone 4 low is only -20° to -10° F. The differences between these two most commonly used zone maps are compared below.

USDA

Zone 1 below -50° F
Zone 2 -50 to -40
Zone 3 -40 to -30
Zone 4 -30 to -20
Zone 5 -20 to -10
Zone 6 -10 to 0
Zone 7 0 to $+10$

Arnold Arboretum

Zone 1 -50° F and below
Zone 2 -50 to -35
Zone 3 -35 to -20
Zone 4 -20 to -10
Zone 5 -10 to -5
Zone 6 -5 to $+5$
Zone 7 $+5$ to $+10$

Each USDA zone is split into an *a* and *b* area with the warmer temperature occurring in the *b* area. Hardiness zone ratings refer to the temperature at which a plant grows best. This rating, however, can only be used as a guide since a number of other factors, such as adequate moisture, a protected location and well drained soil affect a plant's ability to survive. Plants which are marginal in one zone may survive quite well farther north if planted in the proper location. — *Bonsai, October, 1980*

Winter Storage for Vegetables

It may be too late this season to store home-grown vegetables for winter use, but if you're spending your winter pining for fresh, garden-grown produce, it is not too late to make plans for next season. By storing root crops and other varieties of vegetables and fruits in the garden or in a frost-free place, you can reserve space in your freezer for those foods which absolutely require freezing.

Store in the Garden

Store root crops such as mature beets, carrots, Jerusalem artichokes, leeks, parsnips, root parsley, fall and winter radishes and salsify right in their garden rows. Sometime just before the ground freezes in your area, cover the rows with a thick (four to six inch) mulch of straw, hay or leaves. The mulch will keep the roots from freezing and permit easy digging during the cold winter months.

Kale and Brussels sprouts also can be stored in the garden right where they have been growing. They can even stand heavy frost and snow. Many gardeners feel that frost and freezing seem to improve their taste by making these vegetables milder and sweeter. Pick frozen or snow-covered Brussels sprouts just before

cooking, or keep them cold until you are ready to cook them as they tend to get soft and lose flavor if they are held at room temperature.



Store in Frost-Free Places

Unfortunately, modern-day homes are not equipped with the root cellars so essential to housekeeping in years gone by. By sinking a clean, galvanized trash can in the ground outside your kitchen door you can create a root cellar of sorts and extend your winter storage space. Sink the can into the ground to within one inch of the rim and fill it with your freshly harvested roots. After putting on the can lid, cover it with straw which will keep the lid from freezing on tight. Apples also will store well in

these modern-day root cellars. Keep them separate from potatoes as they give off ethylene gas which may cause unwanted sprouts on the potatoes.

A dark cellar, shed or garage kept just above freezing (34° to 40°F) is also an excellent place to store root crops and apples. Shelves of slatted boards in these areas will serve as excellent storage space for winter cabbage, rutabagas and turnips as well.

If your garage or cellar is slightly warmer (45° to 55°F), it is perfect for storing pumpkins and winter squash that have been harvested just before the first heavy frost. Leave part of the stem attached to the fruit. Sweet potatoes also will store well under these conditions. Spread the stored produce off the floor on slatted boards or a mesh frame for best results. — *Jeannette Lowe, W. Atlee Burpee Company*

New Sweet Pea Available

The first rich, salmon-colored sweet pea whose color is truly sun proof has been developed and named 'Frances Perry' in honor of the internationally known author and gardening correspondent. It has taken 15 years of work to produce the new variety, says its originator, Mr. Charles Unwin. The new sweet pea is very frilly with large flowers borne on strong stems. It is available from its originator, W. J. Unwin Ltd., Seedsmen, Histon, Cambridge, England. U.S.A. address: Box 9, Farmingdale, NJ 07727. — *GC & HTJ September 5, 1980*

A "Cure" for Agent Orange

Scientists at Batelle Laboratories in Columbus, Ohio have used genetic engineering techniques to develop a bacteria that ingests the herbicide 2,4-D (also known as the defoliant Agent Orange) and degrades it into a product that can be converted into fertilizer. After isolating the genes that allowed one bacterium to use the chemical as a nutritional carbon source, scientists at Batelle spliced the crucial genes onto a host bacterium that was able to accept the graft and was better suited to laboratory production. This breakthrough could lead to revolutionary techniques for cleaning up land poisoned by other carbon related chemicals such as DDT.



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- 35 percent now own or intend to buy a greenhouse in the next year.
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* Statistics come from the results of an August, 1980 reader survey conducted by John T. Fosdick Associates, Inc.

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—includes "the most dramatic train ride in the Western Hemisphere" through Mexico and an area filled with gorges so huge they can swallow four Grand Canyons! Until several years ago this area was inaccessible except by horseback.

The first exploration, scheduled in March, is filled. This second tour is planned for
April 11-26, 1981

Garden Cruise of the British Isles on M.T.S. Argonaut

—including stops in England, Scotland, Wales, Scilly, Mull, Iona and Orkney with optional earlier departure to visit London and the famed Chelsea Flower Show.

May 21-June 2, 1981

And More Trips to the British Isles!

Spring Exploration of England

—a diversified horticultural itinerary including visits to prominent public and private homes and gardens, botanic gardens, nurseries, parks, plus many cultural and historical attractions as well as the renowned Chelsea Flower Show.

May 7-21, 1981

Autumn Exploration of England

—a similar itinerary but without a visit to the Chelsea Flower Show.

September 10-24, 1981

Spring Exploration of Scotland

—an equally diversified horticultural experience. Participants will visit public and private gardens as well as nurseries, parks and other cultural and historical attractions.

May 26-June 9, 1981

To request additional details or to make reservations for any of these horticultural explorations, write to Dorothy Sowerby, Tour Coordinator, American Horticultural Society, Mount Vernon, VA 22121.

Our 1981 Symposium is scheduled for July 14-18 in Denver, Colorado. Please mark these dates on your calendar and make plans to join other members of the Society in a tour of the Mile-High City and the surrounding Rockies, with special emphasis on alpine gardening and cold-hardy plants. Accommodations will be at the world-famous Brown Palace Hotel.

Propagating Hostas from Seed



The Royal Horticultural Society, in their September issue of *The Garden*, recommends that raising hostas from seed is an excellent method for propagating many of the hosta species, especially if large numbers of plants are desired. Furthermore, results of tests conducted by researcher Peter Thompson at the Royal Botanical Gardens, Wakehurst Place, indicate that sowing in the open under natural conditions or in a cold frame is not the best approach to growing hostas from seed. Quicker, more complete germination can be attained by sowing seed in a heated greenhouse or in a propagating frame.

For the purposes of the tests, seed

from 20 species of hostas was germinated on an agar medium at four different temperatures. As the seed supply was limited, only five species were tested at the highest temperature, 26°C (79°F). All of the seeds tested in the experiment were stored in paper envelopes at room temperature for five to six months after harvest. Unfilled seeds, which are often present in mature seed capsules, were removed before the experiments were started by blowing them away from the heavier, filled seeds.

The test results did not indicate the existence of any form of physiological dormancy that would require a treatment such as chilling before germination can occur. The species do differ in the time taken to germinate, and all preferred the warmer temperatures. Seed tested at 21°C (70°F) had started to germinate six to 13 days after sowing and was virtually complete within three weeks; the species tested at 26°C took only 14 days. The drop in temperature to 16°C (61°F) delayed germination much more than would be expected. At the lower temperature seed was still germinating eight weeks after sowing. At 6°C (43°F) few seeds had germinated during the first 10 weeks of the tests, and after eight months, when the experiment was completed, germination in this group was still incomplete.

Time (in days) to 50 percent germination

	6° C	16° C	21° C	26° C
<i>Hosta capitata</i>	117	46	17	—
<i>Hosta crispula</i>	78	20	9	—
<i>Hosta crispula</i> var. <i>viridis</i>	79	25	10	7
<i>Hosta decorata</i>	63	11	6	—
<i>Hosta decorata normalis</i>	53	12	6	5
<i>Hosta elata</i>	84	10	8	7
<i>Hosta fluctuans</i>	87	21	10	—
<i>Hosta x fortunei</i>	—	—	8	—
<i>Hosta lancifolia</i>	—	12	5	—
<i>Hosta montana</i>	78	23	9	8
<i>Hosta nakaiana</i>	62	12	6	6
<i>Hosta rectifolia</i>	—	—	—	—
<i>Hosta rectifolia</i> var. <i>sachalinensis</i>	83	16	7	—
<i>Hosta sieboldiana</i>	89	23	10	—
<i>Hosta sieboldiana</i> var. <i>sieboldiana</i>	93	34	11	—
<i>Hosta sieboldiana x tohudana</i>	124	76	16	—
<i>Hosta sieboldii</i>	116	14	6	—
<i>Hosta sieboldii</i> var. <i>spathulata</i>	76	16	6	—
<i>Hosta tohudana</i>	95	29	16	—
<i>Hosta ventricosa</i>	139	61	13	8

Meristem Propagation for the Home Gardener

James D. Brasch and Ivan Kocsis of McMaster University, Hamilton, Ontario have developed a formulation of plant hormones that, when applied to a dormant bud on the flower spike of *Phalaenopsis* orchids, will induce the formation of a meristematic duplicate right on the plant. Until now, meristem propagation has not been a practical alternative for the home gardener or even the small commercial grower. With this new method orchid enthusiasts and other gardeners can have all the benefits of producing meristem duplicates, called keiki's (Hawaiian for babies), without any of the expenses of a sophisticated laboratory. Keikigrow, the hormone preparation developed and marketed by the scientists, is a formulation of cytokinins. Brasch and Kocsis have tested their preparation on 250 *Phalaenopsis* spikes, and the accompanying table indicates their results.

Dormant, meristematic buds on the flower spikes of *Phalaenopsis* plants can easily be induced to develop into keikis or additional flower spikes when the hormone preparation is applied according to the directions included with the product. Once a keiki has begun to develop, the hormone applications should be discontinued. At this point judicious watering and a feeding program with a fertilizer high in nitrogen (such as 30-10-10) is most beneficial to developing plants. Foliar feeding, especially with a 5-1-1 fish emulsion fertilizer, is also recommended during this period. The young keikis should be removed when three or four roots have reached a length of one-half to three-quarter inches. Plants that are left growing on the spikes for longer periods seem to make less sturdy transplants. The newly potted plants should be given a fertilizer high in phosphorus such as 10-52-10 in order to induce early flowering.

Applications of Keikigrow may result in the formation of callus (scab) tissue. This growth may be unsightly (it can reach walnut size), however, if it is left in place over a period of several months, the cells may begin to differentiate, and a cluster of keikis can be the result. In some cases the callus tissue gives rise to a cluster of flower spikes, in others it



Courtesy of Plant Hormones

Two stages of keiki development on the same *Phalaenopsis* spike.

withers and dies. If desired, the callus can easily be removed with a sterile knife.

While the formulation currently available was designed especially for *Phalaenopsis*, experiments are also being conducted on other orchid genera such as *Cymbidium*, *Paphiopedilum*, *Vanda*, *Oncidium*, *Dendrobium*, *Calanthe* and *Cattleya*. It also has been tested to some degree on ferns, philodendrons and other rare and hard-to-propagate plants such as the carnivorous *Nepenthes*.

One of the most interesting possibilities for this new product is the reproduction of endangered orchid species. Keikigrow's developers have used their preparation to reproduce

Phalaenopsis intermedia var. *dietzii*, a beautiful and rare orchid that is usually sterile. Obviously the product provides endless possibilities for experimenting, and its developers would be interested in hearing about growers' results.

Keikigrow is available from Plant Hormones, Box 345, McMaster University, Hamilton, Ontario, Canada, L8S 1G0. It comes with complete instructions and is ready to use. Prices in U.S. or Canadian dollars are as follows: 15 cc—\$15.00, 30 cc—\$28.00, 45 cc—\$35.00. The price includes air-mail postage and handling charges. Wholesale and commercial price lists are available on request.—*American Orchid Society Bulletin*, October 1980

Results of hormone application to date based on 250 applications of Keikigrow on *Phalaenopsis* spikes.

Initiation of healthy, normal keikis with roots (2-4 months)	50%
Additional side branch development and flowering nodes that normally would not develop	25%
Abnormal or aberrant forms; callus tissue, keiki clusters, etc.	20%
Negative results; callus or spike turns black, dies back	5%
Death of host plant	0%
	100%

CALENDAR



JANUARY 11-16

Foliage World '81
New Concepts Show
National Tropical Foliage Short Course
Orlando, Florida
Information: Foliage Education and
Research Foundation, Inc., P.O. Box Y,
Apopka, FL 32703

JANUARY 16-17

Wholesale Nursery Growers of America
Membership Meeting
National Association of Plant Patent
Owners Meeting
Chicago, Illinois
Information: Robert S. Fortna, 230 South-
ern Building, Washington, DC 20005
(202) 737-4060

FEBRUARY 5-8

American Institute of Landscape
Architects Convention
Theme: Conserving our Environment
Clearwater, Florida
Information: AILA, Box 1264, Miami, FL
33143
Convention open to nonmembers

FEBRUARY 14-15

Central Florida African Violet Society
9th Annual Show
Continental Resources Company
1560 Orange Avenue
Winter Park, Florida
Information: Mrs. Charles Midgett, 409
W. Buchanan Avenue, Orlando, FL
32809

FEBRUARY 15-19

National Arborist Association Annual
Meeting
Sarasota, Florida

FEBRUARY 18-21

American Camellia Society
Annual Meeting and Show
Show location: Community Activities
Building, 1400 Roosevelt Avenue,
Redwood City, California
Information: Nancy or Jack Mandarich,
700 Woodland Avenue, Menlo Park,
CA 94025

FEBRUARY 26-MARCH 26

Winter Lecture Series
American Horticultural Society
River Farm
Mt. Vernon, Virginia
Information: Dorothy Sowerby, (703)
768-5700

FEBRUARY 27-MARCH 1

South Florida Orchid Society
37th International Orchid Show
Bayfront Auditorium
Miami, Florida
Hours: 10:00 a.m. to 10:00 p.m. Friday
and Saturday, 10:00 a.m. to 8:00 p.m.
Sunday

FEBRUARY 28-MARCH 8

Central Ohio Home and Garden Show
Multi-Purpose Building
Ohio State Fairgrounds
Columbus, Ohio

MARCH 7-15

Indiana Flower and Patio Show
Indiana State Fairgrounds Exposition and
Expo-Pavilion Buildings
Indianapolis, Indiana
Information: P.O. Box 20189, Indianapolis,
IN 46220, (317) 255-4151

MARCH 8-15

Philadelphia Flower Show
Civic Center
34th and Civic Center Boulevard
Philadelphia, Pennsylvania
Hours: 10:00 a.m. to 6:00 p.m. Sunday,
10:00 a.m. to 9:30 p.m. Monday
through Saturday
Information: (215) 625-8262

MARCH 14-21

Boston Spring Flower Show
Theme: Gardening in Your Own Backyard
Commonwealth Pier Exhibition Hall
Boston, Massachusetts
Information: (617) 536-9280

APRIL 10-12

Central Florida Orchid Society
26th Annual Spring Show
Winter Park Mall
Winter Park, Florida
Information: (305) 876-2625

APRIL 18-26

48th Annual Historic Garden Week in
Virginia
Garden Club of Virginia
Information: Booklet (50¢) Historic
Garden Week Headquarters, 12 East
Franklin Street, Richmond, VA 23219
(804) 644-7776

APRIL 25-MAY 3

Euroflora '81
International Fair of Genoa
4th International Exhibition of Flowers
and Ornamental Plants
Information: Claretta Scott, Consulate
General of the United States of Ameri-
ca, Piazza Portello 6, 16124 Genoa,
Italy

MAY 17-23

African Violet Society of America, Inc.
Annual Convention and Show
Sheraton Place Hotel
San Francisco, California

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.

Cold Hardiness of Forsythia Varies

Trials conducted at the University of Vermont, Burlington, indicate that the cold hardiness of various species of forsythia can vary considerably. Field and laboratory tests on three species, *Forsythia x intermedia* 'Lynwood', *Forsythia mandschurica* and *Forsythia ovata* indicate that the buds of 'Lynwood' were significantly less hardy than those of the other two species tested. *Forsythia mandschurica* and *F. ovata* showed a 50 to 60 percent survival rate after snow while the buds of 'Lynwood' showed only five percent survival. *Forsythia ovata* survived temperatures of -2°C in the field while *F. mandschurica* should be hardy at temperatures of more than -32°C . Since *Forsythia mandschurica* has larger blossoms than *F. ovata*, it should be considered for breeding hardy forsythias. —GC & HTJ, August 22, 1980

Home Test for Soil Texture

A simple at-home test for soil texture can help you determine your soil conditioning needs for next season.

Soils are classified by their texture, that is, the relative percentage and sizes of the mineral particles that make up the soil. The most common particle sizes are sand, silt and clay. A loam soil, for example, has approximately equal quantities of the three. Gardeners referring to the "lightness" or "heaviness" of a soil are also referring to soil texture. A heavy soil has a high percentage of clay and other fine particles while a light soil is low in clay and high in sand and other coarse particles.

In order to determine the texture of your soil, you will need a soil sample from the portion of your garden that you want to test and a quart jar filled about two thirds full of water. A dispersing agent such as that contained in Calgon dishwasher detergent will improve the stratification of the layers. Add about one teaspoon per quart of water. Add soil to the jar until the water level rises almost to the top, screw the lid on tightly and shake vigorously until all of the particles seem to be equally distributed. Set the jar aside and let all the particles settle. The sand in your soil sample will fall to the bottom of the jar almost immediately, the silt-size

particles will take a while longer, and the clay particles may take several hours to settle, some remaining in suspension.

After the soil has completely settled, hold a piece of paper up to the jar and chart the layers to determine the percentage of each type of particle. Remember—the speed with which the soil settled will give you an added clue as to your soil texture.

Should you want to amend your soil as a result of this test, these findings will help your county extension agent develop a soil conditioning program suited to your needs. —*The Family Food Garden*, October 1980

Linden Variety Resistant to Japanese Beetle Found

Scientists at the Wooster, Ohio Agricultural Research and Development Center have found a variety of little-leaf linden that shows resistance to *Japanese beetle* attack. *Tilia cordata* 'Chancellor', in recent observations at the Center's shade tree plots, does not appear to be severely injured by the insects even when exposed to heavy infestations.

'Chancellor' appears to be one of the better linden selections currently under evaluation in the Ohio Shade Tree Project. Like many littleleaf lindens, this variety changes its growth habit as it matures. As a young tree, 'Chancellor' has an upright habit, being more than twice as tall as it is broad. The pyramidal growth habit characteristic of *Tilia cordata* becomes apparent at about 10 to 15 years, and the mature form of the tree—a rounded head, the tree often being as broad as tall—does not occur until the plant is 40 to 60 years old. While the variety 'Chancellor' has been one of the slower growing lindens tested, this tendency is offset by its longer life expectancy.

Another good characteristic of the variety is its summer foliage color. 'Chancellor's' foliage is a much darker green than other littleleaf lindens available. Attractive yellow fall color can develop, but normally the fall leaf display of this variety is not spectacular. The ivory flowers are quite fragrant and extremely attractive to bees. One should avoid planting lindens if anyone in the family is sensitive to bee stings. —*The Dawes Arboretum Newsletter*, October 1980

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Induce Renewal Canes on Roses Without Pruning

Greenhouse rose growers soon may be using a new method of inducing renewal canes on roses without the pruning that is generally necessary for success. In experiments conducted at Kanagawa Horticultural Experiment Station in Japan, benzyl adenine (BA) was mixed in a lanolin paste and applied to the lower buds of rose bushes. The paste was applied by scoring the stem either above or below the bud. The benzyl adenine was mixed in various concentrations— .25, .5 and one percent BA applications were the most successful depending on the cultivar. Bottom breaks were induced in over half of the plants tested at one, five and 10 years of age.

The condition of the buds being treated affected the success of the new method. Round buds jutting out from the stems gave better results than flattened buds slightly sunken into the stem. Treatment was most successful on plants with shoots that were developing pea-sized flower buds.—GC & HTJ August 22, 1980

New Method for Developing Seedless Grapes

A scientist at the U.S. Department of Agriculture, Fresno, California, is experimenting with a new method for developing seedless grape varieties. The method, called ovule culture, is based on the fact that most seedless grape varieties *do* have ovules (eggs), but they abort early in their development and in the mature fruit are all but invisible. By removing these "stunted" ovules from the fruit before they abort and placing them on an artificial culture media, Dr. David W. Cain has been able to grow the immature ovules into viable seed. So far he has obtained two plants from seedless parent varieties.

"The exciting aspect of this technique is that it allows grape breeders to hybridize seedless varieties with each other. This not only allows us to make crosses which were previously impossible, but also should result in a much higher frequency of seedless offspring. The increase in efficiency will greatly increase our chances of finding new commercially acceptable table and raisin grape

varieties," Cain says.—*Science and Education Administration, USDA, October 1980*

Nitrogen Fixing Microbe Discovered

"Rice experiments at the SEA Cell Culture and Nitrogen Fixation Laboratory, Beltsville, Maryland are renewing hopes that farmers will one day grow varieties of rice, corn, wheat



and other grasses that get nitrogen fertilizer from nitrogen fixing microorganisms," reports the USDA publication *Agricultural Research*, October 1980. Charles Sloger, a plant physiologist with the Laboratory, and Peter van Berkum, a biochemist from the University of Maryland, have been able to detect a small amount of nitrogen fixing activity on the roots of the rice plants they are growing in the Beltsville greenhouses in salt marsh sediment brought from the

Chesapeake Bay. The two scientists first discovered that the sediment contained a microbe that somehow stimulated nitrogen fixation on the roots of an aquatic grass, *Spartina*. The scientists hope this discovery will help them develop more sophisticated laboratory procedures. In time these procedures may lead to a breeding program that will produce grasses which are able to fix nitrogen in much the same way legumes do.

Favorite African Violets for 1980

Members of the African Violet Society of America, Inc. have selected their favorite violets for 1980. Over 2,545 individual lists were submitted, and of the hundreds of cultivars nominated for top honors, three received over 600 votes, and five more received over 400 votes. The cultivar 'Mark' (Registration number 3007) received the most votes with 682, while 'Tommie Lou' (1744) and 'Tina' (2680) followed a close second and third with 668 and 602 votes respectively. The five cultivars with over 400 votes are: 'Garnet Elf' (2339), 'B. Anna' (2898), 'Dyn-o-Mite' (3440), 'Nancy Reagan' (2167) and 'Helene' (2885). Over 240 cultivars received more than 50 votes each.—*African Violet Magazine, November 1980*

Effects of Microwaves on Hard-Coated Seed

Two Australian scientists are experimenting with a new method for treating hard-coated seed, reports *Australian Plants* in their March 1980 issue. The scientists are studying the effects of microwaves on the seed of *Acacia longifolia*, a leguminous tree used for rapid regeneration of devastated land as well as for large-scale landscape plantings in Australia and other parts of the world.

The microwave energy used in the experiment is obtained from a magnetron oscillator rather than a conventional microwave oven. It operates at a frequency of 2450 MHz and has a measured power output of 650 watts. The seeds were placed in polystyrene foam containers and exposed to the microwaves for periods of time ranging from 60 to 240 seconds. For exposure times in excess of 160 seconds, a beaker containing 50 cc.

of water also was placed in the unit to prevent overheating.

Germination testing on the treated seed indicated that exposures of 160 seconds without a beaker of water in the unit and times of 210 to 240 seconds with a beaker of water present both produced between 65 and 75 percent germination. Acacias are well known for their hard seed coats, and the germination percentage on untreated seed would probably be close to zero.

These results were compared with those recorded for seeds which were nicked or immersed in boiling water. In general, both these last techniques show a faster rate of germination, and in the case of boiling water treated seed, a higher final germination percentage. Seeds that had been nicked swelled from water uptake but showed signs of rotting after about 12 days. At six weeks the seedlings from boiling water and microwave treated batches revealed little apparent difference in seedling size and vigor.

The microwave process has an added advantage in that the treated seed can be safely stored for periods of up to four weeks in paper envelopes with no apparent loss of viability. Scarified or nicked seed in particular must be sown almost immediately after treatment to expect satisfactory germination.

While microwave heating also has been tested for its effectiveness on improving germination in clover, alfalfa and several species of spruce, pine and Douglas fir, scientists are still unsure of the reason for its effectiveness. The microwaves caused partial cracking of the seed coat of *A. longifolia* seed tested as well as changes in the size and color of the strophiole, a raised, elliptical area on the seed surface near the hilum (the point of attachment of the seed to the strand holding it in place in the pod; it often appears to be the point of first water entry in germinating seed). Subsequent tests point strongly to the strophiole as being the dominant site of water entry in microwave treated *Acacia longifolia* seeds.

Will this treatment be successful with other types of seed and with a domestic microwave? That remains to be seen, as scientists still haven't tested the idea. Perhaps it is worth an experiment.

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New Rigorous Climate Plants to Consider for the Garden

Several low maintenance shrubs suited for rigorous climates have been added to the list of plants recommended by two researchers at South Dakota State University, J.E. Klett and Iris Thoreson (see Dr. Klett's earlier article in *American Horticulturist*, Volume 56, #3, Late Spring 1977). The plants have been selected for their adaptability to the climatic conditions of the Great Plains as well as for their growth habit and ornamental characteristics.

Seven small shrubs, generally maturing at four feet or less, have emerged as outstanding plants at the trial grounds. *Amorpha brachycarpa*, commonly called short-podded lead-plant, has dull, gray-green, pinnately compound leaves and bears 10-inch spikes of purple-blue flowers in June or July. It is quite adaptable to poor, dry, sandy soils. *Berberis koreana*, the Korean barberry, is a four to six foot shrub with beautiful, deep-red fall leaf color and bright-red fruit that is attractive in the fall and winter. It will tolerate most soils except permanently wet ones, and because of its spines it will serve as an excellent barrier plant. *Caragana pygmaea*, pygmy caragana, has a round growth habit, bright-yellow, pea-like flowers and grey-green foliage. While its winter appearance is not the most desirable ornamentally, it is able to withstand drought, winds and extreme cold. *Diervilla lonicera*, dwarf bush honeysuckle, bears small, yellow flowers in July and August. It will grow in dry soils and makes a good bank cover. Two new cultivars of *Potentilla fruticosa*, bush cinquefoil, also have been added to the list of plants suggested for the Great Plains, 'Gold Drop' and 'Jackmannii'.

The meadow rose, *Rosa blanda*, is recommended for its adaptability to poor growing conditions, its single pink flowers borne in May and June and its interesting winter character. The plant, which is often thornless, has red to red-purple bark and holds its red rose-hips through the winter.

Five larger shrubs (four to eight feet tall) and one small tree were added to the list. *Philadelphus x lemoinei*, lemoine mockorange, and *Sorbaria sorbifolia*, Ural false spirea, are both prized for their white flowers. *Philadelphus* bears sweet-scented,

showy, white flowers in late spring, and *Sorbaria* bears its large white plumes in June and July when many other woody shrubs are not in bloom. *Sorbaria* has a suckering habit which may make restraint necessary. Meyer lilac, *Syringa meyeri*, bears light-lavender to violet-purple flowers in dense, upright clusters. The flowers, which are not especially fragrant, are borne in late spring. Common sea buck-

thorn, *Hippophae rhamnoides*, was selected for its bright orange-red berries which remain on the plant all winter. Both male and female plants are necessary for fruit production. Nannyberry viburnum, *Viburnum lentago*, is a vigorous shrub or small tree that bears flat clusters of cream-white flowers in late May. Its bluish-black fruit is relished as winter food by birds.

Ivy Trial Conducted by RHS

The Royal Horticultural Society has completed a trial of 200 ivy cultivars, the results of which were published in the September 1980 issue of *The Garden*. The first and only other ivy trial conducted by the Society was held in 1889-1890 at their gardens at Chiswick.

This second trial was designed to evaluate ivy cultivars as climbing plants and groundcovers. These plants were grown on wire mesh since providing brick walls for nearly 200 ivy cultivars at the trial grounds at Wisley was nearly impossible. Unfortunately, the exposed site and sandy soil at the trial grounds kept some excellent cultivars such as 'Goldheart' and 'Buttercup' from performing to their potential. The Society selected several outstanding plants for commendation.

Three First Class Certificates were awarded. *Hedera colchica* 'Dentato-variegata', a cultivar "often described as the best of all evergreen variegated climbing plants," was given this well-deserved award 73 years after its introduction. *Hedera Helix* 'Manda's Crested', a cultivar with lightly curled leaves first introduced in 1940 by W. A. Manda, Inc. of New Jersey, also was given an F.C.C. award. 'Manda's Crested' makes an excellent groundcover, and its soft, green leaves take on a purplish-pink color at the beginning of autumn. The third certificate was awarded to a cultivar introduced in 1955 by a wholesale florist in Springfield, Ohio, Mr. Keith Williams. *Hedera helix* 'Ivalace' is an excellent plant bearing glossy, dark-green leaves with five lobes and a crimped leaf margin that makes the leaves look very lacy.

Thirteen cultivars were given the Award of Merit. They include *Hedera colchica* 'Dentata', commonly known

as the elephant's ear ivy; *Hedera helix* 'Hibernica', an excellent, very old variety first introduced in 1815; as well as several other cultivars of *H. helix* such as 'Pin Oak', 'Atropurpurea', 'Green Ripples' and 'Hamilton'.



Root Ivy Cuttings the Easy Way

The American Ivy Society, in the September 1980 issue of *The Ivy Bulletin*, suggests a handy method of rooting cuttings for gardeners who "can't seem to get their cuttings to root before they rot." The aim is to create a "mini-greenhouse" environment for the cuttings. Here's how: assemble sterile potting soil, a three-inch plastic pot and a clear, disposable plastic cup (make sure this cup, when inverted, will fit down onto the inner rim of the pot to form a good seal). Fill the pot with moistened soil to just below the inner ledge and plant the cuttings you want to root. Then drill or burn a small hole in the bottom of the plastic cup to provide for free air circulation, turn it over and fit it down onto the ledge of the pot. Place your mini greenhouse out of direct sunlight and leave it alone. The cup will keep the humidity level high, and it will need no watering or other care. You will be able to watch the progress of the cuttings without removing the plastic lid. When new growth appears, harden off the new plants by keeping the pot in light shade and gradually removing the cup for longer and longer periods each day.

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WILLIAMSBURG GARDEN SYMPOSIUM

Presented by The Colonial Williamsburg Foundation in association with the American Horticultural Society, April 5-April 8, 1981.

Additional information on transportation, tours and other activities will be found in the booklet, *Symposium Jottings*, contained in the conference packet you will receive on your arrival.

The Program

Unless indicated otherwise, all events will take place in the Williamsburg Conference Center adjoining the Williamsburg Lodge.

SUNDAY, APRIL 5

2:00-5:00 p.m.— Free time to visit Colonial Williamsburg's gardens, exhibition buildings, craft shops, Carter's Grove plantation and Bassett Hall.

5:30 p.m.— *Virginia Room*. Reception: President and Mrs. Charles R. Longworth hosts.

8:30 p.m.— *Auditorium*. Film premiere presentation: *Search for A Century*, the fascinating account of the discovery of the long-lost 17th-century Wolstenholme Towne site at Carter's Grove plantation with Ivor Noel Hume, Colonial Williamsburg's resident archaeologist.

MONDAY, APRIL 6

9:30 a.m.— *Auditorium*. *A Singing Spring: Insect Control Without Poison* with Dr. Carroll M. Williams.

10:45 a.m.— *North Gallery*. Coffee.

11:15 a.m.— *Innovative Plantings for Garden Glory* with James C. Mikkelsen.

2:00 p.m.— Special tour of Historic Area gardens, private homes and the newly refurbished Governor's Palace.

4:30 p.m.— *Foyer*. Informal tea.

8:30 p.m.— *Auditorium*. The Symposium Flower Arrangements Presentation: Claude Jones, Jr. surveys *Williamsburg Floral Styles Past and Present*.

TUESDAY, APRIL 7

6:00 a.m.— The Early Risers' Bird Walk.

9:00 a.m.— *Auditorium*. Symposium Film Special.

9:30 a.m.— *Vivid Aspects of Home Landscape Appeal* with Anthony Tzysnik, ASLA.

10:45 a.m.— *North Gallery*. Coffee.

11:15 a.m.— *Solar Greenhouses—The Beautiful Way to Garden Under Glass While Heating Your Home* with Bill and Susan Yanda.

2:00-5:00 p.m.— Three question-and-answer clinics conducted by Colonial Williamsburg and guest authorities on *Outdoor Planting Sticklers*, *Solutions to Residential Garden Design Problems* and *Whither Indoor Gardening?* at 2 p.m. and, following a 3:15 p.m. tea break in the Foyer, will be repeated at 3:45 p.m.



Colonial Williamsburg Foundation

Williamsburg Garden Symposium participants will be among the first visitors to the newly renovated Governor's Palace. The palace gardens, described by Joan Parry Dutton as a "great outdoor museum," will be especially inviting during April.

8:30 p.m.— *Bruton Parish Church*. Symposium Candlelight Concert.

WEDNESDAY, APRIL 8

9:00 a.m.— *Auditorium*. Symposium Film Special.

9:30 a.m.— *The Newest and Best Annuals for 1981* with James W. Wilson.

10:45 a.m.— *North Gallery*. Coffee.

11:15 a.m.— *Birthing a Botanical Garden* with Ann Lyon Crammond.

Afternoon— Tour on-your-own Bassett Hall, Carter's Grove, and the Historic Area buildings, homes and shops.

7:30 p.m.— *Virginia Room*. The Symposium Gardeners' Banquet. *Plant Hunting in Ecuador and the Galapagos* with Anthony Huxley, M.A., V.M.H.

How to Register

Garden Symposium registration should be made in advance and must be accompanied by a check for \$100 per person. This fee covers lectures, tours of Colonial Williamsburg gardens and exhibition buildings, craft shops, Bassett Hall, Carter's Grove, teas, clinics, the candlelight concert, but not the Gardeners' Banquet and other meals or lodging.

Hotel rates include lodging only. Please give two choices for accommodations, since it is not always possible to reserve your first choice. All accommodations are attractive and every effort is made to give registrants their first choice. A deposit is not necessary to reserve a room.

Symposium Authorities Include

- **Henry M. Cathey**, Chief of the Florist and Nursery Crops Laboratory, Beltsville Agricultural Research Center, Maryland; Visiting Professor Ohio State University; Past President, American Horticultural Society.
- **Ann Lyon Crammond**, Executive Director, The Atlantic Botanic Gardens, Atlanta, Georgia.

- **Anthony Huxley**, Author, Botanist and Horticulturist, Surrey, England.
- **Claude Jones, Jr.**, Williamsburg Floral Stylist.
- **Richard D. Mahone**, Director of Landscape Construction and Maintenance, Colonial Williamsburg.
- **James C. Mikkelsen**, President, Mikkelsens, Inc., Ashtabula, Ohio.
- **Ivor Noël Hume**, Resident Archaeologist, Colonial Williamsburg.
- **Libbey Hodges Oliver**, Flower Arrangements Supervisor, Colonial Williamsburg.
- **Donald H. Parker**, FASLA, Director of Landscape Architecture, Colonial Williamsburg.
- **Anthony Tyznik**, ASLA, Landscape Architect, The Morton Arboretum, Lisle, Illinois.
- **Dr. Carroll M. Williams**, Benjamin Bussey Professor of Biology, Harvard University.
- **James W. Wilson**, Executive Secretary, National Garden Bureau, Inc. and All-America Selections, Sycamore, Illinois.
- **Bill and Susan Yanda**, President and Account Manager of Sunplace Corporation, Hinesburg, Vermont.

Registration Form Williamsburg Garden Symposium April 5-8, 1981

Please register me for the 1981 session. My check covering \$100 registration fee for each person is enclosed. (Please make registration checks payable to Colonial Williamsburg Foundation.)

RESERVATIONS ARE NOT TRANSFERABLE:

Hotel rates are European Plan and are subject to Virginia sales tax. Deposit check is not necessary for accommodations. Colonial Williamsburg cannot guarantee a requested room location within its hotels but will make every effort to comply with the hotel choice.

Please mail your registration form and check to: The Williamsburg Garden Symposium/Mrs. Trudy S. Moyles, Registrar/Goodwin Building/Williamsburg, Virginia 23185.

- | | |
|---------------------------------------------|-------|
| <input type="checkbox"/> Williamsburg Inn | \$ 84 |
| <input type="checkbox"/> Bed-Sitting Room | \$105 |
| <input type="checkbox"/> Colonial Houses | \$ 65 |
| <input type="checkbox"/> Williamsburg Lodge | \$ 65 |
| <input type="checkbox"/> East Wing | \$ 65 |
| <input type="checkbox"/> South Wing | \$ 65 |
| <input type="checkbox"/> West Wing | \$ 73 |
| <input type="checkbox"/> The Motor House | \$ 49 |

My second choice is _____

Date of arrival _____

Date of departure _____

Please tell us how you would like your name badge(s) prepared: (Example: Mrs. John J. Adams or Mrs. Mary Adams)

Signed _____

NAME _____

STREET _____

CITY, STATE, ZIP _____

AREA CODE-PHONE NUMBER _____

I will share a room with:

NAME _____

STREET _____

CITY, STATE, ZIP _____

AREA CODE-PHONE NUMBER _____

U.S. National Arboretum Acquires Largest Private Herbarium in Japan

The U.S. National Arboretum has completed arrangements to purchase what may be the largest private herbarium in Japan. The collection, consisting of about 60,000 specimens (130,000 including duplicates), has been amassed by an amateur botanist and retired Tokyo bus driver over the past 40 years. Dr. Frederick G. Meyer, a research botanist at the Arboretum who will travel to Japan to complete the final arrangements says, "We already have purchased about 6,000 specimens from Mr. Furuse over the past several years, and we prize his material because of its very high quality. . . . This is a golden opportunity for the Arboretum. The acquisition is consistent with our long-standing interest in the plants of Japan. Plant species of Japanese origin are among the most widely used landscape plants in the United States. Among them are most of our evergreen azaleas, Japanese yew, Japanese privet, maples and hollies." Each specimen in the collection has been dried and systematically organized and is accompanied by collection data such as the time and place the plant was collected and the

native environment in which it was found.

When the transfer of this collection is complete (in approximately two years) the U.S. Arboretum will have the largest herbarium of Japanese plants outside Japan. The Arboretum also is making arrangements to acquire Mr. Furuse's private library containing many valuable books on Japanese botany.—*USDA Research News, October, 1980*

NCTRH Seeks Help in Planning Conference

The National Council for Therapy and Rehabilitation Through Horticulture requests aid in planning the program and workshop presentations for their 9th Annual Conference, to take place September 8-11, 1981 at the Grand Hyatt Hotel, New York. Individuals with program suggestions or those interested in presenting papers or making workshop presentations should contact the Council at the address below. Some possible areas for presentations include youth, aging, physical or psychological growth and development, work, play, community or social groups, therapeutic environments, greenhouses, energy, agriculture, landscaping, environmental waste, program development.

In addition to the general presentations, the Council is seeking individuals to present specific horticultural craft activities and technical horticultural topics such as container and shade gardening, greenhouse energy conservation, herb gardening, floral arranging and holiday decorations. Also being sought are presenters for specific professional development topics such as task and activity analysis, medical terminology and pharmacology, observation skills and note writing and supervision.

For more information write Nancy K. Chambers, HTR, Program Chairperson, 1981 NCTRH Conference, 200 Alexander Avenue, Upper Montclair, NJ 07043.

The Englishwoman's Garden—Temporarily Out of Print

Nothing sells like success! Response to *The Englishwoman's Garden*, edited by Alvilde Less-Milne and Rosemary Verey, has been so great that the publisher's supply of these books has been exhausted. We apologize for any inconvenience this shortage has caused those of you who ordered the book through the Society. Please be patient—a second printing is now in progress and all unfilled orders will soon be acknowledged.

AMERICAN HORTICULTURIST

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