

January/February, 1992

The BEGONIAN



The BEGONIAN

ISSN 0096-8684

Publication of the American Begonia Society

American Begonia Society

Founded January 1932 by Herbert P. Dyckman

Aims and Purposes

To stimulate and promote interest in begonias and other shade-loving plants.

To encourage the introduction and development of new types of these plants.

To standardize the nomenclature of begonias.

To gather and publish information in regard to kinds, propagation, and culture of begonias and companion plants.

To issue a bulletin which will be mailed to all members of the society.

To bring into friendly contact all who love and grow begonias.

The Begonian is published bimonthly by the American Begonia Society, Inc. Views expressed are not necessarily those of the society, its officers or the editor. Contents, except where labeled otherwise, may be reprinted without limitation, provided credit is given to "*The Begonian*, magazine of the American Begonia Society."

Membership (subscription) \$15 annually, \$21 first class mail, also Mexico and Canada. \$25 foreign surface mail except Mexico and Canada, \$35 overseas air mail. Added member, same household, \$2. Consult membership secretary for sustaining benefactor, life membership dues. U.S. currency only. Back issues (current volume) \$2.50.

American Begonia Society—P.O. Box 231129, Encinitas, CA 92023-1129

Membership—Subscription, dues, circulation inquiries, and address changes: John Ingles, Jr., 157 Monument, Rio Dell, CA 95562-1617; (707) 764-5407.

Advertising Manager—Martha Curry, P.O. Box 1232, Weatherford, TX 76086

Cover Photos

front: Sue Hessel captured the geometric charm of a floral burst by *B. convolvulacea*, a trailing-scandent species discovered in Brazil in 1860 and offered in the Seed Fund.

back: Hugh McLauchlan photographed his friend George McCormick and the world's largest begonia flower. McCormick raised his *B.* 'Laurie Mac' from seed. The flower measured 13 1/8", earning a place in the Guinness Book of World Records. Learn more about George McCormick on p 4, and read about Hugh McLauchlan on p. 27



IN THIS ISSUE

Articles

The Ruthless Scot	4
Begonias Aussie Born	7
Begonia Species are Variable	10
Book Review	14
Begonia Fiesta	32
Begonian Index 1990	15

Convention 1991:

Exploring the World of Begonias

A Garden in Scotland	27
From Prop Box to Show	28

Regular Features

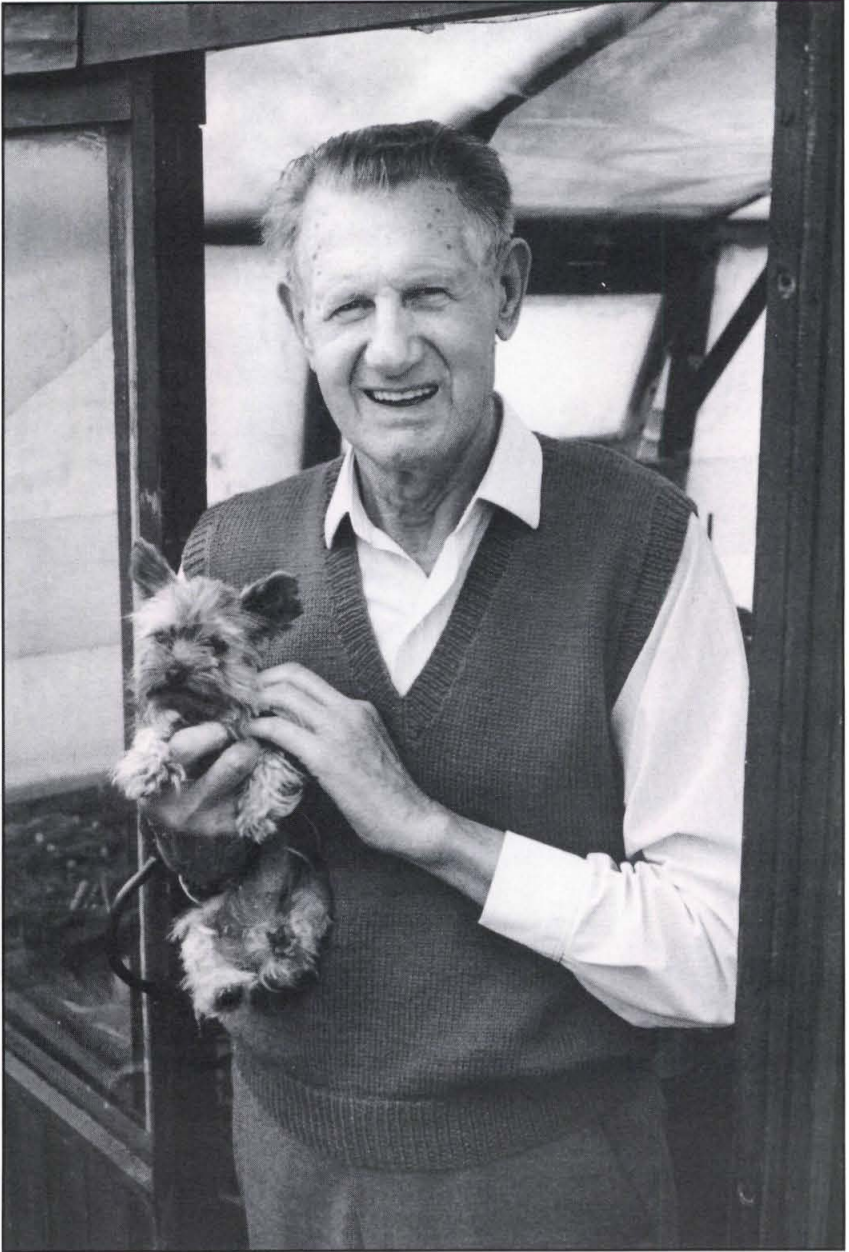
In Memory	13
In the News	13
Bulletin Board	31
Conservation News	32
Seed Fund Notes	33
Seed Fund Listing	36
Coming Events	37
ABS Minutes	38

B. goegoensis from Sumatra is also offered in the Seed Fund. drawing by Kit Jeans Mounger from the Begonia Book of Days

Quick!

Check your mailing label. If it says 1/92 or 2/92, your membership is about to expire.

Please renew! We don't want to lose you!



George McCormick with friend 'Bonnie'

The Ruthless Scot: George McCormick

Text and photos by Mose Fadeem

Some believe he is the finest hybridizer of tuberous begonia alive; Guinness has him on record for the largest begonia flowers ever (13 1/8"); commercial growers it's rumored covet his hybrids; and through it all, George McCormick carries on with an air of quiet confidence in pursuit of the artist's obsession.

With Hugh McLauchlan I visited George in late May 1991 at his dwelling in Kirkconnel, Scotland, a small ex-coal mining village in the southwest, and immediately took a liking to his eccentric character. He has a sort of gentle but crazed glow in his eye that proceeds from an excess of ruthless honesty in this life - the breeder's art is not for the compromising. Throughout his eighty years George devoted a good deal of his energy to animal husbandry, especially dogs, and when he eventually turned to *Begonia* the good eye, the instincts, and the habit of culling all but the best stock was already deeply ingrained. He is principled and rigorous when it comes to destroying plants that don't satisfy the highest expectations. Of about 200 hybrid seedlings this season less than a handful are likely to survive George's critical vision.

But I don't write simply to praise the hybridizer so much as to correct a perception we seem to have in the United States that the Scots are only interested in flower size. The notion is inherently mistaken. It's true that size plays an integral role in their tuberhybrida adventure, but strength and vigor are the leading priorities. The

backbone and mettle of a plant determine future directions for the Scottish hybridizers. McCormick's line has all the size it needs and then some; he proceeds to gladly give some back in order to improve quality.

Now to understand what "quality" means for a Scot one may have to enter a realm of methodical fanaticism and blood-curdling show competition that not only defies description but disrupts notions of sanity. It's certainly beyond my own scope and experience, except to say that many an otherwise rough-hewn clansman has gone to his knees arranging petals on a double begonia.

I would also like to relate to you a dimension of George McCormick that truly impressed me, and that involves the simplicity of the environment and the meager tools with which he works. Down the incline of a narrow yard behind George's flat sits a small glasshouse (10' x 13') with a single bench around. Nearby squat two rows of rugged coldframes, distinctly homemade...and that's it. The rest is man and nature. In a world of horticultural sell that would have us believe we couldn't possibly achieve anything without paying dearly for gadgets, accessories, miracle chemicals, and all sorts of supportive tools we find a no-frills, almost primitive environment that does not get in the way of creative human intensity. George McCormick's unadorned success lies within the man and within the *Begonia* community that offers the framework for talent. George readily admits to some luck along the way but also offers recognition of those behind him who set the stage for his own success.



George's unadorned working environment: a small greenhouse and coldframes - the rest is man and nature.

In later correspondence during the summer I mentioned a *boliviensis* x *cinnabarina* in my garden. George wrote:

"I see you have two of the original varieties which arrived in this country in 1848. In fact, *boliviensis* was one of the parents from which the *pendula begonia* originated. It was because of its elongated stems I suppose that it was used in this capacity. All of the seven varieties imported were crossed and intercrossed, and I have been reaping the benefit of those dedicated early hybridizers. If I had to start off as they had to do, I'm afraid I wouldn't have either the time or patience to match their accomplishments. Hybridists of today have had much of the work already done for

them, and for my part I feel indebted to my predecessors who have given me the means and materials which so greatly simplified hybridization of the modern tuberhybrida. Everything now is pretty straightforward, and with a bit of care and thought and the application of proven methods, success is near enough ensured, provided the seedling plants are given the necessary care and attention. My new crop of seedlings are coming along nicely and in another two or three weeks I will be securing the buds and will be in full flower in roughly six weeks from bud stage. This is the exciting time - will the crosses be fruitful and produce flowers of exhibition quality? Well, we will soon know. Yours Sincerely, George McCormick."



About Mose Fadeem...

"I have read the rough proof of this in which he has made George McCormick immortal and come to think of it he has added a few years to my life." - Hugh McLauchlan
Please see IN MEMORY, page 13.

Begonias Aussie Born

text & photos by Don Miller

"Begonias Aussie Born" is the theme of the first convention of the newly formed Association of Australian Begonia Societies, Inc., to be hosted by the Victorian Begonia Society. The convention will be held March 6-8, 1992, in conjunction with the 40th anniversary of the Ballarat Begonia Festival, which runs through Sunday, March 15.



Downtown Ballarat

There is no better city for this convention than Ballarat in the state of Victoria. Ask any Aussie gardener about Ballarat, and he or she will certainly respond, "Beautiful Begonias."

Traditionally the begonias at Ballarat have been tuberhybridas. These magnificent begonias are displayed in the conservatory at the Botanical Garden, situated on forty acres on the outskirts of the city along the shores of Lake Wendouree. The garden also features masses of *semperflorens* in the annual color beds.

Philip Clingin, Director of Gardens and Parks in Ballarat, says, "The Festival is now the oldest and most successful community festival in Australia, and contributes in excess of 3.5 million dollars to the local community annually." Each year between 40,000 and 50,000 visitors attend the festival and view the begonias.

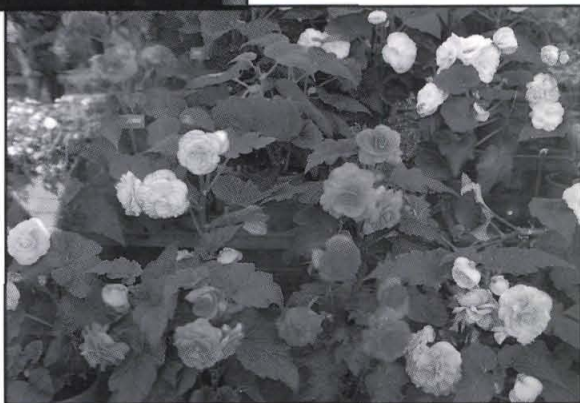
Philip Clingin says, "These begonias are now grown in a new state-of-the-art multispan glasshouse, which features automatic venting, retractable shading, hailstone protection, and rolling benches." The hailstone protection was essential, since the old glasshouses dating from 1927 were destroyed in 1989 by a hailstorm.

The tuberous begonias are planted in September, which is early spring in the land down under. The gorgeous blooming plants are displayed in the conservatory from mid-February to mid-April. One hundred and twenty varieties are grown by begonia growers Wayne Walters and Myra Grinter.

The conservatory is a glasshouse with bleacher-like display stands. The blooming tuberhybrida and tuberhybrida pendula begonias are placed on these stands. Visitors view them through glass windows.



Above and right:
tuberos begonias in the
conservatory



Each year more and more of the “other” begonias are grown at Ballaarat (“other” meaning all begonias except the tuberhybridas). This year the Australian Begonia Societies will display begonia species and the best of Australian hybrids, with begonias from all eight horticultural classifications represented.

I have seen the really spectacular begonias the Aussies grow and hybridize. This will be a major begonia event. If possible, make plans to attend the begonia extravaganza on a trip to the big wondrous lands down under.

For more information, write Philip Clingin
General Manager AABS Inc.
P.O.Box 655
Ballarat, Vic. 3353
phone (053) 338-647
fax (053) 328-122

or
Margaret Wright
Secretary, Victorian Begonia Society, Inc.
‘Maplewood’ 74 Railway Place
Macedon, Victoria 3440
phone: (054) 261-298

Don Miller lives at 1010 Mt. Auburn, Dallas TX 75223. He visited Ballaarat in April 1991.

Editor’s note: sharp proof-readers will notice that Ballaarat is spelled two ways here. The city spells its name with three “a”s, the gardens use the older spelling with four.

at right:
(from left to right)
Philip Clingin,
Wayne Walters, Myra Grinter



at left: the conservatory
at Ballarat Botanical Garden

The Wild Wild East

Ballaarat is located 110 kilometers northwest of Melbourne in the Australian state of Victoria.

A gold rush in 1850 turned an Aboriginal campsite called Balla - arat into a boom town. It is said Ballarat's gold built Melbourne.

Peter Tobin, director of Sovereign Hill (a re-creation of a gold mining town of the mid-19th century) says, "At Golden Points you could pull up a clump of grass and shake the dirt off and gold would fall out. This aroused a keen interest in gardening."

Along with these new "gardeners" came plenty of bush rangers (outlaws) trying to make a fast buck.

Today Ballarat is Australia's largest inland city, with a population of more than 80,000 people. The town itself is filled with Australian Victorian architecture and most of the original downtown area, including its own Stock Exchange, has been restored to its original Victorian splendor.

The history of this beautiful city is good enough reason to visit. But with a begonia convention and festival to see also - well, you just must go down under. - Don Miller

Begonia Species are Variable

by Jack Golding

All Begonia with the same specific epithet are not identical.

Begonia species growing in the wild have differences in their characters, even among those within the same population. Others of the same species growing in diverse locations may have even greater variations.

Most of the Begonia species we have in cultivation have been reproduced from a single plant collected in the wild many years ago. They appear the same because we have been seeing clones of that original plant again and again. When more plants of the same species are introduced from the wild, some think they are a new or different species because some of their characters may differ from those of the plants we know.

A collector upon discovering a population of Begonia may select the most typical plants of the group, but more often he will choose those with the most distinctive variations. It would be ideal if collectors took sufficient specimens to show all of the variants within the group, but most often they take only one or a few specimens.

Specimens from the same collection are often placed in several herbaria throughout the world. When trying to identify a species, its diversity can be observed by studying many specimens, not only from the original collection but also those from later collections.

The author of a name will base his protologue [everything identified with a name at its original valid publication, i. e. diagnosis and/or description, illustrations, references, synonymy, geographical data, citation of specimens, discussion, and comments] on the collected specimens. One will be designated as the type.

For a better understanding of the nomenclatural type of a name, these are a few rules from the **International Code of Botanical Nomenclature, 1988:**

Art. 7. 2. The **nomenclatural type** (*typus*) is that element to which the name of a taxon [a species] is permanently attached, whether as a correct name or as a synonym. **The nomenclatural type is not necessarily the most typical or representative element of a taxon [a species].**

Art. 7. 3. A **holotype** is the one specimen or illustration used by the author or designated by him as the nomenclatural type.

Art. 7. 5. A **lectotype** is a specimen or illustration selected from the original material to serve as a nomenclatural type when no holotype was indicated at the time of publication or as long as it is missing. **When two or more specimens have been designated as types by the author of a specific or infraspecific name,..., the lectotype must be chosen from among them.**

Rec. 7B. 3. Designation of a lectotype should be undertaken only in light of an understanding of the group concerned. In choosing a lectotype, **all aspects of the protologue should be considered as a basic guide. Mechanical methods**, such as the automatic selection of the first species or specimen cited or of a specimen collected by the person after whom a species is named, **should be avoided** as unscientific and productive of possible future confusion and further changes.

Art. 25. 1. For nomenclatural purposes, a species or any taxon below the rank of species is regarded as the sum of its subordinate taxa, if any.

A species comprises not only the element represented in the original protologue (the type), but also all subsequent described variants [*subspecies*, *varietas*, *forma*] ascribed to that species. Hence, if the element now designated as a variant (variety and/or

form) had been discovered first it would have been the type and the element discovered later would have been named the variant.

The variant and the typical element of the species are biological equivalents, one is no more the species than the other.

The description of a species represented by the specific name encompasses the characters of the type and all its variants.

The distinguishable variations of a species in cultivation can be identified by correct names.

The grouping of the variants of a species under one specific name is logical and practical for the botanist. However, a horticulturist needs to be able to name a distinguishable variant from others of the same species. This is not a problem, because these cultivated varieties of the species can also be identified by cultivar epithets.

These excerpts from the **International Code of Botanical Nomenclature-1988** concern the names of plants in cultivation:

Art. 28.1. Plants brought from the wild into cultivation retain the names that are applied to the same taxa growing in nature.

Note 2. Epithets published in conformity with the **International Code on Botanical Nomenclature** may be used as cultivar epithets under the rules of the **International Code of Nomenclature for Cultivated Plants** when this is considered to be an appropriate status for the groups concerned...

Begonia fischeri Schrank is a very variable species with many varieties and synonyms. They all have the same taxonomic status as the type element.

These following varieties of *Begonia fischeri* have correct names:

Begonia fischeri Schrank var. *brevipilosa* Irmscher.

Begonia fischeri Schrank var. *crenato-glabra* Irmscher.

Begonia fischeri Schrank var. *crenulato-glabra* Irmscher.

Begonia fischeri Schrank var. *ermanii* (Klotzsch) Irmscher.

Begonia fischeri Schrank var. *klugii* Irmscher.

Begonia fischeri Schrank var. *macroptera* (Klotzsch) Irmscher.

Begonia fischeri Schrank var. *malvacea* (Klotzsch) Irmscher.

Begonia fischeri Schrank var. *palustris* (Bentham) Irmscher.

When they are growing in cultivation, these varieties retain the same name they were called when growing in the wild, e.g. *B. fischeri* var. *brevipilosa*.

These excerpts from the **International Code of Nomenclature for Cultivated Plants-1980** concern cultivar epithets:

Art. 10. The international term *cultivar* denotes an assemblage of cultivated plants which is clearly distinguished by any characters (morphological, physiological, cytological, chemical, or others), and which, when reproduced (sexually or asexually), retains its distinguishing characters.

Art. 27a. A cultivar name published on or after January 1959, must, except as noted in (b) and (c) below [both involve epithets of botanical names published before or after 1959], be a fancy name, that is, not a botanical name in Latin form.

Art. 27b. A botanical epithet in Latin form, published in conformity with the botanical Code, before, on, or after 1 January 1959, for a plant subsequently considered to be a cultivar, **is to be retained as a cultivar name** unless it duplicates existing cultivar name of the species or hybrid concerned.

Art. 29. A cultivar name, when immediately following a botanical name or common name, must be distinguished clearly from the latter, either by placing the abbreviation cv. before the cultivar name, or by some typographical device, preferably by enclosing it within single quotation marks...

In languages in which capital letters are used, these are required for the initial letter of all words of a cultivar name, except when linguistic usage demands otherwise...

A cultivar epithet can be used for any plant that conforms with Article 10 of the Cultivated Code, not, as some think, only the hybrids or plants that arose in cultivation.

The following name of varieties of *Begonia fischeri* Schrank were validly published, but were later determined to be synonyms of *Begonia fischeri* Schrank:

Begonia fischeri Schrank var. *brasiliensis* (Klotzsch) Irmscher.
Begonia fischeri Schrank var. *elata* (Klotzsch) Irmscher.
Begonia fischeri Schrank var. *eufischeri* Irmscher.
Begonia fischeri Schrank var. *moritziana* (Klotzsch) Irmscher
Begonia fischeri Schrank var. *tovarensis* (Klotzsch) Irmscher.

When growing in cultivation these varieties **should not** retain the same name they were once called. However, since these names are no longer accepted by botanists, these former varieties, if distinguishable in cultivation, can be identified by a cultivar name. The prior varietal epithets are used as cultivar epithets, e.g., *Begonia fischeri* 'Brasiliensis'.

If epithets had been used for species (*Begonia partita* Irmscher, *Begonia suffruticosa* Meisner, *Begonia suffruticosa* Meisner f. *bolusii* Irmscher) that were later determined to be synonyms of another species (*Begonia dregei* Otto & Dietrich) and they are distinctive in cultivation, they are identified by using the previous epithets as cultivar epithets, e.g.,
Begonia dregei 'Partita'
Begonia dregei 'Suffruticosa'
Begonia dregei 'Suffruticosa Bolusii'

A variation of *Begonia dregei* was found in cultivation at the Botanical gardens, Glasgow, Scotland and was distributed to other growers. It is identified by the cultivar name *Begonia dregei* 'Glasgow'.

While all elements of a Begonia species are not the same, even the most variable species can be recognized by the study and understanding of the author's protologue, herbarium specimens, later citations, and by the comparison of living plants. The distinguishable variants of a species in cultivation are named with cultivar epithets.

I thank Dr. Dan Nicolson (Smithsonian Institution) and Carrie Karegeannes (ABS Nomenclature Director) for our discussions and their critiques of my preliminary manuscript.

Long-time Nomenclature Department member and Nomenclature Editor for the Begonian Jack Golding presented a seminar on species variability and nomenclature at the ABS Convention in September. He lives at 33 Ingram Drive, Cranbury NJ 08512-4641.



In the News...

Begonia 'Shiloh' had its picture taken and appeared in the Dallas Morning News House & Garden section on October 25, 1991 in an article by Julie Ryan entitled "Black Magic." Mentioned also were "black-leaved" begonias 'Joe Hayden' and 'Concord', recommended by **Don Miller**.

BEGONIAS, GERANIUMS, EXOTICS
FERNS, OXALIS, CACTI, HERBS
new Full Color Catalog...\$3.00

LOGEE'S GREENHOUSES

(Est. 1892)

Dept. B, 55 North Street, Danielson, CT
06239

In Memory

Ralph Reno, long-time and much loved member of the Edna Stewart Branch, died October 17, 1991. Ralph built the begonia barn which we used at the May Market, year after year. He was always there to put it up and take it down, and tell us how to put it together. We share Marie's sorrow and offer our deepest sympathy. -

The Potting Shed, newsletter of Edna Stewart Branch

K. Mose Fadeem died October 20, 1991. Author, artist, researcher, gardener, Mose was active in many areas of begonia study. Members will remember his many articles for this magazine and his study projects involving members across the country and abroad.

Hugh McLauchlan remembers Mose as "so knowledgeable and professional in everything he did...he had such a unique style in his writing...having a Churchillian flair for the use and charm of the English language...He will be sadly missed but never forgotten by all who knew him."

As Technical Editor of the **Begonian** Mose solicited manuscripts, edited technical materials, and corresponded with members and institutions world-wide. His letters were always a delight, and will be saved and savored by many who, on learning of his death, exclaimed "But I had a letter just ready to send him!"

Mose's contributions were legion, and his curiosity, learning, and wit will be sorely missed.

Donations in his memory may be made to his favorite garden: La Mirada, c/o Kate Deterle, 720 Via Mirada, Monterey CA 93940. - Tamsin Boardman

Book Review:

Maurice Curry reviews

Gardening from the Heart:

Why Gardeners Garden

by Carol Olwell

Antelope Island Press, 1990

\$18.95

Carol Olwell remembers helping her Grandmother grow vegetables for the family, and flowers that they both loved. Some years later, when her first few gardens resulted in a lot of hard work with poor results, she began to wonder and reflect on why gardeners in fact do garden. Her book is a summary of interviews with about two dozen gardeners and beautiful photographs of their gardens.

Each of the gardeners had a slightly different reason for gardening. Some created their gardens for beauty and a love of plants, some as a means of earning a living through food production. For many it was for an understanding of nature and the process of life on this planet earth and society as the caretaker of Earth.

There are professional gardeners who start out for fun, and profit by marketing their produce or teaching horticulture. Found among her gardeners are tree gardeners for fruit; landscape gardeners for parks, homes, and highways; professionals for greenhouse and nursery operators; county agents advising the public and farmers on how to garden or on experimental plant production. Her book is for all these, and for those who garden for their health, as prisoners on the county pea farm (there's a section in the book on working

with inmates), or just for the fun of being out in the sun and playing in the dirt (like me).

Some gardeners begin as children, helping their parents care for the family garden. Others marry a gardener and become partners in the garden - willingly or otherwise; some are late bloomers, so to speak, only gardening after retirement. Many talented people approach a garden as an art form, and create a thing of beauty in a landscape or a secluded nook where they can relax and enjoy their surroundings.

Gardening can be a challenge to those who garden in extreme conditions, such as the desert or the cold conditions of Alaska, and the book covers the difficulties and the solutions. Space available can be a challenge also: one gardener, not content with her own garden space, made a deal with an elderly neighbor to do the neighbor's gardening if allowed to choose the plants that she wanted but had no room for in her own garden!

There are an estimated seventy million gardening households in the United States: men, women, and children working in different soils and climates for love or necessity, and as a gardener you will recognize yourself among the many gardeners in this book - hopefully, not as one on the county pea farm!

Maurice Curry, a Master Gardener, maintains a beautiful acre-and-a-half garden, part natural (with native plants and a seasonal stream and waterfall), and part cultivated. His address is P.O. Box 1232, Weatherford TX 76086.



THE AMERICAN IVY SOCIETY

is the International Registration Authority for *Hedera*; provides sources for new & unusual ivies; publishes *Ivy Journal* three times a year with reports on research, hardiness testing, life-sized photos of ivies. Memberships: General \$15; Institutional \$25; Commercial \$50. Information: The American Ivy Society, P.O. Box 520, West Carrollton, OH 45449-0520.

BEGONIAN INDEX 1991

1991 TOPICS AT A GLANCE

Jan-Feb: B. U126; ancestral leaf form; chromosome counting; year in life of tuber; Fort Worth Botanic Garden; Malaysian expedition; rex leaf propagation; U# listing 152-159

March-April: aesthetic arrangement, rhiz. begonias; conserving older hybrids; U# listing 160-177

May-June: Barkley Collection; growing around the country; pH; species list, conservation; *B. conchifolia* var. *rubrimacula*; flowering leaves; seeds amplified; Australian hybridizers

July-August: hybridizing; Daisy Plant Farm; high humidity begonias; Dr. Fred Barkley; growing in styrofoam boxes; rexes; *B. decora*; 2nd Australian convention; SWR Get-Together

September-October: Hugh McLauchlan; sinus; U# listing 178-186; pine cone begonias; winter survival; baking soda; cold frame; B. 'Ginny'; Washbourn Garden; B. *cathayana*; scented begonias

November-December:

Convention 1991; Glasgow Botanic Garden; Sydney Tropical Center; inventory & back-up cuttings; *B. subscutata*

Regular Features

ABS Awards, call for nominations 61
ABS Awards recipients 1991 205
ABS Board Meeting Minutes 38,78,118,158, 198
ABS Bookstore 115, 34, 157, 238
ABS Services 116, 238
Around ABS 76, 113, 154, 192
Begonian Index 1990 15-24
Bulletin Board 7, 60, 104, 147, 183, 227
Clayton B. Kelly Seed Fund Notes 35, 69, 109, 150, 188, 230
Clayton M. Kelly Seed Fund Listing 37, 71, 112, 153, 191, 233
Conservation News 68, 186, 229
Corrections 26
Directory of Begonia Societies 73, 194
Directory Update 26, 104, 148
In Memory 7, 67, 94, 185, 227
In the News 64, 94, 148, 184, 227
Installation of Officers 204
Judges' Corner 108, 184
New Cultivars 235

Question Box 30, 107, 234
Round Robin Notes 65, 149
Show News 25, 63, 141, 184, 228
Slate of Officers 147
Coming Events 26, 63, 91, 142, 185, 224

Topics

ABS

Aims & Purposes 48, 67
Appointments 183
Awards Committee 141
Awards 61-62, 104
Branch Relations 183
Clayton M. Kelly Seed Fund 27, 95, 97, 128, 129, 132, 181, 234
Conservation Dept. 27, 104, 132, 229
Convention 1982 181
Convention 1985 166
Convention 1988 52
Convention 1989 14, 166
Convention 1990 66
Convention 1991 3, 4, 44, 63, 76, 84, 91, 103, 123, 142, 138, 164, 166, 169, 171, 185, 204-217
Convention 1992 224, 227
Convention 1993 183
Elections 104, 147
Members at Large 104, 177
Nomenclature Dept. 104, 139, 140

Research Advisory Board 60, 76
Research Dept. 60, 104
Round Robins 77, 88, 140
Slide Library 60, 104, 227
Speakers Bureau 104
Species List Project 95-97, 132, 229

General

A.D. Robinson Medal 62, 65, 138, 139, 205
A.D. Robinson Medal winners 62
Acetic alcohol 11
Acid hydrolyse 11
Adventitious growth 9
Air circulation 30, 91, 94, 107, 134, 149
Air conditioning 30, 90, 113
Alcohol, rubbing 65
Alkalinity 92, 174 (see pH)
Ameri-Flora '92 185, 224
Anthocyanin 155
Antonelli Bros. 234
Aphids 65
Arnold Arboretum 186
Atlanta Botanic Gardens 185, 224
Atlanta Flower Show 63, 185, 224
Australian Begonia Convention, 1st, 143; 2nd 3, 4, 26, 63, 143-144, 178
Australian hybridizers 106*
Ameriflora '92 142, 185

- Baking soda 66, 149, 155, 174
 Ballarat Botanical Gardens 144, 185, 224
 Barkley Begonia Collection 84, 95
 Basal branching 86
 Basal growth 87
 Begonias, cane-like 30, 68, 69, 85-87, 91, 107, 110, 152, 188
 Begonias, distinctive foliage 54, 161*, 163, 200*, 137-138, 180-181
 Begonias, fragrant 182
 Begonias, imported 209-210
 Begonias, leaf colors 45-46
 Begonias, leaf spots 155
 Begonias, outdoors 66, 89
 Begonias, reiger 3, 40*, 194
 Begonias, rex 81*, 83, 91, 135-136, 212*
 Begonias, rhizomatous 30, 35, 45-47, 70, 89, 91, 137-138, 170, 171, 180-181, 151-152, 189-190, 231
 Begonias, semperflorens 10, 70, 89, 121*, 123, 160, 111, 156, 188
 Begonias, shape 46-47
 Begonias, shrub-like 30, 35, 53-54, 70, 91, 107, 109, 150-151, 189
 Begonias, size 47, 54
 Begonias, style 46-47
 Begonias, thick-stemmed 36, 69-70, 111, 150, 188
 Begonias, trailing-scandent 70, 111, 188, 225-226
 Begonias, tuberous 12-14, 89, 178-179, 234
 Begonias, tuberous-semi-tuberous 36, 69, 111, 188, 230-231
 Benomyl 174
 Bleach 149, 173, 193
 Blood meal 12, 136
 "Bloom" 13
 Blossoms, opening male 234
 Bone meal 12
 Branching nodes 89
 Calcium 92
 Carbon dioxide 134
 Cedar 66
 Charcoal 130
 Chelsea Flower Show 76
 Chlorine bleach 147, 173, 193
 Chromosomes, counting 10
 Cinnamon 149
 Cold 101, 107, 108, 134
 Cold frame 167, 173, 175
 Compost 66
 Conservation, older hybrids 48-49
 Cooling 91
 Cottonseed meal 12
 Crop Science of America 236
 Crystal Bridge 145, 146*
 Cultural Awards 207
 Cuttings 13, 30, 132, 181
 Cuttings, growth buds 13
 Cuttings, leaf 107, 136
 Cuttings, stem 107, 181
 Cuttings, tip 107, 136
 Cuttings, wedge 31, 136
 Cypress mulch 89
 Daisy Plant Farm 83, 120*, 125*-129*
 Defoliation 9, 155
 Dessicant 234
 Diatomaceous earth 77
 Dolomite lime 92
 Doo Spray 14
 Dormancy 14, 30, 66, 135, 226
 Drainage 89, 90, 150
 Dumbarton Oaks 44, 211*
 Egg shells 154
 Epsom salts 65, 174, 193
 Ethylene gas 101
 Eva Kenworthy Gray Award 61, 139, 140, 141, 205
 Eva Kenworthy Gray Award winners 61
 Exalt-800 174
 Extinction 96
 Fairyland Begonia & Lily Garden 138
 Fertil mix 131
 Fertilizing 13, 65, 89, 136
 Fish emulsion 13
 Fishmeal 12
 Fluorescent lights 30, 31, 76-77, 91, 107, 136
 Foliar feeding 65, 77, 136
 Fort Worth Botanic Garden 27, 65, 95, 97, 100, 101, 140, 146, 208, 227, 236
 Fred A. Barkley Research Grant 139, 146
 Freezes 76, 89, 173
 Fungicide 76
 Funginex 91
 Germination 35, 69, 71, 109, 150, 181, 230, 234
 Grow & Study Gesneriad Club 77
 Genetics 101-103
 Garden Club of America 140
 Glasgow Botanic Gardens 215*-217*
 Great Falls Greenhouse 208
 Grooming 192-193
 Heat 30, 90, 113, 134
 Heat tolerance 155
 Heat, bottom 154
 Heating 173
 Heating cable 131, 173
 Heidelberg, Univ. of 5
 Herbert P. Dyckman Award 61, 139, 140, 204, 205
 Herbert P. Dyckman Award winners 61
 Herbicide 66
 High Bloom 13
 Hormones 101
 Humidity 47, 54, 91, 99, 130-132, 136, 138, 181, 219-222, 226
 Hybrid of Distinction 207
 Hybridizing 124, 138
 Hydrogen 134
 Indoor Light Gardening Society 140
 Indonesia expedition 183, 186
 Insects, beneficial 154
 Inventory & Back-ups 223-224
 Iron sulfate 92
 Ivory soap 90, 173
 Japan Begonia Society 47
 Judging school 108
 Karathan 174
 Kartuz Greenhouses 25
 Kunming Botanical Gardens 33
 Lath house 88*
 Leaf mold 12, 13, 14, 136
 Leaves, hairy 155
 LGM mix 136
 Light gardening 30, 31, 54, 99, 107, 113, 131
 Light requirements 99, 107-108, 134, 135-136, 138, 173, 181, 226, 234
 Liquid Seaweed 65
 Liquinex Grow 13
 Logee's Greenhouses 208, 228, 235
 Longwood Gardens 98
 Lysol 12, 149, 173, 174
 Mae Blanton Service Award 146

Magnesium 92, 193
 Malathion 65
 Malaysia expedition 28*, 29
 Malaysia, Univ. of 29
 Manure 65
 Manure tea 65, 136
 Marguerite Vernon Award 146
 Marie Selby Botanical Gardens 26, 27, 59, 63, 91, 95, 96
 Martin Boyd Memorial Trophy 192
 Massachusetts Horticultural Society 140
 Maxi-crop 176, 177
 Mealy bugs 77
 Mildew 12, 30, 66, 91, 149, 152, 173, 174
 Milldon't 14
 Mineral supplements 94
 Missouri Botanical Gardens 185
 Mites, beneficial 154
 Moisture, excess 134, 138
 Montreal Botanic Garden 27, 186
 Mounts Botanical Garden 89
 Mr. Clean 193
 Mulch 89, 173
 National Begonia Collection, Scotland 215-217
 Nematicide 89
 Nematodes 89
 New England Flower Show 7
 New England Tropical Conservatory 68
 New York Botanical Garden 27, 140, 155, 209
 New York Flower Show 63, 141, 155
 New York State Fair 25
 North Carolina State Univ. 139
 North Haven Gardens 145
 Northeastern Univ. 84, 95
 Nutrients 94 (see also fertilizing)
 Over watering 66, 91
 Outdoor growing 89, 91
 Oxygen 134
 Orchid bark 136
 Osmocote 176
 Packing plants 193
 Panty hose 67
 Peat moss 136
 Pennsylvania Horticultural Society 7, 140
 Perlite 31, 107, 130, 131, 136, 138, 181, 226
 Pest control 154
 pH 67, 92, 94
 Photosynthesis 134
 Photosynthesis cells 155
 Phyllomania 101
 Phylogenetic recapitulation 8-9
 Potash 12
 Pots 90
 Pots, cleaning 193
 Potting mixes 31, 93, 94, 209-210
 Powdered milk 234
 Pro Mix 92, 131
 Propagation 107, 181 (see also cuttings)
 Pruning 91
 Publicity 51
 Recycling tips 97, 99, 103, 108, 114, 116, 129, 136, 172, 182, 184, 185
 Repotting 66, 90, 94, 226
 Rochester County Fair 25
 Rose & Flower Dust 149
 Rosecroft Begonia Gardens 176
 Rotary International 179
 Royal Botanic Gardens, Sydney, Australia 201*, 218*-222*, 240*
 Royal Dutch Bulbgrowers Association 138
 Safer's Soap 90, 173
 Salinity 94
 Sand 13
 Sarah Chapman Francis Medal 140
 Scotland Botanic Gardens 76
 Scottish Begonia Society 141
 Seaweed concentrate 177
 Seed, amplified 105
 Seed, refrigerating 70, 234
 Seed, storing 66, 70, 234
 Seed, value 113
 Shade cloth 173
 Sinus 168-169
 Slugs 154, 155
 Smithsonian Institution 5, 140
 Snuff 193
 Soap 66
 Socotra 11
 Soil preparation 89
 SOS Mata Atlántica 68
 Sound, effects on growth 77
 Southwest Region Get-Together 3, 26, 63, 76, 91, 97, 145-146, 172, 224
 Species Bank 27, 97, 229
 Species, collecting 186, 229
 Species, listing 95-97, 132, 229
 Species, maintaining 209-210, 229
 Sphagnum moss 107, 138, 181, 226
 Staking 12
 Sterilized soil 149
 Stomata 66, 77
 Styrofoam 107, 134
 Sulfur 12, 92, 149, 193
 Sun 107, 134
 Sunshine mix 136
 Superthrive 65, 90
 Sydney Tropical Center 218*-222*
 Symbiosis 150
 Temperature 86, 94, 108, 134, 135, 150, 174, 181, 226, 234
 Terrariums 30, 66, 130-132, 136, 137, 163, 181, 193, 210, 226, 234
 Texas Lawn & Garden Show 50*-51*, 224
 Thompson Begonia Museum 48, 140
 Thompson Trophy 7
 Toads 154
 Toxins 94
 Transplanting 155
 Tropica '92 63
 Tuber storage 14
 U.S. National Arboretum 44, 211*
 U.S. Botanic Garden 65, 207, 208, 212*
 Unidentified Begonias project 33-34, 55-59, 171-171, 208
 Unidentified Begonias Listing 33-34, 55-59, 170-171
 Univ. of California Santa Barbara 139
 Univ. of Montreal 186
 Unusual leaf behavior 8-9, 52, 100-103
 Ventilation 30
 Vermiculite 107
 Vinegar 12, 67, 193
 Virus 149
 Wardian case 48
 Washbourn Gardens 178-179
 Watch Us Grow 65
 Water conservation 136, 142, 147, 154, 172
 Water vapor 134, 138

Watering 14, 66, 99, 136, 181, 226
Wedges 31
Windowsill growing 91
Winter survival 30, 90-91, 173, 175

PUBLICATIONS

Books

Begonia Book of Days 163
Begoniaceae 33, 103, 140, 190, 205
Begonias (Chevalier) 180
Begonias: The Complete Reference Guide 47, 52, 99, 103, 124, 135, 140, 234
Buxton Checklist (rev.) 103
Growing Media for Ornamental Plants & Turf 93
Once Upon a Windowsill 48
Potting Mixes 93*
Species of the Begoniaceae 140, 205
Tulane Studies in Zoology and Botany 189

Newsletters

Astro Branch Newsletter 192
B-Line (A.D. Robinson) 154, 172, 193
Barkleyana 76
Begonia Gazette (Rubidoux) 76, 129, 155
Begonia Leaf (Sacramento) 7, 67, 76, 193
Begonia Leaf-let (South Bay) 114, 184
Begonias Begorral (Orange County) 54, 113, 136
Chicago Begonian 99, 138, 181
Dallas Area Branch Newsletter 193
Journal of Australian Begonia Society 134
La Begonia Barbareña 114
Leaf Cuttings (Westchester) 114
Mae Blanton Branch Newsletter 193
Mallet (Members at Large) 60, 104, 154, 177
Miabegonia 192
Palm Beaches 113, 155, 182
Palomar Planter 77, 114
Potting Shed (Edna Stewart Pittsburgh) 92
Queensland Begonia Society Newsletter 172

Rambler (Eastern Region) 96, 114
Rubidoux Begonia Gazette 182, 185
San Francisco Begonian 138
Shade House (Garden Grove) 77, 114
SWR Begonia Leaflet 95, 154, 172
Unusual Plants 54
Whittier Twitter 192

Pamphlets

Begonias, An Elementary Guide 141
Begonias, Japan Begonia Society 47
Growing from Seed 234
International Code of Nomenclature of Cultivated Plants 236
Terrariums for Beginners 66

Periodicals

American Horticulturist 26, 148
Curtis's Botanical Magazine 209
Fort Worth Star Telegram 227
Green Scene 7
Hobby Greenhouse 148
House Plant Forum 77
Kew Magazine 7, 97
La Prensa (Panama) 64
LAIFS Journal 32
Missouri Botanic Garden Bulletin 77
Nature Conservancy Magazine 68
Newsday 155
Phytologia 140, 205
Organic Gardening 154
Sunset 154
Washington Post 227
Weekly World News 64
*review

REGIONS

Eastern 96, 114
Northwest 7, 77
Southwest 7, 26, 63, 91, 95, 145, 148, 154, 172, 227

MEMBERS AT LARGE

177

BRANCHES

A.D. Robinson 147, 148, 154, 193, 207
Alamo 63

Astro 50-51, 146, 192, 224
Atlanta 185, 224
Barkley 76, 91, 145, 208
Brooklyn-Queens-Nassau 207
Buxton 7, 84, 96, 192, 206, 207, 208
Dallas Area 7, 27, 63, 193
East Bay 7, 192, 207
Edna Stewart Pittsburgh 92, 206
Fort Lauderdale 185, 206, 208, 224
Garden Grove 77, 148
Greater Chicago 7, 99, 138, 207, 208
Jacksonville 91, 148, 184, 207, 208
Knickerbocker 63, 113, 141, 155, 206
Long Beach Parent Chapter 148, 154*
Mae Blanton 7, 27, 148, 185, 193, 224
Miami 7, 63, 141, 192, 206, 208
Monterey Bay 7, 67, 76, 104, 154
Orange County 7, 54, 76, 113, 136, 142, 148, 193, 206, 224
Palm Beaches 89, 113, 155, 184, 193, 208
Palomar 7, 25, 31, 32, 77, 113, 114, 184, 207, 208, 228
Pinellas County 184
Potomac 4, 44, 76, 84, 113, 206
Rubidoux 63, 67, 76, 129, 148, 154, 155, 207
Sacramento 7, 25, 26, 67, 76, 94, 142, 185, 192, 193
San Francisco 63, 91, 94, 113, 138, 142, 154, 193, 206, 228
San Gabriel 207
San Miguel 148, 207
Santa Barbara 114, 136, 154
Santa Clara Valley 207, 208
South Bay 104, 114, 142, 184
Tampa Bay 148
Westchester 77, 91, 114, 142, 207
Whittier 184

INTERNATIONAL SOCIETIES

Association of Australian Begonia Societies 144, 148
Australian Begonia Society 106 (see also South Australia Begonia Society)
Begonia Society of New South Wales 106, 148
Japan Begonia Society 26, 47
Queensland Begonia Society 106, 148
South Australia Begonia Society 148
Victorian Begonia Society 185, 224

INDIVIDUALS

Aikin, D. J. 207
Alberti, Katherine 208
Alcorn, Betty 25
Almstedt, Lorra 26, 148
Amey, Maurice 146
Anderson, Alecia 25
Anderson, Ann & Tim 126*, 129
Anderson, Dave 212*
Anderson, Jeannette 67
Andreetta, Padre Angel 5, 6, 7*
Arakawa, Hikoichi 69, 206, 208, 213, 230
Armstead, Shirley 206
Ash, M/M William 212*
Asmusen, Don 67, 145
Ayers, Elaine 66, 148, 149
Azhocar, Conni 7
Baldwin, Myrtle 114
Barkley, Dr. Fred 205
Bates, Ed 183, 228, 230
Bates, Phyllis 69, 109, 184, 192
Becker, Judy 35, 188
Berg, Barbara & Howard 113
Best, Deborah 228
Blackwell, Margaret 67
Blanton, Mae 65, 66, 101, 149, 193, 227
Bloom, Audella & Herbert 227
Bloschak, Katherine 63
Boardman, Bruce C. 183
Boardman, Tamsin 227
Boozer, Syble 208
Bower, Constance 48
Bower, F. O. 215
Bowes, Dr. Bryan B. 101
Bradley, Kay & Lorne 207

Brin, Roberto 33, 34, 55, 56, 64, 69, 109, 150, 188, 230
Brown, Lorene 124
Brownlee, Nancy 227
Bruns, Merry 102, 103
Bucholtz, Mary 184, 204*, 207, 208
Burley, Hazel 106*
Burt-Utley, Dr. Kathleen 189
Calhoon, Annie 25
Calkins, Eleanor 7, 60, 66, 147, 204*
Calvert, Kathlynn & Merrill 146
Campbell, Joan 7, 55, 102
Caveny, Joyce 206, 208
Caviness, Dorothy 145
Chen, S.K. 33
Chevalier, Charles 180
Churn, Jennifer & Richard 213
Clark, Alice 176
Clemens, Effie & Howard 145, 146*
Clemens, Helen 67
Clemons, Linda & Mike 26, 63, 76, 91, 146
Coats, Margaret 149
Cole, Bob 48, 54
Cole, Constance 77
Cole, Michele 35, 109, 150, 188
Collman, Caroline 228
Correale, Steve 56
Corwin, Mabel 25, 55
Corwin, Ralph 183
Corwin, Mabel & Ralph 7
Crane, Rosemary 146
Crawford, Alma 63, 141
Crocker, Julie 108
Crouch, Glennis 67
Crowell, Maureen 69
Curry, Martha 66, 67, 154, 185, 193
Curtis, Dr. Eric 217
Curtis, Juana & Robert 206, 208
Davidson, Francis 76
Davis, Jackie 69, 150, 188, 230
Davis, Juse 102
Delavie, Alain 188, 230
de Leon 59
De Wildmann, E. 225
Dickinson, Dennis 64
Doorenbos, Prof. Jan 95, 225
Dorsey, Dora Lee 149
Dostal 8

Dufresne, Normand 207, 208
Dworkin, Walter 65, 66, 235
Edwards, Allison 141
Elmblade, Dale 185
Endler, J. 57, 58
Englund, Don 85-87
Everett, T. H. 209
Ewoldsen, Esther & Hans 154
Fadeem, K. Mose 52, 100, 101, 102, 164, 166
Farina, John 141
Farrand, Beatrix 44
Flora, Alberta 7
Foo, Ingeborg 7, 25, 147, 204*
Forest, Mary 141
Fox, Eve 29
Frelinghuysen, P. H. B. 141
Frey, Elsie 77
Friedman, Miriam 141
Froh, Hedy 141
Fryer, Jim 141
Galibert, Agnes 11
Gardner, Doris 208
Gilbertson, Jeannette 7, 69, 147, 154*
Girko, Betty 5, 7
Gold, Alice & Isadore 228
Golding, Dorothy & Jack 208
Golding, Jack 95, 98, 103, 140, 169, 188, 205*
Goldsmith, Lynda 55, 69, 109, 133, 150, 188, 230
Goldstein, Marilyn 63
Golub, Mike 206, 208
Goodwin, Jan 35, 55, 69, 109, 150, 188, 230
Gray, Eva Kenworthy 48
Green, Frank 49, 96, 227
Green, Maybelle 208
Griffith, Robert 108
Gutherie, Lee 184
Hafer, Jake 35, 69, 109, 150, 188, 230
Hahn, Doug 227, 228, 230
Hale, Pete 92
Hall, Iris 141
Hamm, Bob 7, 76, 95
Handreck, Kevin 93
Hanlein, Sue & Bill 208
Hansen, Judy 65
Harrell, Ed 91, 184
Haseltine, Daniel 7
Hatfield, Leslie 60, 76, 102, 205
Haussman, Frank 57
Henry, Dr. A. 180

Hesse, Joyce 208
 Hessel, Sue 141, 207, 208
 Hicks, Terry 154
 Hively, Dot 141
 Hodgkin, John B. Jr. 208
 Hoffman, Frances 65, 66
 Hoover, Scott 147, 183, 186, 209, 228, 230
 Hoskins, Arlene & Jack 208
 Hoskins, Jack 212*
 Hough, Betty 184
 Howard, Harold W. 163
 Howell, John 60, 104, 150, 206, 207
 Hunter, Katherine 176
 Huwe, Julia 192
 Ihara, Ruth 113
 Ingles, Arlene 7, 104
 Ingles, John Jr. 103, 147, 193
 Irmscher, Edgar 163
 Isaac, Evelyn 114
 James, Loretta 25
 Jangoux, Jacques 68, 184
 Jaros, Charles 56, 60, 63, 104, 125, 141, 184, 192, 204
 Jaros, Chuck 63
 Jaros, Helen 63, 125
 Jensen, Doug 150
 Johnson, Martin 33, 55, 56, 57, 60, 186, 188, 207, 208
 Johnson, Sara 64
 Jones, David 29
 Jursch, Ada 94
 Kalal, Bob 193
 Karegeannes, Carrie 95, 103, 205
 Kartuz, Mike 76, 138
 Kawamata, Eiichii 109
 Keepin, Tom 205, 207
 Kensrud, G. LeRoy 93
 Kirby, Laura 145
 Klobas, Spike 93
 Knight, Houston 60, 76, 104, 113, 192
 Koehler, Bob 184
 Kuhnle, Charlotte 65, 66
 Laipple, Bob 228
 Langenberg, Kingsley 49, 95, 96, 97, 104, 132, 228
 Lawrence, Karen 184, 208
 Last, Tim 141, 207, 227
 Leatherman, Sylvia 78
 Lee, Margaret 7, 129
 Lee, Pam 145
 Lemoine, Victor 48
 Lewis, Glen 49
 Lex, Miree 213
 Lindgron, M/M Robert 208
 Lionnet, M. 48
 Loeb, Evie Bossanyi 7
 Louie, Ruby 184
 Lowe, Paul 26, 83, 126, 129
 Luther, Harry 96
 Lynch, Naomi 109, 150, 188, 230
 MacDougall, Thomas 209
 MacIntyre, M. L. 102, 215
 Macnair, Wanda 95, 206
 Macnair, Wanda & Dick 192, 208
 Macon, Scott 29
 Mann, Fannie 184
 Marino, Len 155
 Martin, Tovah 48
 Mathesen, Virginia 63
 Matthews, Patricia 141
 McClain, Nita 227
 McClelland, Mary 66
 McCullum, Ethel 141
 McDuff, Evie 69, 109
 McGough, Charles 145
 McLauchlan, Betty 213
 McLauchlan, Hugh 140-141, 165*-167, 213*, 217*
 McLellan, Dr. Tracy 36, 57, 58, 139, 204, 209, 210, 213*, 227, 230
 Meister, Julia 25
 Meriwether, Rosemund 63
 Meyer, Georgia & Dale 208
 Meyer, Mickey 36, 37, 106*, 152, 153, 188, 191, 232, 233
 Michelson, Francis 102
 Miller, Don 145, 146
 Mills, Dr. John 26, 63
 Moore, Robert 206
 Morley, Myra 134
 Mounger, Kit Jeans 49, 60, 97, 104, 132, 183, 228
 Muller, Susan & Hans 228
 Murphy, Oakley 25
 Myers, Karen 150
 Nagelberg, Esther 113, 155, 192
 Newbold, James 207
 Notaras, Carol 147, 204*
 Notaras, Carol & Peter 208, 228
 Nunes, Barbara 26, 63, 91, 185
 Nunes, James 204
 Ohno, Hiroshi 213
 Ordway, Alice 205
 O'Reilly, Thelma 7, 55, 56, 57, 101, 104, 124, 139, 171, 205, 208
 O'Reilly, Thelma & Tim 208
 Oliver, Bob 7
 Oliver, Constance 108
 Ordway, Alice 60
 Parker, Kelton 27, 141, 146, 227
 Parrish, Bob 25
 Patterson, Laurie 108
 Peng, Dr. Ching I. 97
 Perz, Muriel 104
 Peterson, Ray 76
 Phan, Dr. Thi Hai 10
 Philip, Barbara 83
 Phillips, Cynthia 207
 Phillips, Tiny 7
 Poedtke, Rafaella 25
 Porter, Joy 35, 69, 109, 150, 188, 230
 Porter, Joy & John 207
 Powell, C.C. 174
 Price, Shirley 25
 Pritchett, Kathie & Bill 175
 Prune, Randall 77
 Quinn, J.A. 174
 Rankin, Eunice 208
 Rappaport, Ira 141
 Raul, Prf. Werner 5
 Resen, Jeanette 184
 Rex, Lawrence 208
 Richardson, Russ 147, 185, 224, 230
 Rivera, Dr. Juan 56
 Roach, Margaret 155
 Robinson, Alfred D. 209
 Ropeik, Edythe 63
 Ruthenberg, Anita 145
 Sackenruther, Art 65
 Sacksen, Linde 150
 Sage, Pat 25, 57, 60, 69, 109, 150
 Salisbury, Ann 145, 146
 Salisbury, Ann & Gene 207, 208
 Salisbury, Gene 145, 147
 Sands, Dr. Martin 97
 Santoro, Francis 108
 Scoble, Nan 184
 Scott, Diane 76
 Sechen, Annette 108
 Seiden, Philip 141, 206, 207
 Seitner, Philip G. 105
 Smart, Willie Mae 184
 Smith, Dr. Lyman B. 5, 57, 103, 205
 Soule, Alta 192
 Sousa, John 208
 Stapf, O. 137
 Steiniger, Miriam 146

Seitton, Ruth 207
 Stevenson, John 217
 Stone, Lillian 230
 Strange, Elizabeth 26, 63, 91
 Striepens, Al 77
 Suzuki, Tatsuo 26
 Tanaka, Akira 26
 Taylor, Margaret 206
 Terrell, Robert Harvey 67
 Thomas, Alethea 205
 Thompson, Brad 66
 Thompson, Mildred 33, 130,
 147, 204*, 225
 Thompson, Mildred L. &
 Edward J. 47, 52, 99, 103,
 124, 140, 151, 190, 206, 234
 Tillotson, Betty 60, 147
 Trelease, Bill 67
 Tsamtsis, Paul 25
 Tucker, Kay 208
 Vacca, Patrick 147
 Van Epps, Lloyd 188, 230
 Van Etten, Marie 208
 Verteseuille, Jeanne 208
 Vernaleken, Eddie 63
 Vilke, Peggy 141
 Voss, Bill 65, 108
 Wagner, Elmer 230
 Wasshausen, Dr. Deiter 97,
 103, 205
 Watchorn, Virginia & Wally
 176
 Webb, Gordon 217
 Wehren, Della 94
 Wells, Steve 230
 Welsh, Janet 208
 Williams, Joyce & Ted 213*
 Wilson, Robert 124
 Woodruff, Leslie 138
 Worley, Patrick 101
 Wyrzten, James 235
 Xia, D. Y. 33
 Yamada, Masuo 33, 150
 Yorke, Bernard 106*
 Young, Risa 77
 Young, Vanessa 141
 Yowell, Barbara 145
 Zemansky, Adele 141
 Zheng, R. X. 33
 Ziesenhenné, Margaret 154
 Ziesenhenné, Margaret &
 Rudolf 208
 Ziesenhenné, Rudolf 54, 60,
 70, 96, 99, 103, 104, 139,
 154, 188, 189, 204, 205*
 Zinman, Maxine 204, 207
 Zinn, Johanna 150, 206, 207,
 208, 230

**photo*

CONTRIBUTORS

Artists

Boardman, Bruce C. 97, 99,
 103, 108, 114, 129, 136, 142,
 143, 147, 168-169, 175
 Bruns, Merry 53
 Cole, Constance 83, 77
 Fadeem, K. Mose 8
 Mounger, Kit 43, 53, 62, 110,
 163, 231
 Seitner, Philip G. 105
 Watkins, Nannette 47, 137
 Weinberg, Mary 98, 109, 111,
 130, 180, 203, 225

Authors

Bates, Phyllis 31-32
 Blanton, Mae 30, 107, 234
 Boardman, Bruce 175
 Boardman, Tamsin 68, 93,
 100-103, 178-179
 Bruns, Merry 52
 Bucholtz, Mary 209-210
 Bucholtz, Sam 64
 Calvert, Kathylnn 90
 Carlson, Virginia 135-136
 Coats, Margaret 65-67
 Fadeem, K. Mose 8-9, 85-87,
 165-167, 214-217
 Gold, Alice & Isadore 12-14
 Golding, Jack 168-169
 Gould, Diana H. 35-37, 69-
 71, 109-112, 150-153, 188-
 191, 230-233
 Hamm, Bob 54
 Hoover, Scott 28-29, 68, 133
 Horne, Diane 208
 Jones, Melissa 92
 Kamata, Yasuhage 45-47
 Karegeannes, Carrie 139-
 141, 164, 235-236
 Lee, Pam 27
 Lowe, Paul 89
 Mann, Barry 106, 134
 Michelson, Francis 124
 Miller, Don 5-7, 218-222
 Mounger, Kit 95-97
 Nagelberg, Esther 182
 Nunes, Barbara 4, 44, 84
 O'Reilly, Thelma 33-34, 55-
 59, 125-129, 170-171
 Richardson, Russ 93
 Ritchie, Cynthia 227
 Sage, Pat 149
 Seely, Lana 88
 SOCOTRA 10-11
 Voss, Bill 48-49, 130-132,
 223-224

Weinberg, Mary 98-99, 137-
 138, 180-181, 225-226
 Wells, Stephen 176-177
 Zinman, Maxine 108

Cartographer

Boardman, Bruce C. 28

Photographers

Almstedt, Lorra 121*
 Astro Branch 50-51
 Bates, Phyllis 31-32
 Berg, Howard 49
 Boardman, Bruce C. 144,
 211, 213
 Boardman, Tamsin 25, 100,
 146, 178-179, 204, 205, 208,
 209, 211-213, 236
 Boree, Annette 235
 Calkins, Eleanor 25, 228
 Daniels, Gene 40**, 81*,
 163*, 200**
 Fadeem, K. Mose 9, 85-86,
 165-167, 214-217
 Girko, Betty 6
 Gold, Alice & Isadore 3, 12-
 14
 Gross, Dan 206
 Kartuz, Mike 58
 Lynch, Naomi 56
 McClelland, Mary 160**
 McLellan, Tracy 58
 Miller, Don 1*, 5, 6, 28, 41*,
 201*, 218-222, 240**
 Mounger, Kit 59
 O'Reilly, Thelma 33, 120**,
 125-129, 170
 Sage, John 57
 Seely, Lana 88
 Shires, Carl 145, 146
 Siebold, Howard 174
 SOCOTRA 10-11
 Spiers, Helen 172
 Thompson, Avril 106
 Voss, Bill 131, 224
 Welsh, Janet 80**, 177
**front cover*
***back cover*
Translator
 Tanaka, Akira 45-47

BEGONIA

- acida* 54
aconitifolia 220, 221*
acutifolia 150, 153
'Akane' 46
'Akatombo' 45
'Aladdin' 46
albo-picta 152, 153
albo-picta var. *rosea* hort.
152, 153
alice-clarkiae 189, 191
alnifolia 189, 191
'Alva Graham' 53
'Amigo' 54
amphioxus 97
ampla 70, 71
angularis 152, 153
angulata 219
'Ann Anderson' 128*
annoboensis 70, 71
annulata 95, 209
aridicaulis 46
arborescens var. *confertiflora*
150, 153
'Art' 46
'Arthur Mallet' 48
attenuata 182
bartneri 54
bartonea hort. 'Winter Jewel'
107
'Battern' 47
beddomei 35, 37, 230, 233
'Bess' 46
'Billie Maree' 145
'Black Beauty' 102
'Black Joker' 145
'Black Knight' 45, 46
'Black Magic' 46
'Black Raspberry' 46, 52
'Black Tea' 46
'Blue Chip' 46
bogneri 130*, 131
'Bokit' 46, 102
boliviensis 69, 71, 230, 233
'Boston Blackie' 100
'Bow Joe' 101
bowerae 95, 97, 101, 102,
103, 141, 189, 191
bowerae var. *major* 35, 37,
189, 191
bowerae var. *nigramarga*
102, 189, 191
bowerae var. *Virbob*' 70, 71
'Bowtique' 62, 102
bracteosa 97, 109, 112
'Braemer' 53
breviramosa 130, 131
'Bunchii' 25*
'Burle Marx' 107
butanensis 209
'Buttercup' 62
'Camber' 47
caraguatatubensis 96, 105
cardiocarpa 151, 153
'Carlsbad' 46, 47
carolineifolia 47, 141, 151,
153
'Carolyn Collman' 129
'Carousel' 45, 46
carpinifolia 190, 191
carrieeae 8*-9*, 46, 66, 109,
112
'Catalina' 107
cathayana 180*-181
cauliflora 97
'Charm' 126
'Chichee' 45
chlorosticta 35, 37, 53*, 54,
130, 131
'Christmas Candy' 54, 62*,
107, 126, 184
'Chumash' 102
cinnabarina 69, 71, 105, 230,
233
circumlobata 151, 153
'Cleopatra' 102
'Clifton' 102
coccinea 69, 71, 110, 112
'Cocoa Star' 46
conchifolia 46, 98, 99, 102,
151, 153, 219*
conchifolia var. *rubrimaculata*
46, 98*-99, 101, 102, 151,
153
conchifolia 'Zip' 99
'Connee Boswell' 48, 62
convolvulacea 150, 153
cooperi 35, 37
corallina 152, 153
'Corbeille de Feu' 54
'Corliss Engle' 141
crassicaulis 66, 109, 112,
145, 171
crispula 151, 153
'Crestabruclii' 49*
cucullata 111, 112
cucullata var. *arenosicola*
188, 191
cucullata var. *spatulata* 188,
191
'Curly Purple Stardust' 136
cyathophora 189, 191
'Dainty Lady' 46
'Dale Kramer' 182
davisii 69, 71, 230, 233
dayi hort. 151, 153
'Decker's Select' 54
decora 46, 47*, 137*-138,
182
'Delia Marleau' 236
deliciosa 109, 112
diadema 151, 153
dichotoma 55, 150, 153
dichroa 152, 153, 234
'Di-Erna' 129
dietchiana 150, 153
dipetala 111*, 112
domingensis 57
dominicalis 150, 153
dregei 25, 36, 37, 69, 71, 77,
139, 220, 230, 233
dregei ex Glasgow 230, 233
dregei var. *macbethii* 36, 37,
230, 233
'Dumbo' 67
'Eagleshamm' 46
'Ebony' 67
echinosepala 53, 54, 109,
112
echinosepala var.
elongatifolia 189, 191
edmundoi 189, 191
egregia 111, 112
'Elaine' 107, 184
'Elaine Wilkerson' 184
'Emerald Isle' 99
'Emerald Lacewing' 43, 80*
eminii 105
'Emma Palmer' 53
engleri 109, 112
epipsila 109, 112
erythrogyna 97
'Erythrophylla' 30, 89
'Essie Hunt' 25, 65, 100-103
'Esther Albertine' 235
estrellensis 109, 112
'Eunice Gray' 54, 62
'ex Kew species' 35
exotica 54, 131
evansiana 105; see *grandis*
ssp. *evansiana*
fagifolia 111, 112
fenicis 35, 37
fernando-costae 53, 124,
150, 153
ficicola 189, 191
filipes 55, 111
fimbristipula 70, 230, 233
fischeri 133
fischeri var. *fischeri* 151, 153
fischeri var. *palustris* 151,
153
fissistyla 190, 191
'Fleecealba' 54

- 'Flutterby' 67
flocifera 189, 191
foliosa 36, 37
francois 70, 71, 105
'Frankie Pinder' 127
'Fred Bedson' 46, 47
'Freddie' 62, 139
'Frillies' 232, 233
froebelii 188, 191
fuchsioides 151, 153, 207
'Furano' 46
'Fusco-maculata' 101
gehrtii 46, 66, 109*, 112
'Gene Daniels' 53
'Gene Joyner' 127
'Geometry' 52, 102
geranioides 69, 71, 231, 233
'Ginny' 30, 53, 107, 141, 176, 177*
glabra 56, 111, 112
glabra var. *coralipetiolis* 188*, 191
gladulosa 151, 153
'Glendale' 62
'Glennis Crouch' 62, 65, 101
goegoensis 46, 163
'Golden West' 62
'Grace Lucas' 223
gracilis 231, 233
gracilis var. *martiana* 111, 112, 231, 233
grandis 111, 112, 231, 233
grandis ssp. *evansiana* 30, 69, 71, 206, 207, 231, 233
grandis ssp. *evansiana* 'alba' hort. 231, 233
griffithii 95, 135, 209 (see *annulata*)
guaduensis 150, 153
'Guarant' 45
hatacoa 189
hatacoa 'Silver' 70, 71, 189, 191
hatacoa 'Spotted' 110, 112, 189, 191
'Hazel's Front Porch' (B. 'Rose') 124
'Helen Michelson' 124
'Helen Teupel' 184
hemsleyana 231, 233
heracleifolia 57, 70, 71, 101, 110, 112, 190, 191
heracleifolia var. *longipila* 151, 153
heracleifolia var. *nigricans* 102, 151, 153
heracleifolia var. *pyramadillo* 35, 37, 151, 153
heracleifolia var.
'Sunderbruckii' 152, 153
herbacea 105, 124, 182
hernandioides 66
heydei 109, 112
hidalgensis 46
'Himiko' 46
'Hirao' 45
'Hiro' 101
hirtella 111, 112
hispida var. *cucullifera* 53
hispidavillosa 189
hispidavillosa f. *nigramarga* 189, 191
'Hocking's Trocadero' 141
holtonis 109, 112, 189, 191
homonyma 69, 71, 231, 233
'Honeymoon*' 13
'Honeysuckle' 129, 182
huegellii 36
humilis 109, 112
humilis var. *porterana* 151, 153
hydrocotylifolia 207
imbricata 97
'Immense' 30
imperialis var. *brunnea* 46
incana 54
incarnata 101, 109, 112
involuta 36, 37, 188, 191
'Irene Nuss' 107, 145
'It' 182
'Jean Pernet' 107
'Jekyll & Hyde' 236*
'Jill Adair' 54
'Jim Wyrzten' 235*
'Joe Ed' 184
'Joe Hayden' 45, 101
'John Tapia' 53
johnstonii 111, 112
juliana 152, 153, 190, 191
kellermanii 109, 112
'Kentwood' 107
kenworthyae 102, 110, 112
kinabaluensis 97
kisuluana 150, 153
'Kogane' 45
'Kristi' 129, 182
'Kumwha' 62
'Kurohitode' 45
'La Paloma' 67
'Lacey' 145
'Lady Clare' 53
'Lana' 129, 182
'Lady Frances Jean' 62
lanceolata 182
leathermaniae 110*, 112
'Lee's Luxurians' 53
'Lenore Olivier' 182, 234
'Leopon' 45, 46, 236
leprosa 152, 153
'Libby Lee' 46
liebmanni 45
listada 54, 96, 105, 124, 151, 153, 189, 191, 219, 220*
'Little Brother Montgomery' 124, 206, 207
"Little Martian" 52
longipes 190
'Looking Glass' 66, 85*
loranthoides 150, 153
'Lorene Brown' 124
'Lospe' 46
'Lubbergei' 182
lubbersii 48, 152, 153, 234
ludicra 101
ludwigii 111, 112, 190
luxurians 53, 109, 112, 184
lyalli var. *lyalli* 151, 153
lynchiana 189, 191
'M. Coats' 67
'Mabel Corwin' 54
macdougallii 110, 112, 152, 153 (see *thiemei*)
macdougallii var. *purpurea* 110, 112 (see *thiemei*)
macduffieana 152, 153
macrocarpa 36, 37, 189, 191
maculata 127, 152, 153, 219
maculata var. *wightii* 151, 153
'Madame Butterfly' 203*
'Madame Queen' 62
'Magdalen Madsen' 54
malabarica 70, 150, 153
malachosticta 97
'Mandarin' 182
manicata 35, 37, 57, 101, 102, 103, 171, 189, 191
manicata var. *aureo-maculata* 46, 152, 153
manicata var. *aureo-maculata*
'Crissa' 101, 102, 103, 171, 189, 191
manicata var. *manicata* 102
manicata var. *manicativiridi* 102
manicata var.
ocozocoutlaensis 102
manicata var. *peltata* 102
mannii 105, 207
'Maphil' 102
'Marga' 45
'Mark Thornton' 54
'Martha Floro' 182
'Mary Bucholtz' 127
masoniana 33, 45, 46, 189, 191

- masoniana* var. *maculata* 33
maxwelliana 28*
maynensis 111, 152, 153
mazae 46, 101, 102, 188, 191, 219
mazae var. *deminuta* 188
 'Medora' 54
mazae var. *viridis* 236
megaphylla 35, 37, 54
meridensis 55, 189, 191
 'Merry Merry' 46
metachroa 45, 46
metallica 151, 153, 189, 191
 'Metosa' 53, 54
micranthera var. *foliosa* 69, 71, 231, 233
micranthera var. *venturii* 231, 233
 'Midnight Sun' 54
 'Mikado' 63
 'Mini-Merry' 25
 'Mini-Silver' 101
minor 182, 189, 191
 'Missouri' 46
 'Miyo Berger' 223
molleri 188, 191
mollicaulis 109, 112
morelii 105
multinervia 70, 71, 151
 'Murray Morrison' 54, 62
 'Mystique' 151, 153
 'Nagare' 46
natalensis 69, 71
 'Nao' 46
nelumbifolia 89, 110, 112, 152, 153
nepalensis var. *nepalensis* 189, 191
 'Nightmare' 107
 'Nita McClain' 227
nitida 182
 'Nokomis' 62
 'Norah Bedson' 102
obscura 54, 109, 112
 'Oceanside' 45
odonteiantha 70, 71
odorata 105
 'Ofukuru' 45
 'Oh No' 54
olbia 188, 191
olsoniae 151, 153
 'Orange Rubra' 62, 138
 'Orihime' 46
 'Osceola' 124
 'Ourey' 46
oxysperma 83*
 'Page 13' 209
paleata 45, 151, 153
palmata 135, 189, 191
paranaensis 188, 191
parilis 150, 153, 219
partita 11*, 69
parviflora 190, 191
 'Passing Storm' 206, 207
 'Paul-bee' 53, 62
paulensis 105, 189, 191
pavonina 105
pearcei 30, 69, 71, 231, 233
peltata 53, 54, 109, 112
 'Perfectiflora' 107
 'Persian Brocade' 236
 'Persian Tiger' 207
peruviana 124, 189, 191
 'Petaloons' 129
petasitifolia 188, 191
philodendroides 70, 71, 105
phyllomaniaca 102
picta 30, 69, 71, 95, 231, 233
pilifera 69, 71, 111, 112, 190
 'Pinafore' sport 107
pinetorum 110, 112
 'Pink Avalanche' 206
 'Pink Jade' 107, 129
 'Pink Nacre' 45
 'Pink Shasta' 207
 'Pink Slate' 129
 'Pink Surprise' 46
platanifolia 59, 188, 191
plebeja 33, 34, 70, 71, 110, 112, 189, 191
polygonoides 63, 97
popenoei 189, 191
 'Preussen' 54, 107
prismatocarpa 30
prismatocarpa 'Variegation' 67
procumbens 188 (see *radicans*)
pruinata 35, 37
pseudoisoptera 28*
pseudolubbersii 188, 191
pubescens 190, 191
 'Purple Petticoats' 62
quadrialata 95, 110, 112
quaternata 152, 153
 'Queen Olympus' 45
 'Quinebaug' 53
radicans 70, 71*, 188, 191
rajah 46, 48
ravenii 97
 'Raquel Wood' 45
 'Red Bluff' 207
 'Red Eye' 46, 47
 'Red Planet' 52, 102, 107
 'Red Reign' 25
 'Reichenheimii' 101
reniformis 111, 112, 190
 'Replicant' 45, 46
rex 135
richii hort. 152, 153 (see *thiemei*)
 'Richmondensis' 54, 107
 'Ricinifolia' 89
 'Rikyu' 46
 'Ricky Minter' 46, 62
robusta 135
roezlii 59
rostrata var. *rostrata* 36, 37, 190, 191
rotundifolia 152, 153
roxburghii 152, 153, 209, 219
rubrovenia 135, 209 (see *hatacoa*)
 'Ruth Siebold' 182
 'Sakai' 45, 46
salicifolia 110, 112
 'San Miguel' 25, 54
sandtii 36, 37
sanguinea 109, 112
santa-martae 190 (see *urophylla*)
sarcophylla 150, 153
sartorii 150, 153 (see *sarcophylla*)
schmidtiana 54, 70, 151, 153, 188
schultziiana 189, 191
sciaphila 190, 191
 'Scottish star' 102
 'Secondhand Jeans' 48
seemanniana 70, 71
sericoneura 57, 66, 69, 111, 112, 190, 191
serratipetala 130, 131, 203, 222*
sessilifolia 190, 191
setosa 151, 153 (see *fischeri*)
 'Silver Jewel' 46
 'Silver Slipper' 45
 'Silver Star' 45, 46, 62
 'Silver Surf' 101, 102
 'Silvermist' 83, 85*, 129
 'Sir Percy' 45
 'Siron' 45
 'Sisquoc' 46
 'Skeezar' 45
 'Snow Cap' 206*, 207
socotrana 3, 40**, 95, 231, 233
solananthera 105, 111, 112, 182
solfi-mutata 25, 97, 107, 110, 112, 219
sonderana 69, 71, 231*, 233

- 'Sophie Cecile' 62, 107
'Star Frost' 125
'Starbaby' 101
staudtii 95
'Steve Tapia' 54
stipulacea 219, 220*
strigillosa 101, 102
'Su Go-Go' 163
subscutata 225*-226
subvillosa 151, 153, 188, 191
subvillosa var. *leptotricha* 151, 153
sudjanae 163
suffruticosa 69, 71
'Sunburst' 141
'Surfing' 102
sutherlandii 30, 231, 233
'Sweet Dianne' 182
'Sweet Dreams' 182
'Sylvan Triumph' 107
taiwaniana 151, 153
taiwaniana var. *albomaculata* 150, 153
'Tamaya' 10
'Tangiers' 25
'Tatsutagawa' 46
tayabensis 110, 112
'Tea Rose' 182
tenera 135
tenuipila var. *kennedyi* 189, 191 (see *plebeja*)
'Texas Star' 30, 236
thelmae 66, 150, 153
thiemei 110, 112, 152, 153
'Thrush' 77
'Thurstoni' 65
'Tiger Belle' 45, 46
'Tiger Kitten' 102
'Tingley Mallet' 48
'Tom Ment' 66, 141
tomentosa 107, 109, 112
tonduzii 151, 153
'Tracer' 102
ulmifolia 150, 153, 201*, 203, 222
'Universe' 45, 46, 62, 139
urophylla 190, 191
venosa 54, 203, 220, 240*
'Verde Grande' 62, 236
versicolor 46, 105, 130, 152, 153, 161*, 163
'Virbob' 62
vitifolia hort. 105, 188, 191 (see *reniformis*)
vitifolia var. *grandis* 188, 191 (see *reniformis*)
wallichiana 188, 191
'Wanda' 62
'Weeki Wachee' 124
williamsii 190 (see *wollnyi*)
'Winkum' 206
'Withlacoochee' 53, 62, 124, 184
wollnyi 69, 71, 220, 221*, 231, 233
xanthina 35, 37, 95, 135, 163*, 190, 191
'Yanonali' 46
'Yellow Sweetie' 182
'Zip' 98, 99, 102 (see *conchifolia*)
- Other Genera**
Hillebrandia sandwicensis 150, 153
Symbegonia U012 130
- Begonia Sections**
Platycentrum 180
- Unidentified Begonias**
U002 151, 153
U003 107, 110, 112
U007 110, 112
U008 151, 153, 188, 191
U009 150
U012 130
U014 54, 70, 71, 109, 112
U025 70, 71
U029 151, 153
U031 152, 153
U033 152, 153
U038 35
U049 152, 153, 190
U059 57
U060 152, 153
U064 70, 71
U067 152, 153
U074 152, 153, 206, 207
U078 127
U089 130
U095 110, 112
U100 190, 191
U103 69, 71, 231, 233
U106 190, 191, 231, 233
U107 190, 191, 232, 233
U115 70, 150, 153
U117 231, 233
U118 190, 232, 233
U119 190, 191, 232, 233
U133 188, 232, 233
U134 188, 232, 233
U150 190, 191, 232, 233
U151 188, 191, 232, 233
U152 33, 66, 171
U153 33
U154 33, 190, 191, 232, 233
U155 33, 34, 55, 70, 71
U156 33
U157 34, 70, 71
U158 34, 190, 191, 232, 233
U159 34, 55, 190, 191, 232, 233
U160 55, 111, 112, 232, 233
U161 55, 70, 71
U162 55, 59, 232, 233
U163 55, 57*, 232, 233
U164 55
U165 55
U166 55
U167 56*
U168 56
U169 55, 109, 112
U170 55-56
U171 57
U172 57, 232, 233
U173 57
U174 57, 66, 70, 71
U175 58*
U176 43*, 59*
U177 41*, 43, 59, 127
U178 170
U179 170*
U180 171
U181 171
U182 171
U183 171
U184 171
U185 171
U186 171
U188 111, 112
U192 127
U193 232, 233
U194 232, 233
U195 70, 71
U196 70, 71
U197 70, 71
U198 70, 71
U201 232, 233
U203 70, 71
U205 232, 233
U217 66
U231 59
U236 111, 112, 232, 233
U237 232, 233
U241 111, 112
U245 152, 153U103 69, 71
U246 111, 112, 232, 233
U249 232, 233
U252 232, 233
U253 69, 71
U256 69, 71
U257 232, 233
U258 232, 233
U261 1*, 5*-6
U262 232, 233
U263 232, 233
U268 232, 233

U286 232, 233

U287 232, 233

Unnamed

B. A-5 207

B. "Arc cultorum" 206, 207

Unknown, no U#

Brazil #2 36, 37

Brazil #4 36, 37

Chavez 1701 111

"Malaysia species" 45

Mexican species #1 45

SF#8 35

SF#73 36, 37

SF#251 36, 37

SH#758 28*

SH#773 28*

SH#774 28*

SH#775 28*

SH#776 28*

"Zelda's Problem" 206

*photo or drawing

"Schultz-Instant"



The Natural Way to Bug-free Plants!

the
NATURAL
PYRETHRINS
Insecticide

Available at leading Garden Centers and Plant Departments
Garden Clubs: SEND FOR OUR FUND RAISING OFFER
Schultz Co. 14090 Riverport Drive, Maryland Heights, MO 63043

BEGONIAS
REX BEGONIA SEED
RUDOLF ZIESENHENNE
\$1.00 per pkt plus 25c postage
Calif. residents add 6% Sales Tax
1130 NORTH MILPAS STREET
SANTA BARBARA, CALIFORNIA
93103

LAURAY of SALISBURY
Begonias, Gesneriads, Orchids
Cacti & Succulents
432 Undermountain Road, Rt. 41
Salisbury, CT 06068 203-435-2263
Usually open daily, 10 am - 5 pm
1990-91 Catalog \$2.00



Southwest Region Get-Together
May 15-17, 1992
Houston, Texas
Y'all come!

A Garden in Scotland

Seminar review by D. J. Aikin

Scots are "very keen" on gardening, according to Hugh McLauchlan, and, as he demonstrated in a slide talk at the 1991 ABS Convention, some of them are very, very good at it! Known to many ABS members as a grower of tuberous begonias, Hugh is also a prize-winning photographer, a member of the Rose Society, the Gladiolus Society, the Dahlia Society, the National Vegetable Society, and the Scottish Begonia Society as well as ABS.

Calling his talk "A Garden in Scotland," Hugh offered a year-long guided tour through his garden in Bishopsbridge, Scotland, located north of Glasgow, 20 minutes drive from the Botanic Gardens. Beginning with early spring flowers and continuing through rhododendron, roses, perennials, vegetables, summer-flowering bulbs and espaliered fruit trees to the snow-covered branches of winter, he emphasized the role of color and the thrifty use of space.

Summer in Scotland lasts only three months, but the sun comes up at 5 a.m. and does not set until 10:30 or 11:00 p.m. Noting that a garden reflects the care or disregard of the gardener and you get out of it what you put in, Hugh showed some of the methods he uses to get extra-special results - including prize-winning carrots and parsnips grown individually in drainpipes filed with a special compost. After 30 years, his soil is enriched to a depth of more than 2 feet, but the drainpipes enable him to grow perfect carrots and parsnips 3 or more feet long! Not to mention onions more than 17 inches in diameter.

Hugh has three greenhouses where he grows tuberous begonias to perfection, ruthlessly discarding those whose blossoms

don't reach 9 inches in diameter. When the buds are ready to open, he places a 10-inch collar of cardboard behind the bud to keep it from being damaged by the foliage. Although many growers pinch the other buds to produce one super large terminal bloom, Hugh likes to produce a clump of large blooms on a plant. About 3 weeks before his tuberous begonias reach their peak of bloom, Hugh moves them to what he calls his "begonia shelter," a 12 x 14 ft. structure with a PVC top and open sides lined with shelves. The additional shading and cooler temperatures (12° cooler than the greenhouses) help the blooms maintain their color and slow aging.

Hugh showed some of the many tuberous varieties he grows, including one of his own hybrids, B. 'Mrs. McLauchlan', that took a prize as "best seedling" four years ago. He also grows other begonias - from 'Lucerna' and 'Charm' to 'Illsley', *cubensis*, 'Little Brother Montgomery', U. 008, and *sutherlandii*. A 12 ft. long humidifier, double-glazed, with under-soil heating, is used to carry difficult plants through the winter.

Hugh is "very organic," and doesn't use "any chemicals I've no use for." To eat slugs - the bane of many an outdoor begonia grower's existence - he recommends a frog.

When he talks to horticultural organizations, Hugh encourages them to learn how to use a camera. And when he talks to camera clubs, he tells them, "All right, now go get yourself a garden!" If only all our gardens came equipped with a gardener like Hugh McLauchlan!

D. J. Aikin is a member of the Potomac Branch, and was Show Chair for the 1991 Convention. Her address is 14301 Cantrell Road, Silver Springs MD 20905.



“From Prop Box to Show”

Seminar review by Sue Hessel

Mary Bucholtz' seminar “From Prop Box to Show” could also have been entitled “Showing is Sharing and Caring!” She gave us a neat timetable to prepare our plants for show and some different and environmentally sound suggestions for propping.

Five months before a show, choose your potential entries and isolate them in a space large enough for good air circulation (this helps in preventing mildew and strengthening leaves and stems). Now start caring, repotting, pinching (flowers too), feeding, staking, and grooming. Vary the mildew spray - one recipe is 2 teaspoons of baking soda to 1 gallon of water. If rhizomes are crawling out of the pot, pinch or bend them around inside of the pot and stake them in place for a few weeks. Also feed them with a high phosphorus fertilizer (phosphorus is the middle number on the fertilizer container).

Two months before the show, give your plants the maximum amount of light they can use. If the weather has warmed, foliar feeding may begin. Canes get higher phosphorus once a week now.

One month before the show, trim your stakes, clean the pots (with vinegar and water), and clean foliage (with dishwashing liquid in water, or Safer soap).

A few days before the show water well, trim minor damage on leaf edges with scissors (making sure to follow the leaf shape). Apply a fresh dressing of top soil.

When you arrive at the show, water your plants and do a final dusting and cleaning.

Now go back to the showing is sharing. For five months you've been pinching - with sterile scissors! - and propagating! Always remember to label everything with a waterproof pen as you go along. Make labels from a cut-up bleach bottle - you can use the bottom of the bottle as a saucer, and the top as a funnel, too.

Ways to prop are:

1. in water:

This method is good for canes and some leaves. When roots are 1/2 - 1" long, add vermiculite/perlite to the water a few days before potting to help keep roots from balling up.

2. in prop boxes:

Leaf cuttings - leave 1-2" of stem. Set so the leaf doesn't touch the medium.

Semps - must have side branches to get a full plant.

Rhizomes - cut so they're not twisted. Make sure you put the down side down. Hold with a hairpin and pinch out the growing tip.

3. paper towels in prop boxes:

Moisten towels (approximately 4); place leaves on them, with the labels beside the leaves. Roots should appear in around 3 weeks. If you need to re-moisten towels do so from the edge - don't worry if roots stick to the towels, just pot the towel, too.

When plants are rooted, open the prop box around 1" for a week. Keep sliding the lid off gradually to harden the plants. After potting, leave pots on moistened sphagnum, perlite, or vermiculite for added humidity.

Make sure each plant is labeled, and share them at the show with all those who “ooh and aaah” over their parents - which hopefully have won blue ribbons, trophies, and maybe even a cultural award.

*Sue Hessel, president of Knickerbocker Branch, won the Photography Division at the 1991 Convention. Several of her photos have appeared as **Begonian** covers. She lives at 14 Sutton Place South, New York NY 10022.*

Unidentified Begonia Species List

Thelma O'Reilly, Project Director

The ABS Nomenclature Department maintains a list of unidentified species. These are assigned numbers precede by "U" (for unidentified).

Your cooperation is important for supplying information, including observations, photographs, slides, or drawings, for this group. Any shared information will be appreciated. Please contact Thelma O'Reilly, 10942 Sunray Place, La Mesa CA 91941.

The references in parentheses are to the **Begonian**, year: Seed Fund number or page.

B. U187

Venezuela. Seed collected by Scott Hoover in Pittier National Park, 1980. Tuberous. Stemless. Leaf blades green with red spot at blade-petiole juncture, 4 x 6 inches, broadly ovate, acute, finely pubescent, marginally dentate. Inflorescence emerges from top of tuber. Staminate flowers pink, five (rarely four) serrulate-ciliate, finely pubescent tepals. Pistillate flowers pink, five (rarely six) unequal, broadly elliptic, ciliate-serrulate, finely pubescent tepals, three unequal wings with largest oblong and ascending. Tentatively identified by Thelma O'Reilly and Carrie Karegeannes as *Begonia quetamensis* Smith & Schubert. Verified by Dr. Lyman B. Smith with the following information; In *Phytologia* 54 (no., 7): 469 (Jan 1984), Lyman Smith and Dieter Wasshausen made *B. quetamensis* S & S = *B. novogranatae* A. DC 1864. Note: For additional information see "A Scott Hoover Collection - Begonia U187 Identified as *Begonia novogranatae*" by T. O'Reilly **Begonian** 1985: 73-76.

B. U188

Alturas de Echarate, Peru. Seed supplied to Seed Fund by Professor J. D. Doorenbos, 1985. Original seed, distributed by Jack Golding, was collected by R. Chavez (no. 1701). Habitat Sub-tropical, humid forest, acid soil, Elevation 1450m. (1986: 48-72; 1988: 173; 1989: 188-189.) Thick-stemmed. This species has the peculiar habit of producing a fine pubescence

on all parts of plant, with the exception of stipules and inner surfaces of tepals, that feels sticky (dry) to the touch. Stems green with red lenticels, pubescent. Leaf blades medium green, 4 x 6 inches, both surfaces pubescent. Stipules pale green, 3/4 inch, deciduous. Staminate flowers white, two (rarely three) tepals, forming an a cluster at apices of peduncles. Peduncles green, 3 inches, pubescent. Pedicels white, 1/2 inch, pubescent.

B. U189

Africa. Live plant material labeled J. D. 1575 received by Mildred Thompson from Prof. Doorenbos, 1985. Rhizomatous. Section Scutobegonia. Leaf blades medium green, peltate.

B. U190

New Guinea. Live plant material labeled J. D. 1007 received by Mildred Thompson from Prof. Doorenbos, 1985. Shrub-like. Leaf blades reddish.

B. U191

Paete, Philippines. Seed collected by Carling, 1985. Imported by Martin Johnson. Shrub-like. Climber to 2m. Flowers white.

B. U192

Bicol, Philippines. Live plant purchased and imported by M. Johnson. Plant was given to Bob Haussler and Joan Coulat for propagation and distribution. Trailing-scandent. Stems 12-16 inches, reddish, lenticellate, glabrous. Leaf blades rose-pink with areas of yellow-green splashes at main nerves on upper surfaces, glabrous, openly cordate, ovate, 3 x 3 1/2 inches with finely dentate, ciliate, rippled margins, undersurface glabrous with short, bristly red hairs. Leaf blades glimmer and glow with a sparkling, silvery sheen. Petioles red with sparsely scattered hairs. Stipules 1 1/4 x 1/2 inches, tan with red nerves, persistent. Staminate flowers white, sometimes flushed pink, 4 tepals, 3/4 x 3/4 inches. Pistillate flowers like staminate

flowers, ovary green, wings pink. Peduncles pink, 8-9 inches. Greenhouse or terrarium conditions recommended. For additional information see 'Martin's Mystery Begonia' by Thelma O'Reilly **Begonian** 1988: 1-5-6.

B. 193

Chiriqui Province, Panama. Seed collected by Roberto Brin from Lagunas Volcan, Baru area, 1986. Habitat: Clay banks around the lagoons of tropical rain forest. Elevation 4910'. Temperature range 50-60F. (1986: 70-71; 1989: 153-154; 1990: 154-155.) Rhizomatous. Leaf blades green, 8 x 5 inches, marginally serrate-ciliate with prominent "drip points." Flowers white.

B. U194

Chiriqui Province, Panama. Seed collected by R. Brin from Lagunas Volcan, Baru area, 1986. Habitat: Clay banks around lagoons of tropical rain forest. Elevation 4910'. Temperature range 50-60F. (1986: 70-71; 1989: 68-69; 1990: 142.) Rhizomatous. Leaf blades dark green, 7 x 4 inches, upper surfaces hirsute, lower surfaces glabrous with narrow scales on nerves, marginally ciliate-serrulate, cordate, asymmetrical. Petioles green flushed red, 3 inches, lenticellate. Stipules green flushed red, ovate, keeled. Staminate flowers white, with two tepals (sometimes three.) Tentatively identified as *B. urophyllaby* T. O'Reilly.

B. U195

Chiriqui Province, Panama. Seed collected by R. Brin from Delgados Cattle Farm, 1986. Habitat: Clay banks along tree-covered creek on the farm. Elevation 4910'. Temperature range 50-60F. (1986: 70; 1989: 68-69.) Rhizomatous. Leaf blades green, 7 x 6 inches, drip points marginally. Flowers white.

B. U196

Chiriqui Province, Panama. Seed collected by R. Brin from Delgados Cattle Farm, 1986. Habitat: Clay banks along tree-covered creek on the farm. Elevation 4910'. Temperature range 50-60F. (1986: 70; 1989: 68-69.) Rhizomatous. Leaf blades

green, 6 x 5 inches, drip points marginally. Flowers white.

B. U197

Chiriqui Province, Panama. Seed collected by R. Brin from Cerro Punta, Baru Volcan area, 1986. Habitat: Begonia was covering a tree at the edge of a trail. Elevation 6200'. Temperature range 50-60F. Also collected at Rio Sereno. (1986: 70-71; 1989: 68-69.) Trailing-scandent. Leaf blades green, 5 x 2 1/2 inches, asymmetrical, penninerved. Flowers white.

B. U198

Chiriqui Province, Panama. Seed collected by R. Brin from Delgado Cattle Farm, 1986. Habitat: Clay banks along tree-covered creek. Elevation 4910'. Temperature range 50-60F. (1986: 70; 1989: 68-69.) Rhizomatous. Leaf blades green, 6 x 3 inches, marginally serrated. Flowers white.

B. U199

Chiriqui Province, Panama. Seed collected by R. Brin at Bambito, 1986. Habitat: Slopes of Baru Volcano near a small river in the tropical rain forest. Elevation 5250'. Temperature range 50-60F. Also collected at Delgado Cattle Farm in Volcan. (1986: 70-71; 1989: 68-69.) Shrub-like. Leaf blades green, 5 x 2 1/2 inches, penninerved, marginally serrulate. Flowers white.

B. U200

Chiriqui Province, Panama. Seed collected by R. Brin about five miles beyond Volcan, 1986. Elevation 3200'. Temperature range 60-80F. (1986: 70.) Rhizomatous. Leaf blades green, 9 x 6 inches. Flowers white.



**The Indoor Gardening Society
of America, Inc.** Dept. B

944 S. Munroe Rd., Tallmadge, OH 44278
Dues \$15 a year **INDOOR GARDEN** issued 6
times yearly. Seed exchange, round robins,
cultural guides, slide library.

BULLETIN BOARD

ABS News

President Resigns

President Jeannette Gilbertson resigned, citing increased work duties. The Board accepted her resignation with regret and First Vice-president Carol Notaras moved up to the presidency.

You're Invited to a Party!

The Mother Chapter is having a party. Long Beach Parent Chapter of the ABS is having a party to celebrate our 60th anniversary on January 16th, 1992 at the Huntingdon National Bank, 9025 Artesia Blvd. in Bellflower, California. Rudy Ziesenhenné will be the guest speaker. We are extending an invitation to all. Come join us!

Directory Update

President of **Monterey Bay Area Branch** is **William Schramm**, 17 Calera Canyon, Salinas CA 93908. The branch meets on the 4th Wednesday of each month at 7:30 p.m. at the Monterey Senior Center, Dickman & Lighthouse Sts. in Monterey.

Moving? Don't forget to let the Membership Chair know so you won't miss an issue!



"Captivating Canes"

"Captivating Canes" will be the theme of the 1992 ABS Convention to be held August 19-24 at the Inn at the Park in Anaheim, California. Host branch is Orange county, and co-chairmen are Elda Regimbal, Mary Sakamoto, and Brad Thompson.

As part of their attempt to have as many canes as possible represented at the convention, the chairmen have requested that members throughout the country send cuttings of their favorite canes to be propagated for the sale and for use as decorations. Send cuttings to:

Elda Regimbal
3117 San Juan Dr.
Fullerton, CA 92652
(and thank you very much!)

Hoover Expedition Postponed

Scott Hoover's Asian expedition departure has been delayed because of his duties at the proposed New England Conservatory. He expects to be making the trip within six months, and asks that donations be held until a new departure date is announced.

Northwest Region Calls It Quits

It is to my sorrow that we could not get the NWR organized. There were many people interested in joining, but no one wanted to help. Two people could not do it all.

So we have called it quits, and turned our treasury (\$262.95) over to ABS' general fund.

We sincerely hope that one day someone will tackle the job and NWR will become a reality.

- Arlene Ingles, Membership Chair

CONSERVATION NEWS: Getting 'up to speed' on global issues

All our lovely begonia cultivars have come from species collected in the wild. The attempts to locate species in private collections have been chronicled in previous **Begonians**. Despite such good works locally, we are losing globally.

Rainforests, the home of begonias in the wild, are being depleted. Timber concessionaires in the Philippines, Indonesia, Malaysia, and southeast Asia are harvesting all the hardwoods for export.

These are not necessarily cash poor nations; there are many instances of indigenous peoples trying to stand up to the politicians, the military and the very wealthy who have contrived to sell the forests. Their laws are designed to thwart those who have no power nor the ability to understand such laws.

In Central and South America, the clearing of forests is for creating crop land to feed burgeoning populations, or so cheap beef can be raised on the new, temporary grass, mostly for export.

Independent journalists and scientists are studying the problems of the rainforest. Their studies are accessible in numerous publications available at your local public library: A 'digest' of these issues is in the periodicals of the conservation organizations, e.g. Sierra Club, Audubon, World Wildlife Fund, National & International Wildlife, & Cultural Survival.

Also, book reviews in the Sunday papers can guide you to topical and timely reading. Here are two books to check out right away: **Stranger in the Forest**, by Eric Hansen (recommended to me by Ed Bates), and **Into the Amazon**, by Augusta Dwyer. We'll discuss these and more next issue.

-- Bruce C. Boardman



Orange County Branch Scores with "Begonia Fiesta"

by Virginia Carlson

For several years, the Orange County Branch of ABS has sponsored a Begonia Fiesta during the summer. Fun, Fellowship, and Food are important parts of the Fiesta, but we also have new and unusual begonias for sale, and door prizes - all kinds of plants and plant-related items.

In 1991 the event was planned for August in Elda Regimbal's back yard, in spite of the water shortage. Thankfully, it rained buckets in March so we weren't faced with some of the problems we anticipated. We even had one of those unusual summer drizzles the morning of the event.

We sold tickets as the Mexican food was catered. The Fiesta was publicized throughout the area through branch newsletters and word-of-mouth, and about 150 Begonia lovers came (some from as far away as San Diego, The Palos Verdes peninsula, and Colton) to see Elda's begonias and other plantings, meet with other begonia fanatics, and acquire some new plants.

Door prizes were solicited from members and businesses, and members donated some specimen plants for an auction. Don Case got top dollar for the auction items.

The Fiesta was a success in the usual categories of Fun, Fellowship, and Food, with the bonus of some added Funds with which to plan activities for the 1992 convention, "Captivating Canes."

Virginia Carlson is editor of Begonias, Begorra!, newsletter of the Orange County Branch. Her address is 1137 N. Highland Fullerton, CA 92635.



CLAYTON M. KELLY SEED FUND NOTES

Diana H. Gould, Seed Fund Director
January-February 1992

The 1991 Convention Listing is now available and will be mailed free of charge with all seed orders, or it can be requested by sending a self-addressed, stamped envelope to the Seed Fund Director.

Germination times for this issue's selections range from 7 to 67 days, so please be patient.

The Seed Fund thanks **Roberto Brin, Michele Cole, Jackie Davis, Lynda Goldsmith, Jan Goodwin, Jake Hafer, John Howell, Doug Jensne, Eiichii Kawamata, Naomi Lynch, Wanda Macnair, Evie McDuff, Karan Myers, Joy Porter, Pat Sage, Lillian Stone**, our anonymous donors, and the international exchanges for making this offering possible, and a very special **thank you to Steve Coppins, Ann Moses, and Lillian Stone** for their generous and unselfish labors on behalf of the Seed Fund.

Notes on Seeds Offered: Rhizomatous

B. carrieae (Mexico) has velvety-textured, large, lobed leaves that are a medium-green, puckered, and have an unusual surface. The stems and petioles are a paler green, and the flowers are white.

B. crassicaulis comes to us from Guatemala. It goes into semi-dormancy in winter, losing its heavily incised leaves, and the white

blooms appear before the new leaves.

B. crispula (Brazil) has distinctive foliage, requires terrarium care, has medium-sized medium-green leaves with a puckered surface and scattered hairs giving a rough surface. It has a creeping growth pattern and is SLOW to grow and send up its yellow flowers.

B. deliciosa (Borneo) is classified as an upright because its rhizomes are joined at or below the soil line. It has erect stems and fragrant light pink flowers.

B. fenicis (Philippines) has large, dark-green, glossy, broad, heart-shaped leaves with serrated margins that have tiny points at the nerve endings, and pink flowers.

B. gehrtii (Brazil) has distinctive foliage, large medium-green puckered leaves with green stems and petioles and white flowers. It requires terrarium care in some areas.

B. glandulosa (Mexico; synonyms: *dayi* hort., *hidalgensis*) has medium-thick, waxy, dark green leaves with black veining and red reverse. Petioles are light-green and late winter flowers greenish-white. See **Begonian** March-April 1990 p. 61 for article and photo.

B. goegoensis (Sumatra) requires terrarium care, has distinctive foliage with large brownish leaves with green

veining, pebbly texture and patterning. Stems and petioles are green, flowers are pink from winter to spring.

B. hatacoa (India) is a variable species and it is possible that plants with spotted leaves, silver leaves, or plain green leaves will grow from the same batch of seeds. Please advise what type of leaves you get from the seed, and whether the markings change as the plant gets older. *B. hatacoa* 'Silver' hort. requires high humidity and is upright with medium-green spear-shaped leaves and a silver coating; *B. hatacoa* 'Spotted' hort. shares the need for higher humidity, has the same growth pattern and leaf shape, with silver-spotted green leaves. We also offer seed from India that came labeled *rubrovenia*, a synonym for *hatacoa*; leaf shape and growth pattern are the same, but markings are elongated, very silvery, very irregular.

B. hydrocotylifolia (Mexico) has small green leaves, a creeping growth pattern, and rose-pink flowers.

B. imperialis var. *smaragdina* (Mexico) requires terrarium care. It has distinctive foliage, pustular type, large medium-green leaves and white flowers.

B. lyman-smithii (Mexico) has a repent rhizome. Leaf blades are oblique, asymmetrically obovate to ovate

or broadly elliptic with cordate base, tip rounded to acute, upper surface dark green and lower surface deep red, dentate to undulate at ends of the major nerves. Flowers are pink.

B. masoniana (China) has large green roundish leaves with a distinctive surface and a brown "Iron Cross" marking that gives it its popular name. Flowers are white.

B. nigritarum (Philippines) requires terrarium care. It has distinctive foliage, medium-green silver-patterned leaves and profuse pink-tinted white flowers.

B. paulensis (Brazil) has distinctive foliage, large medium-green puckered leaves and creamy white flowers.

B. pringlei (Mexico) has small lobed green leaves.

B. pustulata requires terrarium care, has distinctive foliage, pustular type, a creeping growth pattern, and rose-pink flowers.

B. U100 (Panama) has pale green hairy leaves and pinkish-white flowers.

B. U254 (Brazil) has been grown for years under the name "*acetosa*." How this tiny charmer ever became confused with the true *acetosa*, which grows to over 6 ft., is one of the mysteries of begonia nomenclature. B. U254 has distinctive foliage, with very thick, dark green velvety-textured roundish leaves with deep red undersides, and very fine abundant red hairs. Flowers are pinkish-white. See **Begonian** Nov.-Dec '89 p. 228 for a dis-

cussion of the confused nomenclature.

Shrub-like

B. acida (Brazil) is a compact grower with distinctive foliate and white flowers.

B. acutifolia (Caribbean; syn. *acuminata*) has small bare green leaves and profuse white flowers tinted with deep pink.

B. alice-clarkiae (Mexico) has distinctive foliage, sparse and beautiful white flowers, and is very difficult to grow.

B. annobonensis (Tropical Africa) has medium-green hairy wide leaves and white flowers.

B. bracteosa (Peru) has bare medium-green leaves and rose flowers.

B. convallariodora (Guatemala) has medium-sized oval green leaves and grows to a possible height of 2-3 feet. Its white flowers have a similar fragrance to the Lily of the Valley.

B. epipsila (Brazil) has medium-sized bare medium-green leaves and very fragrant white flowers.

B. fernando-costae (Brazil) has large wide hairy medium-green leaves and white flowers.

B. foliosa (northern South America) requires high humidity. It has small medium-green bare leaves with red stems and petioles and red reverse veining and small white flowers. *B. foliosa* var. *putzeysiana* (Colombia) is similar in appearance but has waxy leaves.

B. fuchsioides (Venezuela-Colombia) has small medium-green bare leaves and

red-orange flowers.

B. holtonis (Venezuela; syn. *foliosa* var. *amplifolia*) resembles the *B. foliosa* group, but has larger thicker leaves. It will grow to 3 ft tall.

B. incisa (Philippines) requires terrarium care. It has a fern-like appearance, is easy to grow, and has medium-green leaves with red undersides and reddish stems, branches easily, and has white flowers.

B. odeteiantha (Brazil) has medium-sized, medium-green bare leaves and white flowers.

B. scharffiana (Brazil) has wide, hairy, medium-green leaves, requires staking for a well-shaped plant, but can also have a picturesque appearance when grown semi-erect as a basket plant with its ivory-colored flowers from summer through fall. B. U008 has small, round medium-green hairy leaves and flowers that turn rose-colored in strong light.

Trailing-scandent

B. ampla (Tropical Africa) has white flowers with pale orange fruits in summer.

B. glabra (Central America) has medium-green waxy leaves, light green stems and petioles, with undersides light green brushed slightly with red. Flowers are white. Also offered is seed labeled B. U167 (Panama) which has been identified as *B. glabra*. It has red stems and petioles and reddish pink flowers.

B. loranthoides (Tropical Africa) is an epiphyte with medium-sized thick and



drawing by
Kit Jeans Mounger

B. loranthoides

leathery dark green leaves with red reverse, woody stems, pink petioles, and pink-tinted white flowers.

B. glaucophylla is a synonym of *B. radicans*. Its leaves are deeply unequally cordate, bright green with white spots above and purple underneath. It has many small pale pink flowers.

Semperflorens

B. cucullata (Brazil) has white flowers. *B. cucullata* var. *arenosicola* (Argentina) is "distinguished by the narrowly elliptic leaves rounded at the tip, narrow, unequally cuneate at the base, and the larger subentire roundly obtuse stipules" (Jack Golding), and *B. cucullata* var.

spatulata (Brazil) has small medium-green leaves and is everblooming with profuse white flowers.

B. hirtella (Brazil) has thick waxy puckered medium-green leaves and white flowers.

B. schmidtiana (Brazil) is a compact grower with small soft green hairy leaves and pale-pink flowers.

B. subvillosa (Brazil) requires high light, and *B. subvillosa* var. *leptotricha* (Paraguay), known in horticulture as "woolly bear", is similar with white flowers.

B. wallichiana (Mexico) is a *schmidtiana*-type and has pink flowers.

Thick-stemmed

B. dipetala (India) has hairy medium-sized green leaves with fragrant white flowers.

B. involucreta (Costa Rica) requires high humidity, has large hairy medium-green leaves and profusely fragrant white-pink flowers.

B. multinervia (Central America) has large leaves and white flowers tinted with pink. Blooms appear January through spring.

B. U115 (Panama) requires high humidity, has green leaves with red undersides, reddish stems and petioles, and reddish-pink flowers. *B. U115* has been tentatively identified as *B. multinervia*. Growers report some differences.

B. sericoneura (Central America; syn. *pilifera*) is described as non-ramified, trunk-like with fragrant white flowers and medium-green leaves.

Cane-like

B. coccinea (Brazil) is intermediate in height and has coral-red flowers.

B. lubbersii (Brazil) is low-growing with medium-green leaves and fragrant white flowers.

Tuberous

B. brevibracteata (Malawi) grows 30-90 cm. tall, has a glabrous stem, is sparingly branched; leaf blades are ovate-acute to acuminate and margins distinctly serrate. Flowers are white or palest pink.

Unclassified

I have neither classification nor description for *B. U250*.



CLAYTON M. KELLY SEED FUND LISTING

The Seed Fund is a service to ABS members only. It is a privilege of your membership.

All packets of species seed are \$1 each, and all packets of hybrid seed are 50c each; a pamphlet on growing from seed is 25c.

All orders must be accompanied by check or money order payable ONLY in US funds to The Clayton M. Kelly Seed Fund.

Costs of Mailing:

U.S. only: 1-12 packets, 99c; 13-24, \$1.35; 25-36, \$1.71; 37-48 (2 cans), \$2.30; 49-60, \$2.66.

Canada only: 1-12 packets, \$1.10; 13-24, \$1.46; 25-36, \$1.82; 27-48 (2 cans), \$2.35; 49-60, \$2.71.

Mexico only: 1-12 packets, \$1.15; 13-24, \$1.51; 25-36, \$1.87; 37-48 (2 cans), \$2.50; 49-60, \$2.81.

All other international mail: 1-12 packets, \$1.85; 13-24, \$2.68; 25-36, \$3.68; 37-48, \$4.68; 49-60, \$5.68.

Two sets of planter dishes, in US only: \$1.20

Two sets & 1-12 packets, \$1.80; and 13-24, \$2.40; 25-36, \$3.00; 37-48, \$3.60; 49-60, \$4.20.

These mailing costs include the costs of postage, mailers, and glatine seed envelopes.

California residents please add 7 3/4% sales tax to all orders.

Please send your order with payment to:

Ms. Diana H. Gould
9278 Mapleview Way
Elk Grove, CA 95758
U.S.A.

species seed \$1 per packet

*B. acida****
B. acutifolia
B. alice-clarkiae
*B. ampla****
*B. annobonensis****
B. bracteosa
B. brevibracteata
B. carrieae
B. coccinea
*B. convallariodora***
B. crassicaulis
*B. crispula****
B. cucullata
B. cucullata var. *arenosicola*
B. cucullata var. *spatulata*
B. gladulosa
B. deliciosa
B. dipetala
B. epipsila
*B. fenicis****
B. fernando-costae
B. foliosa
B. foliosa var. *putzeysiana*
B. fuchsioides
B. gehrtii
B. glabra
B. goegoensis
B. hatacoa
B. hatacoa 'Silver'
B. hatacoa 'Spotted'
B. hirtella
B. holtonis
B. hydrocotylifolia
B. imperialis var. *smaragdina****
*B. incisa****
*B. involuocrata****
*B. loranthoides****
B. lubbersii
B. lyman-smithii
B. masoniana
B. multinervia
*B. nigritarum****
B. odetiantha
*B. paulensis****
*B. pringlei****
B. pustulata

B. radicans
*B. scharffiana****
B. schmidtiana
B. sericoneura
B. subvillosa
B. subvillosa var. *leptotricha*
B. wallichiana
B. U008
*B. U100****
B. U115
B. U167
B. U250
*B. U254****
mixed species
mixed tuberous species



B. fuchsioides

hybrid seed 50c per packet

mixed canes***
mixed "Frillies"
mixed rexes***
mixed rhizomatous
mixed semps
mixed tuberhybridas
mixed Mickey Meyer hybrids

***very limited supply

COMING EVENTS

February 21-23: Astro Branch display and sale in the Texas Lawn & Garden Show at the George Brown Center, Houston, Texas.

February 21-24: Sacramento Branch participates in Garden & Home Show at CAL-EXPO with display, information, sale.

March 4-8: Atlanta Branch participates in the Atlanta Flower Show at the Atlanta Apparel Mart/Inforum.

March 7-8: The Victorian Begonia Society will be hosting a convention of the **Association of Australian Begonia Societies** in Ballarat, Australia to coincide with the Ballarat Botanic Gardens' Begonia Festival.

March 14-22: Knickerbocker Branch participates in the New York Flower Show, "Discovery '92," at Pier 92. Hours are 10 am - 8 pm weekdays and 10 am - 6 pm weekends. The begonia class will be Friday, March 13 through Monday, March 16.

May 15-17: Southwest Region Get-Together, "Begonias Astronomical", hosted by **Astro Branch**. At the Concord Hotel, Houston, Texas. For more information, contact Tom Keepin, 4513 Randwick Dr., Houston TX 77092; (713) 686-8539.

April 3-Oct. 12:

Ameri-Flora '92

International Floral & Garden Exposition, Franklin Park, Columbus, Ohio. United States' first international floral event, commemorating the Christopher Columbus Quincentennial, with gardening exhibits by 30 nations including Japan, Monaco, Italy, Spain, UK, Bahamas, Canada, Dominican Republic.

August 19-23: American Begonia Society Convention 1992, "Captivating Canes", will be held at the Inn of the Park, Anaheim, California, with the Orange County Branch as hosts.

Deadline for next issue is January 15

BEGONIAN MINI-ADS

Mini-ads are a service to our members. The charge is \$1 per line per insertion with a minimum of \$4. Payment must accompany order. Make checks payable to ABS and mail to:

Martha Curry
P.O. Box 1232
Weatherford, TX 76086

BEGONIA CUTTINGS AND PLANTS. Send \$1 for expanded 1992 list. Kay's Greenhouses, 207 W. Southcross, San Antonio, TX 78221.

SOUTHWEST REGION, ABS: Annual Get-Together, show, sale; newsletter. Membership \$7, family \$10. Send to Marie Harrell, Rt. 3, Box 689, Elgin, TX 78621.

"VICKI'S EXOTIC PLANTS" Beautiful Begonias, Episcias, and Hoyas. Large variety of each. Please send \$1 for list to 522 Vista Park Dr., Eagle Point, OR 97524; (503) 826-6318.

BEGONIAS, FERNS, SHADE PLANTS.

We are now open to provide you with quality plants...Come visit. Golden Hills Nursery (Cynthia Bishop) 4150 Auburn-Folsom Rd. Loomis CA 95650 (916)652-7311.

ATTENTION FLORIDA VISITORS: Are you planning to visit the Tampa/St. Pete area this winter? Pinellas Branch meets 3rd Tuesdays 7:30 p.m. in an easy to find CENTRALLY LOCATED spot. We'd love to have you visit. Call Bill O'Geary (813) 392-0006.

MINUTES OF THE ANNUAL BUSINESS MEETING

The Annual Business Meeting of the American Begonia Society was held after the luncheon of the 59th Convention "Exploring the World of Begonias" on September 14, 1991 at the Old Colony Inn, Alexandria, Virginia.

First Vice-President Dr. Tracy McLellan called the meeting to order at 2:25 p.m. John Howell led the Flag Salute. Mabel Corwin read the Aims and Purposes. Vice-President McLellan welcomed the branches and read the roll call. Reading of the Minutes of the June 22 Board Meeting was omitted.

Treasurer Eleanor Calkins gave the Treasurer's Report from August 1, 1990 to July 31, 1991. Balances are \$4,928.29 in checking, \$43,846.61 in savings, for a total of \$48,775.51.

Committee Reports:

Audit - Ed Bates and Ralph Corwin reported that the National Audit is in progress.

Ballot Counting - Ronnie Nevins reported ballots had been counted and the Officers for 1991-1992 are:

President Jeannette Gilbertson; 1st Vice-President, Carol Notaras; 2nd Vice President, Millie Thompson; 3rd Vice-President, Mary Bucholtz; Secretary, Ingeborg Foo; Treasurer, Eleanor Calkins. The Nominating committee of Arlene Ingles (Chair), John Howell, and Charles Jaros were thanked for their work.

Bookstore - Anita Ruthenberg reported balance as of July 31, 1991 was \$187.29.

Branch Relations - Doug Hahn invited everyone to Columbus, Ohio in 1992 for Ameri-Flora. He reported six queries on new branches, and asked that each branch send him the name and address of its National Director. A booklet on increasing membership will be sent to the branches soon.

Seed Fund - Diana Gould was commended for doing a great job. The Convention Listing was available.

Conservation - Bruce C. Boardman spoke on the need for international cooperation. Scott Hoover will be leaving for Indonesia and needs more donations.

Publications - Tamsin Boardman resigned as editor of the *Begonian*. She was thanked for her work.

Convention - Barbara Nunes was thanked for her untiring efforts, and Maxine Zinman received a round of applause for her work on judging.

Long Range Planning - the 1992 Convention will be in Anaheim, California August 19-23. The 1993 Convention will be held in Miami, Florida.

Nomenclature - Carrie Karegeannes reported 2 new registrations; 56 letters and 12 articles have been sent by members of the Nomenclature Committee.

Public Relations/Advertising - Russ Richardson reported new members from advertisements in horticultural magazines. He has re-drafted the "14 Reasons to Join ABS" and asked members for their input.

Show Entires - Tim Last resigned, and was thanked for his work.

Slide Library - Dan Haseltine and Charles Jaros report four new programs, and requested slides for new programs. Kelton Parker has donated slides from the begonia collection at Fort Worth Botanic Garden.

Business:

Eleanor Calkins reminded members to send dues to the Membership Chair and **all other money and bills only to the treasurer.**

Palomar Branch requested that ABS double the amount pledged to support Scott Hoover's trip. Sue Hessel so moved with Mike Golub seconding. Motion carried.

Frank Green requested donations for the Barkley Collection Preservation Fund.

Meeting adjourned at 4:20 p.m.

Respectfully submitted,

Ingeborg Foo,
Secretary



GROW GREAT FERNS JOIN LAIFS

Annual membership \$15.00

LAIFS Journal with Fern Lessons

Spore Store, Books, Educational programs

Los Angeles Int'l Fern Society

P.O. Box 90943, Pasadena, CA 91109-0943

Join the NATIONAL FUCHSIA SOCIETY

MEMBERSHIP \$15 per year

includes bi-monthly FUCHSIA FAN

The new A to Z on Fuchsias abridged version

\$6.95 plus \$1 shipping (CA residents add 42c tax)

Mail to: National Fuchsia Society, 11507 E. 187 St.

Artesia, CA 90701

Pacific Horticulture

The color illustrated quarterly

for keen gardeners

\$12 a year

(\$14 Canada & Mexico,

\$16 elsewhere)

P.O. Box, 485, Berkeley, CA 94701



Elected Officers

President.....Carol Notaras
2567 Green St., San Francisco, CA 94123
Past President.....Arlene Davis Ingles
157 Monument, Rio Dell, CA 95562-1617
Second Vice-President...Millie Thompson
P.O. Drawer PP, Southampton, NY 11968
Third Vice-President.....Mary Bucholtz
2411 Hendricks Ave., Jacksonville, FL 32207
Secretary.....Ingeborg Foo
1050 Melrose Way, Vista, CA 92083
Treasurer.....Eleanor Calkins
910 Fern St., Escondido, CA 92027

Appointed Chairmen & Directors

Audit Committee.....Marion Paris
4793 Soria Drive, San Diego, CA 92115
Ballot Counting.....Ronnie Nevins
1913 Aspen Circle, Fullerton, CA 92635
Begonian, Back Issues.....Betty Tillotson
3912 Wildrose Way, Sacramento, CA 05826
Book Store.....Anita Ruthenberg
1016 W. Arlington Ave., Fort Worth, TX 76110
Branch Relations.....Douglas Hahn
7736 Stonehill Dr., Cincinnati, OH 45230
Clayton M. Kelly Seed Fund.....Diana Gould
9278 Mapleview Way, Elk Grove, CA 95758
Conservation Committee
Director.....Scott Hoover
718 Henderson Rd., Williamstown, MA 01267
Administrator.....Bruce C. Boardman
Box 249, Roanoke, TX 76262

Convention Advisor.....Barbara Nunes
6025 Greeley Blvd., Springfield, VA 22152
1992 Convention Chairmen
Chairman.....Elda Regimbal
3117 San Juan Dr., Fullerton, CA 92635
Co-chairmen...Mary Sakamoto
Brad Thompson
Historian...Norma Pfrunder
3484 Jefferson St., Riverside, CA 92504
Horticultural Correspondent.....Mae Blanton
118 Wildoak, Lake Dallas, TX 75065
Judging.....Maxine Zinman
Rt. 1, Box 73, Boyce, VA 22620
Long-Range Planning.....Kay Tucker
207 W. Southcross, San Antonio, TX 78221
Nomenclature.....Carrie Karegeannes
3916 Lake Blvd., Annandale, VA 22003
Parliamentarian.....Margaret Lee
1852 31st St., San Diego, CA 92102
Public Relations/Special Advertising
Russ Richardson
1854 Chancery Lane, Chamblee, GA 30341
Research.....Houston Knight
13455 Hadley St., Whittier, CA 90601
Research Librarian...Lorra Almstedt
1965 Celeste, Fullerton, CA 92633
Round Robin.....Pat Sage
1635 Laniotan Ave., National City, CA 91950
Slide Library
Co-Chairman.....Daniel Haseltine
6950 W. Nelson St., Chicago, IL 60634
Co-Chairman.....Charles Jaros
2621 NW 23rd Court, Miami, FL 33142
Speakers Bureau.....Muriel Perz
2943 N. "H" St., San Bernardino, CA 92045

BEGONIAN STAFF

Editor: Tamsin Boardman, Box 249, Roanoke, TX 76262 (817) 481-4305, 481-2169
Nomenclature Editor: Jack Golding
Editorial Associates: Phyllis Bates, Bruce C. Boardman, Kit Mounger, Mary Weinberg
Advertising Manager: Martha Curry, P.O. Box 1232, Weatherford, TX 76086
For subscription, dues, circulation inquiries contact John Ingles, Jr. 157 Monument,
Rio Dell, CA 95562-1617



American Begonia Society
P.O. Box 56
Rio Dell, CA 95562-0056

Address correction requested

Non Profit Org.
U.S. POSTAGE
PAID
Permit No. 3735
Dallas, TX