
THE AZALEAN

Journal of the Azalea Society of America

Volume 7 Number 3

September 1985



AZALEA SOCIETY OF AMERICA

The Azalea Society of America, organized December 9, 1977 and incorporated in the District of Columbia, is an educational and scientific non-profit association devoted to the culture, propagation and appreciation of the series *Azalea* (subgenus *Anthodendron*) of the genus *Rhododendron* in the Heath family (*Ericaceae*).

OFFICERS FOR 1985-1986

PRESIDENT - John U. Rochester, Jr.
(Franklinton, Louisiana)

VICE-PRESIDENT - L. Malcolm Clark
(West Caldwell, New Jersey)

SECRETARY - Valerie Lorenz
(Fairfax Station, Virginia)

TREASURER - Glenn W. Taylor
(Springfield, Virginia)

IMMEDIATE PAST-PRESIDENT - James A. (Tony) Dove, Jr.
(Edgewater, Maryland)

BOARD OF GOVERNORS

AT-LARGE MEMBERS

Terms expiring in 1986

L. Malcolm Clark
August A. Dietz IV
Fred C. Galle
Alice J. Holland
Frank B. White, Jr.

Terms expiring in 1987

James A. (Tony) Dove, Jr.
Charles H. Evans, M.D., Ph.D.
Donald W. Hyatt
Ryon A. Page (chairman)
Russell L. Scott

EX-OFFICIO MEMBERS
(chapter presidents)

CHAPTERS

Brookside Gardens (chartered August 1979)
Deborah Van Vechten, president
Richmond, Virginia (chartered August 1979)
Nancy Swell, president
Robert D. Gartrell (chartered May 1980)
Jerry Goodman, president
Ben Morrison (chartered May 1980)
George S. Switzer, Ph.D., president
Northern Virginia (chartered May 1980)
Charles A. Grandjean, president

Louisiana (chartered June 1981)
John U. Rochester, Jr., president
Ralph W. Pennington (chartered June 1981)
Roy Kelly, president
Tri-State (chartered October 1981)
Fred N. Sievers, president
Mobile (chartered March 1983)
Pat Egan, president
Northwest (chartered October 1983)
Eleanor Stubbs, president
Flame Azalea (chartered May 1984)
James G. Egan, president

HONORARY MEMBERS

Robert D. Gartrell
William M. McCrillis (dec.)
Virginia McCrillis (dec.)
G. Albert Reid

I. Lee Amann
Hugh A. Caldwell
Chevron Chemical Co.
R. A. Comunale, M.D.
Teresa Dunnington
M. Patton Echols, Jr.
Ann and J. Raymond Goza

LIFE MEMBERS

Charles A. Grandjean
Alice and Graham Holland
Janet and William C. Miller III
Nuccio's Nurseries
Helen Schroeder
M. Thais Spencer
Frank B. White, Jr.

Regular membership is open to all interested parties for an annual contribution of \$15.00. Life membership is \$225.00. Members receive *THE AZALEAN* and are eligible for participation in all activities of the Society including those of the chapter with which the member affiliates. For information and membership application, write to the Secretary, Azalea Society of America, P.O. Box 6244, Silver Spring, Maryland 20906.

THE AZALEAN

The Journal of the Azalea Society
of America, Inc.

Dr. Charles H. Evans, Editor

Directors

Art Nancy E. Evans
Business Charles H. Evans, M.D., Ph.D.
Publication Janet B. Miller
Education & Scientific William C. Miller III
Society Activities Robert K. Barry

Advisory Editorial Board

Reid M. Denis
Arthur W. Frazer, Ph.D.
Fred C. Galle
George W. Harding
Sandra F. McDonald, Ph.D.
John W. Neal, Jr., Ph.D.
Ryon A. Page
John U. Rochester, Jr.
Nancy Swell
George S. Switzer, Ph.D.
Frank B. White, Jr.

THE AZALEAN is published during March, June, September, and December by the Azalea Society of America, Inc., P.O. Box 6244, Silver Spring, MO 20906. Additional copies of the current and back issues are \$2.50 each and can be obtained from the Secretary.

Opinions and views expressed in *THE AZALEAN* are those of the contributors or the Editor, not necessarily those of the Society, and are presented to foster a wider appreciation and knowledge of azaleas. Advertisements are presented as a service to our readers and do not imply endorsement by the Azalea Society of America. Advertising and other contributions to *THE AZALEAN* are used exclusively to help defray the costs of publishing *THE AZALEAN*.

Address all editorial and business correspondence to The Editor, *THE AZALEAN*, 9233 Farnsworth Drive, Potomac, MO 20854.

Volume 7 No. 3

September 1985

IN THIS ISSUE:

1985 ASA CONVENTION HIGHLIGHTS

COME ALIVE IN '85—A MOBILE CHRONICLE

Charles H. Evans 49

WHERE IN THE HECK IS SEMMES? (and what difference does it make?)

Russell Scott 51

ODE TO AN AZALEA OR THE BALLAD OF A 'SOUTHERN BELLE'—'PRIDE OF MOBILE'

Fred C. Galle 52

HISTORY OF AZALEAS AT BELLINGRATH GARDENS

Pat Ryan 53

AZALEA PROGRESS CONTINUES

Sidney Meadows 54

EFFECTS OF MEDIA AND FERTILIZATION ON GROWTH OF TWO AZALEAS

Gary S. Cobb, Charles H. Gilliam,
Clyde E. Evans, and James C.
Stephenson 56

PREPARING FOR OLD MAN WINTER

Gary S. Cobb 57

HARDY WHITE AZALEA

Ronald L. Bare 58

"HEA No. 34", A LITTLE KNOWN CONTRIBUTOR TO THE GLENN DALE HYBRID AZALEAS

William C. Miller III 59

ASA NEWS AND VIEWS

THANK YOU FROM MOBILE 60
SOCIETY NEWS

New Classes of Annual Membership 60

Keep Your Address with ASA Current 60

Nominations for Society Governors 60

1986 ASA Convention 60

Cover Design for *THE AZALEAN* 60

Glenn Dale Preservation Project 61

Azaleas, Camellias and Rhododendrons—

by Oerek Fell and Fred Galle 61

Book Review—*GREAT AMERICAN*

AZALEAS, A Guide to the Finest

Azalea Varieties 61

A NEW LOOK AT BRANCH DIE-BACK ON

AZALEAS AND RHODOOENORONS 61

NEW CURATOR OF RHODODENDRON AND

AZALEA COLLECTIONS AT THE U.S.

NATIONAL ARBORETUM 62

AZALEA CALENDAR 62

LETTERS TO THE EDITOR

More on Correct Descriptions of the

Glenn Dale Azaleas 62

1st World Azalea Festival 62

Nutritional Plant Protection 63

Azaleas in Nova Scotia 63

NEW MEMBERS

..... 64

THE AZALEA MART

..... 66

"COME ALIVE IN '85"—A MOBILE CHRONICLE

"The Azalea City" the sign reads as one enters Mobile, Alabama. And the azalea city it was for ASA during March 22-24, 1985, when members from Oregon to Florida and north to New Jersey assembled for the society's seventh national meeting. We came by car, plane, and bus, including as Bob Barry tells it, a "very conservative" contingent of 28 from the middle Atlantic area whose conversation on the bus was "strictly horticultural." But, whatever, the Mobile chapter was ready, and the ASA was treated to the finest southern hospitality.

Pat Ryan and Russell Scott serving as co-chairmen for the convention had everything in place as registration opened on Friday at the Ramada Inn-Airport. Pots of Southern Indica azaleas provided by Tom Dodd Nurseries graced the registration area where Jo Ann and Pat Ryan met each of the more than 110 registrants. Each registrant was provided with a name badge hand-lettered by Mary Scott, helpful reprints on plant care, a reprint of the *Southern Living* magazine article on native azaleas (compliments of Tom Dodd Nurseries), and a map of the commercial nursery industry surrounding the Mobile area. Behind the registration table, a map indicated the home locations of the registrants, and posted adjacent to the map was a dramatic newspaper clipping describing the worse freeze to hit the Mobile area in a century: +3°F on January 21, 1985.

As ASA was gathering, the Mobile azalea season was approaching its glory, and the annual Mobile azalea festival was beginning. Although the freeze had reduced the full splendor of azalea bloom, Mobile still was decked out in a spectacular show of azaleas. The convention opened with a welcome from Russell Scott who, despite the absence of his notes, had it all in order. President John Rochester introduced the society officers and governors in attendance and reviewed the history of the continuing expansion of the society. Bob Barry, chairman of ASA's Satsuki Project, highlighted some of the events leading to the founding of the society and the development of the Satsuki Project. He thanked the members of the Satsuki Project Committee and the nurseries who have been propagating the cultivars in the "Brookside Gardens Satsuki Collection" to make them available for widespread distribution. Bob also expressed the society's deep appreciation to Alice Holland for her major role in founding the Azalea Society of America and untiring service as secretary during the past five years.

Fred Galle reported upon the trials and tribulations of authoring a new azalea book. Conceived four years ago as an intended revision of *The Azalea Book*, the book has advanced to an enlarged and comprehensive resource covering thousands of azaleas. Fred described some of the complexities encountered in determining the origin of a named variety, delayed arrival of material in the mail, difficulties in typesetting, and even computers which deleted as well as added portions of

the index — delet-dele—ad-adaadd-blurp!!! Although Fred was unable to provide a printed edition of his book at the convention he treated everyone to a sample of his wit and humor with a recitation of "Ode to an Azalea." [see page 52.]

The opening session concluded with Pat Ryan explaining that the buses for the tour would leave at 8:30 the next morning and that anyone arriving at 8:31 "had had the tour." With that advice we adjourned to the reception hosted by the Mobile chapter, the highlight of which was Mary Scott's cake, decorated with azalea flowers she had made from hard icing and with lettering made of white chocolate. Mary's admonition as she served—"the flowers are edible but please do not eat the stamens" will long be remembered.

Saturday morning dawned with sunny skies and springtime warmth. Following a continental breakfast and conversation, the buses, all three of them, departed at 8:30, as Pat promised, for Bellingrath Gardens. The azaleas were unfolding into full bloom at Bellingrath—thousands of Kurumes and Southern Indicas. Predominant at Bellingrath, as elsewhere in the Mobile area, were 'Christmas Cheer', 'Hinode-giri', 'Coral Bells', and the Southern Indica famous five—"Formosa", 'Mrs. G. G. Gerbing', 'President Claeys', 'Pride of Mobile', and 'Judge Solomon'. Where else but in Mobile can one see such an impressive mass of Southern Indica azaleas.

From Bellingrath, we traveled to the Mobile Botanical Center where everyone enjoyed a box luncheon and a pleasant interlude exploring the azalea and other plants being developed at the center with assistance from Tom Dodd, Jr. and Pat Ryan. The setting was just right for the members assembled from ten of ASA's eleven chapters to exchange azalea information.

Saturday afternoon, Bill Dodd, Tom Dodd, Jr., and Tom Dodd III guided the convention group through a tour of several of the large commercial nurseries in the Semmes area, which is just to the northwest of Mobile. Semmes is one of the largest commercial azalea and ornamental plant growing areas in the United States. First stop on the tour was Paul Dodd Nursery, where Mark Dodd helped guide us through the propagating and growing areas. Bill Dodd then assisted in showing us the facilities of Tom Dodd Nursery, after which we visited Blackwell Nursery where Ogden Blackwell explained the operation of his nursery. Each nursery concentrates upon one or more aspects of azalea production for the commercial nursery greenhouse, landscape, and/or florist market. Combined, these three nurseries take approximately three million cuttings annually and employ several hundred people on an area of greater than 300 acres.

Azalea varieties and growing techniques vary from nursery to nursery according to their market. Common to the Semmes area, however, are the emphasis on Kurume and Southern Indica varieties and the growing

of azaleas in pots in large, open, unprotected areas on the ground made possible by the favorable climate over much of the year. Red and pink varieties are most popular in the commercial trade, but white, purple, and variegated forms and other Kurumes, Southern Indicas, Pericats, Glenn Dales, etc. are also grown. Cuttings are often propagated under timed sprinklers without misting and in large polyethylene covered quonset type structures. A mixture of 60 percent pine shavings and 40 percent Canadian peat moss is a popular potting mixture, and plants are often fertilized with a top dressing of nine to twelve month slow release fertilizer. Shaping of the plants is accomplished by a variety of methods, including mechanical shearing followed by the use of chemicals such as Offshoot to control the shoots missed by mechanical action. Plants are shipped largely via truck to markets extending from Georgia and Florida to Texas, Ohio, Maryland, and further out.

Following the Semmes nursery tour the conventioners returned to the Ramada Inn-Airport for a plant sale and social hour. During the latter, the Board of Governors met and reelected John Rochester and Mal Clark as president and vice-president respectively, for 1985-1986. Glenn Taylor was reappointed treasurer. Alice Holland stepped down as secretary and Ryon Page was reelected as chairman of the Board.

Saturday evening was highlighted by the annual convention dinner, business meeting, convention address, and, for 1985, a special auction arranged by the Mobile chapter. The invocation was given by Dr. Larry Brown. The dinner was a superlative buffet featuring shrimp creole, Mobile style fried chicken, and roast steamship round of beef. At the annual meeting, the amendments to the by-laws and the nominees to serve as governors for 1985-1987 previously announced in *THE AZALEAN* were unanimously approved. Sidney Meadows, manager of Flowerwood Nursery in Mobile, delivered the convention address dealing with the development of commercial azalea production in the Mobile area.

The convention address was followed by a spirited auction both in a programmatic as well as a literal sense. Frequently the highlight of a meeting or event is the unexpected, and the 1985 ASA Convention auction is a candidate for honors this year. Russell Scott opened the auction with a tribute to the late George Beasley and asked our indulgence while he attempted to conduct what George did so well. At that point, after a quick conference at the head table and to the surprise of all, Nels Nelson informed us that after a three decade hiatus from professional auctioneering he would help Russell with the task at hand. And thus the auction was on, with azaleas from where'er you could imagine, including New Zealand. One after another, 'golden throat' Nels transferred a valued azalea to the highest bidder with assistance in the distribution from Tom Henrichs. Nels even auctioned off a triad of Fred Galle's azalea wood carvings in the shapes of mushrooms. The evening concluded with a distribution of the lovely Belgian-

Indica azalea table centerpiece plants, which had been provided by Blackwell Nursery. Also distributed were three books describing the history of Bellingrath Gardens, provided by the Bellingrath Gardens and Home. Every member in attendance also received as they departed an azalea branched transplant as a gift from the Mobile convention committee.

The activities, however, did not end with Saturday evening. Bright and early Sunday morning, we gathered for continental breakfast and then off again for a bus tour of the Mobile Azalea Trail and historic Mobile. There is no way to adequately describe to those not present the beauty of the azaleas and fellowship of the morning of March 24. The little insights into everyplace and at every turn provided by our tour guide, Sue Lyons, are indelibly etched in the minds of those on the tour. We will long remember the marvelous live oaks, spanish moss, and tree ferns, especially the nearly 300 year old live oak with its 300 foot spread and the splendid azalea display at Ogden Shropshire's home garden.

We next rode through some of the historic Mobile districts with their varied azalea plantings and visited the Velma Croom home, Oakleigh and the Richards-DAR house. Who will forget the spiced tea and Ruth Caldwell playing "Until We Meet Again" on the 1865 Weber piano in the hall of the Richards-DAR house?

The ASA deeply appreciates the efforts of the members of the Mobile chapter, Tom Dodd Nursery, Paul Dodd Nursery, Blackwell Nursery, Bellingrath Gardens, the staff of the Ramada Inn-Airport of Mobile, and all the unnamed others who contributed to the highly successful 1985 annual meeting.

For those who did not have to catch a plane or otherwise head for home immediately after the end of the Mobile tour, an invitation was issued by Mary and Russell Scott to visit their home and nursery. About forty people responded and spent a delightful afternoon on the patio. Mary served cake, cookies, soft drinks and toasted home-grown pecans while Russell showed the visitors around the greenhouses. Russell made available plants to anyone who desired them and quite a few were selected from the approximately 500 varieties on hand. The exuberance of the conversation and the beautiful sunshine and balmy temperature contributed to making it a delightful ending for the weekend.

The bus group from the middle Atlantic region left Mobile early Monday morning and traveled to Callaway Gardens at Pine Mountain, Georgia, for a quick tour. A highlight of the stop was a visit to Betty and Fred Galle's home in nearby Hamilton. After an overnight stay in Atlanta, where a number dined at Anthony's (a gastronomical delight but detrimental to the pocketbook), the bus arrived in the Washington, D.C. area soon after 8:00 p.m. Tuesday night discharging a discharged group. We understand, however, that after a couple of days of rejuvenation most were ready to go again.

Yes, this and much more is the way it was at "Come Alive in '85". We missed those of you who were unable

to attend. As an ASA member, you want to know more about azaleas—where they come from, how to grow and display them, what new varieties are available, and which are the best for your area. That's what the Azalea Society of America is all about—people sharing their knowledge of azaleas with one another. Join us at the

eighth national ASA meeting in the Spring of 1986. Details will for forthcoming in *THE AZALEAN*.

Charles H. Evans
Potomac, Maryland

WHERE IN THE HECK IS SEMMES? (and what difference does it make?)

The attendees at the recent 7th annual meeting of the Azalea Society of America can at least answer the first question. Most, of course, also realize the impact of the area on the rest of the country.

Semmes, Alabama is a small town (population approximately 1200) 15 miles northwest of Mobile, Alabama. There is one branch bank, a post office, a hardware store, two diners, a couple of used car lots, and a multitude of nurseries. The area has been called the "Nursery Center of the South". There are about 150 registered nurseries in the Semmes area.

In the early part of the century, when orange and satsuma trees were being planted in great numbers in Mobile County, the nurseries in the area began to develop. The friable, sandy loam soil lent itself to good root formation and top growth by providing good drainage but enough water-holding capacity to ensure plant viability. However, hard freezes occurred in the late 1920's and early 1930's, similar to our freezes of the last three years, and the citrus production was decimated, never to recover.

The nursery industry then turned to growing ornamentals, primarily azaleas and camellias, and has continued to grow unchecked. As elsewhere at this time, the plants were field-grown and sold balled and burlapped. This process was highly labor-intensive, but with the easy availability of comparatively cheap labor the growing process could continue uninterrupted.

With the advent of World War II, everything changed. Labor either was absorbed into the armed services or into shipyards and defense industries. No longer, and never again to be seen, was the plethora of "stoop labor" necessary for hundreds of acres of row crop shrubbery. Following the lead of West Coast nurseries, the Semmes area converted over a period of several years to container production, and with the advent of soil-less potting mixtures and chemicals, the need for labor has diminished greatly in comparison to the continued increase in production levels.

Every year, millions of azaleas and other shrubs are shipped from Semmes to three compass points, West, North and East. They are not shipped south, as it is hard to grow plants in the Gulf of Mexico. Texas, Oklahoma, Missouri, and Arkansas absorb trailer truck loads of plants annually. Georgia, the Carolinas, and further up the East Coast also use plants from this area.

In the spring a number of discount stores use azaleas as a leader to promote sales. A logical question is what is the source of small azaleas in the hundreds of thousands necessary to fill this need. A great number of these come from small individual nurseries in Semmes who specialize in growing azaleas, not by name but by color, i.e.: white, pink, and red. These are normally sold at a slightly reduced price, since they are sold in volume and frequently out of pots and "packed" in crates and cartons. With these sale-leader plants to discount and variety stores and the eighteen-wheeler loads to garden centers throughout the southern (and some northern) areas of the United States, you can see the end result of the Semmes nurseries as you travel. It would be a very small community where there were no azaleas planted in the landscaping of homes that did not start out their life in Semmes, Alabama.

Russell Scott
Mobile, Alabama

Ode to an Azalea or the Ballad of a 'Southern Belle' — 'Pride of Mobile'

This is no 'Illusion' but a tale of 'Late Love' about a 'Pink and Sweet', 'Plum Beautiful', 'Petite', 'Sweet Sixteen', 'Dainty Lady'.

Our hero 'Big Joe', a 'Cheerful Giant', was 'Spellbound'; by this 'Golden Gal' and called for her hand. He would climb (Girard's) 'Mount Saint Helens', 'Mount Seven Star', swim 'Lake Michigan', 'Lake Erie', and 'Lake Ontario' and 'Come a Runnin' over 'Colorado' for his 'Heart's Desire', his 'Ladylove', if there was no 'April Showers', 'Snow Flurry's with 'Pink Ice' or 'Rivermist'.

Our 'Pretty Girl' was a 'Dazzler', a 'Glamour Girl'. 'Big Joe' (syn. 'Kentucky Colonel' or 'David Crockett' alias in 'Chicago' 'Pistol Pete') came in his 'Dixie Red' 'Red Blaze'r with a 'Red Cap' and 'Red Feather', with 'Twenty Grand' and 'Great Expectations', bearing gifts of a 'Lollipop', 'Gum Drop's, and 'Popcorn'.

His 'Pastel Queen' was no 'Iceberg' or 'Jezebel' but 'Totally Awesome', a 'Pink Jewel', a true 'Pink Gem' in her 'Iridescent' 'Pink Party Dress' (also had a 'Red Party Dress') and 'Pink Ruffles', was 'High Fashion', a 'Pink Dream', you might say a 'Pinkadilly'. Her 'Red Slippers' matched her 'Cherry Ripe' 'Soft Lips', 'Redder Than' and 'Redder Yet'. A 'Debutante' in her 'Filly Billy' 'Easter Bonnet' with a 'Fringe on Top' and a fragrance of 'Summer Perfume' of 'Arpege' and 'Honeysuckle'.

Joe, holding his 'Honey's Lovin Arms', had 'Hot Vibes' as they went to the 'Red Mountain' 'Delicatissima' with 'Honeydew'. Our 'Blushing Maid' had great 'Decision's of a 'Double Dip' 'Frigid' 'Strawberry Ice', 'Chocolate Ice', 'Orange Delight', or 'Parfait' but 'Choice Cream'ed a 'Pink Sherbet' with 'Ribbon Candy'. Joe's 'Decision', remembering 'Mother's Day', was a 'Lemonade' and a 'Cream Puff' instead of 'Pink Champagne' and 'Port Wine'.

The 'Good Times' of this 'Day Dream' 'Golden Sunlight' 'Spring Day' could not end without a 'Showboat' ride at 'Showtime'. They got the 'Rhythm' and danced the 'Rumba', 'Tango' and the 'Hooch-Bah'. They left 'Spellbound' at 'Waltz Time' under a 'Pink Cloud' and the 'Evening Star'. Our 'Pink Lady' was 'In the Pink' with a 'Final Blush' and 'Pink Dreams' of (Nuccio's) 'Happy Days' as a 'June Bride'. Our 'Boldface' 'Fiery Boy's 'Folly' words were 'Flat Out' 'Gosh' ('I'll be Damned') with a 'Fireglow', 'Hot Ginger', and 'Dynamite'.

Fred C. Galle
Hamilton, Georgia

HISTORY OF AZALEAS AT BELLINGRATH GARDENS

The story of azaleas at Bellingrath Gardens began some years before the widespread recognition of Bellingrath Gardens as a horticultural showpiece. The inception of the Bellingrath azalea story actually was at the city home of Mr. and Mrs. Walter D. Bellingrath and resulted from the couple's interest in Mobile's Azalea Trail.

Mrs. Bellingrath, a native Mobilian, was so fond of azaleas that she overplanted the grounds of their urban home and subsequently was obliged to move many azaleas to Mr. Bellingrath's rustic fishing camp on Fowl River. But let's start at the beginning:

Mr. Walter D. Bellingrath was born in Atlanta, GA, and at the age of 10 he moved with his family to Castelbery, AL. In 1903 he and his brother, Will, purchased the franchise for the Mobile Coca-Cola Bottling Company and Walter assumed full management of the Mobile Company in 1904. Starting with next to no sales, he built the plant into one of the South's most successful Coca-Cola franchises.

During the early years of his life in Mobile, Mr. Bellingrath was an active fisherman on the rivers, streams and bays of the area. One of his favorite fishing sites was the East Fowl River area, about 25 miles south of Mobile, at the Lisloy Hunting and Fishing Club located on a bluff overlooking the water, one and one-half miles west of Mobile Bay.

Mr. Bellingrath began purchasing the property surrounding Lisloy Club in 1917 and established a private camp called Bellecamp. It was in those early days of Bellecamp that Mrs. Bellingrath brought to the site on Fowl River the surplus plants from their town house in Mobile and planted them among the Live Oaks.

During the 1920's, Mr. and Mrs. Bellingrath traveled extensively throughout Europe visiting gardens obtaining additional ideas for Bellecamp. Sometime in the early 1920's, Mr. George B. Rogers, a local architect, was retained to lay out the plans for the garden now known as Bellingrath.

In the archives at Bellingrath Gardens are some of Mr. Roger's early renditions of his plans. Many are scale drawings of plantings to contain plants that were purchased from old nursery fields, plantations and homes in and around the Mobile area. The Bellingraths and Mr. Rogers were quick to observe specimen plants of tea olives, camellias, azaleas and other shrubs and to buy them for use at Bellecamp.

Crews were then dispatched to dig, ball and burlap the designated plants and transport them back to Bellecamp. Old photographs, taken in the 1920's and 1930's, show plants being hauled by truck and box car.

The Gardens were opened to the public in the Spring of 1932. When they were opened, the named was then changed to Bellingrath.

In 1935, the Bellingrath Home and Rose Garden Complex, including a conservatory, were completed and the Bellingrath's made the home their permanent residence. The years before World War II saw more development in the completion of the Carriage House with guest rooms upstairs and a small building beside the lake for a Chapel.

The climate, natural acidity of the soil and lack of disease organisms favored the large flowered plants of the Southern Indian Hybrids and the smaller flowered Kurume azaleas in the Mobile area. In the 1920's and 1930's Mobile grew as a town noted for its famed Azalea Trail and also for its many plants, particularly azaleas that were grown in the area. The unincorporated area of Semmes, AL., became the mecca for this industry which to this day still is noted for its large scale commercial production of azaleas and other plants. As Mobile's Azalea Trail grew in popularity, so has that of Bellingrath Gardens, each becoming tremendous drawing cards to the area for many during the flowering season in the early spring.

The Bellingrath's did not want a botanical garden with labels but a garden where people could come to enjoy the pleasing effect of a garden for its beauty and design. There are more than 250,000 azalea plants in the gardens at Bellingrath representing some 200 different varieties of plants. The gardens are attended by some 35 to 40 assistant gardeners with a staff of four horticulturists in charge.

Not only is Bellingrath Gardens noted for its azaleas but over the years it has become a year round garden with the additions of many flowering plants throughout the year. The displays at Bellingrath include camellias in January and February, tulips and daffodils in February and March, azaleas, dogwoods and other flowering shrubs in March and April with thousands upon thousands of flowering annuals lasting into the summertime to be followed by tropical flowering and foliage plants into early fall followed by cascade chrysanthemums in November and by poinsettias at Christmas with the camellias beginning their bloom outside to end one year and usher in the new.

Anytime that you travel to the "CHARM SPOT OF THE DEEP SOUTH" you will find something at Bellingrath Gardens and Home in bloom; a place where you can relax among nature's splendor and enjoy a legacy left to the world by Mr. and Mrs. Walter D. Bellingrath.

Pat Ryan
Theodore, Alabama

AZALEA PROGRESS CONTINUES

Sidney Meadows
Mobile, Alabama

(Keynote Address presented at the Seventh Annual Meeting of the Azalea Society of America in Mobile, Alabama on March 23, 1985.)

Today we all take it for granted that spring will be ushered in with a mass of beautiful blooming azaleas everywhere, because it always happens. Even after the most severe winters of the century, as has been the case for the past two years. This has not always been true.

I grew up in a rural south central Louisiana community where there were no azalea blooms in the spring, because there were no azaleas. Azaleas did not enter my world until the spring of 1938 in Lafayette, Louisiana when I was a freshman at the University of Southwest Louisiana. Azaleas grew well in Lafayette, and there were enough young plants growing around town to put on an unforgettable showing of blooms. It was absolutely breathtaking for one who had never seen an azalea before. Little did I realize at the time the part these beautiful blooming plants would play later on in my life.

The next four years were devoted to working toward a B.S. with a major in Horticulture in 1941 and another year was spent in graduate school at L.S.U. studying plant pathology. After that were three long years getting World War II behind us. The war was over in August of 1945, and it took the remainder of the year to return home, be separated from the service, and hopefully find my place in the world of horticulture, already three years behind schedule.

The most significant thing about the war, other than winning it, was getting to know a wonderful man by the name of Greg Smith, owner of Flowerwood Nursery in Mobile, Alabama. Our working together, along with our common interests, cemented a relationship that has endured ever since.

As a result of our service association and a common interest in horticulture, I was offered a job at Flowerwood Nursery. The offer was accepted, and on January 1, 1946, work was begun propagating and growing azaleas and camellias for Flowerwood. At that time, these two plants represented their total production. Needless to say, my knowledge and training were not equal to the undertaking, because the first year's assignment was to produce one million azalea liners and 500 thousand camellia liners. The Flowerwood people were understanding and helpful, so the cuttings were rooted. Time and practice gradually overcame the hazards of the new personnel that had been recruited at the war's end.

During that era of the late forties, azaleas and camellias dominated the interests of gardeners and retail nurseries throughout the southland. Many retail nurseries traveled under the name of "Someone's Azalea and Camellia Nursery". Most wholesale growers in the Mobile area had either their total focus or certainly their

main focus on producing azaleas and camellias. This azalea and camellia honeymoon continued until the big freezes of 1950 and 1951. As a result of the severe weather, many nurseries increased their product line to cover a wide variety of general ornamentals.

Even with this diversification of the fifties, the interest in azaleas continued to grow, and their numbers dramatically increased. In 1961-1962 more severe freezes were to haunt Mobile area nurserymen. By this time a large percentage of the production had veered into container growing. The winter of 1961-1962 taught everyone that zero degree weather could kill the root systems of a whole host of varieties of broadleaf ornamentals. Much to everyone's surprise and delight, the root systems of azaleas fared very well through the freezes.

This encouraged many nurseries to focus most or all of their attention on container production of azaleas. This practice was not only taken up in the Mobile area, but it has extended to many other areas throughout the south. Many nurseries have done quite well growing azaleas exclusively for the garden center and florist trade.

Since my entry into the azalea world in 1946, many beautiful azalea cultivars have been selected from mutations and seedlings. The biggest trap a wholesale grower can fall into is to try to grow every beautiful azalea that comes along. Azalea customers generally fall into two classes. First you have the collectors who are interested in the best of the new varieties. There is great excitement and intrigue in exploring the new varieties others have introduced, and there is always the possibility of a quality introduction of their own. It takes a certain type of specialized grower to respond to this need. Second, there is the general public which is interested in the beauty and effect that azaleas bring in a general way. They will usually stick to tried and proven varieties in their gardening. To cater to this group, a grower will do well to stick to the variety names that have become household words.

Flowerwood fits into this last group. Over the years, for the most part, we have stayed with the tried and proven varieties of azaleas. We grow approximately 60 varieties that include Kurumes, the famous five Belgian-Indicas ('Formosa', 'Pride of Mobile', 'George Lindley Tabor', 'Judge Solomon', 'Mrs. G. G. Gerbing'), Glenn Dales, and other varieties. As new ones of merit and acceptance show up, they are included in the program. At the same time, some of the old timers are drifting into obscurity, and they are dropped. This is a continuous evolution process and a fairly slow one. There are good examples of this slow process. 'Pink Ruffles' is an excellent azalea with much to offer the world, and it took about 20 years to emerge into its rightful place in the limelight.

In the process of growing many ornamentals in wholesale production, one can pour on the fertilizer and

water and do a pretty good job of getting there early and with the most. This is not the case with azalea culture. Azaleas are best grown under conditions where they are allowed to grow in the summer at a pace that ensures they will be winter hardy and healthy and bloom in the spring. The rush act can disrupt the whole system and performance.

So much success in the azalea world is dependent on putting the right plant in the right place and giving it the proper care. Some azaleas are root rot resistant, others are not. Beginners should beware of those plants prone to succumb to root rot and should they decide to wade into those treacherous waters, then they should be aware that stress conditions in the plant is where it all begins. Much has been said about drainage in azalea culture, but drought conditions can be just as big a culprit. Excess fertilizer can also cause problems. If you make it a practice of walking around your azalea gardens to visually evaluate their condition, considering among your criteria, the looks of the leaves, the best time to evaluate the latter is between sundown and dusk. That is the time when the least light reflections are around to distort the picture.

It is well to remember that fertility requirements for azaleas are relatively low compared to hollies and such. The slow-release fertilizers that have appeared on the market in recent years have done wonders for azalea nutrition. Whereas fertilizer needs of azaleas are low, it is a year round requirement. Naturally it is less in the fall and winter, but it is still a necessity.

Throughout the southland, recent records show that azaleas as a group are responsible for more sales than any other plant. Through mutations and hybridizing, many new varieties have appeared on the scene in recent years. New varieties have continued to add versatility to the garden in color, shape, size, and season of bloom. All of this new adventure has added new excitement into azalea gardening. The possibilities are virtually unlimited, and this intrigue has captured the interest of many gardeners.

Everyone is gifted with a certain amount of inclination to grow something, and this interest has made gardening the number one pastime in America. Interest in azaleas has continued to grow and thus their position in the gardening world has increased. This expanded interest is the result of two things. First, there are the virtues of the plant itself. The azalea is almost unsur-

passed in its display of beauty when in bloom in the spring and as a handsome evergreen the remainder of the year. Secondly, azalea interest has continued as a result of the boosters in a community. As you travel around the southland, you will find your greatest concentrations of azaleas are where you have people energetically devoted to them.

Mobile is world renowned for its azaleas, because people like the Bellingraths, Longs, Smiths and Blackshers to name a few, chose to develop beautiful azalea gardens and promote the cause of azaleas. Longview, Texas is loaded with azaleas because Leonard Riggs, a landscape architect has spent 55 years including a generous planting of azaleas in every garden he has landscaped. Mr. Lambert promoted azaleas and beautiful gardens in Shreveport, Louisiana. Mr. Cato did the same thing for Bainbridge, Georgia. There really is not any big reason why Muskogee, Oklahoma should have one of the most beautiful azalea gardens in the south except for one man, the late Art Johnson. He led the parade, but he had plenty of help throughout the community and the results are in the azalea gardens, to everyone's pleasure. In nearby Tulsa, Joan and Dave Parrish are operating a retail nursery by the name of Azalea Gardens. For all practical purposes, azaleas are their only product. Their presence will do much to assure azaleas a place in that town.

Certainly we must all promote the beauty of azaleas. At the same time, we must also spread the word about good cultural practices. When people succeed with their azaleas, they will continue. In addition, their neighbors will be convinced about azaleas, and this influence can continue until the whole neighborhood is converted and you end up with a beautiful community.

Today we have many azalea cities around. Behind every one of them you will find enthusiastic people, so surely the best is yet to come.

Sidney Meadows has been manager of Flowerwood Nursery in Mobile, Alabama since 1950. He started rooting a million azalea cuttings annually in 1946 and reached a peak of three and one-half million. During his tenure, Flowerwood has grown from 25 employees in 1946 to more than 300 today with four wholesale growing locations. Sidney has been president of the South Alabama Nurserymen's Association. His many local and national honors including being named the Mobile Jaycee's 1983 Boss of the Year and induction into the Hall of Fame of the American Association of Nurserymen.

EFFECTS OF MEDIA AND FERTILIZATION ON GROWTH OF TWO AZALEA CULTIVARS

Gary S. Cobb, Charles H. Gilliam,
Clyde E. Evans, and James C. Stephenson
Mobile, Alabama

Objective and Procedure: Selection of an effective growing medium and fertilization program are essential for production of container-grown woody ornamentals. To evaluate media and fertilization effects, uniform 'Red Wing' and 'Hexe' azalea liners were potted April, 1981, in one gallon (trade) plastic containers. Four media representative of types used in south Alabama were evaluated: milled pine bark-peat (2:1, v/v); milled pine bark-shavings-loam (4:3:1, v/v/v); milled pine bark-sandy clay (5:1, v/v); and peat-shavings (1:1, v/v). Media were amended with dolomitic limestone, eight pounds/cubic yard; regular superphosphate, two pounds/cubic yard; gypsum, two pounds/cubic yard; and Micromax, one and one-half pounds/cubic yard.

Three slow-release fertilizers were incorporated at manufacturers' recommended rates: SREF 20-4-10, ten pounds/cubic yard; Osmocote, 18-6-12, eight pounds/cubic yard; or Sulfurkote 24-4-10, six pounds/cubic yard. Nursery Special 12-6-6 was topdressed in six monthly applications, one teaspoon/pot/month. In September half of the plants in each slow-release treatment received a second fertilizer application, surface applied at the initial rate. In June, 1982, top dry weight and root ratings were taken.

Results and Discussion: Of the four media tested, it appears that greatest plant top growth occurred with pine bark-peat (2:1, v/v) (see Table 1). Greatest top dry weight occurred with fall fertilized plants in pine bark-peat, regardless of the slow-release fertilizer used.

Table 1. Effects of slow-release fertilization and media on growth of 'Red Wing' azalea.^a

Media	Top dry weight, grams ^b						Nursery Special 12-6-6 6 appl. monthly
	SREF 20-4-10		Osmocote 18-6-12		Sulfurkote 24-4-10		
	-FA	+FA	-FA	+FA	-FA	+FA ^c	
Pine bark-peat (2:1, v/v)	46	72	47	76	17	62	29
Pine bark- shavings-loam (4:3:1, v/v/v)	41	64	36	62	17	58	27
Pine bark- sandy clay (5:1, v/v)	46	63	28	57	12	52	22
Peat-shavings (1:1, v/v)	40	64	48	50	14	58	18

^a'Red Wing' and 'Hexe' responded similarly to the media and fertilization treatments.

^bDry weight data, June 24, 1982.

^cFA = Fall application.

Growth was similar when the three slow-release fertilizers were incorporated initially and reapplied in September. When no September fertilization was made, growth was similar in the four SREF amended media but less with the pine bark-sandy clay medium amended with Osmocote or Sulfurkote. Growth with Nursery Special 12-6-6 was less compared to two applications of slow-release fertilizer.

Fall application of slow-release fertilizer resulted in a more vigorous flush of growth in spring, 1982, suggesting that a fall application may alleviate the need for early spring fertilization. This would shift the work load to a time when nurserymen are less busy.

Best root growth occurred in the pine bark-peat or pine bark-sandy clay medium (Table 2). Neither slow-release fertilizer type nor number of applications affected root development. With Nursery Special, root growth was consistently poor.

Table 2. Effects of slow-release fertilization and media on root distribution of 'Red Wing' azalea.

Media	Root rating ^a						Nursery Special 12-6-6 6 appl. monthly
	SREF 20-4-10		Osmocote 18-6-12		Sulfurkote 24-4-10		
	-FA	+FA	-FA	+FA	-FA	+FA ^b	
Pine bark-peat (2:1, v/v)	1.1	1.1	1.4	1.3	1.5	1.3	1.9
Pine bark- shavings-loam (4:3:1, v/v/v)	1.3	1.5	3.0	2.4	2.1	1.5	3.1
Pine bark- sandy clay (5:1, v/v)	1.0	1.1	1.9	1.6	2.0	1.3	2.0
Peat-shavings (1:1, v/v)	1.8	1.3	2.5	2.5	2.3	1.5	3.4

^aRoot rating, June 24, 1982, on a scale of 1 to 5 with 1 representing complete root ball coverage and 5 representing very few peripheral roots. ^bFA = Fall application.

These results show 'Red Wing' and 'Hexe' azaleas can be produced satisfactorily in a number of media with several different slow-release fertilizers. The greatest plant growth occurred in pine bark-peat medium; however, considering media costs, it may not be the most economical choice, since plants grown in other media were almost as large. Reapplications of slow-release fertilizer in September resulted in a vigorous spring flush of growth but did not increase root growth as measured by a visual rating.

From the Field Day Bulletin, Auburn University Ornamental Horticulture Field Station, Mobile, Alabama, 1982, and distributed at the 1985 convention of the Azalea Society of America.

PREPARING FOR OLD MAN WINTER

Gary Cobb
Mobile, Alabama

Severe winters during the past few years have focused attention on the susceptibility of container-grown nursery stock to cold injury. Options available to nurserymen range from the security of an enclosed heated structure to the vulnerability of completely exposed crops. Selection of freeze protection strategies depends on the crop, geographical location, economics, and the grower's philosophy.

Most nurserymen growing woody ornamentals in the Deep South overwinter their crops in relatively exposed locations and depend on seasonal acclimatization (the transition of plants from a tender to a hardy condition) and generally mild temperatures to get them through the winter months.

Severe crop damage during recent freezes has induced many growers to develop plans to minimize injury during unexpected or extreme winter weather. This can be difficult since each freeze is a unique event. Variations in freeze duration, temperatures attained (ambient and dew point), weather conditions before, during, and after the freeze, and the degree of crop, acclimatization contribute to the complexity of devising and implementing effective winter protection strategies. Differences in hardiness among crops and economic limitations must also be considered. While cultural practices will not affect genetic hardiness, they can influence seasonal acclimatization and crop microclimates and thus reduce winter injury.

Winter Injury

Winter injury can be divided into "rapid freeze" and "slow freeze" damage. Rapid freezing is most detrimental, usually resulting in intracellular ice formation, destruction of cell organization and tissue death. Crops are most susceptible to rapid freezing during the late fall and early spring when cell hydration (water content) is high and winter acclimatization transient. Acclimatized hardy plants, including most woody ornamentals, tolerate sub-freezing temperatures, extracellular ice formation, and cell dehydration. However, as temperatures approach lethal levels, cell membrane permeability is altered and injury occurs. Such "slow freeze" damage is typically a mid-winter occurrence, and symptoms may be slow to develop.

While the freezing process is similar in roots and shoots (foliage and stems), roots of most woody ornamentals are substantially less cold hardy; thus, the roots of plants grown in containers are more susceptible than the shoots to freeze injury. Protection of susceptible tissues from lethal temperatures, reduction of shoot desiccation (drying), and encouragement of winter acclimatization are primary objectives in winter protection strategies.

Methods of achieving these goals include modifying

fertilization, pot jamming, establishing windbreaks, mulching, or even using temporary structures for protecting selected crops. Irrigating should also be considered as an economical and readily available means of moderating winter temperature extremes. The role that irrigation can play in winter protection depends on the characteristics of the freeze and the degree of acclimatization of the crops.

Irrigation Practices

The freezing rate of a container root ball is strongly influenced by the water content of the growth medium. A growth medium with high moisture content will decrease in temperature more slowly and remain at the freezing point substantially longer than one with lower moisture content. This buffer against sub-freezing temperatures can be critical during short duration freezes, since slow cooling helps maintain non-lethal temperatures in the root zone. With containers set on bare soil, increased heat transfer from moist soil medium will also help slow the temperature drop in the growth medium. Thus, irrigating to container capacity prior to freezing will provide limited cold protection by moderating temperatures in the root environment. Freezes of short duration have the greatest potential for significant temperature moderation.

Irrigation practices may also limit "slow freeze" damage by reducing desiccation injury. While there is some evidence that dehydrated tissues may be more hardy than hydrated ones under "rapid freeze" conditions, desiccation is more serious during "slow freeze" conditions. To combat desiccation irrigating prior to freezing is generally recommended. This may result in greater resistance to desiccation. It will certainly slow the cooling of the growth medium and insure a readily available water supply for rehydration after thawing. Irrigating after a freeze will speed the warming of the plants and root balls and will minimize desiccation, particularly during windy or sunny weather.

Constant overhead irrigation during severe cold results in icing-over accompanied by considerable and sustained heat gain. Observations of woody ornamentals in commercial nurseries and in limited research trials suggest substantial cold protection with constant irrigation, but limb breakage and excessive root ball moisture (low oxygen) may occur. While there is no evidence to support rapid thawing (with irrigation) of iced-over plants, it is a common practice.

In summary, irrigating prior to potentially damaging winter weather will slow the freezing of the roots and increase water content in the plant. Irrigating after an injurious freeze speeds the warming of the plant and reduces desiccation. Irrigating during the freeze may be beneficial but additional research is needed before this practice should be considered.

While the full potential of irrigation in cold protection is not completely utilized or even understood, it is recognized that root zone temperatures can be moderated and tissue desiccation reduced by timely irrigation. Alone or even in combination with other practices, irrigation may not provide sufficient protection to exposed

crops during severe or sustained cold weather, but it could provide the margin of safety needed under less extreme conditions.

From the *Florida Nurseryman*, December 1984, pp. 5-6, and distributed at the 1985 Convention of the Azalea Society of America.

HARDY WHITE AZALEA

Ronald L. Bare
Washington, D.C.

The U.S. National Arboretum, a leader in the introduction of new and unusual plant materials, has obtained a white-flowered form of *Rhododendron yedoense* var. *poukhanense* (Lev.) Nakai form *albiflora* Ohang. This unusual azalea was obtained by John L. Creech, Director Emeritus, and Sylvester G. March, Chief Horticulturist of the National Arboretum, while leading a tour for The International Dendrology Society throughout Japan in 1980. The white form of *R. poukhanense* was collected from the Watanabe Nursery, Gotemba, Japan, which is located at the base of Mt. Fuji. Mr. Watanabe is a cherry specialist, noted for his selections of *Prunus incisa*, as well as other collections of rare and unusual plants. Included in Watanabe's collection are a white-flowered form of *R. mucronulatum* and various color selections of *R. komiyamae* (*tosaense*). Several other noteworthy ornamentals observed at the nursery were a fragrant, dark purple flowered form of *Wisteria brachybotry* and *Deutzia crenata* var. *nakaiana*, an excellent dwarf groundcover specimen. The two veteran plant collectors seized the opportunity to collect several of these unusual plants for the Arboretum's collections and for introduction into the western nursery trade.

Rhododendron poukhanense, the Korean Azalea, is one of the hardiest of all evergreen azaleas. Its native range extends from the southern island of Cheju, Korea, northward into southern and central Korea. The typical *R. poukhanense*, as described by the Japanese botanist, Jisaburo Ohwi in *Flora of Japan* (English translation 1965), is a brown-strigose shrub one to two meters high. The leaves are narrowly oblong or broadly oblanceolate, 3 to 8 cm. long by 1 to 3 cm. wide. They are acute at both ends, loosely strigose on the upper side, densely so beneath and especially on the nerves. The petioles are 1 to 5 mm. long. The flowers are pale rose-purple, terminal, one to two in umbels. The pedicels are 7 to 10 mm. long. The calyx is five-lobed, the lobes being nar-

rowly ovate, subobtusate to subacute, 4 to 8 mm. long. The corolla is 5 to 6 cm. across, infundibuliform (funnel shaped), five-lobed, with deeply colored spots inside the upper lobes. There are seven to ten stamens, the filaments being glabrous to papillose-pilose on the lower half. The anthers are purplish. The styles are glabrous above, with appressed hairs near the base. The capsules are ovoid, 8 to 10 mm. in diameter.

The white form of *R. poukhanense* could have great potential for azalea breeders. Several reasons for this conclusion are its cold hardiness, tolerance of sun, and its white flower color. The typical variety of *R. poukhanense* has been used for years as a parent plant to transmit hardiness. In fact, two of the most famous hybridizers, Joe Gable and Ben Morrison, used it in creating their hybrid groups, the Gable and Glenn Dale azaleas. This fact alone should give a clue to the merit of the white form of *R. poukhanense* as a parent plant. Furthermore, the white form has the added potential to transmit hardiness without influencing the color of the progeny as does the more dominant rose-purple form. Another added feature of *R. poukhanense* is its tolerance of sun. In its natural habitat in Korea and Japan, it grows in exposed areas in full sun. This characteristic could lead hybridizers to develop azaleas having greater tolerance of sun and cold. With this new white form of *R. poukhanense* as a parent, hybridizers can continue to make advances in creating new and interesting hardy evergreen azaleas.

Ronald L. Bare is a Horticulturist and the immediate past Curator of Rhododendron and Azalea Collections at the U.S. National Arboretum, U.S. Department of Agriculture, Washington, D.C. Inquiries regarding the white form of *R. poukhanense* should be addressed to Ms. Lisa Schum, Curator of Rhododendron and Azalea Collections, U.S. National Arboretum, 3500 New York Avenue, Washington, D.C. 20002.

"HEA No. 34", A LITTLE KNOWN CONTRIBUTOR TO THE GLENN DALE HYBRID AZALEAS

William C. Miller III
Bethesda, Maryland

"HEA No. 34". Not a very impressive name for an azalea, but then names, like covers on books, are unreliable predictors of content or quality. This story begins with the Glenn Dale 'Ambrosia' which, in its own right, is notable and worthy of recognition for its remarkably distinctive color. Looking into its background, in an effort to appreciate its striking beauty, I discovered that the seed and pollen parents listed for 'Ambrosia' were 'Vittata Fortunei' and something called "HEA No. 34". Morrison was very interested in 'Vittata Fortunei' so that was no surprise, but I was curious about "HEA No. 34" and the extent to which it might have been used; that is, the extent to which "HEA No. 34" or its characteristics might be reflected in 'Ambrosia' or other Glenn Dale hybrids. Carefully studying all of the descriptions in Monograph 20, the official account of the Glenn Dale project, I determined that "HEA No. 34" appeared in two more of the 454 Glenn Dale descriptions, 'Medea' and 'Portent'. I have 'Vittata Fortunei', so I knew what it looked like. I knew 'Ambrosia', which has a "pale apricot" effect, and I had read that 'Medea' and 'Portent' were "dull red purple" and "white, flaked magenta", respectively. But, I had absolutely nothing on "HEA No. 34". The lack of data on "HEA No. 34" constituted a real roadblock to understanding how Morrison produced 'Ambrosia' (described as begonia rose) from the likes of 'Vittata Fortunei' (white, flaked or striped violet red or magenta, HCC 27/1). Further, and equally important, there was the implication of the discovery of an unfamiliar series of plants characterized by an "HEA" naming convention. One would have to consider the probability of the existence of an "HEA No. 1" and others.

On its own merit, this loose end was worth pursuing, but in addition, our knowledge of 'Ambrosia', 'Medea', and 'Portent' is incomplete without knowing something about "HEA No. 34". Aside from satisfying my curiosity and laying to rest another loose end, I wanted a good description for "HEA No. 34", because I thought it might provide an additional clue for understanding the heritability of color in azaleas. 'Vittata Fortunei' was used so extensively and so many of its progeny were selected (110 of the 454 Glenn Dale hybrids or 24.2 percent are derived directly or indirectly from 'Vittata Fortunei') that it was just possible that general conclusions might be drawn from studying such a large, well-defined and documented subset of the Glenn Dale hybrid population.

I expected that it was going to be a relatively simple matter to locate a description for "HEA No. 34". The Glenn Dale hybrid project is a well-documented effort, and there are many people in the National Capital area who know the Glenn Dale hybrids well. After exhausting my peers for information on "HEA No. 34" and drawing a

blank, I decided that my next step was to make the rounds of the local Glenn Dale experts. It was a great idea, but I had no success there, either.

My next thought was to check with the staff at the Glenn Dale Plant Introduction Station. I spoke with Bill Ackerman, who also was unaware of any description. I then turned to the files, which still contain many old notes and working documents from the Glenn Dale project era. There I found "HEA No. 34" listed in plant inventories dating back to the 1930's and references to it in notes concerning crosses in which it was utilized... but no description. I discovered, however, that the crosses resulting in 'Ambrosia', 'Medea', and 'Portent' were performed in 1929; that 'Ambrosia' and 'Portent' are sister seedlings both arising from Cross B13577, and that 'Ambrosia' and 'Portent' were selections from 1939, while 'Medea' was selected in 1940.

My most important find, however, was the significance of "HEA". The "HEA" stands for H. E. Allanson, Assistant Chief, Bureau of Plant Industry, from back in the 1920's. In a very old folder I ran across a memorandum dated October 15, 1929 from Allanson to Harry A. Gunning, Station Superintendent at Glenn Dale, to which was appended a listing of Allanson's plants. The listing consisted of names and numbers but no descriptions. Unfortunately, I do not think the numbers are Bell numbers, so they do not tie to anything that I am familiar with. Many of the names listed are familiar today, like the Kurumes 'Appleblossom', 'Benegiri', 'Christmas Cheer', 'Hinode-giri', and 'Sunstar'; and selections of *Rhododendron indicum* like 'Balsaminaeflorae' and 'J. T. Lovett'; while others are unfamiliar like 'Ben Alexander', 'Godogawa', 'Mana no seki', 'Moniui gasone', and of course "No. 34".

An interesting facet of historical significance concerning Allanson, that someone should pursue, is that he is reported to be the only one to have received a complete collection of the Beattie introductions. Even "Bell Station", as the Station at Glenn Dale was known, did not receive a complete collection of the Beattie material, though we know that there are elements of the Beattie introductions in the "woods planting" at Glenn Dale today.

The final chapter on "HEA No. 34" has not been written. The search for a description goes on. Someone...somewhere...has the answer. It is my hope that this article will stimulate others to come forward and help complete the story on "HEA No. 34".

Bill Miller is a member of the Glenn Dale Preservation Project Committee and a past contributor to *THE AZALEAN*.

ASA NEWS AND VIEWS

THANK YOU FROM MOBILE

The Mobile Chapter would like to thank the attendees of the recent convention and annual meeting held in Mobile, Alabama. It was gratifying to realize that just over 10 percent of the total members of ASA were here.

There have been a number of remarks and notes expressing to us a real feeling of appreciation for the good time everyone seemed to have had. We of the Mobile Chapter are delighted that the meeting was so well attended and that there were no noticeable problems encountered.

We would like to remind everyone, however, that it was the members attending who really deserve the credit for making the convention a success. It would not have been possible but for the people like Nels Nelson who contributed so much pleasure, Eleanor Stubbs who had a chuckle readily available, and the 100 or so others who contributed so much in so many other ways.

We'll be happy to have everyone return for another time whenever you desire.

Mobile Chapter, ASA

SOCIETY NEWS

New Classes of Annual Membership

Three additional classes of annual membership in the Azalea Society of America have been established by the society's Board of Governors at its meeting on August 4, 1985. In addition to regular annual membership at \$15.00, the new classes are: Contributing Member for annual payment of \$25.00, Sustaining Member for annual payment of \$50.00, and Endowment Member for annual payment of \$100.00 or more. Each new annual member class entitles the member to all the benefits and privileges of a regular annual membership with the amount above \$15.00 in each new member class constituting a fully tax-deductible contribution to the General Endowment Fund of the Azalea Society of America. Contributing, Sustaining, and Endowment members will in addition be recognized by inclusion of their names in an annual listing of these special member classes in *THE AZALEAN*.

Keep Your Address with ASA Current

THE AZALEAN and other Azalea Society items are mailed under a non-profit permit, at a substantial savings (80 percent) compared to the cost of first-class mail. Under this type of permit your copy of *THE AZALEAN* and other society correspondence will not be forwarded by the U.S. Postal Service to you if your address is different than that on record with the Society. It is, therefore, extremely important that the National Membership Chairman be notified promptly, through your Chapter where appropriate, of any change, or forthcoming change in your address.

September 1985

We are making a special effort to maintain a current accurate mailing list. But even with a correct address, an occasional instance of non-delivery of Azalea Society mailing is inevitable. Anyone one who fails to receive an issue of *THE AZALEAN* or other mailing is requested to report that fact, again through your Chapter if appropriate, to the National Membership Chairman.

If you do not have a chapter secretary to notify, address changes and notices of failure to receive an item should be sent to Mrs. Marjorie Taylor, 5203 Queensberry Avenue, Springfield, Virginia 22151.

Nominations for Society Governors

Don Hyatt has been appointed by the Board of Governors as chairman of the nominating committee for Governors to be elected to serve for the 1986-1988 term. Five members of the society are to be elected as Governors at the annual meeting next May. Please send your recommendations for nominees to Donald W. Hyatt, 1948 Lorraine Avenue, McLean, Virginia 22101 by December 1, 1985.

1986 ASA Convention

The 1986 National Convention and Annual Meeting of the Azalea Society of America will be hosted by the Robert D. Gartrell Chapter during the weekend of May 16-18, 1986. The Society appreciates the gracious invitation of the Robert D. Gartrell Chapter to convene in New Jersey for the 1986 National meeting. Details concerning the location, program, and other events will be forthcoming in the December issue of *THE AZALEAN*.

Cover Design for *THE AZALEAN*

THE AZALEAN staff invites members to submit designs for the cover of our journal. Designs must be black and white line drawings of appropriate size (approximately 5 by 7 inches) to fill the designated design area on the cover of *THE AZALEAN*. Artwork must be suitable for direct photo-reproduction and if previously published must be submitted with a letter describing its origin, and previous publication, with a signed statement by the artist granting the Azalea Society of America permission to incorporate the design as part of the cover layout in *THE AZALEAN* for a period of one year.

Artwork together with any accompanying documents authorizing reproduction in *THE AZALEAN* are to be submitted to The Editor and will be returned only if requested at the time of submission. Designs received by December 1, 1985 will be considered for the 1986 cover. The decision by the staff of *THE AZALEAN* to use or not use submitted designs for 1986 or designs received at later dates for 1987 or 1988 will be final. *THE AZALEAN* does not require transfer of copyright for material accepted for publication. Future rights of reproduction or other use of any artwork submitted whether selected for use or not in *THE AZALEAN* remains to the extent applicable by law with the submitter, or if otherwise, the artist.

Glenn Dale Preservation Project

Society members are reminded of the Glenn Dale Project work days scheduled for September 21, October 19, and November 16. Come join with us in the further development of the Society's Germplasm Resource Area and in the restoration of the historic "woods planting", the site of unmatched hybridization azalea history at the Plant Introduction Station at Glenn Dale, Maryland. Come lend your support to the Azalea Society's first national project. Bring your rakes, pruners, shears, and other equipment and plan to enjoy the fellowship that has become a regular aspect of the Glenn Dale Preservation Project work days. Activities will commence at 9:00 a.m. For directions or more information, contact Roger Brown (301) 577-7509 or Andy Dietz (301) 384-2092.

Glenn Dale Preservation Project workdays are a special opportunity for you to visit this most historic place in the development of azaleas in the United States. Glenn Dale work days are a special opportunity as the Plant Introduction Station at Glenn Dale is open to admission only by prior arrangement with the U.S. Department of Agriculture. Members wishing to visit the ASA's Glenn Dale Preservation areas on other than official society workdays must contact a member of the Glenn Dale Preservation Committee to obtain admission as only members of the committee are authorized by the Society to secure USDA approval for society members and their guests to visit the preservation area. Join with us on one of the upcoming workdays to learn more about and help preserve this unique American azalea heritage.

Azaleas, Camellias, and Rhododendrons— a new book by Derek Fell and Fred Galle.

In response to an invitation by Ortho Books, a division of Chevron Chemical Company, the Azalea Society of America using members of the Editorial Advisory Board of *THE AZALEAN* has reviewed the soon to be released Ortho Book on Azaleas, Camellias, and Rhododendrons written by Derek Fell and Fred Galle, and endorsed that portion of the volume applying to azaleas. Parenthetically, we are told that the Camellia and Rhododendron Societies have made similar endorsements of their horticulturally related segments in the book.

One in a series, *Azaleas, Camellias, and Rhododendrons* contains 96 pages, and many color photographs. The book describes the varieties, historical development, diseases, and general planting and care of the three plant groups. The book will be available this fall in bookstores and other places distributing Ortho Books. *Azaleas, Camellias, and Rhododendrons* is directed to the home gardener and the Azalea Society of America is pleased to recommend this azalea resource to beginning as well as to established azalea enthusiasts.

Book Review: *GREAT AMERICAN AZALEAS, A Guide to the Finest Azalea Varieties* by Jim Darden, Clinton, N.C.: The Greenhouse Press, 96 pages. Soft cover, \$9.95.

A magnificently illustrated guide to a selected list of American azalea varieties. The color photographs are superb and accurately illustrate the flower characteristics of the variety in both color and form (type of flower). There are more than 130 such color prints.

The author has chosen a convenient and very useful format for presentation. The book is divided into sections on bloom color, flower forms (types of flowers), blooming seasons, twenty-three hybrid groups, movement of azaleas to America, master American breeders, planting instructions, and tabular information on the salient characteristics of 300 American azalea varieties. The author writes knowledgeably from the point of view of the production nurseryman, the garden center retailer, and the horticultural teacher.

GREAT AMERICAN AZALEAS is attractive, informative, and well organized. It contains very useful information for students, gardeners, nurserymen, landscape architects, and anyone interested in azaleas. It is a wealth of information at a bargain price!

Fred D. Cochran
Emeritus Professor of
Horticultural Science
N.C. State University

A NEW LOOK AT BRANCH DIE-BACK ON AZALEAS AND RHODODENDRONS

It was discovered at Verde Vista some years ago that the wires attaching the name plates to the plants caused a die-back of the branch to which they were attached.

Three hypotheses for this die-back were considered: No. 1—The wire enhanced excessive heat in the summer; No. 2—The wire enhanced excessive cold in the winter; No. 3—The die-back was caused by some chemical reaction from the wire injurious to the plants.

No. 1 was ruled out, because the summers at Verde Vista are cool and there is considerable shade. No. 2 was considered possible, since the temperature at times in winter is -20 degrees F. with a wind chill to -40 degrees F. In the beginning, very fine wires were used at Verde Vista, and there was no die-back. It was when heavier wires were used that die-back appeared. Also, the fact that the plants were unaffected when heavier wires were used in the greenhouse might give credence to the hypothesis that the wires enhanced the cold.

As for hypothesis No. 3, in the beginning when very fine wires were used there was no die-back. In fact, when the wires were tied too tightly to the branch, the cambium layer of the branch grew over it with no ill effect. But, the wire that was exposed rusted, and the name plates were lost. It was with the heavier wires with lead in them, to prevent rust, that the trouble with die-back began.

In either case, the problem was solved by using a reinforced plastic ribbon which does not rust, enhance extreme temperatures, or have a chemical reaction. This ribbon has the trade name Tylex and is manufactured by DuPont.

W. David Smith
Spring Grove, Pennsylvania

Republished from Bulletin No. 5 of the Verde Vista Preservation Society, Spring Grove, Pennsylvania.

NEW CURATOR OF RHODODENDRON AND AZALEA COLLECTIONS AT THE NATIONAL ARBORETUM

Lisa Schum has succeeded Ronald L. Bare as the Curator of Rhododendron and Azalea Collections at the U.S. National Arboretum in Washington, D.C.. Lisa would greatly appreciate any assistance Azalea Society members can provide her in helping to weed, water, fertilize, inventory, map, and pot up azaleas in the collections. The Arboretum is located at 3500 New York Avenue, Washington, D.C. Lisa can be reached by telephone at (202) 475-4863.

THE AZALEA CALENDAR

September
21

Glenn Dale Preservation Project Workday.
9 a.m.-1 p.m. Andy Dietz, (301) 384-2092.

October
19

Glenn Dale Preservation Project Workday. See September 21.

November
16

Glenn Dale Preservation Project Workday. See September 21.

THE AZALEA CALENDAR lists upcoming Society and chapter activities. Items to be included should be forwarded to the Editor together with name, address, and telephone number of contact person(s) at least three months prior to the month of publication of *THE AZALEAN* in which the notice is to appear.

LETTERS TO THE EDITOR

More on Correct Descriptions of the Glenn Dale Azaleas

The recently published list of the bloom time of the Glenn Dale azaleas (*THE AZALEAN* 7:17-18, 1985) perpetuates one of the errors Morrison made in the *Glenn Dale Azaleas*, Agriculture Monograph No. 20. It is impossible for 'Cygnet' to bloom in early April. Its parents are *mucronatum* and 'Shinnyo-no-tsuki', neither of which is an early bloomer and its sister seedlings 'Cadenza', 'Everest', 'Martha Hitchcock', 'Nocturne', 'Paladin', 'Snowclad' and 'Wavelet' all bloom in May. The correct bloom time for 'Cygnet' is early May.

Some other observations in conflict with Monograph 20:

'Alight'—May have a white eye. Official picture shows a white eye and is so described under 'Luna' as is 'Welcome'.

'Bopeep'—is not a sister seedling of 'Dayspring' and 'Caress'.

'Aztec' and 'Shimmer'—occasional flowers with white eye that are not fixed, i.e. do not repeat.

'Marmora'—definitely hose-in-hose with rare pink stripe.

'Pied Piper'—some flowers with six lobes.

'Louise Dowdle'—entire bush or branch may have white eye that may or may not persist. They do not persist in my experience. This may be true of its sister seedling 'Lillie Maude'.

'Wildfire'—blooms late April for me, and mine is in shade. A plant at the Arboretum also blooms in late April.

'Witchery'—to eight feet—but 'Dream' does not reach that height for me.

Neil P. Campbell
Washington, D.C.

Readers are referred to additional corrections by Neil Campbell and George Harding to the *Glenn Dale Azaleas* by B. Y. Morrison, Agriculture Monograph No. 20, United States Department of Agriculture, 1953, in *THE AZALEAN*, 2(4):6-8, 1980. [Ed.]

1ST WORLD AZALEA FESTIVAL

May 24, 1985

Dear Dr. Evans:

I have just returned from my annual tour to southern Japan, especially Kurume. As usual, I met with Mayor Toshiyuki Chikami, of Kurume, and continued our dialogue on azalea events in this center of nursery activity.

Mayor Chikami announced plans for the 1st World Azalea Festival to be held in Kurume in April 1989. He asked that I bring this exciting news to azalea lovers overseas, particularly the USA. It was my pleasure to be asked by Mayor Chikami to assist with the program and

schedule planning. While the event will be dated to coincide as closely as possible with the flowering of the Kurume azaleas in Kurume (usually around April 24), we are considering field trips to the mountain areas where the ancestors of the Kurume azaleas grow. This includes Unzen, Kujo, Sukurajima, Kirishima, and Takatoge. The wealth of wild azaleas and companion plants such as *Pieris* will thrill foreign visitors to the festival.

Persons interested in the possibility of attending this exceptional event will want to send me their name so we can enter them into the computer to receive further information. As soon as possible, we will provide information on travel, accommodations, and program.

I hope that you will communicate this information to members of the Azalea Society of America so they may think about the opportunity to see the center of distribution and development of our evergreen azaleas.

Sincerely,

John L. Creech
14 Legendary Road
Hendersonville, N.C. 28739

Nutritional Plant Protection

Probably the best guarantee of proper plant performance is to choose a variety that will grow in a particular zone. This selection is based on hardiness or the ability of a particular plant to survive when the temperature reaches the lowest point experienced in a zone. A zone of hardiness is theoretically represented by the lowest temperature possible in that zone. There is, however, often a fine line dividing hardiness zones and temperatures.

The distinction between survival and non-survival may not be so clear in certain seasons. Plants may be considered hardy in a zone but may not acclimate themselves properly to a severely cold winter. To understand this, we must first look at the process by which plants acclimate themselves to cold weather. During the growing season, water moves from the roots up into the xylem tissue and further to the leaves and growing points of the plant. Water is contained not only within cells but also between cells. This water is either "free" or that which may pass through the stomates or pores during evaporation. Free water is present in abundance during the growing season. Conversely, as plants begin to prepare (harden off) for the winter months, more water passes into the cells and becomes "bound" water. If a freeze occurs while there is an abundance of free water, injury may result.

Plants should acclimate gradually so that the cells are turgid (filled with bound water) and the cell walls have thickened. This hardening process usually occurs in the fall as the temperatures become lower and the day length shortens. The plant responds by slowing its growth and hardening off. In recent seasons, however, the gradual cooling of the fall has not taken place.

Therefore, plants have entered the colder winter months with tissue which has not matured properly. When this happens, we must assist these plants with an application of low nitrogen growth stimulant such as 2-20-10 to aid the plant in the maturation process. As you will note, phosphorous comprises the largest percentage of this formulation. Phosphorous is important in the maturation of plants and potassium is responsible for balancing water relations within the cell. The nitrogen content in the formulation is the lowest of the three elements. Nitrogen, if applied in large amounts, will cause a plant to fail to harden and start or continue growth at a time when it would be very undesirable. As the growing season progresses, if certain plants such as azaleas, roses, camellias, crape myrtles, rhododendrons, among many others, do not harden off properly, then much winter injury will occur. The proper procedure to afford these plants additional protection is nutritional. Applications of 2-20-10 or similar growth supplement formulation should begin on August 1 and continue until the first hard frost hits. The best formula should contain not only nitrogen, phosphorous, and potassium but also many other important elements. One excellent formulation to use is Green Cross Wintercare which is available through many mailorder catalogs: Brookstone, Gardeners Eden, Gurney Seed, Van Bourgondien Bros., Mc Fayden Seed, and others. It may also be ordered directly from Green Cross Wintercare Inc., Box 195, Oyster Bay, New York 11771. Telephone (516) 922-9176. Prices are: 1.5 pounds-\$7.95, 5.0 pounds-\$14.95, and 25 pounds-\$32.99 postpaid if your check is included with the order.

Ralph J. Zingaro
Horticulturist
Green Cross Wintercare, Inc.
Oyster Bay, New York

Azaleas in Nova Scotia

The deciduous azaleas all do well here. I am presently testing the evergreen ones here on the coast. *Kaempferi*, *kiusianum*, *poukhanense* and *nakaharai* are good for us. We can also grow and bloom most *kaempferi* hybrids, some Vuyks, most Gables, the Girards, the Shamarellos, a few [North] Tisburys, a very few Linwoods, and possibly some Gartrells but have only had 20 or so of these for too short a time to say anything definite.

We lack sufficient summer heat to ripen wood properly and some plants can suffer if there is a sudden temperature drop before January. Our breeding efforts are centered around *kiusianum* and *nakaharai*, also *nakaharai* x *kiusianum*. Successful results are around the corner.

John Weagle
Halifax, Nova Scotia
Canada

NEW MEMBERS

Edmund V. Mezzitt
Weston Nurseries, Inc.
Rt. 135 Box 186
Hopkinton, MA 01748

Mr. & Mrs. Lorenzo F. Kinney, Jr.
1213 Kingstown Road
Kingston, RI 02881

Mrs. Edith Kelmark
245 Route 87
Columbia, CT 06327

Mr. & Mrs. J. Intili
37 Oak Grove Road
Caldwell, NJ 07006

Richard Ziadie
Box 743
Hackettstown, NJ 07840

Edward and Rosemary Watson
23 N. Starr Dr.
Morristown, NJ 07960

John P. Chillari, Jr.
540 N. 1st Road
Hammononton, NJ 08037

Paul F. Corman
531 Burlington Avenue
Bridgetown, NJ 08302

Henry Schannen
P.O. Box 2061
Princeton, NJ 08540

Pamela R. Berdan
325 West 4th Street
New York, NY 10014

Erich W. Augenstein
310 East 83rd St.
New York, NY 10028

Randolph Wildschut
28 Highland Ave.
Middletown, NY 10940

John E. Boeggeman
13 Patterson Ave.
West Nyack, NY 10994

Elizabeth & Robert Schill
23105 87th Ave.
Queens Village, NY 11427

Mr. & Mrs. John Bredin
RD 3 Woodland Dr.
Sag Harbor, NY 11963

Mr. Pat Burgess
RD #1, Box 205
Montoursville, PA 17754

Mt. Cuba Center
Richard W. Lighty, Dir.
Box 3570
Greenville, DE 19807-0570

John F. Kanoy
RD 3, Box 473
Felton, DE 19943

Dr. Anthony Myer
147 Swann St., N.W.
Washington, DC 20009

Pam Mixer
4225 43rd Street NW
Washington, DC 20016

Raymond W. Buck, Jr.
4902 Laguna Rd.
College Park, MD 20704

Bonnie P. Payne
4620 Woodfield Road
Bethesda, MD 20814

Joan Lunney
8903 Grant Street
Bethesda, MD 20817

Emily M. & Donald D. Gray
7205 Millwood Road
Bethesda, MD 20817

Marilyn & Robert L. Healey, Jr.
1922 Lewis Ave.
Rockville, MD 20851

Terry J. Pogue
2297 Stratton Drive
Rockville, MD 20854

Margaret Reed
12015 Smoketree Road
Potomac, MD 20854

Evelyn B. Jones
9707 Bethany Place
Gaithersburg, MD 20879

Drs. Earl and Terry Stadman
16907 Redland Road
Derwood, MD 20895

Mary Jane & James McGhee
10919 Drumm Ave.
Kensington, MD 20895

Julie & T. J. O'Malley
10019 Frederick Ave.
Kensington, MD 20895

Brian Walsh Barr
10203 Big Rock Road
Silver Spring, MD 20901

Mr. & Mrs. Gilbert C. Bowen
12321 Remington Drive
Silver Spring, MD 20902

Inez Austin Britt
1732 Overlook Drive
Silver Spring, MD 20903

Mr. & Mrs. C., Alan Moore
15515 Tierra Drive
Silver Spring, MD 20906

Elizabeth Leibovici
1513 Live Oak Drive
Silver Spring, MD 20910

Ron Bare
3795 Columbia Pike
Ellicott City, MD 21043

Mr. John W. Neal
398 Pearl St.
Frederick, MD 21701

Donald C. Hand
4690 Mid-County Drive, W.
Monrovia, MD 21770

Harrison J. Langeler
1011 Russell Avenue
Salisbury, MD 21801

Mr. & Mrs. Bruno A. Kaelin
5432 Summit St.
Centreville, VA 22020

Mr. & Mrs. John A. Simmons
7520 Thistledown Trail
Fairfax Station, VA 22039

Valerie and William Lorenz
8610 Running Fox Ct.
Fairfax Station, VA 22039

Mr. & Mrs. Philip W. Shepard
3609 Whispering Lane
Falls Church, VA 22041

Douglas H. Weidman
3435 Executive Avenue
Falls Church, VA 22042

Joyce Ann Weaver
3425 West Ox Road
Herndon, VA 22071

Mrs. Ridgway B. Espy
861 Canal Drive
McLean, VA 22102

W. E. & Dorna Kreitz
2819 Oakton Manor Court
Oakton, VA 22124

Mrs. W. W. Vines
312 S. Fenwick St.
Arlington, VA 22153

Mr. & Mrs. Michael Pontti
2931 Cashel Lane
Vienna, VA 22180

Gary L. Christensen
5208 N. 30th St.
Arlington, VA 22207

William B. Inglee
3907 Woodey Drive
Alexandria, VA 22309

Jean L. Cox
5804 Las Vista Drive
Alexandria, VA 22310

Rolf & Simone Schilling
Box 31
Lottsburg, VA 22511

Wm. B. & Vernell M. Burton
Oakley, Box 309
Goochland, VA 23138

Mrs. James W. Guy
8505 Julian Rd.
Richmond, VA 23229

John & Paula Nachmann
2105 Bambacus Rd.
Richmond, VA 23229

C. Ray & Alice N. Doggett
5309 Windingbrook Rd
Richmond, VA 23230

Mrs. Page Calisch
2400 Cromwell Rd.
Bon Air, VA 23235

Dr. William S. Burton
P.O. Box 201
Nassawadox, VA 23413

David W. Hutcheson
1315 W. Queen St.
Hampton, VA 23669

Amanda W. McLean
107 Fairfield Drive
Yorktown, VA 23692

Wilder & Ann McDaniel
1645 Forest Glenn Circle
Chester, VA 23831

Mr. & Mrs. Delbert Brim
Rt #3, Box 234
Mt. Airy, NC 27030

Robert Lee Means, M.D.
4001 Philpark Drive
Winston-Salem, NC 27106

Martha M. Finkel
12225 Norwood Rd.
Raleigh, NC 27612

Rufus E. Bowland, Jr.
Box 1288 Everette Road
Pinehurst, NC 28374

Bruce Goforth
Route 1, Box 413
Arden, NC 28704

Jim Pinkerton
Rt. 1, Box 243 B-8
Lugoff, SC 29078

Mr. & Mrs. Thomas Bartram
521 Mockingbird Lane
Spartanburg, SC 29302

Mr. Thomas Wiant
Terrain Dr., Rt. 4
Greenville, SC 29605

Mr. Richard Connor
Richard's Azalea Corner
12 Lynda Lane
Greenville, SC 29609

Mr. H. Furman Haywood
Route 10 Miller Road
Greenville, SC 29607

Ms. Janie Marlow
31 Lynchburg Drive
Greenville, SC 29611

Mrs. Mary Price
405 Butler Springs Road
Greenville, SC 29615

Mr. J. C. Trotter
Route 4
Easley, SC 29640

Art Nowell
P.O. Box 547
Richland, SC 29675

Pam & Carl Hoveland
205 Idylwood Drive
Athens, GA 30605

Eddie Coleman
Cripple Creek Nursery
P.O. Box 319
Hawkinsville, GA 31036

Terry Lee Davis, Ph.D.
4328 NW 20th Dr.
Gainesville, FL 32605

Jeffrey A. Morey
Brantwood Publications
Northwood Plaza Station
Clearwater, FL 33519-0360

The Ranch Nursery
P.O. Box 5204
Hudson, FL 33567

R. Owen Blackwell, III
Blackwell Nurseries, Inc.
P.O. Box 85
Semmes, AL 36574

Gary Cobb
Ornamental Hort. Station
P.O. Box 8276
Mobile, AL 36608

Dr. & Mrs. David Wilcox
5266 Lexington Road
Memphis, TN 38119

Mr. & Mrs. Roy B. Strong
548 East Lake Serene
Hattiesburg, MS 39401

Joseph L. & Marjorie Roper
P.O. Box 442
McComb, MS 39648

Mr. & Mrs. C. M. Nunnery
Rt. 2, Box 172
Magnolia MS 39652

Gordon V. Hojalmen
4090 Overlea Ct.
Bloomfield Hills, MI 48013

Mr. & Mrs. Donald L. Saucier
11 Elms Court
Destrehan, LA 70047

Mr. & Mrs. James Ray Phillips
5114 Venus Street
New Orleans, LA 70122

Milda Smith
6129 Vicksburg St.
New Orleans, LA 70124

Michael K. Mobley
P.O. Box 1501
Hammond, LA 70404

Mrs. Sara A. Harris
1035 Carter Ave.
Baton Rouge, LA 70806

Mrs. Charles A. Loomis
P.O. Box 455
Ferryday, LA 71334

Ray Harris
825 Summit Dr.
Rogers, AR 72756

Martha G. Klajnowski
6122 Shady Creek
San Antonio, TX 78239

Royal Gardens
T.E. & Thelma Croson
Rt 1, Box 35
Paso Robles, CA 93446

Ethel H. Korth
1465-38th Avenue
Santa Cruz, CA 95062

George R. Brown
3916 Ballard Drive
Carmichael, CA 95608

John Williams
5941 Moss Creek Circle
Fair Oaks, CA 95626

Ted Van Veen
4201 S. E. Franklin St.
P.O. Box 06444
Portland, OR 97206

Gary Bruce Van Winkle
3205 324th N.W.
Stanwood, WA 98292

Edward M. Papierski
419 E. Taylorcutoff
Sequim, WA 98382

Victor A. & Alma Manencia
310 Hemlock Park Road
Aberdeen, WA 98520

Richard and Shirley Fullerton
15905 Baldhill Road, S.E.
Yelm, WA 98597

Nicholas Guyomarc-h
Kermaeout St. Jean
Riec/Belon, France 29124