

Newsletter

of the American Magnolia Society

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Univ. of Illinois, Urbana, Ill.
Vice-President: Walter S. Flory
Wake Forest College,
Winston-Salem, N. C.

Secretary-Treasurer: Philip J. Savage, Jr.
Bloomfield Hills, Mich.
Editor: John M. Fogg, Jr.
Morris Arboretum, Philadelphia, Pa.

The Meeting at Memphis

JOHN M. FOGG, JR.
The Morris Arboretum

THE FIRST MEETING of the American Magnolia Society was held at the Goldsmith Civic Garden Center in Memphis, Tennessee, on Saturday and Sunday, March 9 and 10. About 50 members and guests were in attendance.

An excellent program had been arranged by Professor J. C. McDaniel, and our local chairman, Mr. Guy E. Robbins, Director of the Goldsmith Center, had provided for our every comfort.

Dr. Fogg, the President of the Society, called the meeting to order at 9:30 on Saturday morning and extended a warm welcome to those present. He thanked the members of the Center for the efforts they had made on our behalf and expressed the hope that this was but the first of many such meetings, during which the members of the Society could get to know each other and exchange ideas.

The first item on the program was a dual presentation on the subject of "Magnolia Species and Hybrid Relationships" by Mr. Philip Seitner, of Chicago, Illinois, and Dr. Frank B. Galyon, of Knoxville, Tennessee. Mr. Seitner exhibited an elaborate and beautifully prepared chart of four genera of the Magnoliaceae (*Manglietia*, *Michelia*, *Magnolia*, and *Liriodendron*) with their subgenera, sections, species, hybrids, subspecies, and varieties. Many, although obviously not all, of the cultivars of *Magnolia* were included. Chromosome numbers of the major taxa were indicated and the origins of many of the more important hybrids and their cultivars were shown. Dr. Galyon then discussed this chart and added a considerable amount of significant information based on his long experience in hybridizing Magnolias. A lively discussion followed this presentation and the suggestion by the President that this chart be printed in the next issue of our NEWSLETTER was enthusiastically applauded.

The next feature was also a dual performance entitled "Present and Potential Hybrids in Early Flowering Magnolias," the discussants being Mrs. Doris Stone, of Hastings-on-Hudson, New York, and our Secretary-Treasurer, Mr. D. Todd Gresham, of Santa Cruz, California. Mrs. Stone told of the extensive program of hybridizing Magnolias she had carried on for several years as a member of the staff of the Brooklyn Botanic Garden and, with the aid of slides, described a very interesting cross between *M. acuminata* and *M. liliflora nigra*. Application for a patent for this hybrid has been filed.

Those who have followed Mr. Gresham's work both in our NEWSLETTERS and in the pages of the Morris Arboretum Bulletin are familiar with the stupendous amount of Magnolia hybridization he has accomplished. It was a treat to have him present a resumé of this work and also to demonstrate a novel method of grafting which he has found eminently successful.

Following a break, during which coffee and delicious doughnuts were served by the staff of the Center, the meeting reconvened for a consideration of "Propagation Methods for Cultivars." Dr. Walter S. Flory, of Wake Forest College, was the first speaker and described, among other things, a remarkable example of self-layering. Mr. Gerd Schneider, filling in for two members whose names were on the program, but who were unable to be present, gave a remarkably lucid and detailed account of the methods of propagation and cultivation employed by his nursery in Aptos, California. The hope was expressed by the President that he would submit a full account of these techniques for a future number of the NEWSLETTER.

Following the lunch hour Mr. Philip J. Savage, Jr., of Bloomfield Hills, Michigan, delivered a fascinating illustrated lecture entitled, "What's Left in China?" This was a comprehensive account of the natural distribution and taxonomic relationships of all the species of *Magnolia* known to occur in China.

Professor J. C. McDaniel, of the University of Illinois, then presented a scholarly paper with the provocative title,

"What Will We Do With Sweet Bay?", in which he further developed many of the observations set forth in his article on *M. virginiana* which appeared in the Morris Arboretum Bulletin for March, 1966.

The remainder of the afternoon was devoted to a tour through the beautiful suburbs of Memphis and visits to the magnificent gardens of Mr. and Mrs. Vance Norfleet and Mr. Joe Kirkpatrick. The tour culminated in a cocktail party tendered by the Memphis Garden Club in the gracious home of Mr. and Mrs. W. L. Bangston.

Following dinner, which was held in the Center, there was a brief business session during which Mr. Gresham delivered his Treasurer's Report and the Nominating Committee presented a slate of officers for the ensuing year. There being no nominations from the floor, the following were duly elected:

President: J. C. McDaniel

Vice-President: Walter S. Flory

Secretary-Treasurer: Philip J. Savage, Jr.

Editor of the Newsletter: John M. Fogg, Jr.

A vote of thanks was tendered to the former officers for their part in founding and running the Society since its inception in 1963.

The balance of the evening was devoted to a showing of slides of Magnolias from a variety of localities. Chief among them was a fine series contributed by J. H. Brydon from the Strybing Arboretum.

On the morning of Sunday, March 10, there was a tour of the extensive collection of Magnolias in the Arboretum. Upon re-assembling in the Center, with President McDaniel in the chair, the members were treated to a showing of slides of Magnolias from various sections of the country. One of the finest series was the Magnolia collection at the Arthur Hoyt Scott Arboretum at Swarthmore, Pennsylvania, shown by Mrs. John C. Wister, the wife of the Director.

The final session was devoted to the auctioning off of a selected group of rooted cuttings and grafts of Magnolias. This material had been generously donated by Tom Dodd Nurseries of Semmes, Alabama; J. Bon Hartline of Anna, Illinois; Joe Hickman of Benton, Illinois, and J. C. McDaniel of Urbana, Illinois. The proceeds from this auction resulted in the addition of more than \$130.00 to the Society's treasury.

The meeting closed with an expression of thanks to our hosts and a reaffirmation of our intention to hold meetings of the Society at regular intervals.

Corrections

Dodd, Col. William R., 106 Trotman Circle, Ozark, Alabama 36360.

Espy, Mrs. Carl, 4130 Amsterdam Circle, Savannah, Georgia 31405.

Farris, Mrs. Victor D., 1252 Ferry Road, Salem, Oregon 97304.

Sarot, Dr. Irving A., Notamiset Road, Quogue, Westhampton Beach, New York 11978.

Seitner, Mr. Philip G., 648 West Sheridan Road, Apt. 1, Chicago, Illinois 60613.

Stone, Mrs. Richard W., 28 Fenwick Road, Hastings-on-Hudson, New York 10706.



Magnolia guatemalensis

Photo: William F. Kosar

Magnolias From Middle America

J. C. McDANIEL

Urbana, Illinois

"ALTO!" I shouted, then "Alto" again several times before my halting Spanish registered with our taxi driver. Finally he halted, dustily, and backed up nearly a quarter-mile to let us examine two Magnolia trees I had spotted on the grounds of a rural school in the municipality of Santa Cruz, Alta Verapaz, Guatemala. It was July, 1964. My wife and I, accompanied by the helpful Senorita Maria Lomali, then of the Guatemalan Census, and two other friends from Guatemala City, were headed for Tactic, the type locality of *M. guatemalensis* Donn. Smith, after a plane trip over rugged mountains, from the capital to Cobán. Here, a few miles downstream from where it was discovered in 1908 at 1550 meters in the big swamp at Tactic, it was growing among pine trees and *Liquidambar styraciflua* on well-drained soil. From one of the schoolyard trees we made our first collection of the species. Though still in flower, it bore seeds which germinated the same summer in Washington. These gave enough good seedlings for the U. S. National Arboretum to distribute them the next year, some as far away as Hawaii, Hong Kong, and Italy.

A little later, we got herbarium specimens and viable scion material, too, from the edge of the big swamp, and from a large tree cultivated in a Cobán patio. (Some trees appear to be native on moist sites at Cobán.) The accompanying pictures show the Cobán clone, grafted from a basal sprout, which flowered at the National Arboretum's greenhouse in February, 1968. The Tactic clone, grafted from a mature branch, had already flowered there in 1965 and 1966, where W. F. Kosar successfully crossed it with pollen of *M. virginiana* var. *virginiana*, getting several vigorous hybrids with the northern Sweet Bay. Both parents are diploid (fide Santamour for *M. guatemalensis*), and we hope these hybrids may be more fertile to further crossing than are the diploid hybrids of *virginiana* with both *M. tripetala* and *M. hypoleuca* (*obovata*). It was with the idea of getting Latin American Magnolias for hybridizing that

Mrs. McDaniel and I undertook our 1964 vacation expedition, 8,000 miles of it by our own car, to Mexico and Guatemala. Another undetermined species we got in the cloud forest of Chiapas, Mexico, is also growing as a graft, but has not yet flowered at the National Arboretum.

M. guatemalensis seedlings so far are hardy outdoors at Lafayette, Louisiana, and Tampa, Florida. From observations of old trees at Tactic and Cobán, I believe it can grow to as large a tree as *M. grandiflora* in suitable mild climates. It is a handsome tree, tending (like our species from Chiapas) to a densely conical shape for many years. Like some *M. grandiflora* seedlings, the Guatemalan species frequently has showy red-pigmented stipules and new leaves. Its stems are glabrous from an early stage, and its leaves are not tomentose beneath, but are briefly ciliate along their margins. The flowers, though creamy white and attractive, are smaller and less fragrant than most seen on *M. grandiflora*. To a considerable extent, this is the report on other Latin American native species, particularly as to flower size. The other fifteen or more evergreen species of the section Theorhodon and the elusive deciduous *M. dealbata* grow in limited areas of the mountains, from Mexico and Cuba to Venezuela, and only the Mexican *M. Schiedeana* has a rather wide range. *M. Schiedeana*, which most nearly approaches *M. grandiflora*, is scattered in several states from Tamoulipas and south to Vera Cruz, west to Durango, Jalisco and Nayarit on the Pacific drainage. (Mr. J. E. Dandy, I hear, has considered splitting it into more than one species.)

In any event, the large flowered *M. grandiflora* from North America is the one most cultivated in Mexico and Guatemala. I saw it flowering well at 9,000 feet in Perote, Vera Cruz. At Chichecastanango grows a good tree of it, with the usual nine tepals, but I overheard a Guatemalan tell his visitor that it was the "double magnolia"—"doble grande y doble dulce." In Guatemala City, I saw none of the native species in cultivation; even the Botanic Garden represented the genus with a tree of *grandiflora*.

I started hybridization with *M. guatemalensis* while in its native country. On a *grandiflora* tree in the capital, I pollinated with *guatemalensis* pollen from Tactic. My seedlings, now in the greenhouse from this cross, apparently include some true hybrids, although the hexaploid *grandiflora* proved generally dominant, as is the case when it has been crossed with the diploid *M. virginiana*. One of the seedlings has leaves nearly as glabrous as *M. guatemalensis*, though otherwise resembling *grandiflora*.

There are other Latin American Magnolias that travelers could search for. In 1966, Dennis E. Breedlove, a graduate student under Professor Peter Raven at Stanford, collected another undescribed *Magnolia* in the lake area of Chiapas along the Guatemalan border. Strandley and Steyermark (Flora of Guatemala) had seen but not collected one in a different part of Guatemala, which they thought was not *M. guatemalensis*. Steyermark, now located in Venezuela, has described two rare species from the highlands of that country, near the Brazilian border. We ran out of time, and out of available funds, before we got to see even any of the Honduran, Costa Rican, or Panamanian *Magnolia* species in their native haunts in 1964. Apparently, only the one Guatemalan and three Mexican species (including *M. Schiedeana* at Seattle and *M. Sharpei* seedlings at Ft.

Bragg, California) have been brought back alive to this country from all of Latin America, including Puerto Rico, where there are *M. portoricensis* and *M. splendens* in separate mountain areas. Several more probably would grow in coastal California and along the Gulf Coast. I'd like to go after some more of them before they become extinct. Anybody join me in a jaunt to Cerro Roraima?

A Taxonomic Diagram of the Genus *Magnolia*

PHILIP G. SEITNER
Chicago, Illinois

INTRODUCTION

*A Primer of Terminology
for Taxonomic and Other Concepts*

THE SPECIES of the GENUS *Magnolia* exhibit relationships suggesting natural categories within the genus. To accommodate all the known species, eleven of these categories are currently established as SECTIONS. Further, these eleven sections all appear to separate naturally into two broader categories, distinguished by characteristics which are easily recognized and seem of phylogenetic significance, but which would not justify dividing the established genus, *Magnolia*, into two genera; the two broad categories are designated as SUBGENERA, one containing eight sections, the other three sections.

Magnolia is one of four genera regarded as members of the FAMILY Magnoliaceae. In turn, Magnoliaceae is one of several related families considered as members of the ORDER Magnoliales.

To return attention to the specific level, it must be admitted that the concept of SPECIES defies a simple definition, but it must be in terms of individuals as they occur in succeeding generations in their natural habitat. Thus, a species is conceived as a population or group in which the individuals (1) possess common characteristics which collectively serve to distinguish the group and its members from all other organisms and, (2) if they differ from each other in any way, differ by characters of less significance^① than the characters that relate them and distinguish them as a group. The concept is further defined by the stipulation that the individuals of the group are not only capable of interbreeding, but in so doing, produce offspring in which the significant specific characters are reproduced.

It is not uncommon that, among the individuals of a species, a group occurs possessing a minor unique character which is constant in the natural habitat and reproducible from interbreeding individuals having the character yet is not sufficiently significant to justify regarding the possessors

① Species definitions — all taxonomic definitions — are artifices of man, based on his finest ability to judge significance of biological differences. Opinions on character significance may vary between taxonomists and may be altered by new information; nevertheless, this collective judgment of man proves to serve him adequately to define a species for the foundation of a classification.

of the character as representing a distinct species. To distinguish these, a taxonomic category may be established which, for sake of simplicity here, can be called a SUBSPECIES. The term, "variety," unfortunately carries more than one connotation, although it is not infrequently used to designate any group below the level of species.

While the concept of species includes the stipulation of fertility between individuals in that group, it does not include a stipulation of sterility between individuals of that group and individuals of another species or even of another genus. Thus, when interbreeding is possible and accomplished between individuals differing by characters of specific significance, the individual offspring containing genetic material of both species is an INTERSPECIFIC HYBRID. (A cross between any two different, genetically stable taxonomic groups results in HYBRID offspring. Thus, there may be intervarietal hybrids, as well as intergeneric hybrids.) The individual or individuals resulting directly from a given cross, such as that between two species, are referred to as members of the first (1) filial (F) generation, abbreviated F₁. All offspring from individuals of the F₁ generation are likewise hybrid in nature, these succeeding generations being designated F₂, F₃, etc. (Back crosses between F₁ individuals and individuals of the parent species or between hybrids of different parents are not considered here.)

Any hybrid or subspecies which is in cultivation falls within the definition of CULTIVAR, a concept useful and applicable to disciplines of horticulture. It includes plant forms resulting from complex breeding and selection, derived with objectives for ornament or agriculture rather than with any regard for ability to compete and survive outside cultivation, and ordinarily genetically transient. The concept of cultivar does not exclude, however, any natural subspecies or hybrid which may be planted for horticultural purposes.

A group or individual is designated as a TYPE simply on the basis of its being the most representative of the superior group of which it is a member. For example, *M. tripetala* is regarded as displaying adequately or better than any other species all the characters of the section, Rytidospermum. Indeed, the type is ordinarily the group or individual on whose characters the definition of the superior group was originally based by the author of the superior group.

CHROMOSOMES

Each species of higher, sexually-reproducing organisms possesses a characteristic number of chromosomes in the nucleus of each of its body (somatic) cells, half of which were derived from its one parent and half from its other parent. It will be recalled that the production of an egg nucleus and sperm nucleus involves the reduction of the somatic chromosome number by one-half so, on fertilization, the number in the somatic cells of the parents is restored.

Keeping the foregoing in mind, the most direct approach to explaining the chromosome numbers in *Magnolia* might be to review first, as concisely as possible, the most simple and universal chromosome arrangement and events. To do this, attention will be directed initially to the egg and sperm nuclei, as follows:

A. Typically, in either plants or animals, each chromosome in an egg nucleus is different from every other chromosome in that nucleus; together, the egg chromo-

somes constitute the basic set characterizing the species. (This basic set is referred to as the haploid number or sometimes as the "X" number.) The sperm nucleus has a matching set of chromosomes, both in number and type. Fertilization, therefore, combines these two sets into one nucleus; in other words, the number is restored to twice the basic set of chromosomes (referred to as the diploid number, or 2X number.)

B. Exceptionally, a species or a variety may possess the basic set, just described as the haploid chromosome number, in multiples greater than two in its somatic cells, this exceptional number being a constant character of the species or subspecies. That condition is named according to the characteristic number of haploid sets present, triploid (3X), tetraploid (4X), pentaploid (5X), hexaploid (6X), etc.

It appears from investigations to date that all members of the Magnoliaceae have a basic (haploid) set of 19 chromosomes. This means that, except in the egg and sperm nuclei, the somatic cells of all these plants might be expected to exhibit 38 chromosomes as the diploid number. It has been demonstrated, however, that, while some species are diploid (38), others are tetraploid (76), and still others are hexaploid (114). The reproductive nuclei of these plants would be expected to exhibit half of these numbers: 19, 37, and 57, respectively.

DESCRIPTION OF THE CHART; DESIGN, CONTENTS, AND PURPOSES

Because the details and objectives of the accompanying chart (Table I) may not be immediately clear, a short explanation has seemed appropriate. The intent is (1) to display, by name, all the members of the genus *Magnolia* apt to be encountered and available for cultivation in temperate climates and (2) to show, by a suitable design, the natural relationships between those *Magnolias* according to best contemporary opinion. Its inception was no more ambitious than to provide an illustration and a basis of arrangement for a representative series of photographs of the plants. As work on it evolved, however, the idea of its possible usefulness as a reference grew.

The classification depicted is basically that described by J. E. Dandy in 1950^②. A personal request for confirmation that the terminology and relationships, as translated into a preliminary sketch for the chart, reflected his current opinion was most kindly acknowledged by Dr. Dandy, with suggestions for certain minor revisions. The background and details of these revisions will undoubtedly appear in some future publication by Dr. Dandy.

Completeness, in terms of *Magnolia* names as well as of supplemental information, has had to be balanced against the primary objective of legibility. An effort was made to be complete with respect to taxonomic aspects in that, where space and legibility seemed to demand an omission, the fact of omission has been suggested, as follows:

Species omitted from a section are indicated by a parenthetical immediately following the species included. (For example, in addition to *M. grandiflora*, 14 other species have been described which are currently attributed to the section Theorodon, but are unlisted on the chart.)

② *A Survey of the Genus Magnolia Together with Manglietia and Michelia*, J. E. Dandy, M.A., F.L.S.; Camellias and Magnolias Conference Report, 1950, 64-81.

Varietal forms omitted are suggested by a parenthetical, showing the approximate number of named forms omitted, or merely by the abbreviation, "etc."

It seemed most desirable to include a documentation of all species crosses known to date to have been successful in the sense of producing offspring. An interspecific hybrid for which there was no known appropriate name is indicated on the chart merely by the symbol \times . Whether or not this present depiction of hybrids has been successful in completeness and legibility, it is clear that the design has reached near saturation for this purpose.

Inclusion of species has been primarily on the basis of horticultural interest for more temperate regions. Omission of a species bears no suggestion that it has no horticultural value in the warmer climates to which it is restricted.

Inclusion of varieties, when restriction was necessary, was based on the objective of representation, as illustrated in the case of *M. \times Soulangiana*. Certain recently-described crosses between hybrids and between hybrids and species have been diagrammed, without space to include names assigned to the selected offspring; the numbers at the extreme right edge, however, represent the number of forms selected and named from each cross so diagrammed.

The choice of upper and lower case lettering was solely to provide a reference guide to accepted capitalization which advantage is lost when upper case lettering is used exclusively. Capitalization of taxonomic category names at the top margin is only because of their use here as column headings.

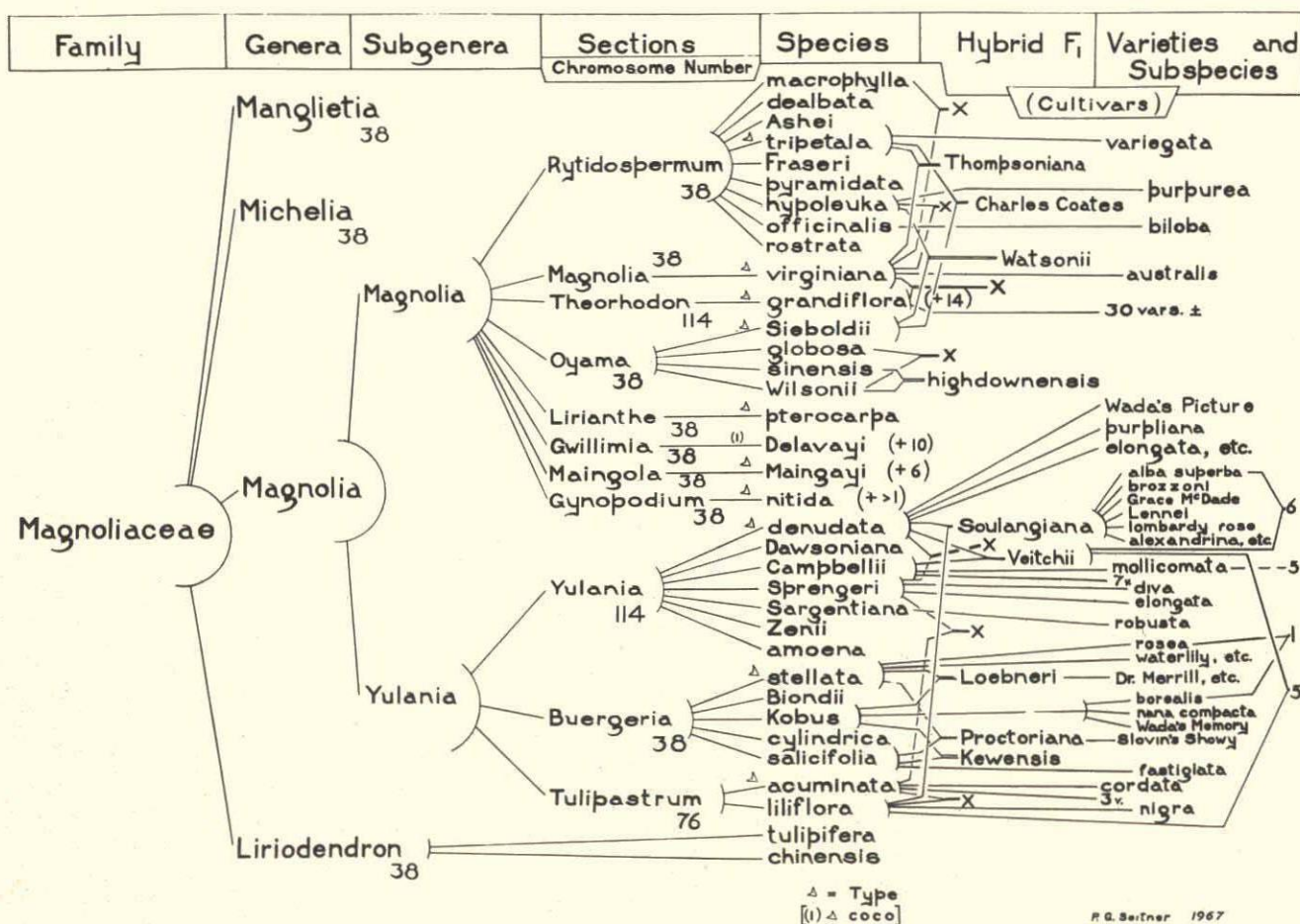
PROPOSALS FOR SUPPLEMENTATION; REVISIONS

It might be possible to insert into the pattern of the diagram much other information by reducing the lettering size to provide adequate space. In doing this, legibility would be sacrificed to information assembly. The obvious alternative is the preparation of supplementary listings or diagrams, providing such information as the omitted species, cultivars, and synonyms. Also, historical documentation might be a useful reference, beginning with identification of authors of the names and dates and citations of publications establishing the names.

Another suggestion has been the designation of temperature tolerance limits for each. This idea might conceivably be expanded to a descriptive code indicating cultivation and character aspects for each species. Also, it would be useful to have recorded the distinguishing and identifying characteristics of each genus, subgenus, and section. A note of the country and region of origin, as well as accessible locations of exceptional and typical living specimens might be of interest.

It is appropriate to give recognition to the transient nature of this diagram. The enthusiasm for varied investigations, especially for further hybridization, must be expected to result in new insights and minor, perhaps major, revisions of the relationships illustrated here, as well as new hybrids and varieties.

Nevertheless, it is offered with the hope that it may serve, for the immediate future, as a useful reference and illustration and, for the novitiate *Magnolia* enthusiast, as a helpful means of orientation.



Letters to the Editor

DEAR SIR:

I read with interest your note in the Magnolia Society NEWSLETTER (Vol. 4, No. 1) regarding the difficulties of establishing a locating list. You are right in saying that the job of compiling a source list using commercial nurseries is next to hopeless. There is simply not enough demand to keep the rarer varieties and species in continuous supply, and the list would be obsolete almost before it could be distributed. In these circumstances the alternative would seem to be fall back on the resources of our members. I believe many of our members would be happy to list the Magnolias they have access to, from which they would be willing to collect seed or scions on the basis of individual requests from other members. A committee of the Society could act as a central clearing house for listings and requests, so as to protect any one member from too frequent demands. The Society would simply publish a list periodically of the Magnolias it has access to through its members, and direct requests to the committee. Of course the problem of proper identification crops up, but apparently even the professional nurseryman is not immune to attacks of mistaken identity. I don't believe it is practical to attempt a seed distribution program similar to that of the AHS if only because Magnolia seeds are simply too short-lived for that kind of handling and of course seeds are useless where horticultural varieties are concerned.

At the same time the Society should properly take an active role in the introduction and propagation of the extremely rare Magnolias, things for example like *M. Coco*, *M. Delavayi*, *M. guatemalensis*, *Talauma Hodgsonii*, *Michelia Doltsopa*, possibly *Manglietia insignis*, etc. If a commercial source is involved propagation costs could be handled by prior subscription for plants by members through the Society, thus assuring a market for the plants. Many members, I am sure, have sufficient skill to undertake the propagation of very rare plants to be distributed to the membership on a volunteer basis, if the initial material could be made available to them. This would not be a short term program, to be sure, since initial distributions would have to be made to members willing and able to repropagate. But if our Society, comprised of people with a particular interest in Magnolias, cannot undertake to make these plants more readily available, then who can? The Society with its collective membership and prestige is much more likely to be able to find and secure initial propagating material, either seed or scions, than is any individual member, especially with the assurance that the plants would be widely distributed and repropagated.

Please let me strongly urge that a beginning of some kind be made at a seed plant exchange program within the Society. Most of the members want it, and I don't believe there is any surer way of securing the permanent interest and participation of the entire membership in the Society.

DR. ROBERT L. EGOLF
University of South Florida
Tampa, Florida.

DEAR SIR:

I must say the response to the listing of my Magnolias in the NEWSLETTER has been interesting and also educational. With regard to the latter, I have not been experienced in cross-country shipment. I have been learning crating and having a canvass of the carriers. I hope that the plants have been arriving in decent shape since they start out as only the hardiest and thriftiest of plants. I am transferring them from containers to plastic bags around their roots, so inspect their roots, sending only the best.

So far my largest order that stemmed from the finding list came locally from the Portland area for a collection of 20 or so Magnolias and other related plants. This order introduced me to Mrs. John (Jane Kerr) Platt. She is a member of the Society and has a most interesting collection and garden. It was her father, Peter Kerr, of the 13-acre estate Elk Rock, who collected a most outstanding group of Magnolias years ago. You undoubtedly have heard of this collection, now mature trees at the Bishop's Close in Portland, Oregon.

Regarding Mrs. Platt, she is a most personably lady and excellent gardener. I approached her to write a history of the Magnolias at Elk Rock for the next NEWSLETTER. I consider it worthy if you have time to contact her concerning this report. I strongly hope she will write this since there are some very rare and outstanding plants in this collection. I recently saw *M. Sargentiana robusta* blooming in Mrs. Platt's personal garden and it was simply magnificent! She tells me that the Elk Rock Magnolias are all on their own roots and most were imported from England (most probably before the days of the ghastly fumigation.) Included is a rare form of *M. Fraseri*, which is most noteworthy.

I received an order from Mr. Seitner of Chicago and he tells me the Memphis meeting was very successful. I hope the group will be interested next spring in a Seattle or San Francisco meeting. Brian Mulligan or Jock Brydon should be interested to hosting such a meeting since both are very interested in Magnolias. The University of Washington Arboretum collection is really coming into its own since the severe freeze of 1955. I am sure that gardens of Seattle and San Francisco contain many more specimens worth viewing.

I will report that my stock of plants, although dented, remains intact except for *M. cordata* and I will have more in the fall. I want to thank you again for your service and hope that the plants arrive in good shape.

JAMES GOSSLER
Springfield, Oregon.

DUES ARE NOW PAYABLE TO

PHILIP J. SAVAGE, JR.

BLOOMFIELD HILLS

MICHIGAN

\$2.00 Per Year

Magnolia x Raffillii

NEIL G. TRESEDER

The Nurseries

Truro, Cornwall

THE LATE CHARLES P. RAFFILL was an assistant curator at the Royal Botanic Garden at Kew. In 1946 he fertilized some flowers on a tree of *Magnolia Campbellii*, which was growing in the Himalayan Section of the Temperate House, with pollen from its sub-species *M. mollicomata*. He corresponded with me frequently at the time about his failures and successes in his attempts at Magnolia crossing and hybridizing.

About a hundred seedling were raised from this cross, the majority of which were subsequently distributed privately by the raiser without official records being kept, so that the whereabouts of most of them is not known. The first recorded flowering was at Windsor Great Park in April, 1959, some thirteen years from the date of germination of the seeds. This tree produced large flowers with the intense pink of *M. Campbellii* overlying an undertone of rosy purple inherited from *M. mollicomata*. It was named "Charles Raffill" after the raiser and received an Award of Merit from the Royal Horticultural Society when exhibited in April, 1963, a month after the coldest winter of the century. When seventeen years old this tree had attained a height of forty feet with a spread of twenty feet.

It should be borne in mind that only plants propagated directly or indirectly from cuttings, layers, buds or grafts off the Windsor tree are entitled to the clonal name "Charles Raffill." Unfortunately this name seems to have become loosely applied to these crosses and even to F₁ seedlings of unknown flower potential.

Because this grex or group of Magnolias resulted from the marriage of two sub-species they are termed 'crosses,' the term 'hybrids' being reserved for marriages between distinct species.

Raffill sent one of his seedlings to the famous Cornish garden of Caerhays in the original distribution where, judging from the situation afforded to it, its flowering potential was underrated for, in close proximity to native beech trees, it soon became drawn upwards by inadequate light and shed most of its lower branches. However, when at last it commenced to flower it caused quite a sensation. It was exhibited at the R.H.S. Show on the 14th of March, 1967, by Mr. F. Julian Williams who aptly named it "Kew's Surprise" and it received an Award of Merit. The flowers are very large with rosy-crimson petals which are white on the upper surface with pink veins and shading to deep pink at the edges. The flower examined had twelve tepals, eight large ones in the two outer whorls with four smaller ones broadly cupped around the gynandrophore to give a flower shape like *M. mollicomata* rather than *M. Campbellii*.

NEWSLETTER. JULY, 1968



Magnolia grandiflora espaliered at
Warwick Castle, England

Photo: Dr. John M. Fogg, Jr.

Whilst Kew claims to have flowered an even redder seedling than 'Kew's Surprise' the Council of the Royal Horticultural Society, at their meeting in November, 1957, saw fit to award the Reginald Cory Memorial Cup to the Royal Botanic Gardens, Kew, for this Magnolia which was grown, named and exhibited by Caerhays.

Three years earlier, in 1943, Raffill had succeeded in crossing *Magnolia Campbellii* with *M. × Soulangiana*. So far as is known no worth-while hybrids have resulted, but here again no record was kept of the distribution and it is possible that good ones exist.

The writer is compiling a comprehensive book on the temperate Magnolias and their hybrids in co-authorship with Mr. Nigel Holman of Chyverton, Zelah, Nr. Truro. Both authors will welcome any information concerning the whereabouts of Raffill's crosses and hybrids as well as any unusual news about other Magnolias.

New Members

THE SOCIETY IS HAPPY TO WELCOME the following new members who have been enrolled since July, 1967:

Barrio, Mr. Charles, Semmes, Alabama 36575.

Brock, Lord Russell Claude, The Old Rectory House, Wimbledon, England.

Brooklyn Botanic Garden, 1000 Washington Avenue, Brooklyn, New York.

Calloway, Mrs. Fuller E., Jr., 1200 Vernon Road, La Grange, Georgia.

Clarke, Mr. Rodes V., 126 North Price Road, St. Louis, Missouri.

Dodd, Mr. Steve, Dodd's Garden Center, 10729 Preston Road, Dallas Texas.

Fondren, Mr. James F., 6832 St. Charles Avenue, New Orleans, Louisiana, 70118.

Glover, Mr. Peter, Cornwood, Ivy Bridge, Devon, England.

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Magnolia grandiflora in Orto Botanico,
Padua, Italy

Photo: Dr. John M. Fogg, Jr.