



The Pipeline

This issue edited by Robert B. Clark, Cattle Landing Road, R.D. 1, Box 288, Meredith, N.H., 03253

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SOME NEW LILAC BREEDING AT THE ROYAL BOTANICAL GARDENS - By Joan Brown,
Ornamental Plant Breeder.

Since joining the Royal Botanical Gardens' staff a little over two years ago, I have become interested in lilac breeding. The excellent collection of species, cultivars and hybrids in the Katie Osborne Lilac Dell, plus the expert counsel of knowledgeable staff members, has made breeding work with lilacs especially enjoyable and, I hope, promising. Several projects have been initiated the past two seasons, involving cultivars of Syringa vulgaris as well as species in the series Vulgares, Pubescentes and subgenus Ligustrina.

With the French hybrids, I felt I might get something new by trying to extend the range of flower colour. The approach I'm using is to cross cultivars from the extremes of the existing colour range. For example, I've crossed some of our best pink cultivars together in hopes of selecting, in the first or succeeding generations, a plant that has a truer pink colour than either parent. Similarly some of our best blues have been crossed in an attempt to get a distinct non-fading blue. With 'Primrose', the best I could do was cross it with our best whites, especially any that showed a tendency to yellow-tinted flower buds, and hope to intensify and brighten the yellow shade. Self-pollination of 'Primrose' didn't succeed this year, but seems worth repeating. What the biochemical limits to pigment production and diversification in Syringa are, I don't know, but perhaps I'll learn more about this once the hybrids flower. And even if, as Patek (1972, I.L.S. Proceedings 1(5): 32) states, we will never get a true blue or red, there is always the possibility of a mutation in a gene controlling some aspect of pigment synthesis, similar to the mutation in roses of cyanidin to pelargonidin, that may one day give a break-through for lilac flower colour as well.

There are several distinctive floral characters, such as the large flowers and inflorescences of 'Frank Patterson' and 'Agincourt Beauty', the extra corolla lobes of 'Rochester', the bicolours of 'Etoile de Mai', and the doubleness of a number of cultivars, that now exist mostly in separate cultivars. Several crosses were made in 1975 with a view to learning about the inheritance of these traits and perhaps combining two or more of them in one new selection. Breeding for flower characters cannot, however, be at the expense of other good qualities of the plant, e.g., attractive foliage and growth habits, vigour, and disease and insect resistance.

In the series Vulgares, the tendency of some types, e.g., S. x hyacinthiflora and S. x diversifolia, to fall colour, and the compound or lobed leaves of S. laciniata and others, offer intriguing possibilities. Perhaps further developments along these lines would prolong garden interest of lilacs beyond the normal blooming period.

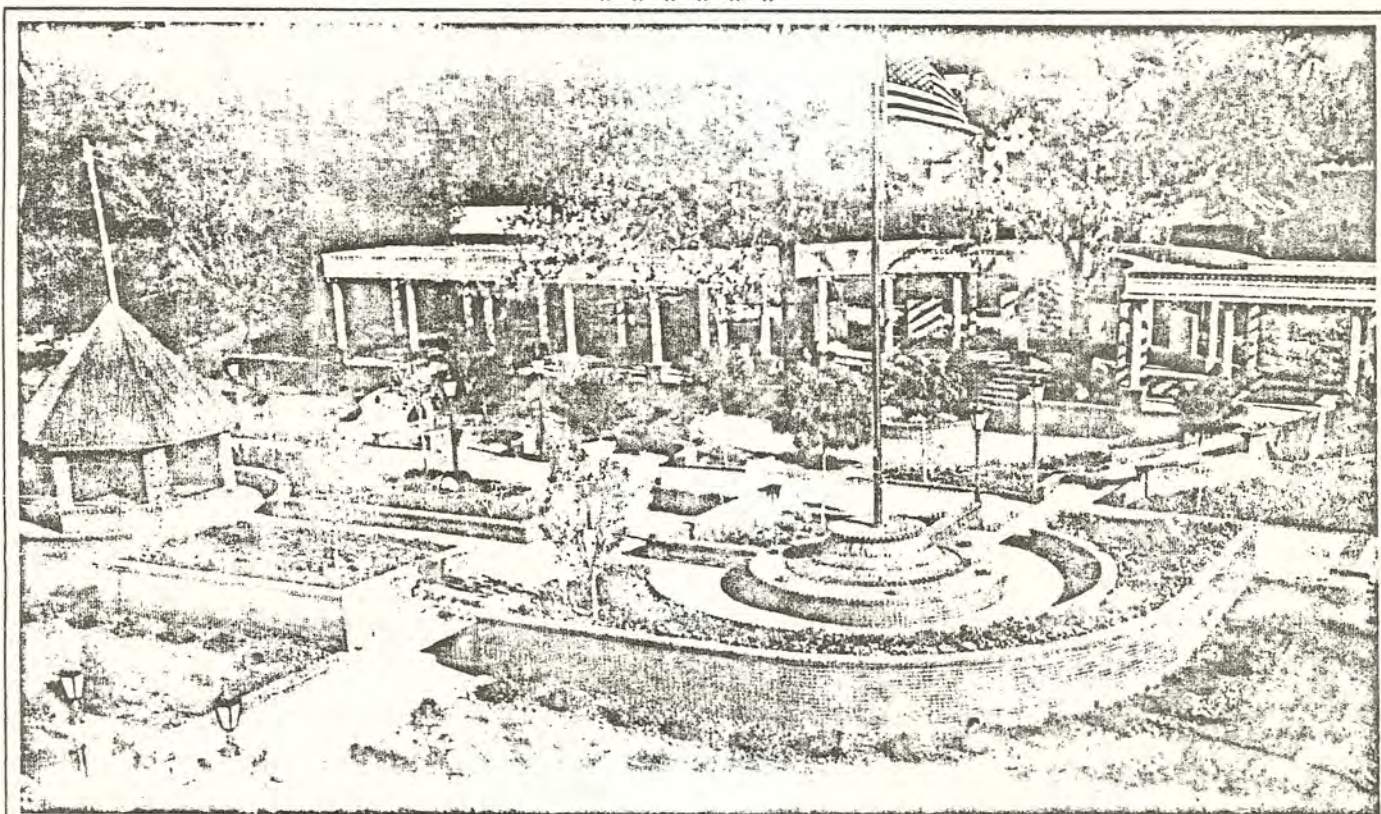
The series Pubescentes also has a number of interesting species. The small leaves and compact plants, plus the ability to rebloom, are all desirable features. Considerable interspecific incompatibility has been reported by other breeders, and my 1975 crosses bore this out. Even where seeds were produced, I obtained a number of weak or albino seedlings. However, exploiting intraspecific variation alone may be another worthwhile route to follow.

The last project is in the subgenus Ligustrina with the tree lilacs S. pekinensis and S. reticulata. So far only albinos have resulted from the interspecific cross using S. pekinensis 'Pendula'. One "unknown" to me is how much variation exists in these species, and whether it is sufficient to make any appreciable progress in improvement.

As a novice lilac breeder, I welcome any comments or criticisms of these new projects. Your informed opinions will doubtless be of much help to me in further lilac breeding.

Ms. Joan Brown, Ornamental Plant Breeder,
Royal Botanical Gardens, P.O. Box 399,
Hamilton, Ontario, Canada. L8N 3H8.

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Views of President Gerald R. Ford Birthsite and Gardens, Omaha, Nebraska.

Lilacs and roses are features in the minipark memorial garden marking the birthsite of Gerald R. Ford, 39th president of the United States, at Omaha, Nebraska. The garden is a national landmark donated to the city of Omaha by James M. Paxson of Omaha. Lourene Wishart, our Mid-western Vice President, assisted in the landscape consulting phases.

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HOW COME 'OAKES DOUBLE WHITE' LILAC - By Professor E.M. Meader,
Rochester, New Hampshire.

I live on a small farm that adjoins Meader Heritage Farm, the farm on which I was born and brought up. Incidentally it has been in our family for more than 200 years and it is still being farmed. It is located in a section of Rochester called Meaderboro. In pre-Revolutionary times settlers moved inland from the seacoast some 15 or 20 miles. Whoever of them first planted lilacs in the neighborhood may never be known. That lilacs have been growing here for many years is evidenced by wide-spreading clones of freely-suckering *Syringa vulgaris*, both the single-flowered purple and the single white. Few colonial houses remain, however, a lilac that was once planted beside the front door often survives to mark the site.

Twenty-six years ago when I moved to my present home, a nearby neighbor, the late Elijah Oakes wanted to give me a plant of an exceptionally fine double white lilac. I could not refuse. When I asked where he had gotten it originally, he said that he had dug a sucker from a large bush that had grown on the dividing line between his and the adjoining property. Just what that bush was like will never be known, since it is no longer there.

Assuming that such an exquisitely fragrant white lilac with large trusses of double flowers must have a varietal name, though it seemed unusual that it suckered so freely, I added a plant of it to the lilac collection at the Agricultural Experiment Station horticultural farm at Durham, New Hampshire. When it would bloom, it could then be compared with the other relatively few cultivars of double white common lilac. For temporary identification I labeled it "Oakes Double White". Now after two decades, knowledgeable lilac enthusiasts still have not definitely decided that this cultivar belongs to any previously named lilac. About 15 years ago, Dr. Owen Rogers furnished a list of lilacs growing at Durham to Mr. John C. Wister at that time registrar of lilac cultivars. Thus the name 'Oakes Double White' was published in *Arnoldia*, vol.23, no. 4, p. 82 (1963). It seems that Meader had named a new lilac. In some ways it will be hard to improve this cultivar as a double white. Ease of propagation by suckers of 'Oakes Double White' should appeal to commercial nurserymen. However, gardeners who grow it just cannot resist giving suckers of it to friends, for it is a lovely lilac.

What is the origin of 'Oakes Double White'? Could it be a sport or mutation to a double-flowering form from the freely-suckering, single white common lilac found about old homesteads of New England? Or, could it be some choice cultivar, planted years ago, yet to be properly identified? I don't know. What I do know is that this lovely lilac was labeled and now is known for Elijah Oakes of Meaderboro Road, Rochester, New Hampshire, upon whose property it was found growing.

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COMMITTEE CHAIRMEN AND REGIONAL VICE-PRESIDENTS: PLEASE NOTE --

Within the scope of the position you may hold within I.L.S., it is of great importance that directors and officers hear of data pertinent to services rendered, duties and accomplishments of the 1976-77 year. For some individuals this request will involve rather detailed reports; others may have little or no reason to submit a formal statement, but you be the judge and contribute accordingly. Your message may very well be brief, yet of prime importance. Better yet, plan now to attend the conference and give your report in person as well as presenting a written copy for the record.

This issue will also serve as a formal notice to all members of the Board of Directors that the annual meeting will be officially conducted on Friday, May 20, 1977, at 8:00 a.m. in Amherst, Massachusetts, in the Lord Jeffery Inn or in a suitable space designated for that purpose at that hour.

Walter E. Eickhorst, President,
The Morton Arboretum, Lisle, Illinois. 60532.

NOMINATIONS FOR AWARDS.

The Awards Committee of the International Lilac Society would like nominations of people in the Society who have made outstanding contributions to the Society in any of the established awards categories listed below.

INTERNATIONAL LILAC SOCIETY AWARDS.

'The Honor and Achievement Award of The International Lilac Society' is to be the highest award given by the Society. It is given only for outstanding work, dedication and service in promoting the Lilac or the Society. To be considered for the award an individual's contributions must be truly outstanding and of benefit to the whole Society. It is awarded only to individuals and not to institutions; given only once to any individual and need not be presented annually.

'The Directors' Award of The International Lilac Society' is to be awarded to the Arboretum, Public or Private Park or Garden for outstanding collections and public display of lilacs, work with promoting the growing and landscape uses of the lilac, outstanding landscaping with lilacs or major research with lilacs. It is an institutional/ or park-garden award. Its purpose is to encourage the planting of lilacs for public display and education. It is not intended for strictly private gardens (no matter how great their excellence).

'The Award of Merit of The International Lilac Society' is given to individuals or institutions, public or private gardens, for outstanding contributions in promoting, growing, researching or working with the Lilac or the Society. It is intended as the Society's recognition for outstanding work or service. It is intended to be given regionally as an *'International Recognition for Work Over and Above the Average'* - for outstanding promotion, for public education, for scientific-research work, or for horticultural excellence. A recipient may receive this award only once for the same work (but more than once for several contributions of equal merit).

Awards are the highest form of public recognition which an organization can bestow. They should not be given lightly but all significant endeavors should be acknowledged. The Awards Committee needs your help to be sure that this years list of nominees be as complete as possible. Please send names of persons you feel are deserving of honor along with a brief resume of the reason for the honor to the Chairman of the Awards Committee, Dr. Owen M. Rogers, Plant Science Department, University of New Hampshire, Durham, N.H. 03824. Deadline for receiving nominations is MARCH 10, 1977.

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PROGRAM FOR THE SIXTH ANNUAL MEETING OF THE INTERNATIONAL LILAC SOCIETY -

MAY 20, 21, 22, 1977.

The Lord Jeffery Inn, Amherst, Massachusetts. All meetings will be held at the Inn unless otherwise stated.

FRIDAY, MAY 20, 1977

8:00 to 10:00 a.m.	Directors' Meeting
8:00 to 10:00 a.m.	Registration
10:00 to 11:30 a.m.	Meeting of the Society - official business
11:30 a.m.	Early lunch at the Inn (Welcome by Professor Arnold Collery)
1:00 p.m.	Bus and cars to Smith College Botanic Garden
2:30 p.m.	Trip from Smith to Old Deerfield, led by Bob Clark
4:00 p.m.	Trip from Deerfield to U.Mass, led by Owen Rogers
5:00 p.m.	REST
6:00 p.m.	Cocktails at the Inn
7:00 to 9:30 p.m.	The President's Dinner - Reports by Officers
9:30 p.m.	Hospitality Suite

SATURDAY, May 21

8:00 a.m.	Breakfast
9:15 a.m.	"Talk on Lilac Gardens", Jack Alexander, Arnold Arboretum
10:00 a.m.	"Propagation", Alfred J. Fordham, Arnold Arboretum
10:45 a.m.	"The Well Bred Lilac", Dr. Owen M. Rogers, U. of New Hampshire.
12:00 noon	LUNCH
2:00 p.m.	Field trip to "Lilac Land", 24 Harkness Rd, led by Al Lumley
5:00 p.m.	Cocktails and Happy Hour at Lord Jeffery Inn
6:30 p.m.	DINNER
8:00 p.m.	Lilac Auction, Amherst College Cage, Public invited. Auctioneer, Pres. Walter Eickhorst.
10:00 p.m.	Hospitality Suite at the Inn.

SUNDAY, MAY 22

8:00 a.m.	Breakfast
9:00 a.m.	Meeting of the Society
9:15 a.m.	"Colchicine and Genetic Changes", Fr. John Fiala
10:00 a.m.	"The Rochester Lilacs", Richard A. Fennicchia, Rochester Parks
10:45 a.m.	"Fertilization of Lilacs", Charles Holetich, R.B.G.
11:30 a.m.	"The Future of the I.L.S.", Dr. John C. Wister
12:15 p.m.	Happy Hour
1:00 p.m.	Award Banquet, Lord Jeffery Inn
3:00 p.m.	Everyone invited to the Lumleys for another look, rest, quiet, with libations

Note I

Lord Jeffery Inn Meal Schedule

Breakfast: 7:30 to 10:15 a.m.
Lunch: 11:30 to 2:00 p.m.
Sandwiches at Bar: 2:00 p.m. to 3:00 p.m.
Dinner: 5:30 to 9:00 p.m.

Note II

Registration charge of \$25. covers President's Dinner,
Bus trips and incidentals

Note III

All housing requests must go to the Manager of the
Lord Jeffery Inn, Mr. Raymond Kelleher and/or
Mr. Albert Lumley, 79 So. Pleasant St., Amherst, Mass. 01002.

SIXTH CONVENTION AT AMHERST - The Lord Jeffery Inn will be convention headquarters for our sixth annual membership meeting, May 20-22, 1977. Society members planning to attend are advised to make reservations right away, since a limited number of accommodations are available. The innkeeper assures the Board of Directors that all ILS members who register will indeed be taken care of at nearby motels.

For room reservations please write as soon as possible to :-

MR. RAYMOND J. KELLEHER,
MANAGER,
LORD JEFFERY INN,
AMHERST, MASS. 01002.

or

MR. ALBERT E. LUMLEY,
79 So. PLEASANT STREET,
AMHERST, MASS. 01002.

and indicate in your letter that you are a INTERNATIONAL LILAC SOCIETY member.

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THIS WINTER EAST OF THE ROCKIES - AND LILACS. The news media make much of the 1976-77 winter and old timers cannot remember anything comparable, so besides whatever is stressful and distressing in the extreme to man, what will be the effect on lilacs? Very little (but please don't quote me). I've been perusing the CIA's "Atlas of China" and I find that the comparable climates of Chinese provinces in which lilacs occur are as follows: Manchuria resembles Minnesota and Nebraska; Peking and vicinity resembles Kansas; Hupeh, Oklahoma; Shensi and Kansu, Wyoming; while Szechuan is like eastern Texas! And I might add that the southeastern European species endure climates comparable to the Ozarks. These data indicate how durable is the lilac in Nature.

For cultivated lilacs the story is slightly different, however. Now we uproot particular plants. We grow them quite unnaturally by siting them haphazardly where we want them for our benefit, unmindful of the plant's need; we pamper or neglect them; and we've modified them through breeding. Still lilacs are adapted to gardens in the northeast and great plains where lakes freeze.

Ogallala Update. Max Peterson reports (January 15th) no precipitation, except for one inch of rain, since September. That was just enough for the winter wheat to sprout, but not to grow. Without snow cover but with constant and fierce winds the dust has been like the 1930's. For instance, the highway two miles south of his farm has been closed on and off owing to drifting dust (windblown soil, that is). Max is not sure of his wheat crop, but he thinks the lilacs will survive !

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By eliminating the necessity of mailing the reminder notices you can reduce the expenditure of your society. PLEASE PAY YOUR 1977 I.L.S. DUES NOW. Mail your dues to Walter W. Oakes, I.L.S. Secretary, Box 315, Rumford, Maine, 04276. U.S.A.