



The Pipeline

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

Vol. III, No. 1.

January 1977.

WANTED ! LILAC BREEDERS By John C. Wister, Swarthmore, Pennsylvania.

One of the purposes of the International Lilac Society, now five years old, is to promote lilac breeding. What kind of a start has it made towards this? In these few years no one can yet tell. It does seem, however, that if the society had really inspired even two or three breeders, we would have heard about it. For, once started, a breeder would have become anxious to learn what other breeders are doing that he would have asked at the conventions or have written to some officer to ask if he were heading in a prospective direction.

If some members have indeed started, it would be good to have the society show an interest in them and in their work. It would be well also to remind them of some of the improvements that those members, who have grown lilacs for a long time, feel are the most needed by the average gardener who just has a few plants for his garden. To illustrate let us for the moment discuss only the common lilac, Syringa vulgaris, (and its closely associated early hybrids) and leave the larger, in fact huge, subject of the other and chiefly late blooming species to be dealt with later by someone of much wider knowledge.

First, let us consider what we now know (or think we know) about Syringa vulgaris. It is native to a relatively small geographic region of central European mountains — in countries we call Hungary, Roumania, Bulgaria, Czechoslovakia and Yugoslavia — and in a climate we usually think of as "cold" (but certainly not to -40° or -50° F). Yet the plants are said to be hardy in parts of Manitoba, Canada, where temperatures often get that cold. We do not know the yearly rainfall or the months of most or least rain; but we do know that on the continent of North America roughly north of the Mason-Dixon Line (approximately 40° N latitude) and from the Atlantic to the Rockies rainfall is usually sufficient for lilacs to grow well without artificial watering (though, of course, they do benefit from watering in rare prolonged droughts).

Let us look back again, this time from another point of view: what do we know about the use of lilacs in gardens? This time we can say we know quite a lot. We know that lilacs were grown for their beauty and fragrance in Turkish gardens; that in 1554 they were brought to northern Europe where by the early 17th century they had become popular; and that they were brought to America by the middle of the 18th century (certainly before 1776).

We know that selected forms of more reddish-purple or of deeper violet-purple began to appear, perhaps by 1820 or 1830. Then Belgian and French, and a little later German and Dutch nurseries began to offer plants by named variety. The greatest of these lilac nurseries was the firm of Lemoine which, between 1870 and 1940, introduced over two hundred varieties, 75 of which were included in the list of 100 recommended varieties ("Lilacs for America", 1953). In this country John Dunbar at the Rochester Parks selected and named some 30 choice seedlings between 1917 and 1923; and on Long Island, Theodore A. Havemeyer also began breeding lilacs about the same time.

A disconcertingly long time (usually from three to seven years) is needed to produce blooming plants from seed; then to judge them adequately it takes five to ten years more; to propagate them in quantity enough to introduce in commerce five to ten years still more; and finally to get them widely accepted in different regions may take still longer. This is why varieties introduced after the 1940's are still considered novelties.

It is true, however, that the time needed can be shortened by modern methods which make possible (without any undue forcing to weaken the constitution as demonstrated in recent years by rhododendron and azalea growers) a fewer number of years before free blooming. Modern propagation also makes quicker multiplication possible; and modern business procedures can and do exploit the virtues of a new variety and stimulate many people to buy it even at considerably higher prices than older varieties.

What helpful suggestions can the society offer to beginners? We have all noticed that lilac plants, in older gardens at least, are often ungainly, or overgrown, or too crowded or too surrounded by suckers. Can this be remedied by selection or particularly by breeding? Very probably, yes. There are numbers of available lilac varieties that are compact and shapely growing and that do not, so soon at least, crowd neighboring plants. Perhaps the society could pinpoint these varieties and tell members which nurseries now offer them.

What parent plants can be suggested for breeding? There is a wild and as little known variety, 'Mount Domogled', which the late Dr. Edgar Anderson found, about three feet tall, in the Balkans in the 1930's, and brought back to the Arnold Arboretum. In cultivation it grows somewhat taller, but is shapely and much more compact than most forms of the common lilac. No breeder seems to have used it until Robert deWilde took pollen of it to Bridgeton, New Jersey, in the late 1950's. There, he produced a number of lilacs which show its desired compact habit and shapeliness. He, apparently, has not made selections, propagated nor distributed any of these seedlings. Certainly Syringa vulgaris 'Mount Domogled' should be tried by other breeders.

Two other named varieties would seem to offer possibilities of transmitting the compact habit: 'Diane' is a little known lilac raised by the late Dr. Casper I. Nelson of Fargo, North Dakota, and which he apparently distributed only to a few friends (it is a very shapely and compact lilac); the other, 'Siebold' (Lemoine 1906) has little to recommend it except that it is relatively dwarf and compact. Its white flowers are dingy and double and may not even be fertile; but at least this variety ought to be tried to see if it would produce dwarf growing plants. The demand now is for compact lilacs that do not need constant or drastic cutting back. The society should recommend varieties that might be used to obtain plants of this kind.

It should be borne in mind that a certain amount of yearly suckering in lilacs is desirable to promote new growth and keep the plant at its prime and ever youthful. Too many suckers often are an unreasonable burden. 'Assessippi', one of the finest Early Hybrids, possesses this undesirable trait; and so does the otherwise noteworthy 'Mme. F. Morel' which apparently will spread out indefinitely and destroy everything in its path, if not restrained. One of Victor Lemoine's older and finest introductions, 'Mme. Antoine Buchner', while not too tall, grows so massive that it is unsuitable for smaller gardens. The ever popular 'President Lincoln' gets too tall too fast and requires too constant cutting back. All of Lemoine's Giraldii Early Hybrids grow too tall and leggy, although not so desperately like telephone poles as the seedlings which W.B. Clark of San Jose, California, raised from 'Lamartine', particularly 'Clarkes Giant' and 'White Hyacinth' which seem impossible to repress even by cutting to the ground at intervals.

It is easy to tell breeders what not to do. But where in our society are breeders with knowledge and experience to advise what to do? Our breeders must go ahead into uncharted courses. That should make their work even more exciting and adventurous and all the more wonderful when they come up with true advances in producing shapely lilacs of pleasantly moderate size yet with a reasonable amount, and only a reasonable amount, of sucker growth. Ideally (and if at all possible) these lilacs should have foliage somewhat resistant to damage by air pollution and not too very attractive to insects either. Many observers have noted that certain varieties do seem to be more attractive, alas, to borers, for instance. Such observations may partly be due to imagination but they seem to have been frequent enough to warrant a more careful study and worth watching while at the same time being sure to have more than one stem for the sake of insurance.

The number of characters to look for in a hybrid seedling would seem to be endless. Some plants, like rhododendrons and mountain laurel, have good plant habit or attractive foliage the year round. The common lilac, unfortunately, does not share these characters; instead it is grown for the beauty and fragrance of its flowers. Nor would it be fair to ask everything of each plant in our garden!

What characteristics do we want most in lilacs? Many people would choose, first, regularity and abundance of bloom. For many years in the collection of over two hundred varieties at Swarthmore the variety 'Capitaine Baltet' was the most regularly abundant. Comparable records, unfortunately, are not kept in any of the principal lilac collections. That is still another project for the society to work toward.

Flowers should be held up well and displayed, not hidden by foliage (a common fault in young rhododendrons). The flower clusters should not appear to be mused or sat upon as sometimes happens in some fine double varieties, especially after a rain shower. The size of thyse and of the individual floret are certainly matters of individual taste. Some people will like even the smallest, as in old 'Asurea Plena'. Others probably will not like 'Glory', particularly after a rain has caused the heavy cluster to droop still more. These people probably may think the individual floret so large as to be too heavy and grotesque (though hardly to be termed "cabbage", like some overlarge roses or peonies).

And, oh yes, fragrance! In much flower breeding fragrance has been entirely overlooked with resulting large and handsome flowers that are odorless or nearly so. Who wants sweet peas or heliotrope without their delightful fragrance? (Evidently some breeders do, or did, or at least are willing to try foistering them upon an unsuspecting public by overpraising their size or color.) Everyone associates the flowers of lilacs with delightful fragrance. This fragrance

varies, or seems to vary from variety to variety, perhaps also from day to day, and under conditions of different temperatures or moisture, perhaps even soil. Perhaps it can never be stated exactly. Visitors to the Swarthmore collection have been heard exclaiming that a certain variety had the fragrance of lemon, or of anise, or cinnamon or thyme when others could not perceive any difference at all. One long time visitor would declare year after year that 'Assessippi' was the most fragrant of all lilacs. There was considerable agreement, at least as far as saying it was one of the most fragrant or at least very fragrant. These are points not worth arguing about. It seems fair to say that there are many varieties which have very delightful fragrances while others may seem to have so little fragrance as to be disappointing. It is to be hoped that breeders, choosing varieties from which to breed, and later making selections in choosing varieties to name and introduce will lean a little in favor of those varieties having fragrance particularly delightful to them.

These are a few of the many points that, it is hoped, the society will stress in its endeavor to find many, many members who would like to try their hands at breeding on a small scale. Perhaps the society can soon go further and point out where to get certain pollens or even to supply pollens of a few varieties. Perhaps in future years it may even be possible for the Society to arrange for members with very limited garden space to secure the cooperation of some individuals or institutions with enough open space to grow these seedlings to a size large enough to be fairly judged, and then, if some particularly outstanding variety is produced, to help to get it introduced into commerce. These are all matters for the years ahead, five, ten or twenty years hence. What matters now is to get started -- not some vague time in the future -- but now, at once; this very next spring when the lilacs are in bloom.

* * * * *

SIXTH CONVENTION AT AMHERST - The Lord Jeffrey 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 JEFFREY 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.

* * * * *

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

MAY 20, 21, 22, 1977.

The Lord Jeffrey 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 Jeffrey 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 Jeffrey Inn
3:00 p.m.	Everyone invited to the Lumleys for another look, rest, quiet, with libations

Note I

Lord Jeffrey 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 Jeffrey Inn, Mr. Raymond Kelleher and/or
Mr. Albert Lumley, 79 So. Pleasant St., Amherst, Mass. 01002.

LORAIN, OHIO, THE "LILAC CITY" THAT NEVER WAS, by Freek Vrugtman, Royal Botanical Gardens.

The May 15, 1931, issue of HORTICULTURE, on page 223, carried the following story:

"Lorain Garden Club Plants Lilacs

Lorain, Ohio, has been made the "lilac city" through the efforts of the Lorain Garden Club. This has special significance in view of the fact that the province of Lorraine, France, for which Lorain was named, has for its provincial flower the lilac.

The town is a manufacturing center and naturally was much in need of beautification. With this end in view, the club purchased 5,000 lilac shrubs and trees. One thousand of these were planted in public parks, while about 2,000 plants were set out around schools, hospitals, public buildings and churches. Civic minded organizations such as the Rotary Club and the Business Men's Association co-operated. The remaining 2,000 shrubs were purchased by individuals for planting around their own homes.

This project is not to end here, however, because additional funds have been appropriated by the town so that plantings can be made each year up to 1935 for the beautification and landscaping of the city school grounds. Lilacs are to play an important part in every planting."

In a letter dated November 25, 1976, Clare Short, ILS Regional Vice-President for the Midwest writes:

"From my retired nursery friend and neighbor, Charles Markham (a descendent of the English clematis specialist of that name [Ernest Markham]), I learn that a Lorain florist, Mr. Heacock, was the leader in organizing a garden society of Lorain, but that it has disappeared with the demise of this instigator. There are still some lilacs in the large city park on Lake Erie shoreline but I fear the dream of a lilac city vanished with the same bubbles that a local garden club had of making Elyria "the forsythia city"."

* * * * *

THE FUTURE OF JERMYNS. This banner is found in "Tradescant's Diary", a column in the Royal Horticultural Society's journal for November, 1976. ILS members will likely recognize the name Jermyns and associate it with Mr. Harold Hillier who established the 100-acre arboretum about his home many years ago and filled it with a superlative collection of exotic ornamental trees and shrubs. Arrangements have been completed between Mr. Hillier and the Hampshire County Council (Winchester) to assure its perpetuation. Well known in the United States and Canada, Mr. Hillier is the author of a compendium of contemporary ornamental plants.

* * * * *

LILACS AT MORDEN, MANITOBA.

Western Canada's regional vice-president Bill Cumming has just sent out a 195-page evaluation report entitled "Woody Ornamentals in the Morden Arboretum" (Contrib. M-205 Agric. Canada Res. Sta., Morden, Manit.). About 10 per cent of the 5,000 entries include lilacs: counting multiple entries, 22 species, 8 hybrids, and 320 cultivars. The genus Syringa takes up 36 pages (pp. 142-178). Dr. Cumming shares authorship with Mr. A. Vitins.

The Morden Research Station was established in 1915 with the planting of hedges and shelterbelts in Canada's great plains to improve agricultural production. Since 1929, under increased acreage, the Morden Arboretum has become a "working collection" in which the plants are in rows, mostly clean cultivated. Species and cultivars belonging to some 40 genera are planted in blocks according to genus, thus making comparison among members of each plant group easier.

The present report covers information about the source, number of specimens and year of planting, plus evaluation data including "hardiness rating" for each entry, sometimes covering a period of 35 years (to 1970). The hardiness rating is based on a scale of 10 points: extremely hardy plants are accorded ratings from 10-9, while those which are not hardy are below 5 with zero indicating complete killing. Failures are reported indicating the putative factor (climate, soil, insect, disease, mechanical injury, and nursery failure). In examining those taxa rated 8.0 or below — actually not many — less than one-third (7 out of 22) of the species, five-eighth of the hybrids, and a mere 7.8 per cent of cultivars scored poorly. To me these negative results are exceedingly interesting, since they point out the lesser adaptive lilacs for the harsh climate of the northern great plains. Actually this report tells how very hardy lilacs indeed are.

* * * * *

MAX PETERSON IRRIGATES HIS LILACS.

If your ranch is located in Nebraska's sand hills and you raise wheat under irrigation, then you must provide extra care for your lilacs too. Last May at the Rochester "Bicentennial" Convention Max Peterson took home a carfull of choice lilacs (I know because he was bidding against me for 'Dr. Chadwick' among others). This is what happened at Ogallala this year :

May 15th. All lilac buds plus small leaves frozen.

June 4th. Lilac leaves burned off in 105° temperatures with 60 mph winds and 7% relative humidity.

July 4th. A 20-minute hail storm ripped off the roof of his ranch house, also stripped his lilacs of all leaves and new growth.

And, of course, later last summer Max's region was visited by a prolonged drought. Nevertheless by mid-September his lilacs began to produce a few small clusters of bloom which continued throughout October.

Max controls Euonymus scale using Lindane, according to label directions, applied by a power sprayer. He reports no scale nor borer in his lilacs. (This report furnished by I.L.S. regional vice-president Lourene Wishart.)

* * * * *