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INTERNATIONAL LILAC SOCIETY is a non-profit corporation comprised of individuals who share a particular interest, appreciation and fondness for lilacs. Through exchange of knowledge, experience and facts gained by members it is helping to promote, educate and broaden public understanding and awareness.

Published January, 1993

This Issue is Dedicated to

WINFRIED K. MARTIN

The Autumn 1992 issue of LILACS carried a modest thumbnail sketch of ILS director Marty Martin. We now wish to flesh out those five lines into an introduction.

Marty and Lisa came to America in 1953, having found a distant cousin

in Cleveland willing to sponsor them. He soon found employment at General Electric's Nela Park plant where he worked as machine operator, later as maintenance machinist. There he became acquainted with lighting expert Kirk Reid of Chardon, Ohio, who grew Christmas trees as a cash crop. Both men were trained foresters and the friendship grew into neighborliness when Reid sold the Martins 30 acres so that they could spend out-of-doors weekends in their primitive woodland cabin. The Martins built their own house by 1961, where they now live in retirement.



But first another neighbor, Eliot Paine, then of the Cleveland Garden Center, persuaded Henry Norweb, at that time director of The Holden Arboretum in 1968, to hire Marty as foreman of the Arboretum's 600-acre Baldwin tract. Two years later Marty was advanced to superintendent of Lantern Court, the former residence of the Warren Cornings, and to assistant superintendent of the Arboretum. By 1974 Marty became full superintendent with responsibilities for the maintenance of 17 houses, 3 public buildings, 6 barns, a sugar house plus 9 miscellaneous structures.

Marty recognized the importance of plants and gardens to arboretums, so his priorities were set to keep the grounds in tiptop condition year round. In his twenty-one years the Holden Arboretum, already the largest in America, doubled its size, to more than 3,000 acres and its maintenance staff from six to thirteen employees. Two federal assistance programs helped the struggling superintendent meet his labor requirements: CETA and AIPT. The former served to retrain unemployed citizens able and willing to learn new skills, while the latter (Association for International Practical Training) enable foreign students to devote up to six months in gaining training in America.

A major accomplishment crowning Marty's tenure at Holden Arboretum has been the planting of a lilac garden adjacent the visitor's center and parking lots. "The idea for a new lilac garden," Marty said, "started with a huge bucket of cut lilacs that I took to Mrs. (Atheline) Wilbur, a trustee's wife who adored lilacs and whose generosity started the new garden." Marty then recounted the events of ILS's ninth annual meeting when Fr. Fiala introduced three of his hybrid seedling lilacs naming them in honor of three Holden Arboretum benefactors: Albert Fairchild Holden, Emery Mae Norweb, and Atheline Wilbur.

Upon Marty's retirement Henry Norweb said, "Marty's most remarkable quality is his ingenuity and ability to accomplish any project in the most efficient manner with the minimum of help and equipment. He is a man of great resourcefulness and a good personal friend." ILS wishes him well in retirement.

PRESIDENT'S MESSAGE

t is my pleasure to extend warm New Year's Greetings to all my fellow members of the International Lilac Society and to thank you for your loyal support as we reinforce our leadership role in the promotion and education of the genus Syringa. Your membership reflects your willingness and commitment to make a difference in the ever changing and challenging world of lilacs.

In the year ahead we must search for more efficient means of acquiring, developing, and disseminating lilac information and knowledge. It is crucial that we further develop and expand our educational programs, that we broaden the contents of our Journal to cover perplexing environmental issues, progress in the lilac disease research, in current lilac trends, and, most certainly, to let the members know of and to follow the growth and success of Colin Chapman's ILS project to introduce and to establish major lilac collections in Europe.

At this time I urge all ILS members to seek out your Regional Vice President and offer your help. Let him/her know how lilacs are performing in your locale, which cultivar grows well/poorly for you. I urge you to help amass lilac information for publication that could help others in your region to grow even better lilacs. Your active involvement is our greatest strength.

Despite our specialty differences, despite our cultural and regional diversities, we are united in our love of lilacs. This responsibility that unites us as lovers, growers and promoters of lilacs is the agenda for my term as your president.

May Joy and Good Health be yours in the New Year.

Reva Ballreich, ILS President December 1, 1992

My Favorite Lilac

By Reva Ballreich, Idyllwood, CA

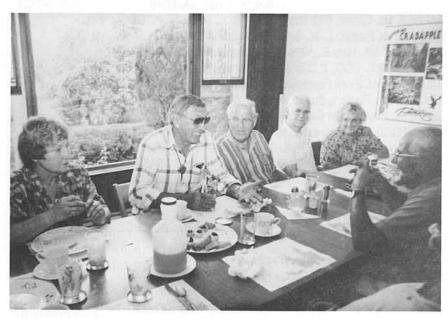
feel there is no more beautiful lilac growing than the enchanting 'Krasavitsa Moskvy'. The large double florets are pink in bud then unfold into a creamy white, giving a true bicolor effect. It is a robust, midseason, profuse bloomer with very stout, erect branches, heavy with large medium green leaves. The delightfully fragrant inflorescences are large but not bunched, lending a softer appearance than most doubles.

In my garden, zone 7, elevation 6,000 ft., snow off and on November through April, 'Krasavitsa Moskvy' has proved to be very hardy, mildew resistant and has a long blooming period. It blooms late enough to not be damaged by spring frosts. I have seen 'Krasavitsa Moskvy' blooming from California to and including Canada and have always been impressed by its consistent flowering habit. No lilac collection would be complete without this rewarding plant.

'Krasavitsa Moskvy', Leonid A. Kolesnikov ('Belle de Nancy' x I.V. Mitchurin')

Available at:

Wedge Nursery, Albert Lea, MN Heard Nursery, Johnston, Iowa Wayside Gardens, Hodges, SC



MEDINA, 1992

Genetic Engineering in the Lilac By Owen M. Rogers

From the article by Dr. Davis, you can see that some new and exciting worlds are opening for the improvement of the lilac. One of the things that has held us back in the past has been the lack of basic genetic information for the lilac. We have no chromosome maps or lists of genes with their location in the genome. Also, as Dr. Davis explains, we can't start with a whole plant so there will never be a procedure that could transform a pink 'Lucie Baltet' into a 'Wedgwood Blue'. The procedure requires that there be a culture of separated cells and a way of growing a whole plant from one of those cells. In spite of these problems, there are many tantalizing possibilities. For example, we know that the common lilac has all the prerequisites for mildew resistance, yet introduction of a gene to "turn on" that resistance through traditional plant breeding has been a hit or miss operation and frequently the transfer also brought along other, often undesirable, genes. Now, we will one day be able to go through a gene "catalog" and order a supply of a gene for mildew resistance and transfer it to lilac cells in a laboratory culture, find one of those transformed cells and grow a whole plant from it. The process sounds easy, and it is straightforward, but not at all easy so don't expect a race of "red nosed" lilacs anytime soon. Do expect some exciting new developments in the field of genetics, and ultimately in the lilac, as we explore and learn to handle this new field of genetic engineering.



LOMBARD

How to Make a Red Nosed Reindeer By Thomas M. Davis, Plant Biology Department, University of New Hampshire, Durham

he advent of genetic engineering has brought the dawn of a new technological age, with a potential to influence society rivaling, and perhaps surpassing, that of the electronics/computer industry. Because many gene-altered animals, plants, and products derived from them are rapidly approaching commercialization, it will benefit consumers, and others concerned with the social, economic, and ethical issues associated with genetic engineering, to be well-informed about the nature of this powerful new technology. The nature of genes and the methods now available to manipulate them are illustrated by the following fanciful, yet technologically feasible, example of genetic engineering in action.

The characteristics of living things are governed, for the most part, by hereditary factors called GENES. A man is a man, a fish is a fish, and a turnip is a turnip, because each has its own particular set of genes. Nature provides barriers which prevent the exchange of genes between different species. A man cannot mate with a fish, nor a fish with a turnip. However, with genetic engineering these barriers can be overcome, making it possible to transfer genes, and therefore hereditary characteristics, from one species to another.

As an example of how this might work, suppose we wanted to create a red nosed reindeer. Reindeer noses are not normally red; therefore we must begin by identifying some organism with the desired red color characteristic to be the source of our "red nose" gene. To illustrate just how far afield we can go in search of our gene, we will use as our source organism the red beet. But before we can understand how a gene, and therefore a characteristic can be transferred from one organism to another via genetic engineering, we must first understand something about how genes work.

We begin with the knowledge that all living things are composed of cells. A human body consists of 50-100 trillion cells. A plant may have fewer cells, or considerably more, depending on its relative size. Within each cell is a nucleus which contains DNA – the chemical material of which genes are made. Also within each cell, millions of chemical reactions are taking place every second. This biochemical activity is called METABOLISM. All activities and characteristics of an organism can be traced back to specific metabolic and other activities of cells. The metabolic activities of cells are governed by biochemical catalysts called ENZYMES.

The spectrum of enzymes and other protein present in a given cell is governed by the genes in the nucleus. In fact, each of the 50,000 or so genes in the nucleus is a kind of biochemical blueprint, that instructs the cell how to construct a particular protein. The instructions are communicated from the genes to the rest of the cell by way of the genetic code.

The red color of a beet is due to a metabolic reaction in the beet cells which converts some colorless precursor chemical into a red pigment. For this reaction to occur, the proper "red color" enzyme must be present. For this enzyme to be made, a "red color" gene must be present in the cell nucleus. The cells of a beet have this gene. The cells of a turnip do not.

In order to transfer the "red color" gene from a beet to a reindeer, we must first extract the desired gene from the beet. Since genes are made from DNA, this means that we must extract DNA from the beet. Once extracted, the DNA must be cut into small pieces. Remember that each cell of the beet has over 50,000 different genes and we only want one. Using the techniques of molecular biology we can cut the DNA, sort the resulting pieces according to their size, identify and selectively reproduce the piece of DNA carrying the gene of interest. This overall process is known as CLONING the gene.

Before introducing the cloned gene into the reindeer, we may need to modify the gene in various ways to be sure that it will work in the reindeer. Even though the genetic code is the same in all living things, a gene from one organism may not work in another unless the gene is appropriately modified. One type of modification is to provide the gene with the appropriate "on/off switch" (referred to as a gene PROMOTER) so that the gene will be expressed, and its corresponding characteristics will appear, in only the right cells of the organism. In the present case, for instance, we only want a red-NOSED reindeer, not a reindeer that is entirely red. The desired promoter, also a piece of DNA, would probably have to be isolated from reindeer cells, and connected to the beet "red color" gene via RECOMBINANT DNA methods.

The modified gene must then be introduced into the reindeer, a process called GENETIC TRANSFORMATION. In order for a newly introduced gene to be passed on to subsequent generations, the transformation must ultimately result in the gene being present in every single cell of the organism. It would be impossible to introduce a gene directly into each and every one of the trillions of cells of a reindeer, or even into the millions of cells in the reindeer's nose. Rather we must introduce the gene into one single cell from which an entire reindeer can be grown.

This is not as strange as it sounds, because we all begin life as a single cell. That cell is the zygote which results from union of a sperm and an egg. In animal genetic engineering, genes are introduced into fertilized eggs *in vitro*, using a microscopic version of a hypodermic needle. These eggs were initially removed and, after treatment, re-implanted into the mother's womb by the same methods used for human *in vitro* fertilization. During the ensuing cell division, each gene in the cell nucleus, including our introduced gene, is copied and will be represented in each and every cell of the developing organism.

In plants, genes can be introduced into single plant cells in a variety of methods. In perhaps the most dramatic method, microscopic, DNA-coated gold pellets are literally shot into plant cells using a so-called "gene gun." Alternately, genetically reconstructed strains of the bacterium, *Agrobacterium*

tumefaciens, can be used as biological gene transfer agents by exploiting the erstwhile pathogen's natural ability to transfer some of its own genes into plant cells. The transformed plant cells, originally taken from leaves or other plant parts, are then grown back into whole, genetically transformed plants in vitro by the process of PLANT TISSUE CULTURE.

In the case of our reindeer, if the reconstructed beet gene works properly in the reindeer cells, the "red color" enzyme will be made, but only in the reindeer's nose. The gene will be present in all the other cells in the reindeer's body, but will only be "turned on" in the nose cells. If the appropriate colorless precursor chemical is present in those nose cells, the enzyme will catalyze the reaction converting the colorless chemical into a red pigment. The result will be a red-nosed reindeer.

For many reasons, our attempt to create a red-nosed reindeer might not work, at least the first time we try it. For instance, the plant-derived enzyme might not function in the foreign cellular environment of a reindeer's nose. Even if the enzyme worked, the red pigment might not be stable in reindeer cells, or the colorless precursor chemical needed for synthesis of the red pigment might be lacking. A few trips back to the drawing board might be needed before the goal could be achieved.

Nevertheless, the technology to do such things does exist, as reflected in the increasingly frequent reports of genetically engineered animals and plants. For example, genes have been introduced into several mammals, including mice and cows, causing the animal's milk to contain useful pharmaceutical products. Ultimately, substances such as human insulin may be produced by genetically engineered cows and extracted from their milk in commercial qualitites. Genes can also be transferred from animals to plants, as has been done to engineer certain plant strains to produce human antibodies.

Genes conferring altered flavors and nutritional values, new flower colors, resistances to herbicides and diseases, and other useful traits have been introduced into several plant species. The first genetically engineered plant variety, a tomato which can be picked when ripe, yet remains firm rather than softening during subsequent storage and shipment, will soon reach the market. It will be very interesting to see whether this first commercial product of plant genetic engineering achieves consumer acceptance. But whether it does or not, many other laboratory-altered plant varieties are on the way to our farms, our flower gardens, and our supermarket shelves.

Given the power of genetic engineering to alter the characteristics of living things, the birth of this new technology raises many legal and ethical issues, and concerns for public safety. Will genetically engineered argicultural products be safe to consume? Can private individuals and corporations claim ownership and patent protection over genes which were originally isolated from living things? Is it somehow morally wrong to "meddle" with nature? Should genetic engineering ever be applied to humans, and if so, how? These and other profound questions will continue to generate serious discussion

and controversy. For those concerned with these issues, it is reassuring to know that the emerging genetic engineering industry is receiving closer public scrutiny than has perhaps any other emerging technology over the past century. Prudent application of this powerful new technology will serve human needs through the production of beneficial new animal breeds and plant varieties – and, who knows, we might even wind up with a real red-nosed reindeer!

Description of Lilacs Selected at

Main Botanic Garden Kazakhsk Academy of Science, Timiryaseva Str., 480070 Alma-Ata, Kazakhstan, Russia

By B. K. Dyagilev (C.D. Holetich translator)

- 'Augerius d' Busbek' (Ayrephyc д' Бусбек)
 Up to 2.5 m tall, with large inflorescence 27x15 cm, florets light-lilac to light blue, double, large 2.4 cm, with delicate fragrance. Blooms abundantly at mid to late period.
- 'Akademik Sakharov' (Академик Сакаров)
 Up to 2.5 m tall, large inflorescence 30x17 cm, florets snow-white, double, 2 cm in diameter, with delicate fragrance. Blooms abundantly at mid to late period.
- 'Iolanta' (Иоланта)

Up to 2 m tall, inflorescence 25x12 cm, florets light pink, double, 2.7 cm in diameter, medium fragrance. Blooms abundantly at mid to late period.

- 'Yuzhnaya Noch'' (Южная ночь)
 Up to 2 m tall, inflorescence 25x14 cm, florets dark blue, single, 2.9 cm in diameter, with medium fragrance. Blooms abundantly at early to mid period.
- 'Antonina Mel'nik' (Антонина Мельник)
 Up to 3.5 m tall, inflorescence 22x11 cm, florets light pink, double, 2.1 cm in diameter, with delicate fragrance. Blooms abundantly at mid period.
- 'Dymok' (Дымок)
 Up to 2 m tall, inflorescence 19x11 cm, florets light blue, double 1.7 cm in diameter, with medium fragrance. Blooms moderately at mid to late period.
- 'Znamya Perestroiki' (Знамя перестройки)
 Up to 2 m tall, inflorescence 22x20 cm, florets pink, single, 3 cm in diameter, with delicate fragrance. Blooms abundantly at mid to late period.
- 'Mirnoe Nebo' (Мирное небо)
 Up to 2.5 m tall, inflorescence large, 30x17 cm, florets blue, double, 2.3 cm in

diameter, with pleasant fragrance. Blooms abundantly at mid to late period.

'Snezhnyi Kom' (Снежный ком)

Up to 2 m tall, inflorescence large, 22x18 cm, florets single, white, large up to 3 cm in diameter, with delicate fragrance. Blooms abundantly at mid period.

'Brilliant' (Бриллиант)

Up to 2 m tall, inflorescence 20x15 cm, florets dark lilac, single, large 2.8 cm in diameter, with pleasant fragrance. Blooms moderately at mid period.

'Luch Vostoka' (Луч Востока)

Up to 2.5 m tall, with large inflorescence, 30x15 cm, florets pink, double 2.1 cm in diameter, with pleasant fragrance. Blooms abundantly at early period.

'Sholpan' (Шолпан)

Up to 2 m tall, with large inflorescence, 29x17 cm, florets blue-lilac, with two corolla layers, 2.5 cm in diameter, with delicate fragrance. Blooms abundantly at mid period.

'Vesenii Motiv' (Весений мотив)

Up to 3 m tall, with large inflorescence, 25x16 cm, florets pink with two corolla layers, large, 3.5 cm in diameter, with pleasant fragrance. Blooms abundantly at early period.

'Hantengri' (Хантенгри)

Up to 3 m tall, with large inflorescence, $25x\ 15$ cm, florets blue-lilac, double, large, 3 cm in diameter, with pleasant fragrance. Blooms moderately at mid period.

'Medeo' (Медео)

Up to 3.5 m tall, inflorescence large, 30x17 cm, florets light-pink, single, large, 3 cm in diameter, with strong fragrance. Blooms moderately at early period.

ALPHABETICAL LIST

Of Syringa Cultivars Growing in the Botanical Institutions of the Former USSR

By Anna Pikaleva

The lilac is one of the favourite ornamentals in the USSR. Several botanical gardens have large collections of Syringa cultivars of both foreign and domestic selection.

Comprehensive information on the major collections was published in 1980. Since that time the assortment of these collections has changed. The objective of this paper is to ascertain the modern state of the major lilac collections in the USSR.

This list was compiled on April 1991 and is based on the information

provided by the several botanical garden correspondents:

- 1. Kr'stev. M.T., Main Botanical Garden of Russian Academy of Sciences, 127276, Moscow, Botanical str., 4, Russia. 214 (51)
- Gorb V.K., Central Botanical Garden Ukrainian Academy of Sciences, 252014, Kiev, Timiryasevskaya str., 1, Ukraina. 57 (4)
- 3. Fedoruk A.T., Central Botanical Garden Belorussian Academy of Sciences, 220072, Minsk, Surganova str., 2a, Belorussia. 191 (66)
- 4. Tereshchenko, S.I., Donetsk Botanical Garden, 340059, Donetsk, pr. Iljicha, 110, Ukraina. 163 (53)
- Buglak V.A., Botanical Garden, 355027, Stavropol, Lenina str., 478, Russia. 156 (44)
- 6. Pikaleva A.V., Botanical Garden, Moscow University, 119899, Moscow, Russia. 144 (62)
- Pechenitsin V.P., Central Botanical Garden Uzbeksk Academy of Sciences, 700053, Tashkent, D. Abidovoi str., 232, Uzbekistan. 46 (18)
- 8. Ruslyakova D.A., Sirenevii sad, 105122, Moscow, Shchelkovskoe shosse, Russia. 32 (19)
- 9. Mazur A.E., Fedorovski V.D. Botanical Garden of Krivoi Rog Pedagogical Institute, 324089, Krivoi Rog, Marshaca str., 50, Ukraina. 48 (22)
- 10. Adamenko E.A., Arboretum of Kaban Agricultural Institute, 350044, Krasnodar, Kalinin str., 13, Russia. 32 (1)
- 11. Paivel A., Botanical Garden Estonian Academy of Sciences, 200019, Tallinn, Kloostrimetsa str., 44, Estonia. 32 (6)
- 12. Ovsyannikova O.M., Botanical Garden of Ecology Institute, Ural's Science Centre Academy of Science, 620008, Sverdlovsk, 8 Marta str., 202, Russia. 31 (9)
- 13. Pomogaibin A.V., Botanical Garden of Kuibishev State University, 433086, Kuibishev, Moscovskoe shosse, 36, Russia. 23 (4)
- Nikomchuk V.N., Botanical Garden of Bryansk Technological Institute, 241037, Bryansk, Stanke Dmitrova str., 3, Russia. 17 (3)
- 15. *Kulikova E.M.*, Botanical Garden of Kaliningrad State University, 236029, Kaliningrad, Belomorskaya str., 20, Russia. 12 (0)
- 16. Kuzichkin A.A., Botanical Garden of Tomsk State University, 624010, Tomsk, pr. Lenina, 36, Russia. 16 (2)
- 17. Luchnik Z.I., Dendrarium of Science-Research Institute, 656020, Barnaul, Zmeinogorski trakt, 49, Russia. 85 (22)
- 18. Dyagilev B.K., Main Botanical Garden Kazakhsk Akademy of Science, 480070, Alma-Ata, Timiryaseva str., Kazakhstan. 130 (63)
- Minaeva A.J., Lesostepnaya Experimental breeding Station (Lipetsk) 84
 (51)

FOREIGN CULTIVARS

Floret		Originator and	Grown
Descrip-	Cultivar	Date of	in
tion	Name	Introduction	Collection
D III	Abel Carriere		3, 5, 17
DIV	Adam Mickiewicz	(Karnow 1958)	1, 4, 6
SIV	Admiral Farragut	(Dunbar 1923)	1,4,0
SII	Agincourt Beauty	(Sloter 1069)	1,4
SI			All and the second seco
D VI	Alba Grandiflora		16
DVI	Alice Eastwood		HYACINTHIFLORA 1
D IV	Alice Harding — see Souvir		
DIV	Alphonse Lavallee	(Lemoine, 1885)	1
SII	Ambassadeur	(Lemoine, 1930)	7
SIV	Ambroise Verschaffelt	(Brahy-Ekenholm, pre 1863)	5
D III	Ami Schott		1, 4, 6
S VII	Andenken an Ludwig Spath		
	Syn. Ludwig Spaeth, Souve	nir de Ludwig Spaeth	1, 2, 3, 4, 5, 6, 7, 9, 10,
			11, 12, 13, 16, 17, 18, 19
SIV	Anna Nickles	(Stone)	1
S VII	Anne Shiach		1
D VII	Arthur William Paul	(Lemoine, 1898)	2, 5, 18
SIV	Assessippi		HYACINTHIFLORA 1, 3
D III	Aucubaefolia		1, 3, 4
DV	Belle de Nancy	(Lemoine 1801)	2, 3, 4, 5, 6, 7, 8, 16, 17, 18, 19
SV	Bellicent	(Preston)	JOSIFLEXA 1, 6
DV	Berryer		HYACINTHIFLODA 2 2 5 12 10
SIII	Blue Hyacinth		HYACINTHIFLORA 2, 3, 5, 13, 18
DV			HYACINTHIFLORA 3, 5, 6, 9
SV	Boussingault	(Lemoine, 1897)	1
3 V	Buffon	(Lemoine, 1921)	HYACINTHIFLORA 1, 2, 3, 4, 5, 6,
0.111	0.1		7, 9, 10, 11, 13, 14, 15, 18, 19
SIV	Calpurnia		PRESTONIAE 1, 3, 6
SI	Candeur	(Lemoine, 1931)	1, 3, 4, 6
S VI	Capitaine Baltet	(Lemoine, 1919)	2, 5, 6, 9, 10, 11, 16, 17, 18, 19
DV	Capitaine Perrault	(Lemoine, 1925)	1, 5, 18, 19
SV	Catinat	(Lemoine, 1922)	HYACINTHIFLORA 3, 18
SII	Cavour		1, 3, 4, 5, 6, 9, 11
SIV	Celia	(Preston, 1928)	PRESTONIAE 3, 6, 12, 18
D VII	Charles Joly	(Lemoine, 1896)	1, 2, 3, 5, 7, 8, 9, 10, 11, 12, 13,
		W. Carte	17, 18, 19
SIII	Charles Nordine	(Skinner, 1960)	HYACINTHIFLORA 1
SVI	Charles X	(Audibert, pre 1830)	
		Syn Charles Dix.	
		4 HAR # 10 C - 1	2, 3, 5, 7, 11
SV	Charm	(Havemeyer nrg 10/11)	3, 4, 9
	Charmian		PRESTONIAE 1, 5, 6
9073 (0.07) up	Christophe Colomb		
	Clarkes Giant		1, 3, 4, 5, 6
	Comte Adrien de Montebello		HYACINTHIFLORA 3, 4, 5, 6, 17
UIT	contre Aurien de Montepello	(remonie, 1910)	5, 17

D V Comtesse Horace de Choiseul (Lemoine, 1891) 3, 14	D VI	Compte de Kerchove	(Lemoine, 1899)	3
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D IV Francisque Morel (Lemoine, 1896) 5, 17, 18 S VII Frank Paterson Paterson, 1961) 1 S V Frau Wilhelm Pfitzer (Pfitzer, 1910) Syn. General Haig 1 S II Fred Payne (Havemeyer, 1943) 1 S VII Furst Bulow (Spath, 1920) 1, 2, 3, 4, 5, 6, 8, 10, 18 D III Gaudichaud (Lemoine, 1903) 18, 19		Francisca	(Preston, 1928)	PRESTONIAE 1, 3, 6 12, 18
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S V Frau Wilhelm Pfitzer (Pfitzer, 1910) Syn. General Haig 1 S II Fred Payne (Havemeyer, 1943) 1 S VII Furst Bulow (Spath, 1920) 1, 2, 3, 4, 5, 6, 8, 10, 18 D III Gaudichaud (Lemoine, 1903) 18, 19	S VII	Frank Paterson	Paterson, 1961)	Elizabeth and the second of th
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S VII Furst Bulow (Spath, 1920) 1, 2, 3, 4, 5, 6, 8, 10, 18 D III Gaudichaud (Lemoine, 1903) 18, 19		Fred Payne	(Havemeyer, 1943)	
D III Gaudichaud (Lemoine, 1903) 18, 19		Furst Bulow	(Spath, 1920)	1, 2, 3, 4, 5, 6, 8, 10, 18
D.V. Congral Perching (Lemoine 1924) 1 17		Gaudichaud	(Lemoine, 1903)	
D V deliefal reisining (Lenionic, 1924)	DV	General Pershing	(Lemoine, 1924)	1, 17

D VI D III S I S IV D VI S VI S I	Georges Bellair Georges Claude Gerrie Schoonenberg Gilbert Gismonda G.J. Baardse Gloire d'Aalsmeer	(Lemoine, 1935) (Eveleens Maarse, 1948) (Lemoine, 1911) (Lemoine, 1939) (Eveleens Maarse, 1943) (J.D. Maarse, 1938) Syn. Glory of Aalsmeer Gloire de Nancy	4 1 17 1, 4 3 1, 4 3, 5 18 1, 3
D III	Godron	(Lemoine, 1908)	18
SV	Goplana		PRESTONIAE 3
SV	Grace Orthwaite	(Brand, 1937)	1
S VI D IV	Guinevere	(Preston, 1934-1938)	JOSIFLEXA 1, 3, 6
SI	Guizot	(Lemoine, 1897)	12, 17, 18
DIV	Helene Agathe Keesen Henri Martin	(W. Neesen, 1935)	1, 4, 12
DII	Henri Robert	(Lemoine, 1912)	5, 17
SV	Herman Eilers	(Stenman de Messe	1, 4
	Toman Endo.	maeker, pre 1913) Syn. Beauty of Frankfurt, Pink	
C VI	105	Beauty of Frankfurt, Sinai.	
SVI	Hiawatha	(Skinner, 1932)	PRESTONIAE 1, 3, 4, 6
S VII S IV	Hugo de Vries	(K. Keesen, 1927)	3, 4, 5, 6
SIII	Hugo Koster	(Noster, 1914)	1, 2, 8, 10, 11, 18
SI	Hunting Tower	(Skinner)	1, 4 VILLOSA x SWEGINZOWII 1
SIV	Hyazinthenflieder		1, 4, 5, 6, 7, 11, 14, 16, 17, 19
DIV	Hippolyte Maringer	(Lemoine 1909)	1, 4, 5, 6, 7, 11, 14, 16, 17, 19
S VII	Irvina	(Klager, 1920)	î' '
SIV	Jacques Callot	(Lemoine, 1876)	6
S 11	Jaga	(Bugala)	PRESTONIAE 3, 12
SIV	Jagienka	(Bugala)	PRESTONIAE 3
SV	James Macfarlane	(Yeager, 1959)	JOSIFLEXA 1, 3, 6
S 1	Jan van Tol	(van Tol, 1916)	1, 3, 5, 11, 12, 16
DV	J. de Messemaker — see Mo	ns. J. de Messemaker	2 2 2 2 2
D V D I	Jean Bart	(Lemoine, 1889)	3, 12
UI	Jeanne d'Arc	(Lemoine, 1902)	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 12,
SII	Jessie Gardner	(Cardnor)	14, 17, 18, 19
SII	Johann Mensing	(Garuner) (Eveleges Maarce 1038)	1 17
SIV	Jonkheer G. F. van Tets	(Eveleens Maarse, 1930)	1, 4
SIV	J. R. Koning	Eveleens Maarse, 1955)	1
D III	Jules Simon	(Lemoine, 1908)	1, 4, 5, 6, 8, 11, 17, 19
SI	Kate Härlin	(Pfitzer, pre 1910)	3, 5, 11, 18
DV	Katherine Havemeyer	(Lemoine, 1922)	1, 2, 3, 4, 5, 6, 7, 9, 10, 12, 15, 17, 18, 19
SI	Konigin Luise	(Pfitzer, 1921)	5
S VI D III	Lady Lindsay	(Havemeyer, 1943)	1, 4, 18
SV	Lamarck	(Lemoine, 1886)	7, 18
S VII	Laplace	(Lemoine, 1911)	HYACINTHIFLORA 1, 5, 10
SV	Lavoisier	Lemoine, 1913)	1, 3, 4, 11, 17, 18 2, 3, 4, 6, 17, 18
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2 02	5 7 7	0 0 10000	
D IV	Lemoinei	(Lemoine, 1878)	4, 6
DII	Le Notre	(Lemoine, 1922)	5
DIV	Leon Gambetta	(Lemoine, 1907)	2, 3, 5, 6, 10, 13, 18, 19
D IV	Leon Simon		2, 4, 5, 7, 17, 18, 19
D VI	Louis Henry		4, 5, 18
SII	Louvois		HYACINTHIFLORA 5
SVI	Lucetta		PRESTONIAE 1, 3, 4, 6, 12, 18
SV	Lucie Baltet		1, 3, 4, 5, 17
	Ludwig Spaeth — see Ander		
SIII	Madame Charles Souchet	(Lemoine, 1949)	1, 3, 4, 5, 6, 17, 18
SIV	Madame Rosel	(Eveleens Maarse, 1950)	1, 3
SV	Maiden's Blush	(Skinner, 1966)	HYACINTHIFLORA 1
SVI	Marceau		1, 4, 5, 9, 14, 17
D V	Marc Micheli		1, 2, 4, 5, 17
D VI	Marechal de Bassompierre .		3, 5, 11, 15, 17, 18
SVI	Marachal Foob	(Lemoine, 1037)	1, 2, 3, 4, 5, 6, 10, 13, 17, 18
0.000000	Marechal Foch		
D III	Marechal Lannes		1, 3, 4, 5, 6, 7, 8, 9, 14, 18, 19
SIV	Marengo		3, 5, 17
D III	Margot Grunewald	(Grunewald, 1913)	4
SI	Marie Finon	(Lemoine, 1923)	5
SI	Marie Legraye	(Legraye, 1879)	1, 2, 3, 4, 5, 7, 10, 11, 13, 16,
			17
SIV	Marlyensis	(pre 1839) Syn. Marly.	
		Marlyensis Rubra,	
		Rouge de Marly	1, 17
SVI	Massena	(Lomaina 1022)	3, 4, 5
DIV	Mathieu de Dombasle		2, 3
DIV	Maurice de Vilmorin		1
	Maxime Cornu — see Mons.		
DII	Maximowicz	(Lemoine, 1906)	1, 2, 3, 5 6, 10, 17, 18
SI	Mevrouw Lombarts	(Lombarts, 1932)	3
DIV	Michel Buchner	(Lemoine, 1885)	1, 2, 3, 4, 5, 6, 7, 10, 11, 12, 13,
			14, 16, 17, 18, 19
D VII	Mildred Luetta	(Hetz. 1950)	1
S VII	Milton		ī
SIV	Mirabeau		HYACINTHIFLORA 1
			INTERSPECIFIC HYBRID 1, 4, 6
SV	Miss Canada		INTERSPECIFIC HIDRID 1, 4, 0
DI	Miss Ellen Willmott		
		Syn. Ellen Willmott,	
		Miss Willmott	1, 3, 4, 5, 6, 7, 9, 10, 11, 18
SVI	Missimo	(Clarke, 1944)	HYACINTHIFLORA 1, 5, 17
DI	Mme. Abel Chatenay	(Lemoine, 1892)	1, 2, 3, 5 6, 9, 18, 19
DV	Mme. Antoine Buchner		1, 2, 3, 5, 6, 7, 10, 13, 17, 18, 19
SVI	Mme. Briot		1, 18
DI	Mme. Casimir Perier		1, 2, 3, 4, 5, 6, 7, 8, 10, 11, 12,
<i>D</i> 1	millo. Odollilli i Giloi	(Londing 1004)	15, 17, 19
0.1	Mma Foliv	(Folix & Dukhine 1024)	1, 3, 4
SI	Mme. Felix		1, 0, 4
SI	Mme. Florent Stepman		1 2 4 5 7 0 10 12 17 10
0.111		Messemaeker, 1908)	1, 3, 4, 5, 7, 8, 10, 12, 17, 19
SVI	Mme. F. Morel		1, 2, 4, 18
DIV	Mme. Jules Finger		3, 4, 5, 17
DI	Mme. Lemoine	(Lemoine, 1890)	1, 2, 3, 4, 5, 6, 7, 9, 11, 12, 13,
			15, 16, 17, 19

S VII	Monge	(Lemoine, 1913)	1, 2, 3, 4, 5, 6, 12, 17
DI	Monique Lemoine		3, 4, 5, 6, 14, 17
S VII	Mons. J. De Messemaeker		
		Messemaeker, 1908)	
-	MEANING WALKSONS COMMUNICATION	Syn. J. de Messemaeker	1, 4
DV	Mons. Maxime Cornu	(Lemoine, 1886)	2
DV	Montaigne		1, 3, 4, 5, 6, 17, 19
S 1	Mont Blanc	(Lemoine, 1915)	2, 5, 6, 7, 12, 15, 17
SVI	Montesquieu		HYACINTHIFLORA 18
SI	Monument	(Lemoine, 1934)	1, 3, 4, 5, 6, 18
DV	Monument Carnot		2
SII	Mood Indigo	No. of the contract of the con	1, 3
D VI	Mrs. Edward Harding	(Lemoine, 1922)	1, 2, 3, 4, 5, 6, 10, 14, 18, 19
SV	Mrs. Harry Bickle	(Rolph, 1956)	1 10 10 100
SVI	Mrs. Watson Webb	(Havemeyer)	1
S VII	Mrs. W.E. Marhsall	(Havemeyer, 1924)	1
D VII	Murillo	(Lemoine, 1901)	5
SV	Necker	(Lemoine, 1920)	HYACINTHIFLORA 2, 3, 5, 7, 9, 12,
			15, 17, 18
S VII	Night	(Havemeyer, 1943)	1, 3, 4
DI	Obelisque	(Lemoine, 1894)	2, 3, 4, 5
SV	Oberon	(Preston)	PRESTONIAE 1, 6
D III	Olivier de Serres	(Lemoine, 1909)	3, 4, 5, 6, 17, 19
SV	Ottawa	(Preston)	6
SIV	Pascal ,	(Lemoine, 1916)	HYACINTHIFLORA 1, 3
S VII	Pasteur	(Lemoine, 1903)	1, 3, 4, 5, 6, 7, 8, 9, 14, 17
SVI	Paul Deschanel	(Lemoine, 1924)	1, 5, 6, 10, 18
D VII	Paul Hariot	(Lemoine, 1902)	1, 3, 4, 5, 6
D VI	Paul Thirion	(Lemoine, 1915)	4, 5, 10
SIV	Peerless Pink	(Eveleens Maarse, 1953)	1, 3, 5, 17
SVI	Perle von Teltow	(Grunewald, pre 1914)	3
SV	Pink Mist	(Havemeyer, Eaton, 1953)	3
SV		(Clarke, 1948)	HYACINTHIFLORA 3
D VI	Planchon	(Lemoine, 1908)	1, 3, 5
SIV	Pom Pom	(Robinson, 1937)	1, 4, 17, 18
SV		(Lemoine, 1933)	HENRYI x TOMENTELLA 1
DIV	President Carnot	(Lemoine, 1890)	2, 4
DIV	President Fallieres	(Lemoine, 1911)	1, 3, 5, 11
D III		(Lemoine, 1886)	1, 2, 3, 4, 5, 10, 11, 13, 17, 18
D VI		(Lemoine, 1901)	2, 3, 4, 5, 7, 11, 17, 18
S VII		(Brahy-Ekenholm, 1861)	5
D VI	President Poincare		1, 3, 4, 5, 6, 8, 9, 11, 12, 15, 18, 19
DIII	President Viger		3, 10, 11, 18
SI	Primrose	(G. Maarse, 1949)	
		Syn. Yellow Wonder	1, 3, 4, 5, 6, 9, 19
DIV	Prince de Beauvau	(Lemoine, 1897)	3, 5, 10
DI		(Mathieu, pre 1908)	1, 2, 3, 4, 5, 6, 9, 13
SI		(Maarse Bros., 1938)	1, 5, 17
SVI	Priscilla	(Havemeyer, 1941)	1, 3
S VII		(Lemoine, 1928)	1, 5
DI		(Havemeyer, 1943)	1
S VII	Purple Glory	(Clarke, 1948)	HYACINTHIFLORA 1, 3, 5
		MILLION PROPERTY CONTROL OF THE PROPERTY OF TH	

S VI	Reaumur	(Lemoine, 1904)	1, 2, 3, 4, 5, 6, 10, 11, 13, 14,
S VI	Redwine	(Procton 1036)	15, 17, 18, 19 JOSIFLEXA 1, 3, 6
SI	Reine Elisabeth		JUSII LEAR 1, 3, 0
31	Kellie Elisabetii		1
D 111	D	Messemaeker, 1908)	1
DIV	Renoncule	(Lemoine, 1881)	2, 5
SI	Riet Bruidegom		1, 3, 4
S VII	Rochambeau		1, 4
DIV	Rosace		1
2807	Rouge de Marly — see Marl		
DV	Rowancroft Pink		HYANCINTHIFLORA 1
D VII	Royal Purple		HYACINTHIFLORA 1
SVI	Ruhm von Horstenstein		2, 4, 5, 7, 10, 18, 19
DΙ	Saint Joan	(Blacklock, 1953)	1
DI	Saint Margaret	(Blacklock, 1953)	1
S VII	Sarah Sands		3
S VII	Sensation		1, 3, 4, 5, 6, 14, 17
SII	Sesquicentennial	(Fennichia)	1
DI	Siebold	(Lemoine, 1906)	3
DI	Souvenir d'Alice Harding		
		Syn. Alice Harding	1, 3, 4, 5, 6, 18
	Souvenir de Mme Louis	•	otat stetat as
	Gielis	(Gielis, 1950)	1
SIV	Spring Sonnet		1. 6
S II-IV	Stanislaw Moniuszko		1, 4
S VI	Stefan Makowiecki		Ĭ
DIV	Swarthmore		HYACINTHIFLORA 1, 4
D VI	Sweetheart		1. 4
SV	Telimena		PRESTONIAE 5
DIV	Thunberg		1
D VII	Tom Taylor	(Skinner 1962)	HYACINTHIFLORA 1
S VII	Tombouctou		4, 5
S VII	Toussaint-L'Ouverture		4, 5, 6, 9
SI	Vestale		
31	vestale	(Lemonie, 1910)	2, 3, 5, 6, 8, 9, 12, 13, 14, 15,
C VIII	V	(lamaina 1016)	17, 18, 19
S VII	Vesuve	(Lemoine, 1910)	1, 4, 6
D IV	Victor Lemoine	(Lemoine, 1906)	3, 4, 5, 6, 17
S VII	Ville de Troyes		2, 3, 4
SII	Violet Glory		1
DII	Violetta		1, 3, 4, 6
SV	Virginia Becker		1, 4
SIV	Vivian Evans		1
DIV	Viviand-Morel		1, 4, 6, 9
S VII	Volcan		4, 5, 18
SVI	Voorzitter Dix		1
DV	Waldeck-Rousseau		3
SI	White Hyacinth		HYACINTHIFLORA 3, 5
SI	White Swan	(Havemeyer, 1943)	5
S	William H. Judd	(Skinner)	DIVERSIFOLIA 1
DIV	William Robinson	(Lemoine, 1899)	2, 9, 13, 15, 19

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Editorial

At long last it is time for Society members in ILS's third decade to discuss sensitive or otherwise controversial topics on lilacs and their culture. Either out of timidity or apparent lack of knowledge our members hesitate to take a stand. It seems that ILS has in consequence become static.

What have we achieved in twenty-odd years?

- The International Congress of Horticultural Science has designated the Royal Botannical Garden as official registrar of cultivar names of Syringa. Member Freek Vrugtman fills the office.
- In 1976 Dr. Owen M. Rogers published the Tentative Register of cultivated names in the genus *Syringa*. This reference booklet serves as a check list of authentic names of lilac cultivars. It is hoped that a revised edition soon will become available to students of lilac nomenclature.
- ILS has awarded grants for the study of microplasmic like organisms which causes witches'-broom in lilacs, chiefly late hybrids.
- ILS has published special bulletins and booklets from time to time toward fulfillment of its educational aims.
- Several ILS members individually have engaged in personal missionary work by speaking on lilacs before garden clubs and encouraging the planting of lilacs in private gardens and community-wide projects.

Such has been the impact of ILS in lilacdom over two decades. What of the future? ILS needs willing workers to carry on and expand these worthy enterprises which will popularize our favorite flower, the lilac.

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