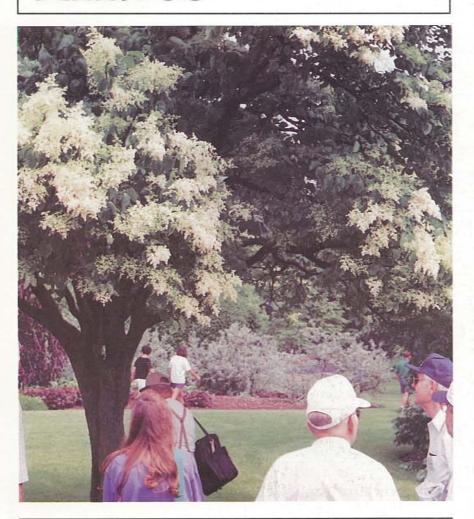
Lilacs

VOLUME 27, NUMBER 4 FALL 1998



QUARTERLY JOURNAL

of the International Lilac Society

IN THIS ISSUE:

Publications Available

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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.

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LILACS 1998

PUBLISHED SEPTEMBER 1998

Covers

Front Cover

Syringa reticulata reticulata at the Niagara Parks Botanical Gardens May 29, 1998. Photo credit Brad Bittorf who says "Let 'em loose and they congregate at the lilac."

Back Cover

Lilacs at Claude Monet's garden in Givernay, France. Photo credit Frances Davies.

Next Issue Deadline

The next deadline for material to be included in the winter issue of **Lilacs** will be December 8, 1998. This is the membership issue, so please check your listing and let the Membership Secretary, David Gressley, know of any changes that should be made.

The winter issue will include information on next year's convention so start planning ahead.

Learning To Treat Diseased Lilac Plants

By Cal Schroeder UNH Cooperative Extension

DOVER - If the number of calls coming into our office regarding diseased lilacs are any indication, I'd say folks with lilacs should take heed.

Lilac blight, (Ascochyta syringae), a fungus disease, had appeared on many lilacs in our area. Samples brought into my office are either leaves with brownish/tan lesions on the leaves or the whole end of the branch has turned brown and died in the shape of a Shepherd's crook. Some people have indicated their whole shrub has died back.

I've asked Dr. Cheryl Smith, University of New Hampshire Cooperative Extension Specialist for plant health, if she has seen any of this come into the plant diagnostic lab. Her response was an emphatic "yes."

Earlier this summer she cultured out both bacterial blight and *Ascochyta* fungus blight. Here is the information she provided to me.

The symptoms of lilac blight occur in two phases: a shoot blight in the spring (brown/black stem/twig cankers with a distinct lower margin, killed twigs usually form a Shepherd's crook), and a leaf blight phase later in the growing season The shoot blight is hard to distinguish from bacterial blight. The leaf blight symptoms start out as olive-green lesions/blotches (often appear water-soaked) that turn light brown then tan. The entire leaf can be blighted.

The fungus stays alive through the winter in the bud scales and new shoot infections occur during wet weather in the spring. This is usually a minor disease, but severe outbreaks are favored by prolonged wet weather during bud-break and shoot elongation. New infections on the leaves take place whenever wet weather occurs.

Dead shoots should be removed about 4 to 6 inches below dead areas. Burn removed branches. Pruning should be done when the shrub is dry to help prevent the spread of the disease. A copper fungicide can be used to control further infections this season. Spray at 10-day intervals during wet weather. A fungicide containing the active ingredient thiophanate methyl (the active ingredient in Cleary's 3336) will also be effective. Some trade names for homeowner products are: Bonide-Benomyl or Black Leaf rose and ornamental spray.

When pruning out diseased shoots, in case it is bacterial blight, be safe and disinfect the pruning shears either in alcohol or a 10-per-cent solution of bleach. Be sure to rinse pruners thoroughly after submersing them in the bleach solution since bleach is very corrosive to metal.

This disease is not usually such a problem on lilacs, but because of the

wet weather we have been experiencing (especially in June) it seems to be everywhere.

Don't forget - the most important control is sanitation. Cut out diseased branches and trunks, rake up fallen leaves, and destroy (burn) all affected tissue. Copper fungicides will help protect new tissue.

Cal Schroeder is an educator specializing in agricultural resources at Strafford County UNH Cooperative Extension. Reprinted from Foster's Daily Democrat, Dover, N.H. Wednesday Evening, August 12, 1998

Editor's Notes

It is with great pleasure that we can advertise the availability of the new International Register of Cultivar names in the Genus *Syringa* L. We finally have all the information on lilac names in one source. It truly is a work in progress so if you see <u>anything</u> that needs to be changed, corrected or added please contact the Registrar, Freek Vrugtman, immediately. He can be reached by mail at:

Freek Vrugtman, IRA Syringa, Royal Botanical Gardens, Box 399, Hamilton, Ontario, Canada L8N 3H8. The Lilac Registrar's e-mail address: lilacreg@rbg.ca or through the URL (Uniform Resource Locator):

http://www.rbg.ca/lilacreg

This last lilac page at the Royal Botanical Garden may not be ready just now. You can check it by calling Frank Comella, RBG Manager of Marketing and Programs. His voice mail is (905) 527-1158 ext. 224.

on on on

Pauline Fiala, who faithfully mails out every issue of **Lilacs**, has a request. If you have two addresses, particularly if you spend part of the year at a separate address, please list both of those addresses in the membership list. If you don't and Pauline sends the issue to you at address number one, the result is double postage and considerable delay while the post office returns it and Pauline then has to send it to address number two.

·6 ·6 ·6

It's time to start planning ahead. The Convention Committee has announced the sites of several future meetings. They are these:

1999 - Shelburne, Vermont - May 20, 21, 22 and 23

2000 - Montreal, Canada

2001 - Rochester, New York

2002 - Nebraska

1999 Convention

The Annual ILS Convention will be held on May 20th, 21st, 22nd & 23rd (Thursday to Sunday) at the Susse Chalet Hotel in Williston (near Burlington), VT. USA.

Your arrival and registration at the hotel and Board Meeting at 2 PM. Thursday:

A full day of activities at the Shelburne Farms, the University of Vermont Friday:

Horticultural Research Farm and the President's Dinner.

A full day of activities at the Shelburne Museum (Shelburne), the annual Saturday:

Lilac Auction and the Award's Banquet.

Complimentary breakfast and our FAREWELL to the ILS Convention Sunday:

for 1999!

The Susse Chalet Hotel is located in Williston (near Burlington), VT about 10 miles from Shelburne and about 3 miles from the Burlington International Airport. Rooms will be reserved for members. Our convention will coincide with the Shelburne Museum's Lilac Festival. Lilacs will be seen at the Farm Museum and Research Center. Bus transportation will be provided between all ILS activities and the hotel (personal autos may be used).

In the next ILS Quarterly Journal a full description will be printed including: the convention schedule; transportation (auto and air) details; descriptions of the lilac collections to be seen; area points of interest to be seen; and how to provide lilacs for the auction, etc. . . .

Mr. Reed Cherington of the Shelburne Museum staff is coordinating the convention for ILS along with a local committee and Peter Ely of ILS. Reed is also a new member of ILS.

Please contact Peter Ely (203-888-2628 or 57 Squantuck Rd., Seymour, CT 06483) with any convention suggestions or ideas!

Auction 1999: Please plan to consider possible lilac donations for the auction at this time. More detailed information will be written in the next Quarterly Journal on shipping and other information. Contact Peter Ely for any questions at this time (address above).

We hope to make this a most enjoyable experience for each member in a most beautiful setting, called VERMONT!!



PHOTO CREDIT -PETER ELY

Orville Steward talks pruning with a member of the Shelburne Museum staff as they prepare for the 1999 Convention.

Lilacs: Past, Present and Future

By Frank Moro

In the coming event of the 2000 convention in Montreal I am looking for old photos that people may have hidden in their albums of people like Isabella Preston, Frank Skinner, Father Fiala, and any other present or past lilac people. I would like to receive correspondence from those who would like to share these for a special presentation for the 2000 convention. Once located either the photos can be sent down to me, they will be scanned and returned or if you prefer to get a color photocopy done and send the copy I will pay for the reproduction.

I would like to make the convention one that people will remember forever and longer. The theme for this convention will be **Lilacs: Past, Present and Future.**

I am also trying to locate some of Isabella Preston cultivars for this convention. Anyone that may have some rare varieties please contact me at the home address at the end of this article.

Also I am in the long task of trying to put a listing of lilacs together. It seems that many of us and parks have lilacs that others are always looking for but nobody ever knows where to look. I would like everyone interested to put a list of cultivars together that they have planted and submit them so I may put them on computer and make this list available to everyone who requests it. My goal as part of the ILS is to really push forth and help organize the interest of lilacs for the upcoming millenium. Please also include the time of flowering in your collections and if you receive people for guided tours.

- Frank Moro, 1510 Pine, Mascouche Quebec J7L 2M4, Canada Tel/fax: 450-477-3797

Lilacs for Distribution

The time has finally arrived where much hard work on our part will start the new way of lilacs to begin showing up in the lilac world. Select Plus will begin to introduce to the members of ILS, a Fiala lilac for every quarterly. Also one other lilac will be selectioned and sold at a reduced rate to members. Also Select Plus International Nursery has in the past issue and will continue to donate 3% of all net sales back to the ILS.

S. vulgaris 'Pixie': 'Pixie' is a semi dwarf lilac with much potential. Besides being multipetaled it has a very intense color of white. Created in 1981 by Father Fiala this is the first time it has ever been offered to the public. It is a cross of 'Rochester' ×'Rochester'. It is a single white and reaches 4 - 7 feet in height. Prices include shipping continental US and Canada. They

in 4-inch pots. U.S. \$10.00 - Canadian \$14.00. There is a maximum of 2 per household.

S. vulgaris 'Königin Luise': This lilac has a very satiny white appearance. The eye of the flower is hardly noticeable making it have a remarkable contrast against the green stems. It was crossed by Pfitz in 1921 and is also a single white. It is available as a 4-inch pot. U.S. price \$8.75 Canadian \$12.00.

Hybrid 'Alexander's Pink': An introduction of Jack Alexander in 1967 it is a cross between *S. *josiflexa* 'James Macfarlane' **S. prestoniae* 'Ethel Webster'. It is very floriferous and of a very satiny clear single pink. It is available as a 1 gallon 15-inch plant. The U.S. price is \$15.00 and Canadian \$18.00. As always for Canada please add respective taxes.

Please note all these lilacs will be delivered in spring of 1999. Quantities are limited so order early. Please do not order more than 2 of each variety.

SELECT PLUS INTERNATIONAL NURSERY

FREE: write us for your 1999 Lilac and companion plant listing Or visit our website at: spi.8m.com

TITANIC SPRING OFFER

	U.S. Regular	U.S. Sale	Cdn. Regular	Cdn. Sale
S. ×josiflexa 'Royalty' 1g 15"	\$14.00	\$11.00	\$17.00	\$14.00
S. ×hyacinthiflora 'P.K. Smith' 1g 12"	\$15.00	\$12.00	\$17.00	\$14.00
S. vulgaris 'Marie Finon' 1g 15"	\$15.00	\$12.00	\$17.00	\$14.00
Buy 1 of each and save more!!!	\$30	.00	\$36.	00

'Royalty' is a late flowering dark single purple. 'P.K. Smith' is an early single lavender with beautiful burgundy red fall foliage. 'Marie Finon' is a mid-season flowering single satiny white and very fragrant..

Shipping for US \$8.00 · US include broker and export papers

Shipping for Canada \$11.00 · Please for Canadian orders add taxes.

Make check payable to: Select Plus International Nursery.

1510 Pine, Mascouche, J7L 2M4 Quebec

Tel. and Fax: 450-477-3797

Publications Price List

Now available from Royal Botanical Gardens:

International Register of Cultivar Names in the Genus Syringa L. (Oleaceae).

Royal Botanical Gardens is pleased to announce that the international Register of cultivar names of lilacs has been compiled for publication for the first time by Lilac Registrar and RBG Research Associate Freek Vrugtman. Mr. Vrugtman notes that the present volume represents the "work-in-progress" version of September 1997, and that the work to compile the International Register continues.

Hard copies of the full Register complete with appendices (ca. 324 pages) are available from RBG for \$25.00 Canadian (\$17.50 U.S.) plus shipping and handling charges of \$5.00 Canadian for addresses in Canada and \$10.00 Canadian (\$7.00 U.S.) for addresses outside Canada.

Copies on floppy disc (Windows 95/Word 7.0) are available for \$17.00 Canadian (\$12.00 U.S.) plus \$3.00 shipping and handling for all addresses.

The complete Register will soon be available on the Royal Botanical Gardens website at http://www.rbg.ca Mail your order with payment to:

Chris Graham, Manager Horticultural Services, Royal Botanical Gardens, Box 399, Hamilton, ON L8N 3H8. *Please allow 4 weeks for delivery.*

Special - Special - Special

Edward A. Upton Scrapbooks of Lilac Information

In an attempt to lower our inventory of these two fascinating books "chuck-a-block" full of lilac information, the ILS Board of Directors has authorized a price reduction sale; each volume \$8.00, \$15.00 for both. At this price, we have to add a \$4.00 postage and handling charge but this is still a substantial savings and a great value.

Edward A. Upton Scrapbooks of Lilac Information (Edward A. Upton). 1980, 1987. Reprinted vols. 1 & 2 of the books in our vol. 1 and vols. 2 and 3 in our vol. 2. Material collected and assembled by a noted nurseryman relating to lilacs from the 1920s to the mid-forties. Black and white. Limited editions. Numbered.

These volumes, and copies of the Duorak Lilac Study listed below, can be ordered from: Owen M. Rogers, Editor, Plant Biology Department, University of New Hampshire, Durham, NH 03824-3544.

<u>Lilac Study</u> (Joseph Dvorak, Jr.) 1978. Reprint. Line drawings of lilac flowers, foliage and stem detail. Descriptions of form and color. Soft cover. Black and white. \$10.00

We also have a few copies of the 1976 Tentative International Register of Cultivar names in the Genus *Syringa* and Jack Alexander's *Lilacs: Plants of History – Plants of Tomorrow*. Both of these have or soon will be superceded by new publications, but anyone desiring copies for historical reasons can contact the Editor for prices and more information.

Trademarked Lilacs

by Owen M. Rogers

trademark should indicate a source not a product. You would not go into a store and ask for a Scotch®, but if you wanted transparent tape, mending tape or a desk dispenser for those tapes and saw the Scotch® trademark (or its parent company 3M) you would know who made it and that it had all the degrees of quality and reliability that you associate with products carrying that trademark.

The product also has to have a name. You ask for transparent tape or mending tape and – as any office supply catalog can tell you – you have a choice of companies that make that kind of tape. It should come as no surprise then that companies spend a great deal of money advertising their trademarks and considerable effort to prevent others from using their trademark without paying them a royalty or usage fee.

There are two ways of establishing trademarks in the USA, namely,

 by registering a trademark with the office of the Commissioner of Trademarks in Washington, D.C. for all of the US, or at the state level [registrations on the federal level and state level are not necessarily coordinated]; registered trademarks are usually indicated by the use of the R in the circle [*]; and

2. by usage. If a commercial firm continues to use a particular logo and designates it as a trademark [The usual symbol is ™] it becomes a trademark by usage as long as the company assiduously maintains control of that trademark. If the trademark falls out of use it may lose its legal status. Also, legitimately or not, nurseries have been known to omit this ® and ™ symbols so that the trade mark looks like a cultivar name.

In addition to trademarks, plants can also be patented through the Office of the Commissioner of Patents and Trademarks (nearly 30 lilacs have been patented). There is a rigorous application process and substantial fees required when applying for a plant patent. When issued (in the USA), plant patents are valid for 17 years after which the plant becomes public property. Some commercial firms choose to add a trademark name – which has no specific end date – to their patented plant in order to extend the period during which they would have control of their plant.

The Cultivated Plant Code does not allow the name of the "varietal denomination" (cultivar name) to be trademarked. Originally plant patents in the USA were issued without a cultivar name but more recently they are also required to have to have a "varietal denomination."

The trademark is the property of a specific company. The owner of the trademark can use that trademark for any "varietal denomination." For instance the trademark Majestic®, owned by Monrovia Nursery, has been used for a number of cvs. in different genera. But different companies could apply different trademarks to the same cultivar, this has happened with roses. Monrovia Nursery has also trademarked a lilac. Blue Skies® is the registered trademark owned by Monrovia but their lilac plant has the cultivar name 'Monore.'

It is to a company's interest to get you to use their trademark name instead of the product name so that the source company will have the increased exposure when you think of any of their products. In plants this is pushed by making the trademark easy to pronounce and remember while the cultivar name is made difficult to pronounce and remember. Regent® is the registered trademark on a lilac owned by Princeton Nurseries, Inc. but the cultivar name is 'PNI 7523.'

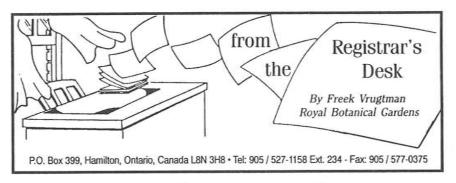
All of what has just been said pertains to plants and trademarks in the USA. Trademarks in other countries follow the rules and regulations of that country which may or may not be similar to our regulations. Commercial firms have to pay attention to all the rules for trademarks in any and all the countries where they do business. If a producing company does not control use of its trademark, it could lose its exclusivity. Aspirin was once a trademark but is now in common use.

Individual members of ILS don't have to follow all the ins and outs of trademarking but everyone should know that a plant can have both a cultivar name and a trademark and we try very hard to be sure that the most up-to-date names and symbols are used in the society's publications. Also, if a person is working with catalogs from other countries there may be additional complications to knowing just which plant is being offered. Also, the laws of different countries vary so that a legal trademark in one country may not have standing in another. Commercial firms can register their trademarks in several countries.

Below is a list of known trademarked lilacs giving the trademark name; the owner of the trademark and the "varietal denominator" (cultivar). There may be others of which I am unaware and the list is in flux and subject to change over time e.g. China SnowTM used to be Water TowerTM.

Trademarked name:	Owner of Trademark:	Varietal denomination (code or cultivar name):	
BLUE SKIES* BURGUNDY QUEEN* CHINA SNOW™ ELFE™ ELFENKONIG™ FLAMINGO™ FRAU HOLLE™ JOSEE™ MISS AMERICÆ™ REGENT* REGENT* SCHNEEWEIBCHEN™ SCHONE VON MOSKAU™ STERNTALER ™ SUMMER CHARM* WATER TOWER*	Monrovia Nursery Co., USA L.E. Cooke Co., Inc. USA Chicagoland Grows™, USA Kircher Baumschulen, D Kircher Baumschulen, D Kircher Baumschulen, D Kircher Baumschulen, D Pepineres Minier, F Kircher Baumschulen, D Princeton Nurseries, USA Andre Briant Jeunes Plantes, F Kircher Baumschulen, D Kircher Baumschulen, D Kircher Baumschulen, D Kircher Baumschulen, D Discov-Tree R. & D., USA See: CHINA SNOW™	'Monore' 'LECburg' 'Morton' 'Dark Night' 'Sunset' 'Edward J. Gardner' 'St. Margaret' 'MORjos O60F' 'Agnes Smith' 'PNI 7523' 'Delreb' 'Mount Baker' 'Krasavitsa Moskvy' 'Primrose' (Holden) 'DTR 124' S. oblata spp. dilatata (Nakai) P.S. Green & M.C. Chang	

Note: Usually the symbol ™ stands for trademarks established and maintained by usage; the symbol ® is used mostly for trademarks registered in the USA. Country designations: D=Germany, F=France, USA=United States of America. In the above list, two of them, Blue Skies® and Summer Charm® are also patented under the cultivar names 'Monroe' and 'DTR124,' respectively.



Fr. J. Thomayer [1856-1938] Czech plantsman and lilac originator

rantišek Josef Thomayer, landscape architect, pomologist and nurseryman, was born in Trhanov, near Domažlice, in Western Bohemia, formerly Austria-Hungary and Czechoslovakia, today the Czech Republic. He trained at the Pomological Institute at Prague-Troja, studied landscape architecture at Frankfurt, Germany, and gained additional experience in landscape construction and nursery practice in France. In 1894 he was appointed parks director for the City of Prague, a position he held for ten years. During his tenure he constructed and renewed most of the Prague parks of that era, establishing his high professional standards and reputation.

In 1894 he founded his own company at Ríčany near Prague: Thomayerovy Stromové Školky. The decades that followed were very productive. Thomayer designed and executed numerous private and public parks at home and abroad, including Hungary and Russia; he was a prolific writer, author of the volume Jablka (Apples), 1894, in the series České ovoce (Czech fruits), of articles in Austrian, Czech and German horticultural magazines, and was editor and co-publisher of České Flora and Časopis českych zahradníků (magazine of Czech gardeners).

We have seen photocopies of the lilac pages of only one Thomayerovy Stromové Školky catalogue, undated but ca. 1932. About sixty lilac species and cultivars are offered for sale, while it is stated that the collection at the nursery comprises 120 different lilac cultivars. Vilém Walter (in litt.) cites Thomayer's obituary in Zahradníké listy (gardening pages) of March 3, 1938, to the fact that Thomayer corresponded with Lemoine, France, that his lilac originations had earned him highest awards at expositions at Vienna and Budapest, and that some of his lilacs had been offered for sale by French nurseries. Thomayerovy Stromové Školky was operated until dissolved by the heirs in the early 1990s.

One known stock-plant of 'Bohdan Kaminsky' was reported by Jabûrec [1997].

References used:

in litt. Václav Jabůrec to Vrugtman, April 3, 1992, and March 14, 1997 in litt. Vilém Walter to Vrugtman, January 7, 1997

Lilac cultivars originated by František Josef Thomayer

S VII 'Architekt Fr. J. Thomayer', Thomayer 1932 VULGARIS {perhaps 'Charles Joly' × ? }
Thomayerovy Stromové Školky, Cat., p. 37 [n.d.] cv. name not established.

S II/VII 'Bohdan Kaminský', Thomayer 1932 VULGARIS {parentage not known] Thomayerovy Stromové Školky, Cat., p. 38 [n.d.] cv. name not established.

D V 'Č. 18.', probably Thomayer VULGARIS {parentage not known}
Thomayerovy Stromové Školky, Cat., p. 37 [n.d.]
cv. name not established; not reported in cultivation.

D IV/V-II/VII 'Č. 19.', probably Thomayer VULGARIS {parentage not known}
Thomayerovy Stromové Školky, Cat., p. 37 [n.d.]
cv. name not established; not reported in cultivation.

S VI 'Č. 20.', probably Thomayer VULGARIS {parentage not known}
Thomayerovy Stromové Školky, Cat., p. 37 [n.d.]
cv. name not established; not reported in cultivation.

D IV/V-III 'Č . 21.', probably Thomayer VULGARIS {parentage not known}
Thomayerovy Stromové Školky, Cat., p. 38 [n.d.]
cv. name not established; not reported in cultivation.

D IV/VII

'Č. 22.', probably Thomayer
{parentage not known}
Thomayerovy Stromové Školky, Cat., p. 38 [n.d.]
cv. name not established; not reported in cultivation.

D V 'Č. 23.', probably Thomayer VULGARIS {parentage not known}
Thomayerovy Stromové Školky, Cat., p. 38 [n.d.]
cv. name not established; not reported in cultivation.

D VII 'Profesor Dr. Jos. Thomayer', Thomayer 1922 VULGARIS {parentage not known} Thomayerovy Stromové Školky, Cat. p. 38 [n.d.] cv. name not established; not reported in cultivation.

ABBREVIATIONS:

S - Single flowers D - Double flowers

COLOURS

I White V Pinkish
II Violet VI Magenta
III Bluish VII Purple

IV Lilac

& bicolour [e.g. VII & I for purple and white]

/ - colour combinations [e.g. III/VII for bluish-purple; V-VI for pinkish to magenta]

cultivar with variegated and/or golden foliage

? information incomplete

Cultivar names appearing in **bold type** have been registered.

Adolf Vaigla - The man and his lilacs

by Freek Vrugtman

dolf Vaigla lived through turbulent times. When he was born on 1, January, 1911, Estonia was part of the Russian Empire. The revolution of 1917 brought self-government to the Estonians, but the sovereignty gained by Estonia in 1920 lasted just over 20 years. In 1940 the Soviets occupied the Baltic republics. Estonia re-gained independence from the USSR some 50 years later in 1991.

Working in the orchard owned by his brother was young Adolf Vaigla's first horticultural experience. He later shifted to growing vegetables for family use and for sale. From 1927 until 1929 Adolf attended basic horticultural school at Vahi. Here he met three people that became his rôle models for life, namely August Mätlik, professor (lecturer) at the University of Tartu; Karl Robert Tavel, who had extensive practical horticultural experience in countries outside Estonia; and Arvid Vilms, his older school friend, who apprenticed in the nursery Willi at Tartu and, many years later when employed at Sheridan Nurseries in Ontario, was to become Vaigla's "Canadian connection" and the source of his lilac stock.

In the spring of 1930 Adolf Vaigla became garden superintendent at Väimela agricultural school. Later, in 1936, after military service, he was appointed head of the technical training department of the Räpina horticultural school.

Beside his work as an instructor Adolf Vaigla continued his own studies, earning a master's diploma in 1937, completing his studies at Räpina horticultural college in 1940, and qualifying as vocational teacher in horticulture in 1941. Later, in 1956, Vaigla earned a diploma in agronomy.

The major part of his working life Adolf Vaigla spent in Räpina. He was an expert in every sector of agriculture and horticulture, and his influence on development of agricultural and horticultural practices and on scientific development has been a significant one. His major achievements are in the acclimatization of garden plants and corn (*Zea maize*). Vaigla also looks back on a successful 35 year teaching career* He retired in 1971.

Acknowledgments

We pay tribute to the late Arvid Vilms, who first brought to our attention the lilac work of Adolf Vaigla.

ILS members, Colin Chapman and Ole Heide, were instrumental in reestablishing contact with Adolf Vaigla.

The writer wishes to thank Claus Koch for translating from the Estonian. Adolf Vaigla provided the descriptive information on his lilacs and edited the biographical note.

Literature consulted

Kivistik, J. 1991. Adolf Vaigla. *Aiandus Mesindus* 3–1991:23-25 Kivistik, J. 1997. Adolf Vaigla sirelisordid. *Maakodu* 5'97:22-23 (illustrated). Vrugtman, F. 1991. Lilac Registrations 1990. *HortScience* 26(5): 476-477.

Lilac cultivars selected, named and introduced by Adolf Vaigla

S. vulgaris L. 'Aino'

{parentage not known; selected in 1969; cv. name registered in 1990} Shrubs 2.5 m tall, suckering moderately. Foliage dark-green, disease-resistant. Flowers in 20- to 25- cm long upright thyrses, fragrant. Florets single, violet blue [S II-III], 2 to 2.4 cm in diameter. Plants thrive in rich loamy soils and are known to be hardy to -33°C.

Vrugtman, *HortScience* 26(5): 476-477 [1991]; Kivistik, *Maakodu* 1997(5):22-23 (ill.) [1997] - in Estonian.

S. vulgaris L. 'Andres'

{parentage not known; selected in 1969}

Shrubs to 3 m tall, suckering moderately. Foliage dark-green; leaf-blades measuring 8×5.5 cm; disease-resistant. Flowers in thyrses to 18 cm long and 8 cm broad, fragrant. Florets single, lilac-pinkish [S IV/V], to 2.6 cm in diameter. Plants are known to be hardy to -35° C.

S. ×hycinthiflora Rehder 'Arvid Vilms'

{'Clarke's Giant' × ?; selected in 1970; cv. name registered in 1990} Shrubs to 3 m tall, practically free of sucker growth. Foliage dark-green, disease-resistant. Flowers in very large thyrses, fragrant. Florets single, lilac [S IV], 3 to 3.5 cm in diameter, corollas large and with recurved lobes. Plants known to be hardy to -34°C.

Vrugtman, HortScience 26(5): 476 [1991];

Kivistik, Maakodu 1997(5):22-23 [1997] - in Estonian.

S. vulgaris L. 'Elsa Maasik'

{'Andenken an Ludwig Späth' × ?' selected in 1969; cv. name registered 1990}

Shrubs of moderate height to 2.5 m, suckering moderately. Foliage darkgreen, disease-resistant. Flowers in thyrses to 15 cm long, fragrant. Florets single, deep-purple [S VII], darker than 'Andenken an Ludwig Späth', 1.8 to 2.2 cm in diameter. Plants thrive in rich loamy soils and are known to be hardy to -34° C.

Vrugtman, HortScience 26(5):477 [1991]; Kivistik, Maakodu 1997(5):22-23 (ill.) [1997] - in Estonian

S. vulgaris L. 'Helen' (Vaigla, not Skinner) - See 'Leenu'.

S. vulgaris L. 'Helgi'

{'Mrs. Edward Harding' × ?"; selected in 1952}

Shrubs to 4.5 m tall, suckering moderately. Foliage green; leaf-blades measuring 10×6 cm; disease-resistant. Thyrses 1 to 2, to 25 cm long and 8 cm broad, conical; fragrant. Buds red-violet. Florets double (2.5 times), dark violet pinkish [D II/V], 1.8 to 2 cm in diameter. Plants are known to be hardy to -34°C.

Kivistik, Maakodu 1997(5):22-23 (ill.) [1997] - in Estonian.

S. ×hycinthiflora Rehder 'Jaan'

{'Clark's Giant' × ?; selected in 1990}

Shrubs to 4 m tall, practically free of sucker growth. Foliage dark-green; leaf-blades measuring 10×10 cm; disease-resistant. Thyrses 1 to 2, to 15 cm long and 13 cm broad, ovate. Buds dark violet. Florets single, bright magenta [S VI], to 3.5 cm in diameter. Plants are known to be hardy to -35°C. Kivistik, Maakodu 1997(5):22-23 (ill.) [1997] - in Estonian.

S. ×hycinthiflora Rehder 'Kivi Ats'

{'Esther Staley' × ?; selected in 1956}

Shrubs to 4 m tall, practically free of sucker growth. Foliage dark-green; leaf-blades measuring 12×11 cm; disease-resistant. Thyrses 1 to 2, to 19 cm long and 14 cm broad. Buds dark red. Florets single, bright magenta [S VI], to 3.2 cm in diameter. Plants are known to be hardy to -34°C. Kivistik, Maakodu 1997(5):22-23 (ill.) [1997] - in Estonian.

S. ×hycinthiflora Rehder 'Laine'

{'Esther Staley' × ?; selected in 1985}

Shrubs to 4 m tall, practically free of sucker growth. Foliage dark-green; leaf-blades measuring 8.5 × 8 cm; disease-resistant. Thyrses1 to 2, to 20 cm long and 12 cm broad. Buds dark pink. Florets single, bright pink [S V], to 2.6 cm in diameter. Plants are known to be hardy to -35°C. Kivistik, *Maakodu* 1997(5):22-23 (ill.) [1997] - in Estonian.

S. vulgaris L. 'Leenu'

syn - 'Helen' (Vaigla, not Skinner)

{'Mrs. Edward Harding' × ?; selected in 1952}

Shrubs to 4 m tall, suckering moderately. Foliage dark-green; leaf-blades measuring 10.5×7.5 cm; disease-resistant. Thyrses 1 to 4, to 15 cm long and 9.5 cm broad; fragrant. Flowerbuds pinkish purple. Florets double (2 to 2.5 times), purple pink [D VII/V], to 2.5 cm in diameter. Plants are known to be hardy to -35°C.

Kivistik, Maakodu 1997(5):22-23 (ill.) [1997] - in Estonian.

S. vulgaris L. 'Liina'

{parentage not known; selected in 1946}

Shrubs to 4.6 m tall, suckering moderately. Foliage dark-green; leaf-blades measuring 8.5 × 8 cm; disease-resistant. Thyrses1 to 3, to 20 cm long and 9 cm broad. Buds violet. Florets double (1.5 to 2 times), bright pink [D V], to 2 cm in diameter, fragrant. Plants are known to be hardy to -33°C. Kivistik, *Maakodu* 1997(5):22-23 (ill.) [1997] - in Estonian.

S. vulgaris L. 'Saima'

{'Andenken an Ludwig Späth' × ?; selected in 1952}

Shrubs to 4 m tall, suckering moderately. Foliage dark-green; leaf-blades measuring 8 × 7 cm; disease-resistant. Thyrses1 to 2, to 20 cm long and 8 cm broad, conical. Buds dark-violet. Florets violet purple [S II/VII], to 2.1 cm in diameter, fragrant. Plants are known to be hardy to -33°C. Kivistik, *Maakodu* 1997(5):22-23 (ill.) [1997] - in Estonian.

S. vulgaris L. 'Silja'

{'Mrs. Edward Harding' × ?; selected in 1969}

Shrubs to 4 m tall, practically free of sucker growth. Foliage dark-green; leaf-blades measuring 7 \times 5 cm; disease-resistant. Thyrses 1 to 4, to 25 cm long and 11 cm broad, conical; strongly fragrant. Buds pinkish purple. Florets double (triple) violet pink [D II/V], to 2.3 cm in diameter. Plants are known to be hardy to -35°C.

Kivistik, Maakodu 1997(5):22-23 (ill.) [1997] - in Estonian.

S. vulgaris L. 'Tiina'

{parentage not known; selected 1969; name registered in 1990} Shrubs to 3.2 m tall, suckering moderately. Foliage dark-green; disease-resistant. Flowers appearing in mid-season; thyrses erect, to 35 cm long and 12 cm wide, up to three spikes per thyrse; fragrant. Florets single, pink [S V], to 2.2 cm in diameter. Known to be hardy to -34°C.

Vrugtman, HortScience 26(5):477 [1991];

Kivistik, Maakodu 1997(5):22-23 [1997] - in Estonian.

S. ×hycinthiflora Rehder 'Vaiga'

{'Esther Staley' × ?; selected in 1970; name registered in 1990} Shrubs to 2.5 m tall, suckering moderately. Foliage good green; disease-resistant. Flowers appear in mid-season in very large, upright thyrses, fragrant. Florets single, pink to grayish white [S V], to 2.8 to 3 cm in diameter. Plants are known to be hardy to -35°C.

Vrugtman, HortScience 26(5):477 [1991];

Kivistik, Maakodu 1997(5):22-23 [1997] - in Estonian.

ABBREVIATIONS:

S - Single flowers D - Double flowers

Colours

I White V Pinkish
II Violet VI Magenta
III Bluish VII Purple

IV Lilac

& bicolour [e.g. VII & I for purple and white]

/ - colour combinations [e.g. III/VII for bluish-purple;

V-VI for pinkish to magenta]

* cultivar with variegated and/or golden foliage

? information incomplete

The International Register

by Freek Vrugtman, Lilac Registar [Paper presented at the International Lilac Society Convention 1998]

o many people names of lilacs are not important, but to others, names are important; they want to be sure which lilac they happen to be talking about. Names are important in communication. I should like to summarize the events that have lead to the compilation of the International Register of Cultivar Names in the Genus Syringa L (Oleaceae).

Toward the end of the 19th century and during the first decades of the 20th century there was a sharp rise in the number of new garden plants. With it came the need for some kind of order, system or rule for naming these plants; we have written about these developments elsewhere. Right now I want to focus on the lilacs.

In the 1920s two people became intensely interested in lilacs; one became a botanist in the process, the other one was a horticulturist. Both left their mark on lilac nomenclature.

The first of these two people was **Susan Delano McKelvey**, born in 1883. In 1919, at age 36, she came to Boston where she joined the staff of the Arnold Arboretum as a volunteer. The story of Mrs. McKelvey's life as a

botanist at the Arnold Arboretum has been written up by Edmund Schofield and published in *Arnoldia*.² I am now quoting from that paper, because I could not tell the story any better.

"She began to study the plants on the grounds of the Arboretum and in its greenhouses under the tutelage of William H. Judd (1861-1949), who was the Arboretum's propagator.

"Early on she took a particular interest in the lilac collection, just then under development.

"Over the next seven years she would visit lilac collections in the United States, Canada, England and France, gathering information for her book. She would visit numerous plant nurseries and would examine preserved specimens in the herbaria at Kew and Paris, as well as in the Gray Herbarium of Harvard University, and would borrow specimens from Kew, the British Museum, Edinburgh, and Budapest. She would correspond with Renato Pampanini in Florence, Camillo K. Schneider Cecil E.C. Fischer, and other specialists, as well as with growers in the United States, France, Germany, Switzerland, the Netherlands, and other countries. She would pore over herbals, the early botanical literature. monographs, botanies, floras and the botanical and horticultural journals of ten countries, as well as the catalogs of well known nurseries in many of those same countries. In 1925 she would describe a new species of Syringa [S. rugolosa McKelvey; now called S. mairei (H.Lév.) Rehder].

"The resulting book, *The Lilac: A Monograph*, appeared in 1928,

published by Macmillan.

"The Lilac was well received. The Journal of the Royal Horticultural Society called it a "remarkable volume on the genus Syringa – a unique monograph which will for many years constitute a monument to the remarkable research and painstaking industry of an American lady-botanist." Horticulture, Scientific Monthly, Rhodora, Landscape Architecture, the New York Times and Herald Tribune, the Times of London, and many other publications – professional and lay alike – lavished praise on it.

"The Lilac was selling exceedingly well In 1929 McKelvey received the Centennial Gold Medal of the Massachusetts Horticultural Society for the book, and the Schaffer Medal of the Pennsylvania Horticultural Society, the first time the medal had been awarded for a book. From the Garden Club of America she received the Emily Renwick Achievement Medal."

So much for the quotations of Edmund Schofield's paper. Mrs. McKelvey never looked back; instead she turned to the genera *Yucca* and *Agave* of the Southwestern United States, studying them with the same intensity and dedication as she had studied *Syringa*. What Schofield does not mention

is that in 1936, at the 12th International Horticultural Congress, the Berlin Congress, McKelvey's *The Lilac* was proposed as the standard for nomenclature for lilacs.³ Today, seventy years after being published, McKelvey's *The Lilac* still is the most well-documented monograph on the cultivated lilacs.

The second person I want to talk about is **John Casper Wister**; he was born in 1887. He became a landscape architect and a true plants-man, interested in a wide range of genera including lilacs. Between 1914 and 1974 Wister wrote more than fifty articles on lilacs.⁴

Recognizing the need he compiled "A lilac check list" published in the January 1927 issue of the *National Horticultural Magazine*. It appears to be the very first check list of lilacs. In 1941 a lilac survey was conducted by the *Committee on Horticultural Varieties* under John Wister's chairmanship and under the auspices of the American Association of Botanical Gardens and Arboretums (AABGA). The report of that survey was published under the title "Lilacs for America." The original report came out in 1942; there was a revised and corrected edition in 1943, and there was a follow up paper "Additions to lilac survey" in 1951. A second lilac survey was carried in 1953; its report, also with the title "Lilacs for America" was published October 1953.

At this point I would like to diverge briefly to expand on the state of nomenclature of cultivated plants.

Latin used to be and, up to a point still is, the language of science, including botany. Latin is the language used for describing and naming plants newly discovered in the wild. Since botanists were trained in the art of describing plants they frequently described and named sports and mutations of garden origin; horticulturists however would describe new garden plants using modern languages and assign names in the same languages. Simultaneous use of these two methods lead to confusion, and it became necessary to separate botanical and horticultural nomenclature.

At the first in-official International Horticultural Congress of Brussels in 1864 a proposal was presented to reserve Latin names for species and botanical varieties, and use non-Latin fancy names for garden forms. It took almost 90 years of discussions, proposals and counter proposals by botanists and horticulturists on both sides to the Atlantic to come to an agreement and formulate the first International Code of Nomenclature for Cultivated Plants (ICNCP). This new Code was adopted in 1952 at the 13th International Horticultural Congress of London.⁵ This Code also established the term "cultivar", abbreviated "cv.", for cultivated varieties, distinguishing them from botanical varieties or "varietas", abbreviated "var."

Registration of cultivar names by officially appointed International Registration Authorities (IRAs) was approved and introduced by the 14th International Horticultural Congress of Scheveningen in 1955.6 The first

seven IRAs were appointed by the Scheveningen Congress 1955. An additional ten IRAs were appointed by the 15th International Horticultural Congress of Nice in 1958; including the IRA for cultivar names in the genus *Syringa.*⁷ The appointment went to the Arthur Hoyt Scott Horticultural Foundation at Swarthmore College, Swarthmore, Pennsylvania; John C. Wister in turn was appointed registrar of the new IRA.

These appointments came five years after the publication of *Lilacs for America – 1953*. John Wister had been the driving force behind the Committee, its Survey and its Report. The more than 800 cultivar names listed in *Lilacs for America* [1953] were accepted as registered by the International Horticultural Congress [Nice, 1958].⁸

Now we can rejoin the main story.

The two landmark events for lilac nomenclature and registration were: (1) the proposal made at the 12th International Horticultural Congress [Berlin, 1936] designating McKelvey's *The Lilac* as the standard for nomenclature for lilacs, and (2) the designation at the 15th International Horticultural Congress [Nice, 1958] of *Lilacs for America* [1953] as the starting point of lilac cultivar name registration.

John Wister served as Lilac Registrar from 1958 until the end of 1974, when he retired at age 87. Five registration lists were published during those years. Nomenclature of cultivated plants and cultivar name registration were in its infancy when Wister took on lilac registration; by the time he retired the Cultivated Plant Code had been revised and updated three times, namely in 1958, 1961, 1969; many rules had been added, refined and updated, keeping pace with the evolution of horticultural practices and the requirements of commerce.

When Royal Botanical Gardens, Hamilton, Ontario, was appointed by the 19th International Horticultural Congress [Warsaw, 1974] to succeed the A.H. Scott Horticultural Foundation at the beginning of 1975 IRAs were required to include all known cultivar names, registered or non-registered, in their listings. It should be noted here that the *Lilacs for America* [1953] survey covered only those lilac names that were submitted for registration. The existing information gap was closed by an extensive and intensive literature survey carried out by Owen M. Rogers of the Department of Plant Science, University of New Hampshire, culminating in the publication of the *Tentative International Register of Cultivar Names in the Genus Syringa* in 1976.¹⁰

This brings us to the present, because from there on, McKelvey's *The Lilac* [1928], and Wister's *Lilac for America* [1953] with the registration lists that followed, and Roger's *Tentative International Register* [1976] have been the foundation for the current project, the *International Register of Cultivar Names in the Genus Syringa L. (Oleaceae)*. This first version of the International Register was presented at the 1998 Convention of the

International Lilac Society (ILS) through the sponsorship and cooperation of the ILS and Royal Botanical Gardens (RBG).¹¹

The current version of the International Register is a "work-in-progress" document; we are quite aware of its shortcomings; so far I have been the one and only proofreader, and I am well aware of the inconsistencies, missing quotation marks, spelling errors, and so on, which one seems to find only by actively using the document. A few errors were introduced by transferring the document from one format into another. The International Register is now available as "hard copy" (printed copy) and on floppy disk (in IBM-compatible and Macintosh formats). The International Register also had been placed on the RBG web site where it can be accessed at <www.rbg.ca/lilacreg>. On the RBG web site the various parts of the International Register can be updated periodically. Each part will always show the notation "Last updated" plus the date, so the user will know when the changes have been made.

Feedback from users not only would be greatly appreciated, feedback is essential for future progress of this project.

In closing, a few words on the future of the International Register and cultivar name registration.

During the period John Wister was Lilac Registrar there were three revisions of the Cultivated Plant Code. Since RBG in 1975 there have been revisions in 1980 and 1995; we are expecting another one following the Third International Symposium on Taxonomy of Cultivated Plants, to be held in Edinburgh, UK, in July 1998. Standards for cultivar name registrations have been raised significantly. Cultivar descriptions and flower colour determinations must be more exact. Cryptic descriptions such as "single, white" are not acceptable. Measurements must be metric. "Standard Portfolios" containing herbarium specimens, color photographs, descriptive information, and so on, must be established for each cultivar name to be registered. Final writeups for publication of registrations are prepared by the Registrar, based on information received, after which they are cleared with the individuals registering the new cultivar names. The chair of the AABGA Nomenclature and Registration Committee edits the manuscripts before they are submitted for publication to the editor of *HortScience*.

Cultivar names, regardless whether registered or not, must be put through the so-called "nomenclatural filter" to determine whether the epithet is "established" and "accepted". 12 In the past some names have been registered as cultivar names without a cultivar being in existence. We hope to be able to research at least some of these cases with the help of the proposed Lilac Inventory Database announced in the recent issue of *Lilacs – Quarterly Journal*. 13

Contribution No. 96, Royal Botanical Gardens

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Research Abstracts

Editor's Note: These abstracts are reports of published research. They are included here as a sampling of lilac research being done around the world.

Wang YouQun; Liu RuiNing [In vitro induction of leaf abscission in Syringa oblata and its histological and ultrastructural changes.] Acta Horticulturae Sinica (1997) 24 (4) 403-404 [Ch, 6 pl.] College of Biological Science, China Agricultural University, Beijing 100094, China.

PILARSKI, J. Relations between solar irradiation, temperature and the photochemical activity of chloroplasts isolated from the bark and leaves of lilac (Syringa vulgaris L.). Polish Journal of Environmental Studies (1997) 6 (3) 53-57 [En. 17 ref.] Franciszek Górski Department of Plant Physiology, Polish Academy of Sciences, Slawkowska 17, 31-016 Kraków, Poland.

It has been found that under solar irradiation the temperature of the sunny side of stems may be up to 12°C higher than that of the air. The temperature of the shaded side of the stems is 2-3° lower than that of the sunny side. The temperature of the leaves exposed to sun may be up to 8° higher than the open air temperature, while that of the shaded leaves is up to 5° lower. Investigations on lilac on the effect of temperature on the photochemical activity of chloroplasts have shown that in April and June the optimal temperature for photochemical activity of chloroplasts isolated from bark falls within the range of 25-35°, and, in November, in the range of 25-30°. The optimal temperature for the activity of chloroplasts isolated from leaves is 35°. Solar irradiation when warming the stems and leaves also increases the activity of chloroplasts. Only on hot summer days at noon is the temperature of sunny bark higher than optimum, resulting in a decrease in chloroplast activity.

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AIELLO, A.S.; GRAVES, W.R. Success varies when using subirrigation instead of mist to root softwood cuttings of woody taxa. *Journal of Environmental Horticulture* (1998) 16 (1)42-47 [En, 21 ref.] Department of Horticulture, Iowa State University, Ames, IA 50011-1100, USA.

A subirrigation method for rooting softwood cuttings of seven woody taxa was compared with intermittent mist. Both methods resulted in >90% rooting of Spiraea × bumalda cv. Goldflame. Averaged over two dates, >50% of Ulmus cv. Pioneer cuttings rooted, and >70% of cuttings retained leaves and formed callus regardless of method. Subirrigation with mist was unsuccessful for rooting Amelanchier lamarckii, Maackia amurensis or Prunus serrulata cv. Kwanzan. Subirrigating cuttings without mist resulted in reductions in rooting percentage, leaf retention, and callus formation of >90% for A. lamarkii and >50% for P. serrulata compared to misted cuttings. For misted cuttings of A. amurensi, percentage rooting, leaf retention, and callus formation were 23, 48, and 35% respectively; in contrast, no subirrigated cuttings of A. amurensis. Syringa vulgaris cultivars Charles Joly and Michael Buchner differed in response to the propagation methods. Sixty-one, 15, and 42% of Charles Joly cuttings rooted when misted, when subirrigated with tap water, and when subirrigated with a solution of complete fertilizer that contained N at 5.4 mM, respectively. For Michael Buchner, 48, 7, and 19% of cuttings rooted under mist, when subirrigated with water, and when subirrigated with fertilizer, respectively. Use of subirrigation without mist is recommended for rooting softwood cuttings of S. bumalda cv. Goldflame, Ulmus cv. Pioneer, and S. vulgaris cv. Charles Joly.

Horticulture Abstracts 1998, Vol. 68 No. 7

Editor's Notes: J. Herbert Alexander, Sr. was a nurseryman in Middlesboro, Massachusetts in 1966. He sent the following letter (see pages 116-119) to the Director of the Royal Botanical Gardens as they were just getting started in the development of the Katie Osborne Lilac Collection. Freek Vrugtman sent the letter for publication in Lilacs and of it said, "There is a lifetime of experience and love for plants in that letter, providing the reader with a rare glimpse of the real John Herbert, age 82, plants-man, grower of dahlias, blueberries, lilacs and rare and uncommon shrubs." Apparently there was something in his genes because his grandson, John H. Alexander III, is now the Propagator for the Arnold Arboretum.



Janaury the Twenty-seventh 19 66 Our 58th year in the Plant Business

Dr. Leslie Laking, Director, Royal Botanical Gardens, Hamilton, Ontario, Canada. RECEIVED

Dear Dr. Laking,

ROYAL BOTANICAL GARDENS

Altho it may be "Sending Coal to Newcastle" to you folks, to send you our Lilac Planting and Cultural Directions, you may find an idea that is practical, and at anyrate, you will know that I am trying to give you all the information we possess, to insure good results and more orders.

Our Organic Methods have been handed down for generations, and the use of iron since my Grand-Father's day.

One of my Grand-Fathers was a School Master, the other a Carpenter who would be a contractor in these days.

Both had very very good gardens in their day that were their pride and joy, and by having good gadens, they brought up healthy children.

For years, while I was a boy, my carpenter Grand-Father always would "preach" "Waste Nothing-Save All" and in his carpentering work, instead of tossing away rusty nails, or bent nails, he tossed them into a can or pail he carried in this wagon, always saying a rusty nail in ones foot could cause Lock-jaw, and, then too, they will do my apple trees good, so even rusty nails on old lumber were always removed and went into the pail.

The nails were accumulated all year and each Spring when new fruits or shrubs, were planted, the nails were divided up, and went under each tree, apples and plums had the most nails.

We have around 20,000 large fruiting sized Blueberry bushes, all planted with about 100 tin cans under each bush, for moisture holding ability and to provide iron, as iron makes good red blood.

Also all our stock bushes of Lilacs and Shrubs and all fruit trees are so planted.

We dig holes 3 feet deep and 3 feet wide for trees and $2\frac{1}{2}$ feet deep and 3 feet wide for Lilacs and Elueberries. Its lots of work, but it is my sincere opinion that fruit has beetter flavor, and that the iron will give those who eat our blueberry more film and make good red blood.

When holes for Lilacs and Bluebarries are dug, the best top soil is piled beside each hole, and becomes the base for our Planting Soil Mixture. The less desirable sub-soil is hauled to our compost heaps, and a thin layer spread over the compost, to return to our top soil, when the compost is used the valuable minerals that have leached away from our present top soil and are now in the sub-soil. Thats the Scotch way of doing it. I'm Scotch you know.

At the bottom of each hole, 21 feet depp, we stand in upright, with tops open and bottoms closed, to hold water, as many old waste tin cans as we can squeeze into each hole. Usually around 100 cans.

We make square holes with straight up-and-down sides as they will hold more cans and more organic materials.

Its the best use of waste tin cans to my knowledge, and in my opinion has two advantages, they hold moisture and water, and this moisture is available all during June, July, August and September, when the bushes can use meore moisture and when we usually secure less from rains.

As you folks know, when the canstust, they become oxidized iron and as you know, the fiberous feeding roots of Lilacs and Blueberries, have the ability to pick-up, absorb or assimulate this oxidized iron and it goes into the plants roots, structure and berries in case of the Blueberries.

As you know, all nature provides its future progeny with the best of its available foods it can store, consequently, the berries will store much of the collected iron so the iron is very good for growing blueberries.

For Lilacs we think the extra iron gives better foliage color, better blossom color, richer colors, and heavier texture to foliage. Also it may be a notion, but I think blossoms will last longer before they start to go-by, or become passe!

Then on top of the cans, tosavethem from filling up with soil, we rake in seven or eight inches of organic wastes, anything available, garden wastes, leaves, pine needles, fruit wastes, nut wastes, table wastes, fish cleanings and bones, and animal bones, hay, straw, or any other organic wastes.

These are also moisture providing materials, and will supply moisture before the Lilac roots reach the moisture in the tin cans, and as all this organic materials decompose, they provide considerable extra food for the bushes over the years, and at the same time, provide an idea. location for earth worms, and other soil organisms to live, growup have their progeny, die and decompose, and the more soil organisms that die, the more food will be available.

As you foolks know, the tiny sparks of energy created when soil organisms rot, decompose, are the way nature provided for plant to live and secure their food, consequently, the more organismaterials under the bushes the more food Energy, Plant Life, Plant Food, call it whichever you wish, its all the same, and the more provided the better growth your will secure, and this is continuous source of food, consequently will provide steady, continuous uniform growth on plants.

We think plants growing continuously are in far better shape, than plants that have liberal applications once or twice, then starve while they ait for more applications.

Then, on top off the Organic wastes, we shovel in the Planting Soil Mixture, using the top soil saved when the holes were dug, we mix with it 35% compost, 35% Peat Moss, the 25% top soil saved and 5% other addatives.

At times, when we have them all available, we use ten other addatives, or as many as we have available, and use the others in our annual fertilization.

We use considerable horse manure in our comppst so that is always liberally availble in the compost, as we have four stables handy where we can secure all the horse manure we want, for the hauling, free.

I will discuss the addatives in our annual fertilization program, and altho we do not always get all four applications on each year, we try to do so.

It has always been my opinion, that if we are to secure maximum results from our breeding work, that we should grow our plants and bushes the very best possible, each and every year, year after year, and we think the breeding accomplishments we have secured are the results of this continuous build up of health, strength, vigor and vetality, plus intelligent selection of parents, plus using the cream of each generation of progeny as parents in succeeding generations.

It is also my opinion, that its far better to make three or four moderate applications more or less regularly, than one or two larger more liberal ones, less regularly. Also, it is my sincere opinion that no fertilizer should be applied after July, as late fertilization stimulates late soft growth and soft wood does not go thru Winter in good conditions, and with Blubberries, if they are making new wood until frost time, they do not harden up to go thru Winter good, and much pruning out of old Winter-killed wood ispeeded in the Spring, so extrawork is made. More important however, on Blueberries fruit buds will not form in anywhere the numbers they will if bushes harden up and are allowed to develop maximum fruit buds the bushes have the capabilities to develop, so late fertilization on Blueberries robs much of the possible fruit crop. On Lilacs, I think more blossom buds are set if fertilization is discontinued in early July.

Also, I believe the earlier in the Spring, the first application can be mmade the better, and then a second application three to five weeks is most beneficial. First two are very very important and to be of nitrogen foods, then they are quickly soluable readily ava/ilable and the rains and snow that comes late thawing will take the nitrogen down to the roots, and when new fiberous feeding root-hairs are developing, this food and moisture is available. I also think the more food available in the first six or eight weeks each year gives the plants a larger heavier fiberous feedingroot system, and that more flowers or fruit is developed as a consequence of this better early supply of nitrogen fertilizers.

We also usually make the third application of a nitrogen food, and the last in June or early July of either Bone Meal, Granite Dusty fine ground Phosphate Rock or Potash Rock. Try to alternate them from year to year, as all these are longer available more slowly soulable and will in all probability last in the soil for several years, but if ranewed more or less regularly or two mixed together and applied each year you are sure of maximum sources of food.

The nitrogen sources we use are all animal fowl or bird manures, Fish Meal, Dried Blood Meal, Horn and Hoof meal when available, hard to secure now, Cottonseed Meal, Soy Bean Meal, Peanut Oil Meal, Tankage, Meat Scraps, all of which are good, all of which are nitrogen sources.

At times we have also use Bovung and Sheep manures Pulverized from the Grain Store or Wholesale Fertilizer supplies.

When we are preparing Planting Soil Mixtures, we make a fifty wheelbarrow mixture a one time, near our compost heaps, and put on layers of Peat Moss, Compost, loam, sand, second layer peat moss, two layers compost then use a bucket full of whatever of the fertilizers we have just mentioned over the top and its all Rototillered into the mixtures.

We grow up mouch of our young plants in mixtures in beds, so for years, have had a gang make mixtures and wheel them into beds much of the Spring planting/time.

However fifth uniform mixtures and a very good mixture, with this in it, we do this good roots into our plants and probably spend three orfour times more on planting our plants than anyone in the business. However, we do not waste any money on catalogs, and that goes into our soil preparation and our breading work, and has proven decidedly to our advantage and that of our customers.

Mott of this is old stuff to you folks, but you can at least appreciate the efforts we make ourselves and the efforts we take with our customers, to make sure they are successful, and you will be surprised to know that practicallyall to whom we sell, will take these extra planting directions and do have much better results, so we can re-sell them more easily the next times.

Also I am sure if our customers do follow these instructions, altho its considerably more work, than they have done previously to grow their bushes, they follow it ones they have seen the decidedly better plant growth they secure, and I never worry about loss of a customer, and much of our sales are from the recommendations of our old loyal customers.

It takes more time to Acknowledge orders, as you can appreciate, but its lots cheaper then large page advertising, and more practical, in my estimation and has worked for us for over 57 years.

Again thanking you for your order and trusting you find these planting suggestions we supply our customers interesting, I remain, with my very best wishes for a mighty good graying season this Summer,

Organically yours,

J. HERBERT ALEXANDER.

Very cordial

Another set of Lilacs lists for your files, in case more than one wish them handy.

Tips For Beginners

How much water does a lilac need? How often should it be watered? If the leaves appear to be wilting can this be a sign of too much water and also not enough water?

Lilacs don't like wet feet. They can stand drought better than too much water. Admittedly wilting is a sign that the leaves don't have enough water but this can be due to problems at a number of places. For example, wilting could occur if there is not enough water in the soil. It could also occur if there is too much water and the roots have suffocated and are unable to take up water. Then, if the roots are in good health, leaf wilting could be caused by blockage of the stem vascular system by a fungus, a bacterium or damage by a stem borer. Finally, wilting could be the result of disease in the new shoots and developing leaves, e.g. bacterial blight.

So wilting is bad news – what to do? The best plan is to start at the bottom and look for the casual condition. If the leaf wilting occurs during the normal growing season and the soil feels dry, water the plant. If the wilting stops, you've answered all the questions. If not, look further for the weak link in the water chain. However, don't automatically assume that you should wait for wilting before watering. All rules in biology have exceptions and this is true of watering lilacs. Two important exceptions where you should not wait for wilting are these:

1. Newly planted lilacs. Don't wait until leaf wilting occurs. The plant needs as much as ½ inch of water per week during its first year of establishment. If this comes from normal rain, no additional water is needed, but if there is no rain, it must be supplied by the grower. A lilac bush is not the easiest plant to get established and lack of water will cripple a new plant and visibly slow down its establishment.

2. Plants in the southwest USA and other places where there are wet/dry seasons instead of hot/cold cycles. In those areas the plants dry down late in the season and begin regrowth with the spring rains. Because the desert southwest is unique, three people from different areas in that region have added their comments on watering lilacs to this column.

Assuming the plant truly needs water, it should be well watered and then not rewatered until the soil down, say – an inch or more is dry to the touch. Deep watering will encourage deeper root development and actually reduce the number of times water must be added. Remember – lilacs need care but don't like wet feet.

Water Need By Lilacs In The Southwest

By Louis C. Erickson

Ilacs probably "need" the same amount of water regardless of where they are growing. It is the amount of water that the lilacs "use" that varies with the location. This can be understood best by persons who remember what a clothes line was, or is. Hang out clothes to dry on a cloudy, cold day and the clothes may still be damp at the end of the day. On the other hand, hang out clothes on a clear, hot, breezy day and the clothes become dry in a matter of minutes. The leaves on lilacs can be likened to clothes on a clothes line, with the difference being that the roots replace, on a continuous basis, the water lost through transpiration. Cut off a lilac plant and hang it on a clothes line and it will dry just like clothes do.

Lilacs need good roots and a continuous supply of water. Because much of the southwest is quite arid it is necessary to water during most of the year. Although some precipitation may occur in any month, the bulk of the rainfall occurs between November and April. When a given amount of water is added to the soil it soaks down only until the wetted soil is at field capacity, and the moisture tension is at zero atmospheres. As the roots remove water, the tension rises to about 16 atmospheres, at which time the wilting point has been reached and the roots can no longer take up water.

Sandy soil holds little water and without much force, so when the water is removed by the roots, the tension rises quickly to the wilting point and the plant suddenly goes into a permanent wilt. A fine textured soil with some clay in it, on the other hand, characteristically holds much more water and, moreover, the tension rises slowly to the wilting point. As a result, as the plant removes water it enters into an incipient wilt because the roots cannot take up water fast enough to keep the plant turgid. Recovery can occur overnight but during the next days the water deficit will become greater and finally the plant will be in a permanent wilt. In most soils, after watering, the water stress in the plants begins to build up slowly at first and then more rapidly to the wilting point. The grower should learn to recognize the signs of moisture stress, and water before wilting occurs. The amount of water to apply should be enough to wet the soil to the depth of the bulk of the roots, which will be about 2 feet. This depth will vary with the soil characteristics and prior watering practices. Occasional deep watering has the benefit of flushing out salts, but going from very dry conditions to very wet in one step may result in bark and stem splitting due to the sudden massive uptake of water by the previously stressed plants.

During the first year, new plants should be watered frequently to avoid any stress. If the plants were container grown they need the first year to extend the root system into the surrounding soil. Frequent watering should be done to keep the root ball continuously moist. When established plants leaf out and flower in the spring, adequate moisture is important in order to get maximum expansion of the inflorescences and new shoots. As the new growth matures, flower buds are already forming for the following year's bloom. Watering should continue to avoid having the flower buds dry up and die. Withholding all water during autumn is an unwise practice. The plants might not survive such treatment, especially if the root systems were not extensive and the water retention characteristics of the soil were not the most favorable. The alleged benefit of withholding water to partially substitute for winter chilling is questionable. An autumn rain could initiate an abortive type of flowering with the resulting loss of flower buds for bloom in the spring.

There are three common ways to water lilacs: basin or furrow, sprinkler, and modified drip (timed flow through spaghetti tubing). The basin or furrow watering may be hand controlled or with a timer. In automatically sprinkled gardens the lilacs do quite well, unless there is a tendency to keep the soil very moist, as where grass is watered. The modified drip is commonly used to conserve water. That it does, but only because a small volume of soil is moistened, and that tends to restrict the spread of roots and to limit the size of the plant. More than one emitter per plant should be used for large plants.

Climatic factors are important in determining how often to water. The rainy season corresponds very closely with the dormant season of the lilac, so watering is unnecessary during the winter in all but the most arid locations. In the southwest, annual rainfall ranges from a low of about 2 inches to a maximum of over 50 inches, so supplemental watering will vary greatly.

The southwest's 24 climate zones (Sunset New Western Garden Book) are based mainly on minimum temperatures which range from practically no frost near the ocean to very low temperatures (-3°F. to -34°F.) at high elevations. Minimum temperatures are not nearly as important as maximum temperatures in affecting water usage. Summer temperatures in the 90s and 100s result in great water consumption by lilac plants. Wind can also increase water use greatly. Coupled with high temperatures is the probability of a low relative humidity, thus resulting in even greater water use. In the arid southwest the sparseness of the vegetation largely precludes a high relative humidity, except near the ocean and in coastal valleys. Overcast skies are common along coastal areas during morning hours, as contrasted with clear skies in inland valleys and higher elevations.

Watering Lilacs In The San Jacinto Mountains

by Reva A. Ballreich

his article is about watering lilacs in the San Jacinto Mountains in southern California. I am simply going to tell you what I do waterwise at this nearly 6,000 foot elevation where my lilac collection is located. The soil at this elevation (around the timber line) is composed of fairly equal parts of decomposed granite, oak leaf mold, decayed branches and decayed pine needles making it a sort of a sandy loam on the humus side. By the mere makeup of the soil it both drains well and retains moisture. I help the moisture retention by using a pine needle mulch.

All my plants are on drippers. There are four 4 gallons per hour drippers to each plant. I have placed the emitters around the periphery of the basins to encourage a greater root system. I find this method wets a greater volume of soil than using the emitter at the center of the basin and also because of more cubic feet of wet soil the drying process is much slower than if the water were directed toward the center of the basin. As the plants become older, larger and new growth (suckers) grow beyond the basin I enlarge the basin to accommodate the new growth and run another dripper to the area. Each plant receives 16 gallons per hour for 2 hours each section on approximately a two week program if required. We have a number of summer thunder storms with heavy downpour, so, the dripper systems are manual instead of automated for obvious reasons. If the temperature is high and there is some wind movement I watch for evapotranspiration at the leaf surfaces and test the soil moisture with my trusty trowel.

I have my own well so water is not a problem. I can run several drippers at a time. My greatest foe in growing lilacs is the capricious weather we have in the springtime in our mountains. The snow does not seem to know when to stop. Perhaps next spring will be charmed and I will have beautiful lilacs for my Annual Lilac Tour.

Irrigation and Water Needs

of the lilacs at Descanso Gardens in La Canada-Flintridge, California (approximately 30 miles inland from the Pacific Coastline and 1300 feet elevation) By Rudy Schaffer, Volunteer Lilac Curator Descanso Gardens

How, When and How Often?

These questions and "Are you putting ice around the plants to get them to bloom?" have been asked any number of times.
Unlike most other parts of the country, Southern California is different.

No two areas are the same, elevation, climate, soils and water availability.

The Descanso one acre lilac plot is next to a storm drain which was filled with lots of unrelated material. It was covered with silt from the Arroyo riverbed, which in a dry state forms a hardpan. This soil mixed with native soil amendments makes a good planting medium.

The first overhead irrigation system installed years ago is still in use. But the old impact sprinklers were replaced with the much improved Hunter rotor heads and works very well with our 125 plus PSI. An earlier underground drip system was abandoned prior to our involvement with the lilacs.

With the remodeling of the garden (mostly volunteer work) and the installation of walkways we put in an above ground drip emitter system. The mainlines are located under the walkways and each island and the background plantings has an individual faucet with a Y connector and ½ inch tubing going all around to each plant to equalize pressure and flow control. Each plant has 1-3 emitters depending on size. The system works well. However, if all else fails the old stand by, hand watering of either young or oversized plants will keep all lilacs happy.

The drip system is set to run once a week April - May to Labor Day, 3-4 hours at night depending on weather and temperature. The impact sprinklers are being used once or twice a week on hot days for a quicky 2-3 minute shower in the late forenoon, making sure the plants dry off fast to prevent mildew. After Labor Day the established lilacs over 3 years old begin their forced dormancy.

There is simply no substitute for a keen eye to know how the plants are doing during the growing season and the resting period. If there is a more than ½ inch rain in October, followed by a warm weather spell, we get a certain percentage of premature blooms. And of course, the last word is always spoken by mother nature and we better live with that to truly enjoy the wonders of the lilacs, their fragrance and all.

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