

Franklin County Master Gardener Growing and Enjoying Lilacs in Central Ohio

August 4 – Online Class

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International Lilac Registrar

Board of Directors, International Lilac Society

Organized by Mike Hogan, Extension Educator & Associate Professor
OSU Extension



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES





Photo: Montreal Botanic Gardens

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*Growing and Enjoying Lilacs
(Syringa) in Central Ohio*



Contents

- Key Facts
- Types of Lilacs
- Flower Forms & Colors
- Growing Conditions & Maintenance
- Making More Lilacs
- Cut Lilac Flowers and Perfume
- Public Collections & Festivals to Visit
- Well-Known Lilacs

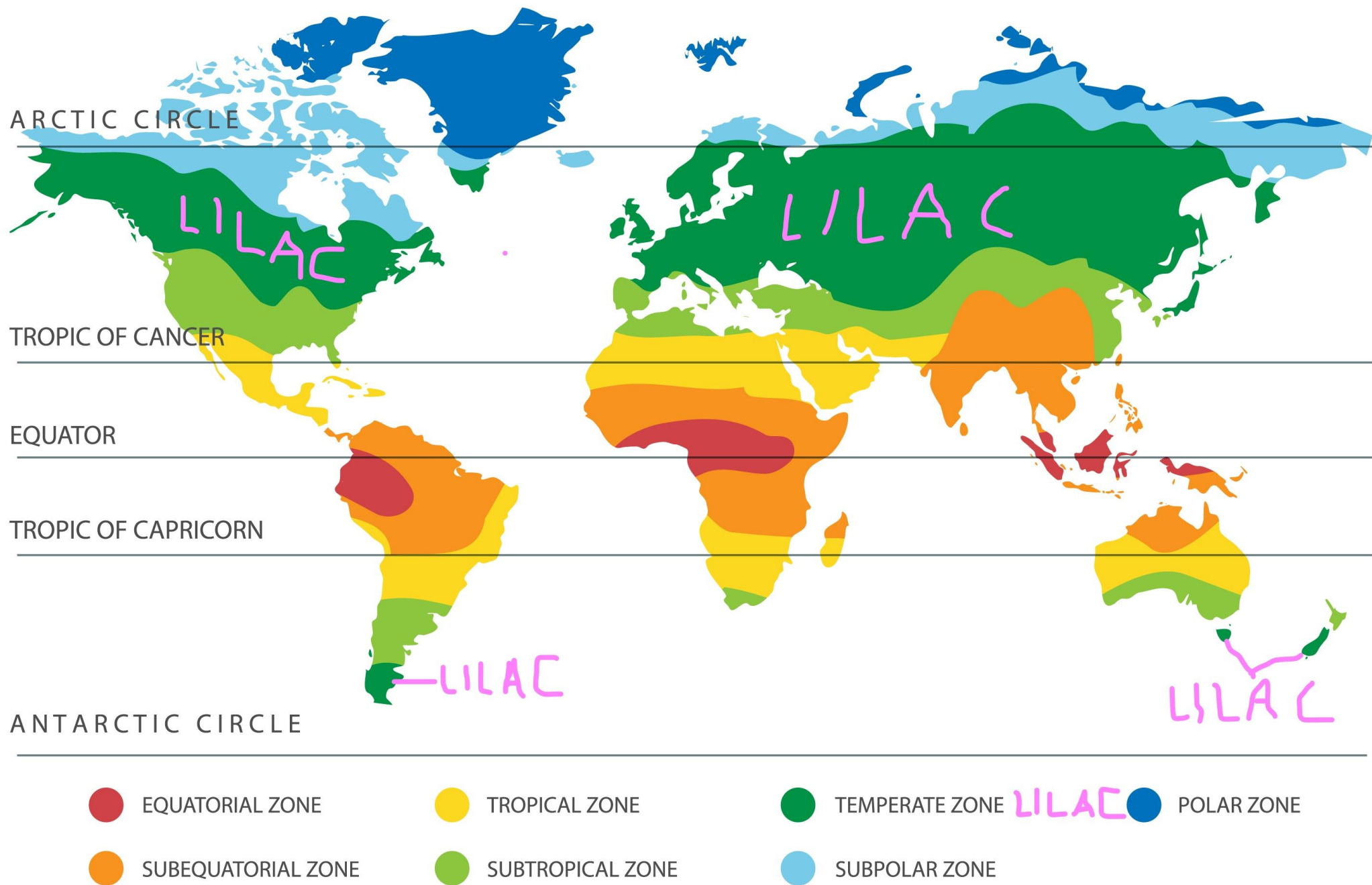


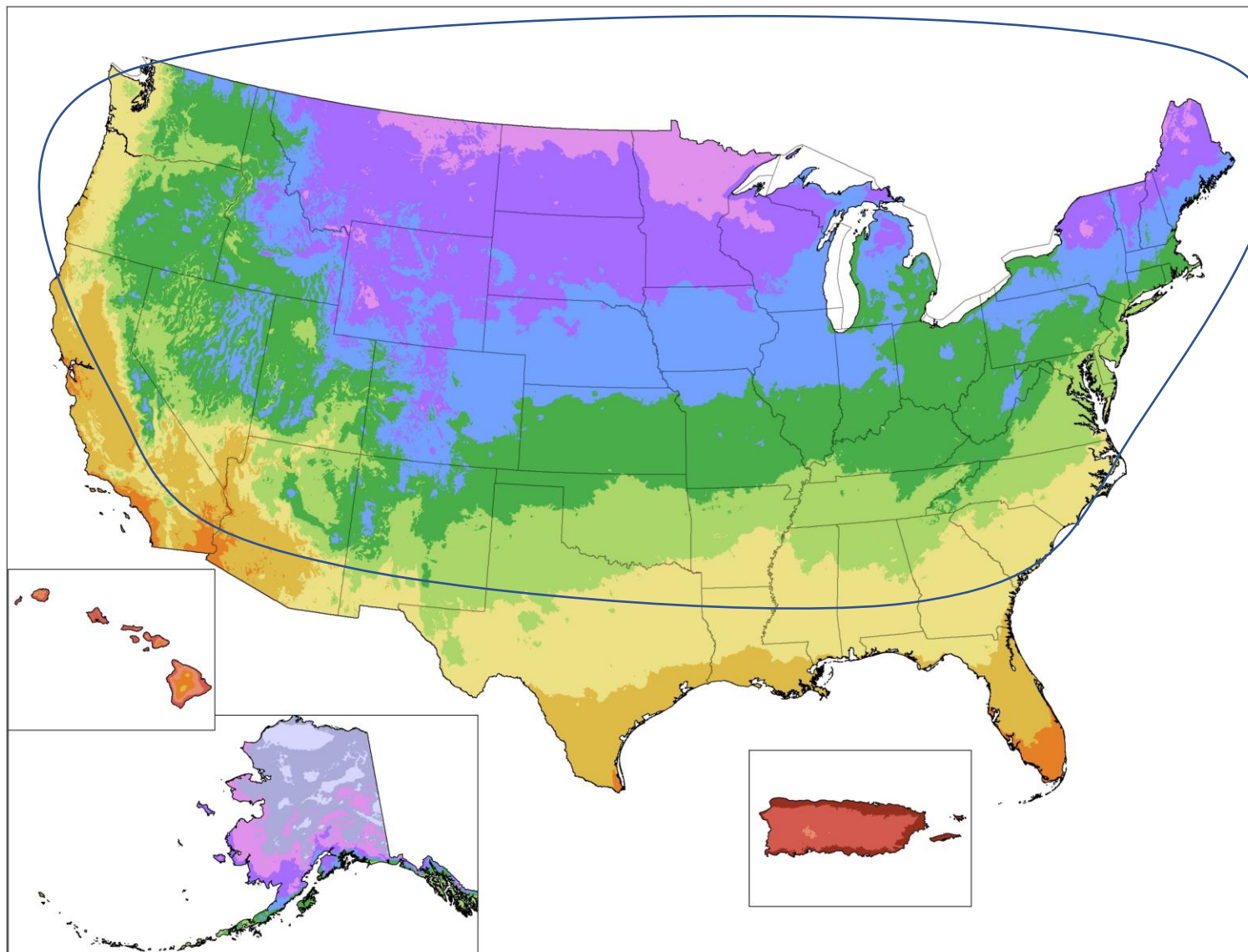
Types of Lilacs

- **4 Series:** Common (Syringa), Littleleaf (Pubescentes), Late (Villosae), Tree (Ligustrina)

- (1) Common species: vulgaris, ×hyacinthiflora, ×chinensis, ×persica
- (2) Littleleaf species: pubescens, patula, microphylla
- (3) Late species: josikaea, komarowii, tomentella, ×prestoniae, ×josiflexa, ×henryi, ×swegiflexa
- (4) Tree species: reticulata, pekinensis

- **LILAC SERIES CAN'T INTERBREED OR HYBRIDIZE**





Average Annual Extreme Minimum Temperature 1976-2005

Temp (F)	Zone	Temp (C)
-60 to -50	1	-51.1 to -45.6
-50 to -40	2	-45.6 to -40
-40 to -30	3	-40 to -34.4
-30 to -20	4	-34.4 to -28.9
-20 to -10	5	-28.9 to -23.3
-10 to 0	6	-23.3 to -17.8
0 to 10	7	-17.8 to -12.2
10 to 20	8	-12.2 to -6.7
20 to 30	9	-6.7 to -1.1
30 to 40	10	-1.1 to 4.4
40 to 50	11	4.4 to 10
50 to 60	12	10 to 15.6
60 to 70	13	15.6 to 21.1

Lilacs



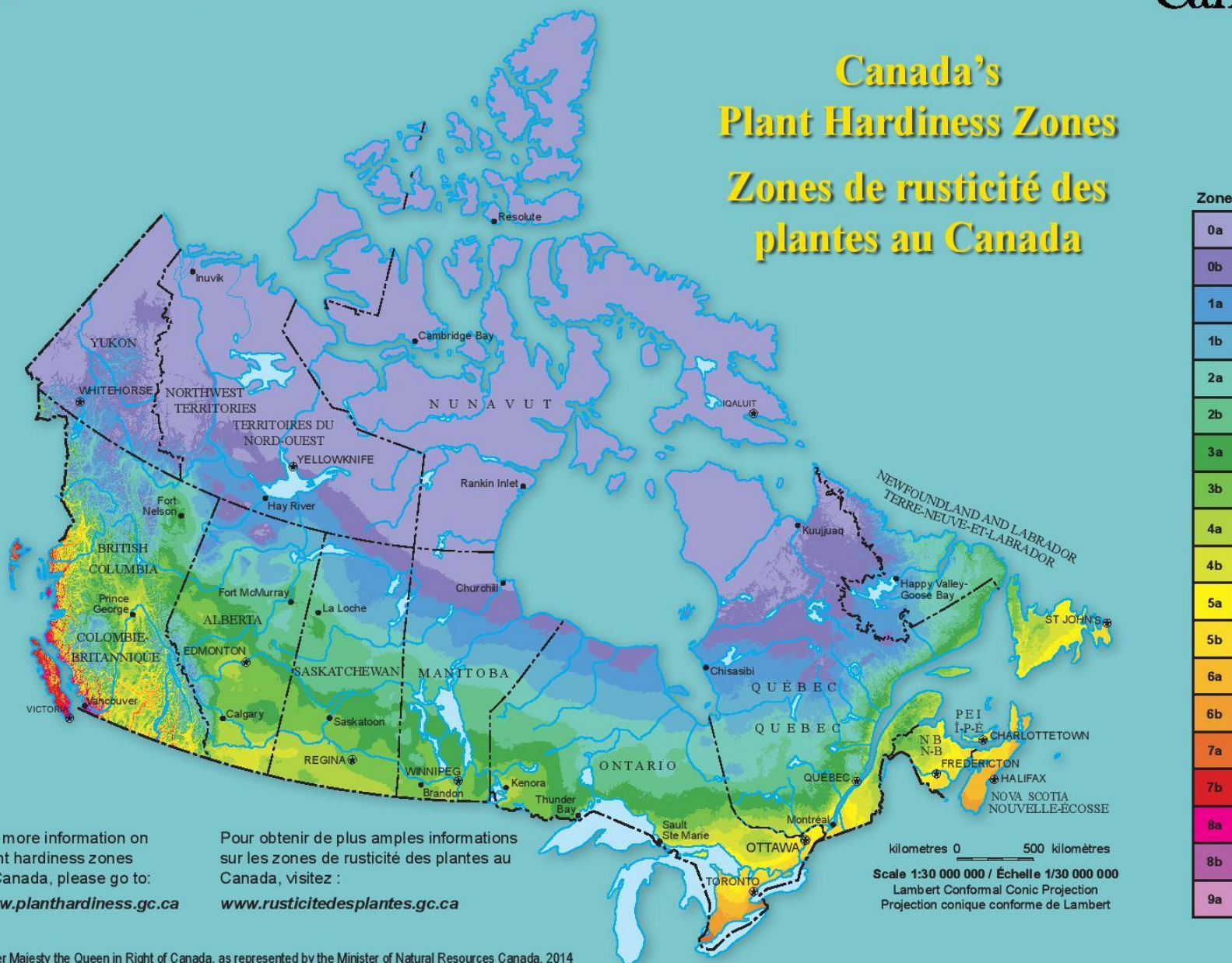
Natural Resources
Canada

Ressources naturelles
Canada

Canada

Canada's Plant Hardiness Zones

Zones de rusticité des plantes au Canada



Leaf Comparisons of the Four Lilac Series



Left to Right:

(1) Common Lilac and

(2) Littleleaf Hairy Lilacs (patula, pubescens, microphylla)

Left to Right:

(3) Late Lilac and

(4) Tree Lilacs (Japanese, Amur, Peking)



(1) Common Series: *S. vulgaris*



- The common lilac in stores.
- Comes in lilac and white colors.
- Native to Eastern Europe.
- Brought to USA by early settlers 1700's.
- Largest flowers, mid-season May bloom.
- Great lilac fragrance!



'Aleksandra Pakhmutov'



'President Lincoln'



'Albert F. Holden'



'Agincourt Beauty'

(1) Common Series: *S. vulgaris* Hybrids

- Over 1500 cultivars
- 7 official flower colors
- 11 bud colors



(1) Common Series: *S. x chinensis*

- *Protolaciniata* x *vulgaris* (natural, we think)
- Small oblong leaf.
- Color white (rare) to pink to lilac.
- Great fragrance.
- Only one, double form flower cultivar ('Duplex').
- Early blooming



(1) Common Series: *S. x hyacinthiflora*

- Oblata x vulgaris; all are named cultivars.
- Normal vulgaris-type leaf; dark purple hints when young and in fall.
- All seven Wister colors.
- Great fragrance.
- Many singles and doubles; blooms earlier than vulgaris.

Top left clockwise:

'Sweetheart', 'Declaration',
'Pocahontas', 'Sister Justina',
'Doctor Chadwick', 'Esther
Staley'



- “Persian Lilac”
- Uncertain parentage; appears 1700.
- Small chinensis-like leaf.
- 4 colors: white, pink, lilac, violet.
- Great fragrance.
- Single flower form only.

(1) Common Series:
S. x persica



microphylla



pubescens



patula



microphylla

- Korean littleleaf lilac.
- Subspecies *pubescens*, *microphylla*, and *patula*.
- Bloom at end of and after common lilac.
- 3 colors: white, pink, rare purple.
- Most are smaller in height.
- Great lilac fragrance.

(2) Littleleaf Series:
S. pubescens

(2) Littleleaf Series: *S. pubescens*, *patula*, *microphylla*

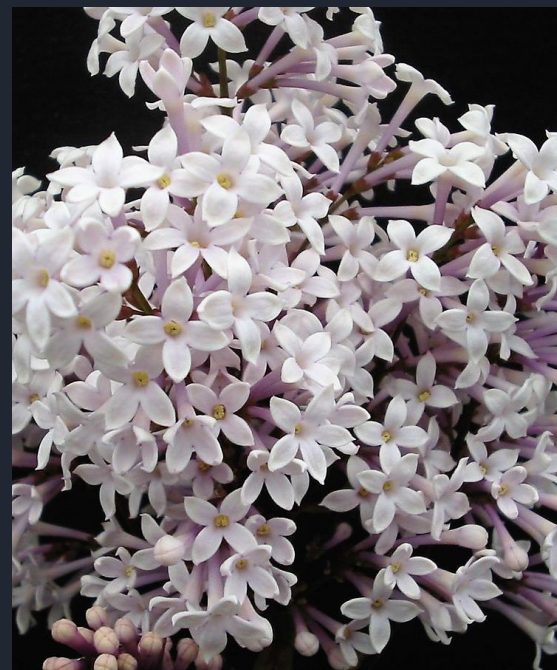
- Many nice cultivars, especially reblooming.
- Many others are subspecies crosses.
- Nice Fall color of leaves.
- 3 colors: white, pink, purple
- Small leaves and florets





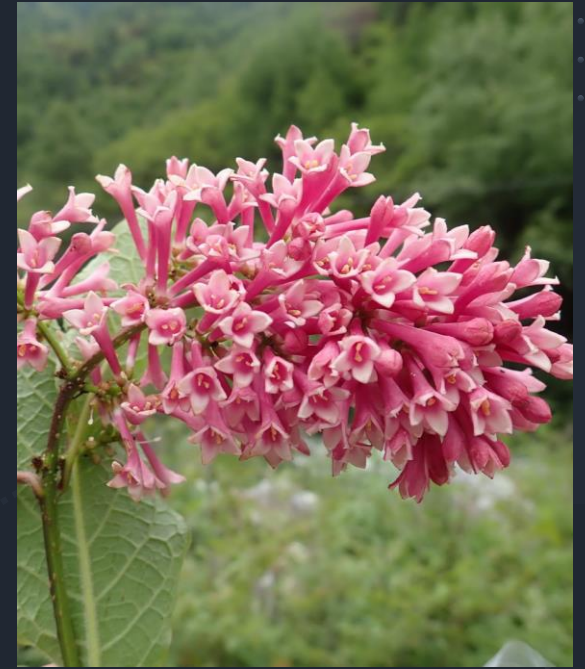
(2) Littleleaf Series: *S. pubescens*

- Fall leaf color of Series Pubescentes.
- Japanese cultivars by Hideo Ihara.
- Not seen in other Series



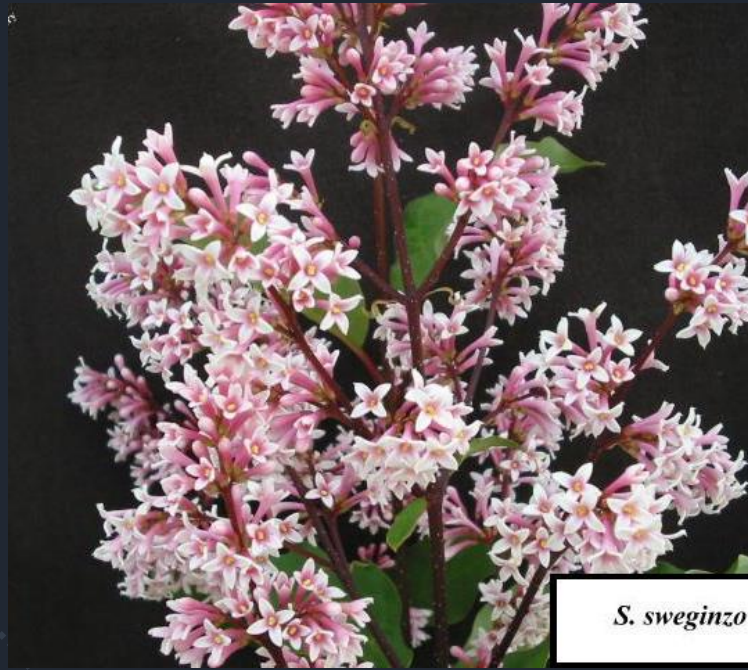
(3) Late Series: *S. josikaea*

- Late blooming, after the common lilacs and before the tree lilacs.
- Color white to pink.
- Longer, rougher leaves than the other Series.
- Spicy fragrance.
- Endangered, Ukraine & Romania tiny native habitat only



(3) Late Series: *S. komarowii*

- Two subspecies, *komarowii* and *reflexa*.
- Late blooming, after the common lilacs and before the tree lilacs.
- Color: white, pink, rare others.
- Longer, rougher leaves than the other Series.
- Spicy fragrance.



(3) Late Series: *S. tomentella*

- Three subspecies, *tomentella*, *sweginzowii*, *yunnanensis*.
- Late blooming, after the common lilacs and before the tree lilacs.
- Colors: white, pink, lilac, rare violet.
- Longer, rougher leaves than the other Series.
- Spicy fragrance.



(4) Tree Series: *S. reticulata*

- Japanese or tree lilacs.
- Two subspecies of *reticulata* and *amurensis* (Manchurian or Amur lilac).
- Last to bloom of all lilacs.
- Colors: white with yellow buds.
- Cultivars with better tree form and flowers, e.g. 'Ivory Silk'





(4) Tree Series: *S. pekinensis*

- Chinese tree lilac.
- Last to bloom of all lilacs.
- Colors limited to white and yellow.
- Cultivars with better tree form and flowers,
 - e.g. 'Beijing Gold'.
- Smaller than *reticulata*, cherry tree-like smooth, peeling bark.



Flower Forms: Single, Double, Multipetal

- double only with common lilac (*vulgaris*)

I- White	II-Pink	III-Red	IV-Orange	V-Yellow	VI-Green	VII-Cyan	VIII-Blue	IX-Violet	X-Purple	XI-Magenta
255,255,255	250,195,205	190,60,70	250,175,130	245,210,130	75,210,165	150,225,225	155,200,250	200,185,245	230,185,245	245,130,205



Photo by Charle-Pan Dawson

11 Bud Colors



Photo by Tatiana Poliakova

Wister Color	I White	II Violet	III Blue & Bluish	IV Lilac	V Pink & Pinkish	VI Magenta	VII Purple
RGB Code	255,255,255	201,186, 248	153,198,249	236,158,225	248,195,206	244,131,205	228,185,293

7 Wister Flower Colors

Bud and Flower Color

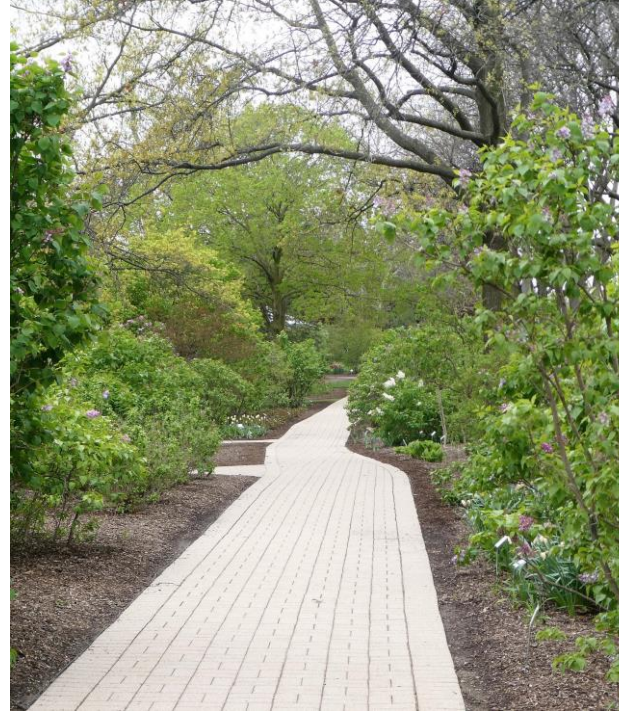
- Colors
 - 11 bud colors
 - 7 Wister flower colors



Growing Conditions

- What do Lilacs *Need*?
 - Full sun—6+ hours/day
 - Neutral to alkaline soil (pH 6.5–8.0)
 - Good drainage—no “wet feet”





Maintenance: what they like

- Pruning to height once per year
- Pruning within 2 weeks of flowers dying
- 5-10-5 fertilizer every other year
- Grass and weed-free base with mulch
 - 3 foot diameter minimum
- Planting 8 feet apart for hedge
- Planting 12 feet apart for individuals
- Reduce maintenance with compact/dwarfs

Making More Lilacs

Cuttings

Suckers (offshoots)

Grafting

Cuttings

- Softwood spring green growth (no brown bark)
- 4-6 inches length
- 2-4 leaves at tip, strip others
- Dip ends in growth hormone (IBA, 0.3%)
- Stick 1 inch deep in potting medium
 - Pure coarse sand OR
 - Sand, potting soil, perlite, lime, ER fertilizer
- Keep leaves constantly moist and humid
 - Misting or fogging system
- Wait 2-3 months, check for roots



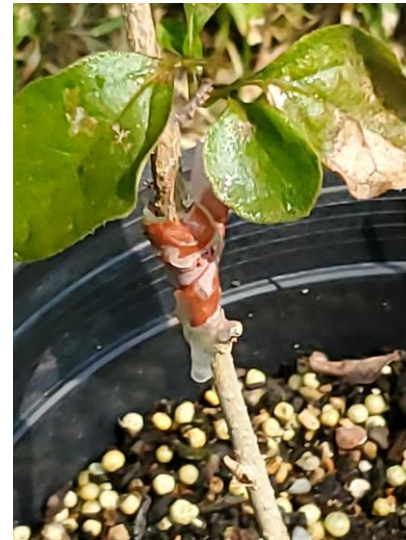
Suckers (Offshoots)

- Suckers occur naturally in the Common Lilacs
 - Rare in other lilac series
- Spring or Fall only
- Dig around sucker, confirm connection to mother plant
- Cut the root connection near mother plant
- Dig up sucker with as many roots as possible
 - Could wait for 6-12 months for it to make more roots before potting
- Plant in potting soil and pot, water often first one year.



Grafting

- Use rootstock in same Genus (Oleaceae, Olives)
 - Privet, Ash, Forsythia, all Lilac Series
- Pencil size base is best
 - Can be larger with side-grafting
- Desired lilac is called a SCION
- In mid-winter (January), cut 4-6-inch scion with 1-3 buds
- Cut ends to fit into each other
 - A learned skill
- Tape or rubber band in place, seal with wax or wax tape
- Wait 1-3 months to see if new growth sprouts
- Expose graft union after 6-12 months





Cut Lilac Flowers for Vases

- Lilac flowers last 1 to 5 days depending on treatment
- Clean, heavy base vase washed with soap, water, 1 tsp bleach
- Fill vase with fresh water, floral preservative or sugar, 1 tsp lemon oil or bleach
- Choose stems with $\frac{2}{3}$ to $\frac{3}{4}$ flowers open; buds provide contrast
 - Lilacs do not open more after cutting
- Cut flowers to length in morning, plunge in fresh, cool water for 1 hour

Cut Lilac Flowers for Vases

- Remove most leaves so only work is hydrating flowers
 - Can insert leaf stems later
 - Recut 1 inch off stem ends at 45-degree diagonal
 - Controversy: smash or slice stem end to take up more water
-





Making Lilac Oil, Pomade, and Perfume

- All commercial lilac fragrances are synthetic and not authentic
- Lilac oil can only be made by the secretive process of cold ENFLEURAGE
- Process for lilacs re-discovered 2017 by retired chemist in Cherry Valley, New York who owns a lilac farm; she's the only one in the world making it:
 - <https://cherryvalleylilacs.com/blog>

Making Lilac Oil, Pomade, and Perfume

- No lilac oil in plant; scent is made at base of living flower only and released into air
- Capture the volatile scent by laying fresh flowers on fatty pomade for 24 hours, replacing with more fresh flowers daily for 33 days
 - 16 bushels of flowers for 1 lb of pomade (\$48/half ounce)
 - 16 bushels for 15 ml of essential oil (\$525).
 - Oil lasts 4 hours on skin, 12 hours on paper strip
 - Can make into longer-lasting perfume by adding ambergris (\$63,000/lb; \$150/10ml of 3%)



Great Public Lilac Collections

- Lilac Museum, Saint-Georges, Quebec—672 cultivars, 690 plants
- Highland Park, Rochester NY—500 (1200)
- RBG, Hamilton, Ontario—509 (532)
- Dobeles, Latvia—400
- MBG & RAS, Moscow, Russia—400
- Hulda Klager Lilacs, Woodland, Washington—400
- CEF, Ottawa, Ontario—289 (313)
- New York BG, Bronx NY—288 (324)
- Longenecker BG, Madison WI—261 (293)
- Lilacia Park, Lombard, Illinois—190 (368)
- Arnold Arboretum, Boston NY—140 (399)
- Holden Arboretum, Kirtland, Ohio—137 (212)
- Montreal Botanical Garden—116 (219)



Montreal Botanic Gardens



Katie Osborne Lilacs,
Royal Botanical Gardens, Hamilton, Ontario Canada



Photo: Richard Hincliff



Photo: Charle-Pan Dawson



Photo: Hideo Ihara



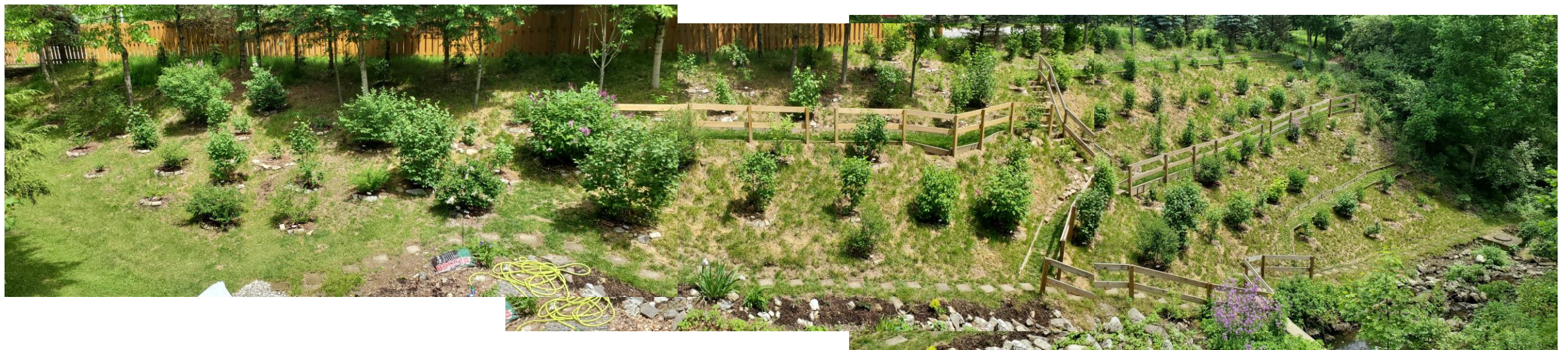
Photo: Hongxia Cui

- *Holden Arboretum, Cleveland*: 137 cultivars, 212 plants
- *Rowe Arboretum, Cincy*: 87 taxa (named cultivars plus species plants)
- *Dawe's Arboretum, Newark*: 50 taxa
 - 15 mature tree lilacs
- *Mt. Airy Arboretum, Cincy*: 50 taxa

Local Ohio Public Lilac Collections

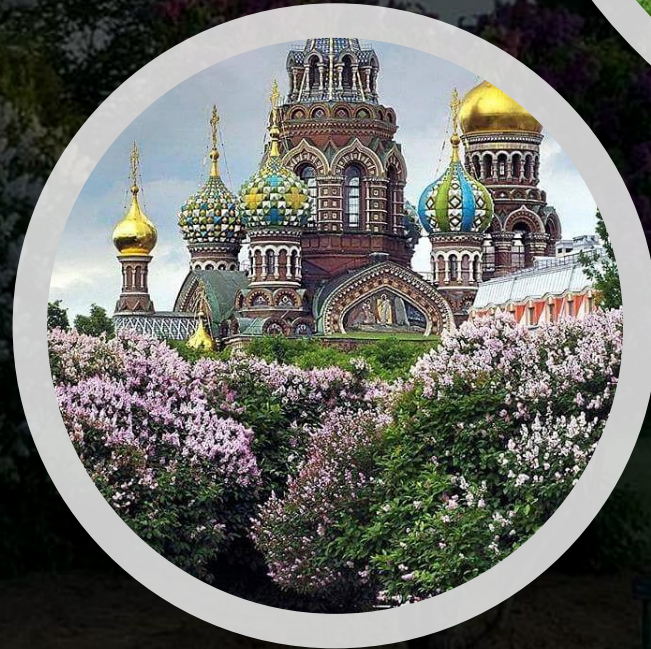


DeBard Lilac Terraces: 145 cultivars



Festivals

- Rochester Lilac Festival, Rochester, NY
- Lilac Sunday, Arnold Arboretum, Boston
- Lilac Museum Festival, Saint-Georges, Quebec
- Lilac Days, Klager Gardens, Woodland WA
- Lilac Time, Lombard, IL
- Mackinac Island Lilac Festival, MI
- Spokane Lilac Festival, Spokane, WA
- Taos Lilac Festival, Taos, NM





16 petals: Jo Anderson



24 petals: Linda Blackman



5 petals: Jen Ruiz



9 petals on 'Wonderblue'

The Great Multipetaled Lilac: 'Rochester'

- Lilacs have 4 petals per floret on each panicle or inflorescence
- 5 or more is called "radial doubling" and is rare and a sign of good luck
- Known record is 28 petals
 - Until this year
- 'Rochester' has many hybrids (next 2 slides)

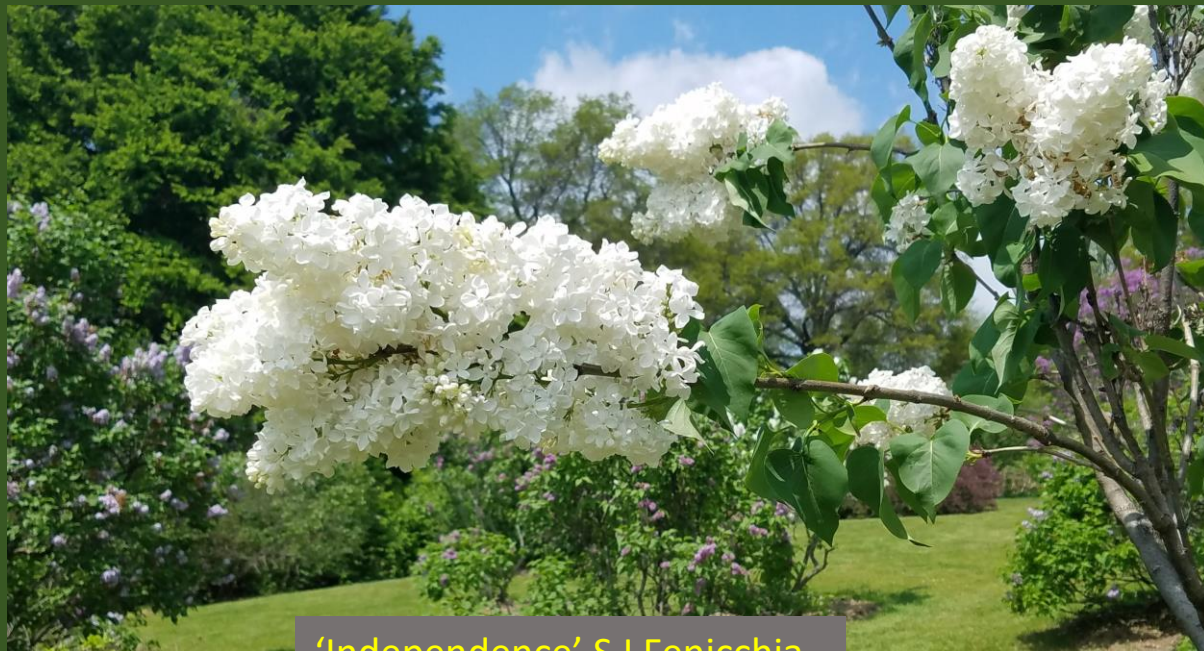


'Rochester' by Linda Blackman

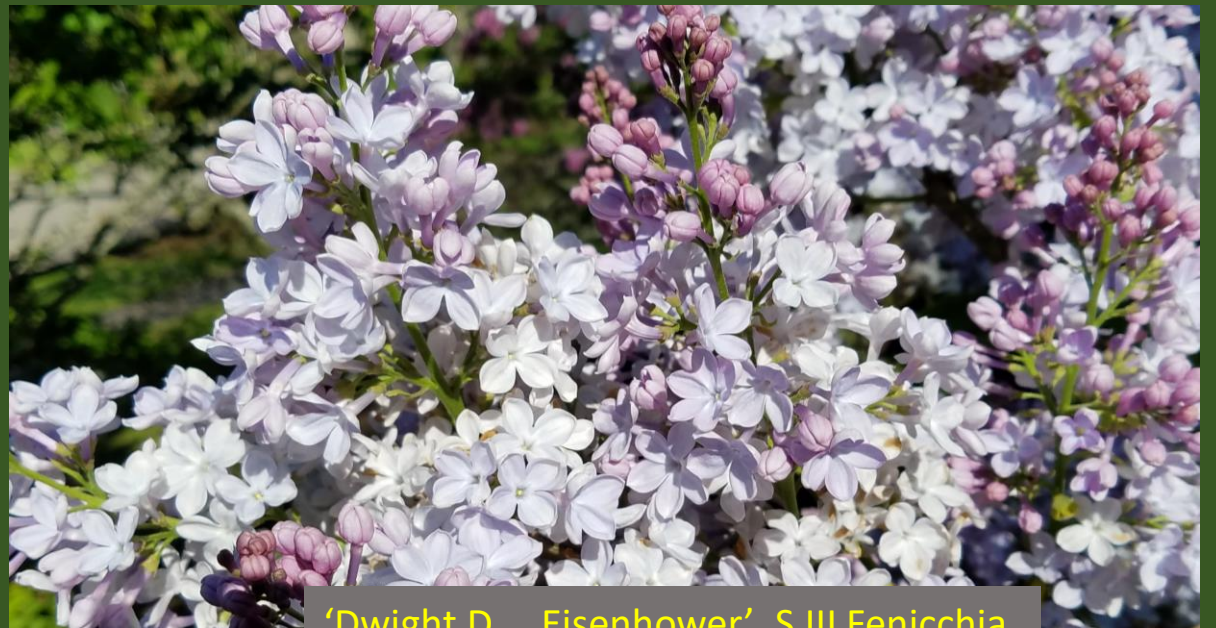
The new Multipetaling Record: 58 Petals!

- On June 4, 2020, a floret from 'Souvenir d'Alice Harding' in Moscow, Russia was found with 58 petals (in an already double floret)





'Independence' S I Fenicchia



'Dwight D. Eisenhower' S III Fenicchia



'Flower City' S II-VII Fenicchia



'Atheline Wilbur' D VI Fiala



'Arch McKean' S VI Fiala



'Alvin R. Grant' S VII Fenicchia



'Lois Amee Utley' D V Fiala



'Wonderblue' S III Fiala



'Mollie Ann' S IV Fiala



Well-Known Lilacs



'Rochester'



Beauty of Moscow ('Krasavitsa Moskv')



'Aucubaefolia'



'Sensation'

Well-Known Lilacs

Want to know more?

<https://www.InternationalLilacSociety.org>

Or Facebook group:

<https://www.facebook.com/groups/106502479685645/>