





**Contents** PRESIDENT'S LILY PAD P1 **BULB SALES 2019 P2 ARLS EVENTS P2 LILY SOURCES P4 DIRECTORS LIST P5** 

**BEETLE MUSINGS P6 SPECIES CONTEST P11** More lilies to Love P7-10 Darm Crook Speaks by Bill Mackay P11-13

# President's Lily Pad message

Like us on Facebook; Follow us on Twitter

If you haven't checked out the updated website: www.arls-lilies.org.

Happy Spring ARLS members, I hope that your lilies are well on their way to a fantastic display for the summer. While the snow left relatively early, my lilies were slow to start due to the cold nights. With the warm temperatures we have had in the last couple of weeks, they are well on their way now! I am thankful every day that I am not challenged (yet) by that terrible little lily beetle that many of you are at war with but I am still constantly patrolling. I hear that the Doktor Doom residual is an excellent tool to support you in keeping the beetles in check!

It was great to see so many of you at the AGM in April, it was one of the best turn outs we've had in a few years. For those that attended I know you were not disappointed as Darm Crook was a wealth of knowledge about growing species lilies! For those that were not able to make it we videotaped the session and are working on a strategy to share the information. In addition to the great presentation, we awarded the First Annual Arnold & Cathy Semeniuk Volunteer Award to Britta Johnson and Leo Krupa (check your next Bulblet for the details and pictures)! As if that wasn't enough we also had a great selection of bulbs to ensure you could add a few new lilies to your gardens and I must confess I still have a couple that need to find a place in my garden!

Well as we look ahead to the summer of 2019 we have an exciting line up of activities for all of us to participate in! Where to start? First there is the Species Spectacular Season of Sharing Contest – you can share pictures of your species lilies in bloom in your gardens to the ARLS Facebook page or email them to me (dlkaban@hotmail.com) for sharing. At the end of the summer we will draw a winner from the entries (prize may involve one more special lily species to your garden). Then there are our Shows, be sure and mark your calendars!! The 24th Annual Martagon Show will be July 5-7, 2019 at the University of Alberta Botanic Gardens (formerly the Devonian Botanic Garden). We are excited to have Sandy Venton from Manitoba coming out to judge the Show. Be sure to stop by Saturday to visit with Sandy (or ask a question of the Martagon expert) and to take in the amazing display of Martagons as well as the Botanic Gardens. Then there is the 34<sup>th</sup> Annual Lily Show which will be at Greenland Garden Centre again this year, July 19-21, 2019. Big shout out to Greenland for partner with us to host the Show at the Greenhouse, they also have a beautiful display garden that is worth a walk through. The one challenge associated with having the Show there is I

never end up going home empty handed! © For some of you, you took advantage of The President's Challenge last fall to get a free bulb. Now you will have to hold up your end of the bargain and bring in a stem to one of the Shows. I'm really excited because this guarantees that we will awarding our First Time Exhibitors Award at the Shows this year.

And if that is not enough there is the 72<sup>nd</sup> Annual NALS Lily Show and Symposium in Boston from July 10-14, 2019. The Show Committee has been working tirelessly to put on a great event; the Show is actually being hosted at the Arnold Arboretum!

I look forward to seeing each and every one of you at one or all of the events!! And don't forget to get your species lily pictures in for sharing!

Happy Gardening!!! Lorne

#### **ARLS AFFILIATES**

Alberta Horticultural Association icangarden.com/clubs/aha

@YYCGardening https://www.facebook.com/calhort/ Calgary Horticultural Society calhort.org

Edmonton Horticultural Society edmontonhort.com @YEGgardening

https://www.facebook.com/groups/14571255402/

North American Lily Society *lilies.org* https://www.facebook.com/NorthAmericanLilySociety/

RHS Lily Group www.rhslilygroup.org/

#### **BULB SALES 2019**

Contact Britta to volunteer for a bulb sale shift or packing party.

You get 10% off plus you get first pick of the bulbs. Book your time and reserve your bulbs.

The bulb sale list may not have all sale bulbs listed. It is a listing of what ARLS has ordered or been offered in time for publication.

#### SEPTEMBER:

28 Greenland Garden Centre, Sherwood Park

30 Edmonton Hort. Society September meeting 11113-111 Ave free to EHS members or \$10 non-members Edmonton

#### **ARLS EVENTS 2019**

24th Martagon Lily Show Saturday/ Sunday July 6 & 7 U of A Botanic Gardens Spruce Grove Hwy 60

Entries Friday July 5, 5-9 pm Saturday July 20, 8-10 am

Judging Saturday 10:30 am to 1 pm

Visitors Saturday 1-5 pm and Sunday 10 am to 5 pm

34th Annual Lily Show Saturday/ Sunday July 20 & 21 Greenland Garden Centre, Sherwood Park

Entries Friday July 19, 5-9 pm Saturday July 20, 7-9 am

Judging Saturday 10 am to 1 pm

Visitors Saturday 1-5 pm and Sunday 10 am to 3:30 pm

NALS Show 2019 July 10-14 Boston

# Please Come to Boston

July 10-14

Now that I have your attention with the lyric title of the 1974 Dave Loggins musical hit, read on to learn more about the exciting upcoming event. Have you ever dreamed of a trip to the famous 281 acre Arnold Arboretum on the grounds Harvard University?! Well this summer would be a great year to fulfill that bucket list item because you could couple it with your participation in the 72<sup>nd</sup> NALS Lily Show & Symposium!!! The New England Lily Society team has been hard at work putting together an amazing itinerary for this years NALS sponsored event. The Lily Show is actually going to be presented at the Arnold Arborteum, so you will not only be able to revel in the fabulous varieties of lilies but also immerse yourself in this incredible historical site.

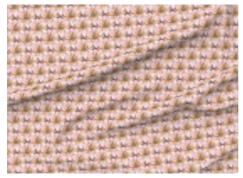
The Arborteum was established in 1872 and is home to a multitude of *living* collections of trees and plants from around the world. "As of June 2015, the living collections consisted of some 14,760 accessioned plants representing 3,800 botanical and horticularal taxa, with particular emphasis on the woody species of North America and eastern Asia..." (reference Albert Arborteum website). If that is not enough of a draw, Saturday will be a day filled with garden tours in the surrounding area. And as always the Convention is a great opportunity to learn more about growing, showing and hyubridizing our beloved lilies through workshops, reuniting with old friends or cultivating new lifelong friendships. So mark your calendar and make your reservations for July 10 to 14, 2019! I look forward to see you there! Lorne

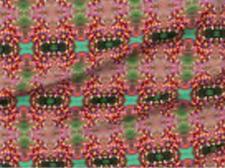


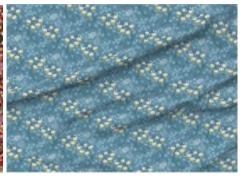
For all the details and to register for the Show visit the website at http://nals2019.lilies.org/index.html!

NALS 2020 is in the works more information later.

Are you interested in sewing or crafts? Well I found a site.







Lily fabric and you can also order it as wallpaper or gift wrap! As simple as pick your pattern, pick your fabric—yeah you can choose a fabric, even denim is a choice. It is not inexpensive but it has many lily choices in many colour choices with lots of fabric choices. I love variety! And for those that can't decide order a sample book or a sample of your favourites and use them as key displays in a new project or just get a bunch and make a quilt.

https://www.spoonflower.com/en/fabric

#### **LILY SOURCES**

Bertha Lardner: Martagon Lilies NE Edmonton 780-478-7929 lardnerbm@gmail.com

Valley K Lily Ranch Lynnette Westfall; Asiatics, OTs, some martagons & species

RR1 Edberg TOB 1JO <a href="http://plantlilies.com">http://plantlilies.com</a> great resource and lily gallery. mail order only bulbs@plantlilies.com

Parkland Lilies - Fred Fellner seedlings RR1 Vermillion 1-780-853-2355 final last years of hybridizing

Rundlewood Gardens Specialty Nursery & martagons 1643 Altadore Ave SW. Calgary (corner of 16th Street and 46th Ave SW) <a href="http://www.rundlewoodgardens.ab.ca/">http://www.rundlewoodgardens.ab.ca/</a> info@rundlewoodgardens.ab.ca location shopping only- no mail order shipping. Stop by when in Calgary- check website for hours.

Lily Nook Nigel & Joyce Strohman; all things lily

Box 846 Neepawa Man. ROJ 1H0 http://www.lilynook.mb.ca 1 204 476 3225 info@lilynook.mb.ca

Skinner Nursery Hugh Skinner; martagons, species, asiatics

Box 220 Roblin Man. ROL 1PO 1-204-564-2236. ski hugh@mts.net

Jeffries Nurseries Ltd. P.O. Box 402, Portage la Prairie, Manitoba, R1N 3B7

29053 Trans Canada Highway #1 35 miles west of Winnipeg near Portage la Prairie Man. www.jeffriesnurseries.com/ 204-857-5288 jeffnurs@mts.net

SW-Gardens Sandra-Pat Willis: lilies from various divisions

22507 Kenesserie RD Thamesville ONT. NOP 2KO <a href="http://www.s-wgardens.com/">http://www.s-wgardens.com/</a> 1-519-692-5580 swgardens@yahoo.ca

LilyCrest Gardens Brian Bergman; Bergman seedlings, [OTs, asiatics, orientals & trumpets from active hybridizing] 51 Woodcrest Dr. Toronto ONT. M9A 4J3 Facebook.com/LilyCrestGardens 1-416-614-6394 bfberg@rogers.com

#### Members receive discounts at the following businesses:

- \* ALL SEASONS GARDEN CENTRE. 10027-81 Ave. Edmonton 10% discount. Membership card must be presented and discount may not apply to all products.
- \* APACHE SEEDS LTD. 10136 149 ST., EDMONTON 10% discount. Membership card must be presented and discount may not apply to all products.
- \* CANNOR NURSERIES LTD. TWP RD 514 WOODBEND RD, SPRUCE GROVE (west of Devonian Gardens) 10% discount. Membership card must be presented and discount may not apply to all products.
- \* ELLERSLIE GIFT & GARDEN 10330 Ellerslie Rd SW, Edmonton Membership card must be presented prior to purchase and discount may not apply to all products.
- \* VALLEY K LILY RANCH aka plantlilies.com

15% discount on all bulb orders, excluding shipping. Contact Valley K by email at webmaster@plantlilies.com to request the discount code BEFORE ordering. Follow Valley K on Facebook https://www.facebook.com/plantlilies sometimes she has contests.

# FACEBOOK Albertaregionallilysociety THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER THE BULBLET VOLUME 34, NUMBER 2 SUMMER 2019

ARLS OFFICERS TO 2021			
PRESIDENT	Lorne Kaban	Bonnyville Phone 780.812.3533	pres@arls-lilies.or

VICE PRESIDENT VACANT
PAST PRESIDENT VACANT

 SECRETARY
 Laurie Hepper
 Edmonton Phone 780.916.0922
 sec@arls-lilies.org

 TREASURER
 Britta Johnson
 Edmonton Phone 780 433.7869
 treasurer@arls-lilies.org

**DIRECTORS 2018-2020** 

bertramc@telus.net Phone 780,469,1085 Cecilia Bertram Edmonton Mike Danchak Edmonton Phone 780.462.0615 mikedanchak@yahoo.com **Ieuan Evans** Phone 780.987.4398 Spruce Grove Dr.IREvans@gmail.com Phone 403.274.4747 Dianne Skimming Calgary diskimming@gmail.com

**DIRECTORS 2019-2021** 

Phone 780.710.0775 sueingabs@gmail.com Suzanne Stack Gibbons Bill Mackay Innisfail Phone 403.227.3563 bmackay@telusplanet.net Suzanna Durand Phone 780 743-5128 Spruce Grove dominaterra@gmail.com Leo Krupka Edmonton Phone 780.484.8714 oma.opa2@shaw.ca

LIBRARIAN (Board Appointed-to 2020)

Terry Willoughby Spruce Grove Phone 780.968.1818 <a href="mailto:library@arls-lilies.org">library@arls-lilies.org</a>

WEB EDITOR (Board Appointed-to 2020)

Shauna Willoughby Spruce Grove Phone 780.968.1818 <u>webeditor@arls-lilies.org</u>

NEWSLETTER EDITOR VACANT fill in <u>blackmartagon@gmail.com</u> <u>news@arls-lilies.org</u>

**ARLS COMMITTEES** 

Bulb Sale Chair:

Advertising & Public Relations:

Publishing Committee Chair:

Vacant
Suzanne Stack
Shauna Willoughby
Venue Coordinator:

Laurie Hepper

Membership Chair: Britta Johnson <u>members@arls-lilies.org</u>

Web Committee Chair: VACANT; Laurie, Britta & Shauna members
Speakers Committee: Lorne Kaban, Bill MacKay, Terry Willoughby

OLDS College Committee Chair:
U of Alberta Botanic Gardens Committee Chair:
Britta Johnson
AGLC-GAIN Funding Chair:
Laurie Hepper
Casino 2018 Chair:
Ieuan Evans
NALS Liaison:
Shauna Willoughby

24th Martagon Show Chair 2019 Lorne Kaban

34th Annual Show Committee 2019 Suzanne, Dianne, Lorne, Britta, Laurie

#### UNIVERSITY of ALBERTA BOTANIC GARDEN NEWS

Events at the garden: check out the website for all events <a href="http://botanicgarden.ualberta.ca/">http://botanicgarden.ualberta.ca/</a>

Twitter <a href="https://twitter.com/UABotanicGarden">https://twitter.com/UABotanicGarden</a>;

Facebook https://www.facebook.com/UABotanicGarden

#### **MUTTART NEWS**

The Muttart Conservatory is going under some infrastructure upgrades this year, starting July 2nd until January 2021 the building will be closed. July 1 IS A CLOSING DAY EVENT. COME OUT AND ATTEND. The gardens will still be open so you can go down at any time and wander through the new plantings.

NOMINATIONS FOR THE NALS REGIONAL MEDAL are being solicited please submit to Shauna Willoughby.

<u>VOLUNTEERING WITH ARLS</u> we now have a procedure to follow and track volunteer hours. When a volunteer reaches the required hours, they are eligible for a lily bulb. Please make sure you confirm your hours volunteered with your volunteer coordinator.

#### **LILY BOOKS**



ARLS had the opportunity of getting 30 of these books. The final 3 are for sale at \$72 CDN. Postage is extra if we have to send them to you.

Pontus Wallsten The Lily Species and their bulbs

#### Pontus is also speaking at the NALS show & Symposium in Boston

Does anyone want to provide a 1 paragraph book review?

Beetle Musings <u>lilybeetle@arls-lilies.orq</u> report to ARLS if you have questions, I will try to answer them.

Report your invasion. With a picture To Carlton University lilybeetletracker@weebly.com There is also a resource page on the website

Report your beetles - with a picture to Olds College Kfry@oldscollege.ca

If you are in need of beetle brochures to give to a friend or neighbour. Contact sec@arls-lilies.org



(photos L. Hepper)

KEEP WATCH. KILL THE BEETLE. REPORT THE BEETLE. I ended up with over a dozen pots in the garage with energetic early lilies sprawling all over trying to reach the light I finally got them out May 9 thinking it has to be past frost now. Well May 10 I got 8 beetles on my new tender lilies, they left the garden lilies alone and went for the young stuff hardening off. So I sprayed with Dr Doom on May 10. On May 24 I bagged a couple more beetles that had flown into my neighbours yard and grabbed a couple of leaves stuffed them in the bag and thought 'I have some for the bulb sale tomorrow. I can show off live beetles'. Well, morning came, I grabbed my bag o beetles. Oh Oh. They are dead. Toes up dead. I grabbed the May 10 bag to show off too and there are a couple still alive. Interesting. I guess feeding the beetles leaves that were sprayed with Dr Doom a couple of weeks ago is still deadly. And why are the beetles from May 10 still hanging in with no lilies to eat?? Made for some lively discussion at the bulb sale. I even sold some lily bulbs. May 28 I was doing a patrol and found 10 more beetles. It was time to spray again. 18 days of beetle free garden between sprays. This is good because it takes almost a can to cover my whole garden. I have a lot of lilies. Dr Doom even works on ants so the ants don't climb all over my lilies anymore either. Maybe I should see how it works on ant hills? It seems to discourage the leaf cutter bees from harvesting the lily leaves too. I guess I should buy them another sacrificial rose.

### FACEBOOK Albertaregionallilysociety **TWITTER @ ALBERTA lilies** THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER THE BULBLET VOLUME 34, NUMBER 2 SUMMER 2019 **MORE LILIES TO LOVE:** Moving beyond the familiar.

Fans of lilies are always looking for more! If you have been happily growing the familiar Asiatics, Division I and Martagons, Division II, perhaps it's time to branch out into the world of lilies from other divisions and to interdivisional crosses. Many different types of lilies from other divisions and interdivisional crosses are available, offering attributes not often found in the old faithfuls such as oversize blooms, exotic fragrance and a wider range of colours.

For almost ten years the Research Plots at Olds College have been used for data collection on the general performance of Asiatic lilies, as well as the impact of mulch-use and planting depth on that performance. Over the years we have expanded the focus of our collection to include several lily hybrids from other divisions and we felt it was time to outline some of the information we have gathered.

First and foremost we are interested in hardiness – whether these hybrids can survive and thrive in Alberta's climate. We are then interested in other performance matrices such as height, bloom count and bloom duration. Initially lilies were kept in the plots for three years, but as we interpret the data from our hybrids, we have realized that three years is not long enough to be able to determine trends in performance so moving forward we will aim to keep them in the plots for a minimum of five years. The information provided below has been taken from specimens that have been in the plots for three or more years.

#### Asiapet (AA Hybrids) - Division VIII interdivisional crosses

These lilies are the result of crosses between Asiatic and Trumpet/Aurelian lilies. Asiapets are generally considered hardy, although it is recommended that they be planted deep and for mulch to be added. They are desirable for their huge, fragrant blooms in late season (August/September).

At the college we have grown only one specimen, Ivory Belles which was in the garden for three seasons. The plants were at their tallest in the first year, then declined over the next two years. Bud and bloom numbers peaked in year two, then drastically declined over the third season. Bloom duration also peaked in year two. With this minimal data, indications are that this lily will not be reliably hardy or a good performer over a longer growing time.

- Average Height 34 cm
- Bloom time end July to early August
- Average bloom duration 10 days



Ivory Belles

#### Orienpet (OT Hybrids ) - Division VIII interdivisional crosses

Orienpet (or OT) hybrids are a cross between Oriental and Trumpet lily types that bring together the best characteristics of both. We see the colour range of the trumpet lilies (reds, yellows, oranges) with the shape of the orientals, along with a light, pleasant scent. In the college plots we have grown Northern Carillon, Pink Brilliant, Siesta and Yelloween for between 3-5 years.

# FACEBOOK Albertaregionallilysociety THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER

THE BULBLET VOLUME 34, NUMBER 2 SUMMER 2019







Top left- Pink Brilliant Top right -Yelloween Lower left -Siesta Lower right - Northern Carillon



Generally, all cultivars have had stable height, bloom count and duration. In some cases a peak in performance measurements was seen after 2-3 years and then generally levelled off. All would be considered hardy so far.

- Average height 50-75 cm;
- Average bloom count 4-6 blooms per stem
- Bloom time late July or early August
- Average bloom duration 14-20 days



**Trumpets - Division VI** 

Left Tetra Gold right Pink Planet

Trumpet lilies are tall and elegant with large trumpetshaped flowers. They are known for their incredible,
strong fragrance. Bred from species found in China,
varieties can be found with downward facing, bowl
shaped or upfacing flowers and colours that include
white, yellow, chartreuse, pink, purple and peach.

There are only three trumpet lilies in the plots that have been in for three seasons or more — African



The Alberta Regional Lily Society Pron

Queen, Griesbach Tetra Gold and Pink Planet. These will be left in the gardens, along with newly planted trumpets Orange Planet in 2017 and Easter Moon in 2018. Plant height has remained stable or increased over the three seasons, as have the number of blooms and bloom duration.

- Average height 50-80 cm;
- Average bloom count 3-5 blooms per stem
- Bloom time late July to early August
- Average bloom duration 10-20 days

#### Oriental-Asiatic Hybrids (OA Hybrids) - Division VIII interdivisional crosses

Oriental-Asiatic hybrids are expected to have the hardiness of Asiatics, with a light fragrance from the Oriental side of the cross. In the plots we grow Red Power, Yellow Power and Kaveri all planted in 2015. In all three they were their tallest in the first year, declining the next two years. We have spotty data on bloom time and duration so no comments can be made at this time.

- Average height 50-80 cm;
- Average bloom count 4-8 blooms per stem
- Bloom time late July
- Average bloom duration 14-21 days





Red Power Yellow Power Kaveri

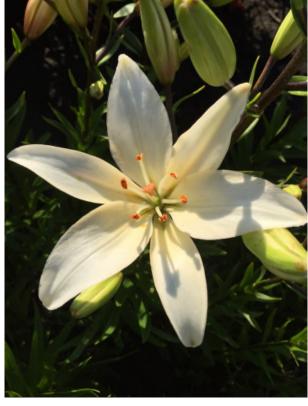
#### LA Hybrids - Division VIII interdivisional crosses

Crosses between *Lilium longiflorum* (Easter lilies) and Asiatics, LA's have large fragrant blooms and are reported to be hardy in Zone 3. Our collection includes Dynamico, Kiss Me, Courier, and Purple Diamond in the gardens for between three and six seasons. No clear trend in heights over the seasons has emerged – some peaked after two to five years, although none dropped off dramatically over time (with the exception of Courier in its 4th year). The same can be said for bloom count and duration.

# FACEBOOK Albertaregionallilysociety THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER THE BULBLET VOLUME 34, NUMBER 2 SUMMER 2019

- Average height 55-65 cm;
- Average bloom count 5-7 blooms per stem
- Bloom time –mid to late July into early August
- Average bloom duration 15-20 days





Stay tuned as Olds College Botanic Gardens, with the support of the Alberta Regional Lily Society continues to trial lilies and share data, promoting the growth and love of lilies.



Jane Reksten
Manager, Botanic Gardens and Greenhouses at Olds College

All photos in this article provided by Olds College Top left Dynamico top right Kiss Me

lower left Courier lower right Kiss Me



The Alberta Regional Lily Society Pron Bonnie Doon STN PO Box 68138 Edmonton, AB T6C 4G0

Promoting genus lilium as an excellent garden plant

### **FACEBOOK Albertaregionallilysociety** TWITTER @ ALBERTA lilies THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER THE BULBLET VOLUME 34, NUMBER 2 SUMMER 2019

# SPECIES SPECTACULAR SEASON OF SHARING CONTEST **SPECIES LILY PHOTO CONTEST FOR 2019** SUBMIT 1 PHOTO PER DRAW ENTRY TO WIN A SPECIES LILY BULB

To support and encourage the growing of species lilies we are asking you to take a photo with any of the species lilies growing in your garden and either share them on the ARLS Facebook page or send them to me at dlkaban@hotmail.com and I will post them. For each individual species that is shared you will receive an entry for a draw at the end of the season to win a special species lily bulb. The contest will start at the beginning of the growing season in 2019, so you still have time to get a bulb or two of species lilies!

Can't wait to see your species lilies! Facebook had its first species lily post hurray!

#### **REQUESTING NOMINATIONS**

ARLS is now awarding the Cathy & Arnold Semeniuk VOLUNTEER AWARD for an outstanding volunteer who goes above and beyond in supporting our Society in its endeavours and events. Please forward your nominations with a supporting letter to <a href="mailto:pres@arls-lilies.org">pres@arls-lilies.org</a>

This was the first year for the award and Melanie Farkas and her sister came to present the award named for their parents. The nomination committee had two very deserving nominees and could not decide as both were outstanding in the behind the scene support of the society throughout their membership. The outstanding volunteer award went to Leo Krupka and Britta Johnson.

# Darm Crook's Talk on How to Grow Lilies from Seed

By Bill Mackay

On April 27, 2019 Darm Crook gave a great presentation on his work with lilies, primarily species lilies. Darm lives near Hay River, north of the 60 parallel. Pretty far north to grow all the species that he is able to grow. He grows all his lilies in raised beds with 10" of soil above the natural sandy soil of his area. He has found that these beds work well for him, they are well drained and heat up nicely in the spring. He was clear to point out that what happens with the lily plant in one year is directly due to growing conditions the previous summer and how much energy the bulb was able to store.

Darm makes his own pesticide from rhubarb leaves. He mixes one pound of leaves to 1 quart of water, boils for 10 - 15 minutes, he lets the mixture cool, he then filters out the leaves and sprays the clear liquid on his plants to kill pests. I wonder if this would work for the lily leaf beetle in Alberta?

His soil has a pH of 6.3 – 6.5 but he needs 7.2 – 7.5 for alkali loving lilies. He uses wood ash to raise the pH because lime leaches out too quickly. He used two parts ash to one part of the soil being treated. To make alkali soil acidic he used wood charcoal, crushed and worked into the soil.

Lilies that like alkali soil get mottled and bleached leaves if they are in acidic soil.



Darm told us that many of the species lilies that are available to gardeners are highly inbred and have a very low level of genetic diversity. As a result, one focus of Darm's work with lilies has been to increase the genetic diversity of species lilies by germinating seed that has been obtained from a wild species lily and crossing the resulting plant with a plant of the same species that has been in cultivation for a long time. Darm is well known in the species lily community for this work on species lilies and hence he has been sent seed from wild species lilies from lily fanciers around the world.

#### **Growing lilies from seed**

If you wanted to learn how to grow lilies from seed, including the multitude of species lilies Darm is the 'go to guy'. The remainder of this article will focus on what Darm had to say with regard to germinating lilies from seed as well as a bit of a review of the different types of germination found in various species/cultivars of lilies.

Darm keeps detailed notes with regard to all aspects of the work he does with lilies.

#### Handling seeds

When seeds are harvested Darm dries them for 3 weeks in an envelope in his house which has low relative humidity. He puts seeds with epigeal germination in baggies in October in order to plant out successfully the next summer. To extend the length of time seeds are viable he freezes them at -15 but he said you can use -20C domestic freezer or -10C fridge freezer.

Darm candles all his seeds. Ones without an embryo are discarded. If he sees a dark black ring around the embryo, they have mould. He uses 100% bleach for 15 minutes to treat all contaminated seeds, then he rinses the seeds, plants them and in his experience they all germinate.

#### Germination of Seeds

As most lily aficionados know lilies have two types of germination, epigeal, the easy one and hypogeal the one that requires more care as it generally involved a period of cooling during the germination process. The two types of germination are summarized diagrammatically below.

# Two types of germination of lilies.

Diagrams from The Lily Nook



http://www.lilynook.mb.ca/Articles/Lilies from Seed.html

and Let's Grow Lilies

The first growth from the seed is the cotyledon which can be either above ground (epigeal) or below ground (hypogeal).

#### Epigeal is usually easy and quick

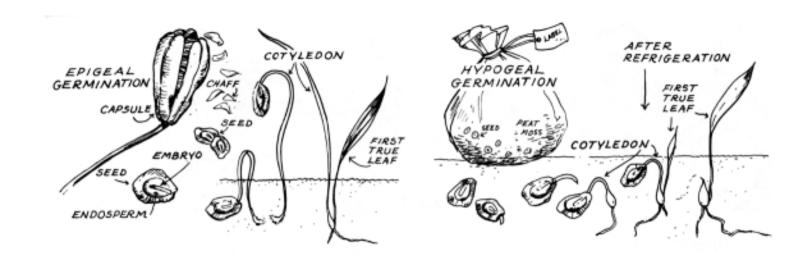
**Hypogeal** germination first occurs below ground, the cotyledons never extend above ground during initial short germination period. This is followed by a period in the dark at 18-20C for 4 months, then get true leaf emerging and you pot it up.

Plants that use **immediate hypogeal** germination are hardy and easy to grow. Seeds have to take up moisture to germinate. Put them in a baggie with medium that is wet enough that the seed is able to absorb the moisture. Darm uses 4 1/2" pots and seven seeds per pot placed under lights. Once the seed swells take out from under the lights and dry out. Once seeds have taken on moisture they will rot quickly if level of moisture in the medium is too high. So, the seeds may need to be removed from a wet medium, dried some and placed in less moist medium.

**Immediate epigeal** seeds don't go into dark. Darm puts them under lights for 9 -24 days. When plants are one inch long, he pots them up.

Species that use **delayed epigeal** germination need a cold period, but length of the cold period varies from 6-12 weeks. Darm gives them all 12 weeks then to 10 C to germinate. For cultivars that use **delayed hypogeal** germination Darm puts seeds in a bag with moist medium and keeps them in the dark and cold for 3 to 5 or 6 months. Then he plants them out and in a few weeks first leaf appears.

Specific information on germination of various species, as documented by Darm is available on the Pacific Bulb Society Website at: https://www.pacificbulbsociety.org/pbswiki/index.php/LilyGerminationBySpecies



lilium Superbum colouring page. Yes adults can colour too.



Native to eastern North America. Grows in acidic, sandy, constantly moist soils. Stoloniferous bulbs. Need dividing every 5-6 years if you have clumps. Prone to virus. Hates long, warm dry summers. Grows to 3m with up to 50 flowers.

Grows wild in wet marshy acidic bogs with high summer rainfall. Deep red to yellow shades