

# President's Lily Pad message

*Like us on Facebook; Follow us on Twitter* If you haven't checked out the updated website: <u>www.arls-lilies.org</u>.

Greetings to all of you, my lily comrades! I cannot believe that 2019 is fast coming to a close, where has the time gone? I hope that you all had a wonderful Fall and that you were able get some exciting new bulbs through the Society sales. As much as we all cannot wait to see these new lilies I believe we are all looking forward to the gardening break. It is an opportunity for us to recharge our batteries, page through a few plant catalogs (Lily Nook is one of the best of course) and hopefully all of you have a pod or two of lily seed that you will be looking forward to planting in the not too distant future.

As I pause to reflect on 2019 there are so many ARLS highlights that come to mind. We kicked off our gardening season in April at the AGM with our friend Darm Crook from Hay River joining us to share his amazing experience and success with growing species lilies in the NWT. His inspiration caused me to add a couple more species lilies to my garden this year and to start working on lowering the pH in an area of my garden so I can try a few more varieties next year. I know I'm not the only one that was motivated by Darm's stories. The month of May was dry with moderate temperatures, so we weren't sure whether we were going to have that many stems for the Martagon Show. With June came the rains and more moderate temps, which resulted in our urban, Edmonton, lily growers having a good supply of Martagons for the Show. We ended up with an amazing Show with 166 stems. Our great lily friend and Martagon expert, Sandy Venton, made the trip from Manitoba to team up with Terry Willoughby to judge the event at the University of Alberta Botanic Garden. Did I mention the rain that started in June, well it continued throughout July (and August) which led to our Asiatics being a little later than usual. Even with the adversity we had a beautiful Annual Show at Greenland that Shauna Willoughby and Leo Krupka skilfully judged. We waited for the warm weather and it really never was delivered. If I have to find a silver lining to the cool, rainy summer it was that I had stems of Lilium tigrinum and leichtlinii blooming into October when the snow first came. A couple of other items that



THE BULBLET VOLUME 34, NUMBER 4 WINTER 2019 are noteworthy are: Doktor Doom is an excellent support in controlling the lily beetle and this fall we had one of the best one day bulb sales at Greenland that we've had in many years.

THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER

I also attended the NALS Show in Boston this summer from July 10-14. The host committee did an incredible job of welcoming participants and providing a wide range of activities to keep us busy and entertained. The Arnold Arboretum was a beautiful venue for the Show and provided an opportunity for many people from the area to come out and see what genus lilium has to offer in the garden! I'm really excited about the 2020 NALS Convention and Show as it is coming back to Canada! Mark your calendar and plan to be in Burlington, Ontario from July 8-12, 2020 so you can take in the events associated with "2020 Vision – NALS Ontario"!

I want to extend my thanks to all of our dedicated volunteers that made our shows and bulb sales a great success. If you have a little time and want to get a little more involved let me know as we can always use the additional support!

If you have a dear family member or friend that loves to garden and shares your passion for the wonderful genus Lilium, consider getting them a membership in ARLS for Christmas. It is an inexpensive gift that has many great rewards: select garden centre discounts, the quarterly Bulblet newsletter and the incredible chance to network and learn from other lily lovers at many Society events through the year!

I would like to extend the warmest of wishes from me and my family to you and yours for the coming holidays and a very Happy New Year filled with many sunny days in the garden and a few fat seed pods filled with all kinds of lily potential!

Happy Gardening!!! Lorne

### **ARLS AFFILIATES**

Alberta Horticultural Association *icangarden.com/clubs/aha* Calgary Horticultural Society *calhort.org* <u>@YYCGardening</u> <u>https://www.facebook.com/calhort/</u> Edmonton Horticultural Society *edmontonhort.com* @YEGgardening https://www.facebook.com/groups/14571255402/

North American Lily Society*lilies.orghttps://www.facebook.com/NorthAmericanLilySociety/*RHS Lily Groupwww.rhslilygroup.org/



Gardening is a matter of your enthusiasm holding up until your back gets used to it. ~Author Unknown

Minneapolis leuan Evans hybridizer



# BULB SALES 2020

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.

### **SPRING: STILL WORKING ON DATES FOR 2020**

### **ARLS EVENTS 2020**

Winter Mingle & Show Awards Feb 23, 2020 Crestwood Hall AGM & Spring Seminar April 18, 2020 Woodvale Hall 25<sup>th</sup> Annual Martagon Show July 4 & 5, 2020 U of A Botanic Garden, Spruce Grove NALS Show Ontario July 10-12, 2020 35<sup>th</sup> Annual Lily Show July 18 & 19, 2020 Greenland Garden Centre, Sherwood Park

# LILY SOURCES

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

Valley K Lily Ranch LAST YEAR- WILL BE CLOSING 2020 - SELLING OFF STOCK Lynnette Westfall; Asiatics, OTs, some martagons & species

RR1 Edberg TOB 1J0 <u>http://plantlilies.com</u> great resource and lily gallery. **mail order only** <u>bulbs@plantlilies.com</u>

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

**Rundlewood Gardens** Specialty Nursery & martagons 1643 Altadore Ave SW. Calgary (corner of 16th Street and 46th Ave SW) <u>http://www.rundlewoodgardens.ab.ca/ info@rundlewoodgardens.ab.ca</u> 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 <u>http://www.lilynook.mb.ca</u> 1 204 476 3225 <u>info@lilynook.mb.ca</u>

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. <u>www.jeffriesnurseries.com/</u> 204-857-5288 jeffnurs@mts.net

SW-GardensSandra-Pat Willis; lilies from various divisions22507 Kenesserie RD Thamesville ONT. NOP 2K0<a href="http://www.s-wgardens.com/">http://www.s-wgardens.com/</a>1-519-692-5580<a href="https://swgardens.com/">swgardens@yahoo.ca</a>

LilyCrest GardensBrian Bergman; Bergman seedlings, [OTs, asiatics, orientals & trumpets from active hybridizing]51 Woodcrest Dr. Toronto ONT. M9A 4J3Facebook.com/LilyCrestGardens1-416-614-6394bfberg@rogers.com

Mother Nature gives rainy days so gardeners could get the housework done. ~Author Unknown

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## MEMBERS RECEIVE DISCOUNTS AT THE FOLLOWING BUSINESSES:

\* <u>ALL SEASONS GARDEN CENTRE. 10027-81 Ave. Edmonton</u> 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 LAST YEAR

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

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		Lorne Kaban	
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Lily beetle		lilybeetle@arls-lilies.org	

No two gardens are the same. No two days are the same in one garden. ~Hugh Johnson



My Experiences as an <u>Alberta</u> Regional Lily Society Summer Student at Olds College Botanic Gardens

> By Alexa Bricker Fall 2019



Alexa third from left photos courtesy of Olds

My name is Alexa Bricker and I have been working in the Olds College Botanic Gardens as the lily research student for the past two summers. I grew up on a cattle farm west of Didsbury, Alberta. Currently, I am studying at the University of Alberta, majoring in Biology and minoring in Agriculture. Before working at the Botanic Gardens I had some experience gardening at home, but I had not worked with lilies nor heard of the lily leaf beetle.

The Olds College Botanic Gardens has a large collection of lilies, some of which are used for research. This research includes measuring appropriate planting depth of lily bulbs, collecting data on the attributes of many different types of lilies, and research on the lily leaf beetle.

At the College I maintained lilies in the lily research plots as well as the lily collections in the Botanic Gardens. Every week I collected data on various attributes of the lilies in the research plots including height, number of blooms and length of bloom time. Jane Reksten and I compiled this data over three year periods to help identify the best performing lilies.

In the past two years that I have been working as the lily research student, Olds College has been conducting research on a biological control agent for the lily leaf beetle under the supervision of Dr. Ken Fry. This biological control is a parasitic wasp (*Tetrastichus setifer*) that lays their eggs inside the lily leaf beetle larvae and cause death once the larvae has gone underground to pupate. Every week I checked the lilies in the Botanic Gardens for beetles and squished all of the lily beetles that I found. When the lily beetle larvae began to appear, I collected them and dissect some of them to determine if they have been parasitized by the wasp. The aim of the research into the parasitic wasp is for future control of the lily leaf beetle population across Alberta.

I am grateful for the opportunity to learn about horticulture, and research the lilies and the lily leaf beetle. This job has helped expand my experience in scientific research and methods which will be greatly beneficial to my studies at university. I have also gained a tremendous amount of knowledge about lilies, as well as many other plants in the Botanic Gardens. This experience and the knowledge I gained working at Olds College will aid me as I work towards completing my degree and for my future career.



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# UNIVERSITY of ALBERTA BOTANIC GARDEN NEWS

Events at the garden: check out the website for all events <u>http://botanicgarden.ualberta.ca/</u> Twitter <u>https://twitter.com/UABotanicGarden;</u> Facebook https://www.facebook.com/UABotanicGarden

# MUTTART is closed until January 2021

You can still go down and enjoy the gardens

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

**VOLUNTEERING WITH ARLS** 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.

# **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 <u>arls@arls-lilies.org</u>



Best Potted lily Annual show leuan Evans



Hepper Garden Delta & Dreaming Joy (photos L. Hepper)

Despite the gardener's best intentions, Nature will improvise. ~Michael P. Garofalo



# LILY BEETLE MUSINGS

I have very little to report since September. The little red devils stayed away after the August sprayings. I kept looking as I really don't want to deal with the emergence. Bad enough they come visit after hibernating in someone else's warm compost or mulch. I just regret having to clean up all the leaves as they were providing winter homes for the ladybugs.

# **NOTICE**

In case you missed the small print or a visit to the Valley K website, 2020 is the last year for that source of lilies. Order your stock as soon as you can.

# 2019 Species Spectacular Season of Sharing Contest Report

### Do you know what a species lily is?

Wikipedia provides the following definition: Lilium is a genus of herbaceous flowering plants growing from bulbs, all with large prominent flowers. Lilies are a group of flowering plants which are important in culture and literature in much of the world. Most species are native to the temperate northern hemisphere, though their range extends into the northern subtropics. Many other plants have "lily" in their common name but are not related to true lilies.

Well this year was the first year for our Species Challenge and did we get to see some beautiful specimens on our, ARLS, Facebook page. For those that may not be on Facebook we wanted to share the pictures with you.

So starting on May 21<sup>st</sup>, Jonathan Allan Lang shared a fine specimen of Lilium Martagon albiflorum. This lily is native to Croatia and was first discovered near Zagred, the capital city. Croatian botanist Vukotinovic first described this lily in 1877 and recognized that the flowers are more waxy in appearance than the standard martagon album. It like other Martagon species prefers woodland, light shade gardens with mild acidic to alkaline, well-drained soil.

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Lilium martagon albiflorum

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Jonathan gardens in Waynesboro, Virginia, which is why he was able to grow such a beautiful specimen of this species lily. He followed up with another species picture on June 04<sup>th</sup>, Lilium michiganense. This lily is native to eastern North America, through the Great Lakes region of Ontario to the Upper Mississippi Valley including South Dakota, New York, Georgia and Oklahoma. It prefers Zone 4 to 8 and grows in wet meadows, low woods and swampy areas.



Lilium michiganense Photo credit: Patrick Beale

In mid-June, we started to see the lilies emerge here in Alberta! Suzanna Durand shared a picture of



Lilium hollandicum, which is not true species but an F1 hybrid of Lilium bulbiferum x Lilium maculatum. This cultivar is relatively rare in natural environments is does appear in a couple of European locations. It is widely cultivated and looks more like the Lilium bulbiferum parent but is taller, leafier and has more flowers. The leaves and upper stem are less hairy than the true species. Another of its unique characteristics is that it appears from rhizomes.

#### Lilium hollandicum

Then on June 24<sup>th</sup> we got a real treat when Shauna Willoughby posted a picture of Lilium monadelphum that was in bloom in hers and Terry's garden! This beauty originates from North East Turkey to the Caucasus in Russia and Armenia. This banana yellow lily has brown spots

and reflexed (bent backward) tepals, and grows to a height of 0.5 to 2.0 metres. When this lily is grown in optimal conditions the bulbs can reach a weight up to 2 kilograms (4.5 pounds)!

We then had a pause in pictures as we all got busy in our gardens and didn't have time to post on Facebook.

Then Britta Johnson, long time ARLS member and our treasurer, sent us a bouquet of species lilies pictures from her garden. Britta's not on Facebook but we are so happy she shared because she is a testament to how many varieties and unique species we can grow in our Alberta gardens. Enjoy the following photo gallery of the photos that Britta shared. She tells me that she has several more species growing in her



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garden, I guess we are going to have to see what 2020 brings!

*Lilium monadelphum* Photo credit: Shauna Willoughby



Lilium auratum var. platyphyllum

This was one of the offerings from the 2019 ARLS Spring bulb sale and Britta did a great job of growing it!

This species is in the Oriental class and has its origins in Japan. Due to the widespread collection it is now somewhat rare and protected. It prefers acidic soil. This lily is known for its large scented blooms and plants can grow up to eight feet in height and have twenty flowers. Lilium auratum is generally short lived (3-4 years), so it is important to either reproduce the bulbs from seed or by scaling which is the most efficient method.



Lilium dauricum

Lilium dauricum is also sometimes referred to as Lilium pensylvanicum. This is a result of a mistake by English botanist, John Bellenden Ker that was later corrected. The lily comes from Asia and Siberia and is named after the Dauricum region. The standard color is orange like the one pictured from Britta's garden. But there can be a great deal of variability as there are citrinum (yellow), red and pink or red overlays. The species is also known to produce near albino seedlings. Depending on the variety, there is also a great deal of difference in the size as they can range from 13 to 70 centimetres (6 to 34 inches).



Lilium duchartrei



Lilium hansonii



Lilium leichtlinii

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Lilium duchartrei has smaller bulbs than many other varieties, with the average being the size of a dime and the largest being similar to a golf ball. This little jewel originated in China, specifically north-western Yunnan, western Sichuan and south-western Ganshu. It grows from 20 to 150 centimetres (8 to 60 inches). It grows in well drained humus soil and does not like excessive winter moisture (causes bulbs to rot). It stoloniferous which means is plan can come up 10-15 cm away from where the bulb was originally planted.

Lilium hansonii primarily originates from Korea but has also been found in Siberia and Japan. In its natural environment this lily grows in humus soil and reaches heights of 30 to 180 centimetres (12 to 72 inches). This species lily is one that has been used in the hybridization of Class 2 Martagons. Like Martagons, this lily is known to pout when transplanted. If transplanting L. hansonii it is better to do so in the fall. Once established, it is considered one of the easiest and long lived species to grow in the garden.

Lilium leichtlinii is native to Japan, where it grows on grassy mountain slopes with humus soil. It reaches up 180 cm (6 ft) in height. This yellow turkscap shape lily has brown spots and can have from two to thirty flowers. This species will grow in sun to half-shade and generally flowers in early to mid-July.

L. leichtlinii is one of the very easiest species to grow and if you are looking for a species lily to try in your garden this one comes highly recommended. The beautiful yellow flowers would complement any lily collection.



Lilium maculatum var. flavum

Lilium maculatum var. flavum was first discovered in Japan. It prefers slightly acidic, well-drained soil and likes to be kept evenly moist throughout the summer growing season. The average height of this little lily is about 30 centimetres (12 inches), so it is best suited for the front border in your garden.

We were able to get a few bulbs of this lily from our species lily expert, Darm Crook, up in Hay River, Northwest Territories.

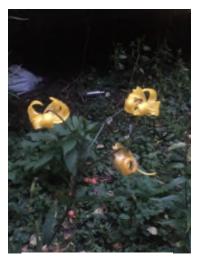


Lilium tigrinum splendens

Lilium tigrinum splendens is also referred to as L. lancifolium and is commonly referred as tiger lily and has grown in many country gardens for many decades. Its nature environment is in the wilds of the mountains of China, Japan, Korea and Manchuria. This species lily variety is another easily grown in half-shade or sun in well-drained humus-rich soil. It has been grown as a food crop for centuries in China and is compared to potatoes in flavor. So if you didn't get a bulb of L. lancifolium planted this fall you may want to add it to a pot of soup!



I also have a few species pictures that I have yet to share to Facebook so you will get the first preview of them. The L. liechtlinii and tigrinum bloomed in my garden right up until the end of October when the winter finally took them out. The L. philadelphicum was blooming on Canada Day in the ditch by our home.





Lilium leichtlinii

Lilium tigrinum splendens



Lilium philadelphicum



Lilium martagon var. pilosiusculum

Then there are the pictures of Lilium martagon var. pilosiusculum that were taken on June 25. (Where's Lorne? is the one picture – LOL – the species challenge was supposed to include you in the picture with your lily!) This martagon originated from Russia, China and Mongolia, it grows in the partial shade of woodlots. One of its unique and distinct qualities that is not clear in the picture is the fuzzy stem and buds.

So the 2019 Species Spectacular Season of Sharing Contest created an opportunity for us to see some species lilies that other gardeners are growing in their gardens, especially in Alberta.

Everyone that shared a picture will have their name entered in a draw that we will do at the Winter Mingle and of course they will get a species lily bulb from the Spring Bulb sale.

There are species lilies that are threatened or endangered in their natural environments because of deforestation, environmental destruction / change or over harvest. These lilies are the critical building blocks of most of the cultivars that we enjoy in our gardens today. We as gardeners have a responsibility to do what we can to preserve these heritage lilies, so if you haven't already tried a species variety in your garden let 2020 be the year you give it a try!

And maybe if you share a picture in 2020, you might win a species bulb to add to your collection.

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# 2019 ANNUAL 24<sup>th</sup> MARTAGON LILY SHOW REPORT

Sorry this report will have to wait until next issue now.

# **REREADING THE PAST**

Laurie Hepper

A 1995 article in the Saskatchewan Gardener by Janet Warner on slugs would have been useful to have revisited this gardening season, but as we all know the slug population will expand if one does not do certain containment practices. I am going to list the points of interest that still have relevance and we can all benefit from doing at least one or two of these next year. Keep mulch, low growing plantings and shady spots to a minimum if possible. Beer traps work, but you can use sugar water and be as effective. The early morning and late evening harvesting of feeding slugs is still one of the best methods. It says to use gloves to pick them and place in a salt-water solution. I do one better and use a pickle jar filled with salt and water and a pair of chopsticks. I leave it handy so a foray outside has it easy to grab and just pluck the little suckers up and swish. By the end of the wet season the jar is usually full and can be placed in the garbage with lid on. The chopsticks can be used to placemark a plant or bulb in the fall.

Placing a flat board on the soil will allow slugs to gather in one spot and make it easier to collect them. We always have a jar ready in the spring to start the process over again. Slugs also do not like to crawl over sharp objects. This includes sand, oyster shells diatomaceous earth, crushed egg shells, and even fiberglass batting; and to do double duty the lily beetle does not like egg shells, diatomaceous earth or oyster shells either.

Apparently wood ash works too and interferes with their slime, but you have to keep replenishing it. That is great if you have a backyard firepit. Slugs also avoid Artemisia (wormwood) and Rosemary so the fresh plant or a tea from these are great toxic repellants, and they are especially fond of leaf lettuce so you could use this as a trap plant or avoid planting this where slugs will get at it. Maybe a fence of mulched artemisia around the lettuce garden will work.

Photo credit Savy Gardener

Copper works as a deterrent, it seems it gives off electric shocks with the mucus. Too bad slugs don't light up like fireflies with that deterrent. It would be so easy to pick them. Lastly cultivate the soil spring and fall and even mid summer if the invasion is severe this brings the eggs to the surface to dry out or freeze depending on when you do it.

And a final note if you can borrow your neighbour's chickens or ducks they love slugs and their eggs get really yellow with the added protein. I used to have the task of collecting slugs for our ducks when I was age 7-12, an easier job as I lived in Surrey B.C. and slugs are know for being large. I just scooped them up with a hand trowel and flung them into the pen.

# **DO PLANTS THINK?**

Sometimes It Appears That Way.

The Bush lily, Natal lily or Kaffir lily is a lily in the genus Clivia and Amaryllidaceae family. It is native to shaded woodland habitats in South Africa. It has also now become naturalized in Mexico, Australia, New Zealand and in the USA, particularly in California. It is readily grown from seed producing broad deep, green, strap shaped leaves with flower stems up to 20 inches (or 50 cm) tall. The flowers, lily like and cup shaped are in clusters of 10 - 20 terminally borne



Photo credit houseplantexpert.com

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flowers that are an iridescent red, yellow or orange. I got some seeds in Des Moines a few years back from one of the garden sites that we visited at the Iowa, NALS event and I now have several vigorous flowering indoor lilies.

The Bush lilies grow well even beside north facing windows and have relatively low water requirements. These lilies have evolved to manipulate Samango monkeys to attain their survival success. Following flowering, these Bush lilies produce 10 - 20 yellow or red berried pea shaped fruit up to a half inch in diameter. The soft berry part of the fruit has a sweet flavour and is readily eaten by the monkeys but there is a difference. Normally monkeys will fill their cheeks with edible fruits but with the Bush lily fruit they do not. As soon as the monkeys feed on these fruits they spit out the seed immediately usually only a few feet from the parent plant. Researchers found that while the fruit flesh was edible the seeds were laced with lycorine a very bitter toxin that could cause vomiting or even death.



Photo credit garden.org

What the Bush lily "wants" is to remain in this specific shaded moist environment so that seedlings can grow in a favourable growing location. If the seeds were to be deposited randomly in dry open unsuitable areas, they would be unable to develop into mature Bush lilies. In other words, these lilies live in specific microclimate colonies and have developed a seed dispersal mechanism to ensure success.

When you think of it, martagon lilies have also developed survival mechanism to ensure their success. In nature, martagons are native to open woodlands in cold

temperate climates where they are often the first plants to emerge from below ground in early spring ranging from early March to late April depending on the local climate. This allows them to emerge before their woodland undergrowth competition and the leaf canopy development of the trees. Martagons are fully emerged in early spring while the competition, annual and perennial undergrowth and leaf canopy are still emerging. Martagons have about 6 - 8 weeks to flower and set seed before they are generally overwhelmed by the surrounding undergrowth. If seed set is successful the flower stems will continue elongating and at the same time the seed heads stay intensely green. Martagon flowering stems may be 3 - 7 feet (1 - 2 metres) above ground by July or early August. The much shorter non-flowering stems will rapidly die back in August into the bulb in order to conserve energy and moisture for the following season. The fertile flowering upper stems and seed pods are intense green since they are now providing the sunlight energy to provide the developing seeds with carbohydrate (sugar) reserves for future seedling development. When the seed pods are brown and mature in September and October, they will split open and only dispense their seed contents in wind gusts so that they do not travel very far, unlike dandelions or sticky burdock. They really seem to say that they like where they are and do not want to travel any distance. The same can be said perhaps for Asiatic lilies in given sites.

When the martagon seeds fall to the ground in September they will germinate hypogeally in a week or so if the soil is moist or if as we have as in Alberta an early September snowfall. If the ground is dry, they will not germinate that fall and will remain dormant until the next spring. Asiatic seeds mature much later in the year in northern climates and it maybe too cold or dry for seed germination by the time they mature. Anyway, it is better to plant epigeal seeds in early spring of the following year.

So, if you want to save a year growing martagons outdoors, sow a half to 1 inch deep (1 - 2.5 cm) immediately they are ripe in late August to early September into moist soil that is still warm.

Martagon seed germination as we know is delayed hypogeal. They will germinate in warm or cool moist soil and grow a tiny bulb. This bulb attached to the seed will require at least 6 - 8 weeks preferably of cold to near freezing temperatures (normal winter weather) in order to germinate. Then as soon as it warms up in the spring the bulb will rapidly produce a single true leaf above ground. In my garden if I do not cut off my martagon seed heads after flowering and I get an early September snowstorm my problem weeds the following year will be countless germinated single leaf

THE BULBLET VOLUME 34, NUMBER 4 WINTER 2019 martagon seedlings in early spring. I just have to hoe them out or the seedlings will grow amongst my named martagons.

THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER

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Technically delayed hypogeal is a survival strategy. Martagon seeds can form bulbs in the fall and be instantly ready to emerge as seedlings in early spring and produce the first true leaf which can use the available sunlight for about 6 - 8 weeks in April and May before the woodland undergrowth and trees canopy over and cut out the sunlight. Seedling martagons are also much more vulnerable to Botrytis mould than their mature parents that often carry their lower foliage up to a foot above ground allowing air circulation and reduced botrytis infection. Unfortunately, the new ground hugging 1 - 3-year-old seedlings are subject to morning dew and very high probabilities of botrytis infection.

If you can spray these martagon seedlings 1 - 3-year-old weekly from mid-May to August many of the seedling martagons will flower in 3 - 5 years and not the usual 7 years or more. The fungicide (canola fungicides do the job) allow the seedlings to increase their bulb size with a much longer growing season.

So delayed hypogeal germination and seed pod dispersal are martagon strategies to compete and grow effectively in a suitable woodland community alongside the parent plants.

Dr. leuan R. Evans

# Gardening requires lots of water — most of it in the form of perspiration. ~Lou Erickson



Started from discarded scale need to know name

Hantsing

Pink Attraction ( I had this labelled Towering Delight for years)

**TWITTER @ ALBERTA lilies** 

Photos L. Hepper