



[www.arls-lilies.org](http://www.arls-lilies.org)



FACEBOOK [Albertaregionallilysociety](https://www.facebook.com/Albertaregionallilysociety)



TWITTER @ ALBERTA\_lilies

THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER

THE BULBLET VOLUME 32, NUMBER 1 SPRING 2017

# The Bulblet



## Contents

PRESIDENT'S LILY PAD P2

BEETLE MUSINGS P4

LILY BASICS PART 3 OF 3 P5

THE EFFECT OF PLANTING DEPTH AND PRESENCE OF MULCH  
ON THE EMERGENCE AND FLOWERING DATES OF LILIES P8

IS MULCH NECESSARY? P10

REVUVENATING YOUR LILY BEDS AND PLANTINGS P12

## Save the date 2017

**AGM 2017** April 29, 2017. 10 am - 4 pm Woodvale Hall. Speaker  
TBD

If you did not make the Winter Mingle Your show awards will be  
available to pick up here. **PLEASE NOTE THAT YOU NEED  
TO RENEW YOUR MEMBERSHIP BEFORE MARCH 31 TO  
BE ELIGIBLE TO VOTE AT THE AGM**

## ARLS Affiliates

Alberta Horticultural Association [icangarden.com/clubs/aha](http://icangarden.com/clubs/aha)

Calgary Horticultural Society [calhort.org](http://calhort.org)

Edmonton Horticultural Society [edmontonhort.com](http://edmontonhort.com)

North American Lily Society [lilies.org](http://lilies.org)

RHS Lily Group [www.rhslilygroup.org/](http://www.rhslilygroup.org/)

## Spring bulb sales

**April 22** Bonnyville  
Gardener's Day bulb  
sale

**April 29 & 30** Calgary  
Hort. Spring Garden  
Show, Spruce  
Meadows Calgary

**May 20** St Paul's bulb  
sale

Others TBD



## Welcome to St Louis, Missouri for the North American Lily Society 70th Annual International Lily Show & Symposium!

**Convention Dates June 28 –July 2, 2017**

Outstanding lodging and fabulous Lily Show at the  
Sheraton Westport Chalet Hotel St. Louis  
Garden Tours at the

Missouri Botanical Garden and Bellefontaine Cemetery  
Check our website at <http://nals2017.lilies.org/> for more details  
To lend your time and support to this convention,  
please contact Lynn Slackman at  
[lslackman@tenbytech.com](mailto:lslackman@tenbytech.com)



## President's Lily pad Like us on Facebook; Follow us on Twitter

Our current projects are underway and we hope to have a great progress report for April 29. This year We moved the AGM to the end of April to avoid conflict with Easter and the Calgary Garden Show, somehow that did not work out as the Calgary Garden Show has moved to the same date as the AGM. I hope all our Calgary members show up to support us down there if they do not make the trek up to Edmonton. Thanks to Jane Reksten, Olds College who supplied all our lily photos for this issue. Now that I have the Newsletter done I will work on a speaker for the

AGM. *Good growing Laurie*

**Newsletter Editor** Any spelling and grammatical errors are all my own. If you see a data omission, please inform [pres@arls-lilies.org](mailto:pres@arls-lilies.org) with the correction.

## LILY VIGNETTE

I like to hear the stories behind the lily. A picture and approx. 25 words is all it takes. Submit to [pres@arls-lilies.org](mailto:pres@arls-lilies.org)

## MEMBER BENEFITS

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](http://plantlilies.com)

15% discount on all bulb orders, excluding shipping. Contact Valley K by email at [webmaster@plantlilies.com](mailto:webmaster@plantlilies.com) to request the discount code BEFORE ordering. Follow Valley K on Facebook <https://www.facebook.com/plantlilies>

**22<sup>nd</sup> ANNUAL MARTAGON SHOW JUNE 24 & 25** Public viewing Sat 1-5 pm Sun 10am- 5 pm  
Devonian Botanic Gardens. IF SPRING IS LATE the show will move to July 8 & 9 check Facebook for updates- garden admission applies.

**32<sup>nd</sup> ANNUAL LILY SHOW July 22 & 23** Greenland Garden Centre. Public viewing Sat 1- 5 pm Sun 10 am - 3:30 pm. Show is free but feel free to shop or stop at the bistro.



**NOTICE OF AGM APRIL 29, 10 am ELECTIONS FOR OFFICERS AND DIRECTORS.  
ALL OFFICERS, DIRECTORS AND CHAIRS ARE REQUIRED TO SUBMIT A WRITTEN ANNUAL  
REPORT ON THE YEARS ACTIVITIES IN THAT ROLE.**

### Lily Sources

**Valley K Lily Ranch** Lynnette Westfall; asiatics, OTs, some martagons & species  
RR1 Edberg TOB 1J0 <http://plantlilies.com> great resource and lily gallery. mail order only  
[bulbs@plantlilies.com](mailto: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) <http://www.rundlewoodgardens.ab.ca/> [info@rundlewoodgardens.ab.ca](mailto: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. R0J 1H0 <http://www.lilynook.mb.ca> 1 204 476 3225 [info@lilynook.mb.ca](mailto:info@lilynook.mb.ca)

**Skinner Nursery** Hugh Skinner; martagons, species, asiatics  
Box 220 Roblin Man. R0L 1P0 1-204- 564-2236. [ski\\_hugh@mts.net](mailto:ski_hugh@mts.net)

**SW-Gardens** Sandra-Pat Willis; lilies from various divisions  
22507 Kenesserie RD Thamesville ONT. N0P 2K0 <http://www.s-wgardens.com/> 1-519-692-5580  
[swgardens@yahoo.ca](mailto: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](https://www.facebook.com/LilyCrestGardens) 1-416-614-6394  
[bfberg@rogers.com](mailto:bfberg@rogers.com)

**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 [www.jeffriesnurseries.com/](http://www.jeffriesnurseries.com/)  
204-857-5288 [jeffnurs@mts.net](mailto:jeffnurs@mts.net)

### ARLS DIRECTORS

**PRESIDENT** Laurie Hepper (to 2017) Edmonton Phone 780.916.0922 [pres@arls-lilies.org](mailto:pres@arls-lilies.org)

**VICE PRESIDENT** **VACANT**

**PAST PRESIDENT** **VACANT**

**SECRETARY** Lorne Kaban (to 2017) Bonnyville Phone 780.812.3533 [sec@arls-lilies.org](mailto:sec@arls-lilies.org)

**TREASURER** Britta Johnson (to 2017) Edmonton Phone 780 433.7869 [treasurer@arls-lilies.org](mailto:treasurer@arls-lilies.org)

## THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER

THE BULBLET VOLUME 32, NUMBER 1 Spring 2017

### DIRECTORS

Cecilia Bertram (to 2018)	Edmonton	Phone 780.469.1085	<a href="mailto:bertramc@telus.net">bertramc@telus.net</a>
Mike Danchak (to 2018)	Edmonton	Phone 780.462.0615	<a href="mailto:mikedanchak@yahoo.com">mikedanchak@yahoo.com</a>
Ieuan Evans (to 2018)	Spruce Grove	Phone 780.987.4398	<a href="mailto:ieuan@tbwifi.ca">ieuan@tbwifi.ca</a>
Dianne Skimming (to 2018)	Calgary	Phone 403.274.4747	<a href="mailto:diskimming@gmail.com">diskimming@gmail.com</a>
Suzanne Stack (to 2017)	Gibbons	Phone 780.710.0775	<a href="mailto:sueingabs@gmail.com">sueingabs@gmail.com</a>
Bill Mackay (to 2017)	Innisfail	Phone 403.227.3563	<a href="mailto:bmackay@telusplanet.net">bmackay@telusplanet.net</a>
Ada Socholotuik (to 2017)	Morinville	Phone 780.939.6935	<a href="mailto:thegoodnessofchocolate@gmail.com">thegoodnessofchocolate@gmail.com</a>
<b>VACANT</b>	Director (to 2017)		

### LIBRARIAN (Board Appointed-to 2017)

Terry Willoughby Spruce Grove Phone 780.968.1818 [library@arls-lilies.org](mailto:library@arls-lilies.org)

### WEB EDITOR (Board Appointed-to 2017)

Shauna Willoughby Spruce Grove Phone 780.968.1818 [webeditor@arls-lilies.org](mailto:webeditor@arls-lilies.org)

### Newsletter editor

### VACANT

fill in [pres@arls-lilies.org](mailto:pres@arls-lilies.org)

[news@arls-lilies.org](mailto:news@arls-lilies.org)

### ARLS COMMITTEES

Bulb Sale Chair:

### VACANT

Advertising & Public Relations:

Suzanne Stack

Publishing Committee Chair:

Shauna Willoughby

Venue Coordinator:

Laurie Hepper

Membership Chair:

Britta Johnson

Web Committee Chair:

**VACANT;** Laurie, Britta & Shauna members

Speakers Committee:

Laurie Hepper, Bill MacKay, Terry Willoughby

OLDS College Committee Chair:

Bill MacKay

Devonian Gardens Committee Chair:

### VACANT

AGLC-GAIN Funding Chair:

Laurie Hepper

Casino 2018 Chair:

Ieuan Evans

NALS Liaison:

Shauna Willoughby

32<sup>ND</sup> Martagon Show Chair 2017

Lorne Kaban

22<sup>ND</sup> Annual Show Committee 2017

Cecilia, Laurie, Shauna, Suzanne, Lorne, Britta



## Newsletter deadlines- Feb- May- Aug- Nov 15

Feb 15 for Mar 1 Bulblet Get your information in to [pres@arls-lilies.org](mailto:pres@arls-lilies.org) Please put subject: 'newsletter submittal' in email so I can find it in my inbox when I need it.



(photo L. Hepper)



Remember the beetle emerges at the same time as your lilies and they are fertile. Keep watch. Kill the beetle. Report the beetle. Especially squash the larvae- [that black voracious lump on the underside of the leaf]. Leaf damage is easily noticed and the larvae don't run, fly off or hide. Killing larvae will interrupt the life cycle and if you get them all you may be lucky enough not to have any more fly in for a year or two.

**Beetle Musings** [lilybeetle@arls-lilies.org](mailto:lilybeetle@arls-lilies.org)  
Report your invasion. To Carlton University  
[lilybeetletracker@weebly.com](http://lilybeetletracker.weebly.com)

There is also a resource page on the website  
If you are in need of a beetle brochure to give to a friend or neighbour. Contact [pres@arls-lilies.org](mailto:pres@arls-lilies.org)



## THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER

THE BULBLET VOLUME 32, NUMBER 1 Spring 2017

**Name tags** Call Shauna to get an update.

**Nominations for the NALS Regional Medal**  
are being solicited please submit to Shauna Willoughby.

### DEVONIAN BOTANIC GARDEN NEWS

We have an opening for a liaison with the Gardens. Call 780-916-0922 Laurie to volunteer. Arnold has stepped down due to health reasons. The Lily Beds at the DBG will soon be laid out and hopefully planting of the Asiatics will be underway this spring. The last of the lilies are being accessioned this winter and the full data base finalized.

Events at the garden: check out the website for all events. [www.Devonian.ualberta.ca](http://www.Devonian.ualberta.ca)

**Twitter** @DevonianGarden; **Facebook** DevonianBotanicGarden

### LILY BASICS (Part 3) Planting and Culture



*Aphrodite*



*lily plantings at Olds*

#### Planting

Lilies are best planted in bulb form in the early fall before the ground becomes cold. This allows the bulbs to start root growth before winter. While the bulbs can still be planting in the spring, the resulting plants will be just a little bit less robust. They can also be planted as potted plants and planted in the summer, much like other familiar perennials. This is how they are found in the garden centers. For a larger choice and for fall planting, bulbs are often mail ordered from reputable suppliers.

Care must be taken to ensure the planting location and conditions lead to healthy and successful lilies. Good drainage is a must, so avoid areas where water collects – a raised bed or slope would be a good choice. Amending the soil with compost or organic matter will assist with drainage as well as providing the loose, rich soil that lilies prefer. Planting depth will vary depending on the size of the bulb. A good rule of thumb is to

**THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER**

THE BULBLET VOLUME 32, NUMBER 1 Spring 2017

dig deep enough that the soil above the top of the bulb is approximately 2 times the size of the bulb. This results in bulbs being planted between 3 and 8 inches deep. Err on the side of planting too deep, rather than too shallow. Bulbs should be watered in after planting, and adding a layer of mulch can help with moisture conservation and weed suppression.



Baby Pink Bells- Fred Fellner



Black Gold - Gene Fox

**Culture**

Lilies are relatively undemanding plants, as long as their basic needs are provided. They are resilient to heat and cold, and do not generally need staking. They require full sun or dappled shade – some varieties can handle more shade than others. As mentioned above, open soil with lots of hummus and good drainage is essential! Lilies grow most vigorously in the spring and summer and their moisture needs are at their highest at these times and in general terms its best to keep lilies consistently moist. Once lilies are well established they can handle periods of drought, but if you are concerned about losing valuable specimens it will not hurt to give them a deep drink of water. There are varying opinions, but if lilies are grown in good, rich soil they should not need additional fertilizers.

Lily stems can be cut back to below where flowers were formed once blooming has finished, but be sure to leave enough foliage to continue feeding the bulb. This is the time of the year when bulb strength is gained for next year's flowering. Once the leaves and stem have browned in the fall, they can be cut back further. Leaving a few inches at the base will help with locating the bulbs in the spring before they emerge.

There's so much more to learn about lilies. We hope to offer more on topics such as lily species and cultivars; divisions and their descriptions; propagation; diseases and pests; uses and partners in the garden.

**Written by Jane Reksten**, Manager, Botanic Gardens and Greenhouses at Olds College, ([www.oldscollege.ca](http://www.oldscollege.ca)) and the Alberta Regional Lily Society ([www.arls-lilies.org](http://www.arls-lilies.org))



**THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER**

THE BULBLET VOLUME 32, NUMBER 1 Spring 2017



Calgary Tower Gene Fox



Pink Peach – Fred Fellner Bed



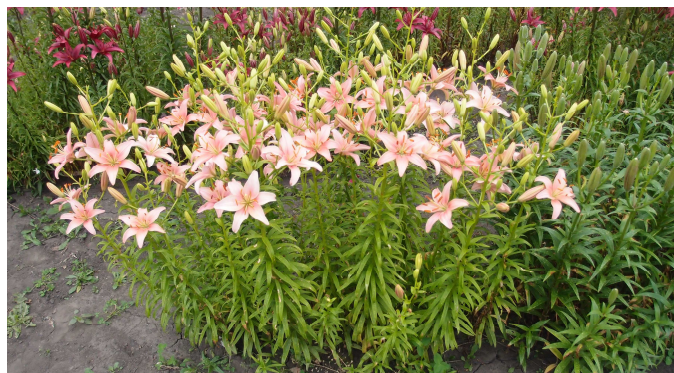
Cool Breeze- Fred Tarlton



Fred Fellner Lily Bed



Gardenia



Gypsy

All photos this article Olds College

The Alberta Regional Lily Society

*Promoting genus lilium as an excellent garden plant*

PAGE 7 OF 14

Bonnie Doon Stn PO Box 68138 Edmonton, AB T6C 4G0

MARCH 2017

Copyright © 2017 Alberta Regional Lily Society All rights reserved.



## THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER

THE BULBLET VOLUME 32, NUMBER 1 Spring 2017

## Is Mulch Necessary?

## The Effects of Planting Lilies with Mulch

Jane Reksten, Olds College

The question of whether it is necessary or even beneficial to plant lilies with a layer of mulch on the soil surface may have crossed many a gardener's mind, but little actual research has been done on the subject. Adding mulch may be more expensive and time consuming than leaving the soil bare, so is it worth it? Olds College, supported by and in partnership with the Alberta Regional Lily Society, addressed this question in a three-year experiment between 2009 and 2011.

Within the Olds College Lily Trial beds, three mulch treatments were used. In one plot, bulbs were planted at a 15 cm depth and had no mulch layer, meant to act as a control. In the remaining two, the bulbs were planted at a 15 centimetre depth with a 5 and 10 centimetre mulch layer (pine bark mulch was used). Six cultivars were tested ('Crimson Pixie', 'Connecticut King', 'Gran Paradiso', 'Fangio', 'Royal Club', and 'Orange Up-facing'), with two bulbs of each cultivar grown within each plot. Emergence date, maximum height, bud count, date of first bloom, flower count, and date of last bloom were recorded. The measurements of each lily cultivar were compared to one another to see if there were any discernable differences in the growth performance of the mulch covered treatments versus the control.



No mulch



5 cm mulch



10 cm mulch

Our results suggest that growing lilies with mulch is unnecessary, and may even have negative effects on the performance of the lilies when the mulch is laid too thickly.

## EMERGENCE AND BLOOM DATES

The presence of mulch affected the emergence dates of the lilies. Bulbs planted with mulch emerged later than those planted without mulch, typically by about five to seven days. The depth of the mulch did not seem to be a factor.



Mulch also played a role in bloom dates. While plants with a 5 centimetre mulch layer typically bloomed at the same time as the control, plants with a 10 centimetre mulch layer generally bloomed two weeks later.

Crimson Pixie in 5 cm mulch



## THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER

THE BULBLET VOLUME 32, NUMBER 1 Spring 2017

### HEIGHT

Three lily cultivars, 'Crimson Pixie', 'Connecticut King', and 'Gran Paradiso', were generally taller when planted with no mulch than with a 5 centimetre or 10 centimetre mulch layer. This difference ranged from 19 to 50 centimetres. On the other hand, 'Fangio', 'Royal Club', and 'Orange Up-facing' were tallest when planted with a 5 centimetre mulch covering, the difference ranging from 10 to 20 centimetres.

### GENERAL PERFORMANCE

Throughout the three years, the performance of plants with a 10 centimetre mulch covering was variable - sometimes they performed well and sometimes they experienced slightly stunted growth. In 2009 it was noted by summer student Daniel Chappell that lilies planted with 10 centimetres of mulch showed some signs of chlorosis, or yellowing, in the first few weeks of growth, however as the growing season progressed they soon became healthy looking plants.



Lilies in 5 cm mulch



Lily in 10 cm mulch

Some bulbs of the mulch trials did not grow at all, or showed stunted growth. In 2009, 8.3% of the mulched trial lilies did not grow or had stunted growth. In 2010, that number doubled to 16.6% of plants, and in 2011, the number dropped again to 5.5% of plants. It is unclear as to why the percentage greatly increased in the year 2010. (Note the plants that had stunted growth or did not grow were either in the 5 centimetre or the 10 centimetre mulch trial, not in the control group.)

### BLOOM COUNTS AND DURATION OF FLOWERING

What is really important to lily growers of course is the flower. So did the presence or absence of mulch affect the quality and number of blooms? After comparison within each cultivar of the peak bud and flower counts and bloom time spans of the plants within each trial, it was found that 10 centimetres of mulch had a negative effect. Bulbs planted at a 15 centimetre depth with a 10 centimetre mulch layer consistently produced fewer buds and flowers over the years than the control. Bulbs planted at a 15 centimetre depth with a 5 centimetre mulch layer typically showed similar bud and flower counts as the control.



Royal Club in 5 cm mulch

## CONCLUSION

Generally speaking the addition of mulch to gardens is considered useful for weed control and water retention. The mulch layer blocks sunlight to the soil surface, inhibiting weed germination, and preserves the soil moisture by reducing evaporation from the soil. Mulch also insulates the soil, keeping it at a steady, cooler temperature. These are factors worth considering when deciding whether or not to lay a layer of mulch in the garden. However, any positive effects on the growth of lilies are minimal. The trends observed in the lily trials at Olds College suggest that while planting lilies with (no more than) 5 centimetres of mulch is acceptable, mulch is not necessary for growing healthy lilies.

Full report written by: Breana Venneman, Olds College Lily Research Assistant 2012

Data Collected by: Olds College Lily Research Assistants Daniel Chappell (2009), Leanne Ejack, (2010), and Alyssa DeGray, (2011)

Supervised by: Wendy Daley, Olds College and Bill MacKay, Ph.D.

## The Effect of Planting Depth and Presence of Mulch on the Emergence and Flowering Dates of Lilies

Jane Reksten, Olds College

In 2008, Olds College and the Alberta Regional Lily Society initiated a series of trials designed to determine the effects of planting depth and presence of mulch on the growth performance of six cultivars of Asiatic lilies. Emergence and flowering data was studied in the 2009 growing season.

Two bulbs of each of six cultivars of lilies were planted per test plot. The lilies used were 'Connecticut King', 'Gran Paradiso', 'Fangio', 'Crimson Pixie', 'Orange Up facing', and 'Royal Club'.

The conditions applied included planting the lilies at five, ten, fifteen, and twenty centimetre depths. To study the effects of the presence and depth of mulch, additional bulbs were planted at a 15 centimetre depth with an application of 5 and 10 centimetre layers of mulch. Pine bark was used for the mulch.

Over the growing season, the following data was recorded: emergence date, height, spread, bud count, date of first bloom and date of last bloom. Height and spread were recorded on a weekly basis and bloom data was collected every two or three days. For the purposes of this article the focus is on emergence date, date of first bloom and height at blooming.



**THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER**

THE BULBLET VOLUME 32, NUMBER 1 Spring 2017

**EMERGENCE**

Our results showed that emergence was affected by planting depth and depth of mulch but showed that flowering dates were not affected. A general trend emerged showing that the greater the planting depth, the later the emergence. Also, emergence was delayed by the presence of mulch. Bulbs planted at a shallow depth, (ie. 5 centimetres) consistently emerged earliest, and as the bulbs were planted deeper or with mulch covering, the plants emerged later. With the exception of 'Royal Club', an LA hybrid lily, lilies planted at a 15 centimetre depth with 10 centimetres of mulch emerged last - much later than those planted at 5 centimetres depth with no mulch.

**FLOWERING DATE**

Flowering date was much less affected by the planting depth and mulch cover than was the emergence date suggesting that the plants may have compensated for their later emergence. Generally, lilies of the same cultivar bloomed within five days of one another, despite the fact that they may have emerged from the soil as much as a few weeks later than the first emerging plant of their cultivar. The exception to this is the plants with 10 centimetres of mulch, which seemed to bloom later than all other lilies regardless of other factors.

**HEIGHT AND GROWTH RATE**

Observations were also made to determine whether the lilies grew to an equal height at bloom time, or if lilies that emerged later bloomed at a shorter height, trading a growth in size for a fixed bloom date. If the lilies that emerged later did bloom at a similar time and height as those that emerged earlier, that would indicate a faster growth rate than their earlier emerging counterparts. To test this hypothesis, daily growth rate was calculated. In some instances the lilies did not produce flowers and so data for those plants was not included.

The differences in daily growth rate were subtle, but there were a few noticeable trends. Lilies planted at 10, 15 and 20 centimetre depth with no mulch had faster growth rates than those planted at a 5 centimetre depth. They were also of equal or greater height when blooms were first recorded than those planted at a 5 centimetre depth. This indicates that the plants that emerged later caught up to the plants that emerged earlier.

However, lilies planted at a 15 centimetre depth with 5 centimetre or 10 centimetre mulch covering were consistently shorter than the other plants and had slower growth rates. This suggests that the presence of mulch slightly hinders the growth rate of the lilies. It also shows that the lilies with 5 and 10 centimetres of mulch bloomed before reaching the peak height for the cultivar. This implies that lilies will bloom at a fairly specific time in the growing season, even if they have not reached full height.

**SUMMARY**

These results may be useful when deciding how to plant lilies. Alberta's climate can be harsh, and a late frost has the potential to kill early emerging plants. By planting lily bulbs deeper or with a mulch covering, the plants will emerge later. This makes it possible for the affects of late frost to be avoided, while allowing for blooming at the usual time. The addition of mulch may slow the growth of lilies, but the differences are small enough to go unnoticed.

Full report written by: Breana Venneman, Olds College Lily Research Assistant 2012

Data Collected by: Daniel Chappell, Olds College Lily Research Assistant 2009

Supervised by: Wendy Daley, Olds College and Bill MacKay, Ph.D.



## REVUVENATING YOUR LILY BEDS AND PLANTINGS

Ieuan R. Evans

February 2017

An often overheard remark amongst lily growers is, “my lilies are getting smaller and smaller and fading away.” So what’s happening? Well it really depends on the kind of lily that you are growing, your location in the province of Alberta, soil type and whether or not you live in the confines of a city or urban areas.

### ASIATIC LILIES

By far the most commonly grown lilies are collectively called Asiatic lilies. They are generally the ones that you find in bulk bags of 10 or more in box stores or they may be the most common lilies sold in bulb catalogues. The more exotic types are found in bulb catalogues. Tiger lily is just another name for a type of Asiatic lily.

All lilies will generally grow in a range of soil pH from 5 to 8 but do best between 6 and 7. Exceptions are the highly scented Oriental lilies which must have a pH of around 5.5. For most Albertans they must be grown in pots made up of 40% garden soil and 60% common peat that has been thoroughly mixed. A tablespoon of sulphur powder or prill should be added to each 1 gallon pot to maintain soil acidity.

Back to Asiatics:

1. They like full sun.
2. They must be planted with the tip of the bulb 4 – 5 inches deep, unlike tulips, the lily feeding roots grow on the stems above the bulb as well as below the bulbs.
3. They must be dug up, preferably in September, if they have been growing undisturbed for 3 – 5 years.
4. The dug up bulbs must be separated into large and small. The larger bulbs should be replanted into a new area of the garden that has not grown any lilies in the last few years.
5. Why? – Almost all lilies, especially in gardens where they have grown for very many years, contract lily root and bulb diseases.
6. These bulb rotting bacteria and fungi [*Fusarium* sp., *Rhizoctonia* sp., *Penicillium* sp.] with common names such as soft rot, blue mold and scale rot.
7. When lilies multiply and grow in clumps these diseases build up particularly under the bulbs. They do not run out of fertilizer or nutrients, an old wives’ tale.
8. Transplanting these bulbs individually, a few inches apart, especially into peat moss mixed soil will rejuvenate almost all lilies.
9. The peat moss, which is Nature’s supreme compost with the same nutrient value as cattle, horse or sheep manure stimulates the natural soil fungi, which help suppress the bulb feeding disease causing fungi.
10. The peat should be very generously applied and dug into the spot or rows planted to lily bulbs to a depth of 6 – 8 inches.



**THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER**

THE BULBLET VOLUME 32, NUMBER 1 Spring 2017

11. Small half inch or less lily bulbs should be planted in a similar way but only 3 inches deep again with lots of peat compost.
12. To stimulate growth of your lily bulbs use ammonium phosphate fertilizer or any of the complete liquid or concentrate fertilizer types. Ammonium phosphate, which contains lots of nitrogen, phosphate and sulphur should be applied at a rate of a half cup (4 ounces) per square yard. Apache Seeds in Edmonton sells 25 Kg bags.
13. Of the various manures on the market none contain much, if any, in the way of plant fertilizer except for poultry manure. Yes, Virginia the cows, horses and sheep have extracted almost all of the nutrient from their feed and what we have left is a kind of peat moss that is still very good for garden soil health.
14. Few if any of Alberta's garden soils require micronutrients except for very sandy or very peaty soils. Sandy soils may require copper, zinc and boron and usually sulphur (Epsom salts or magnesium sulphate) at 2 ounces a square yard). Peat soils are generally only very short of copper (copper sulphate – blue stone) at ½ ounce (dissolved in 1 gallon of water) per square yard.

**ORIENTAL LILIES**

As previously mentioned they prefer acid soil, so most Alberta soils would have to be amended with peat moss and sulphur to bring down the pH to around 5. A soil similar to that for growing azaleas, rhododendrons or blue berries is needed. Aluminum sulphate can also be used to lower soil pH. Unfortunately oriental lilies have a long growing season and unless grown in pots, those grown in the garden outside flower in late September generally suffering frost injury. All other growing facts pertaining to Asiatic lilies apply.

**TRUMPET AND AURELIAN LILIES**

Trumpet and Aurelian lilies can be grown successfully in the bigger cities such as Edmonton and Calgary and many other urban areas. Outside of the cities full mulching with several inches of peat moss or compost is required to give them that extra frost protection in some of our colder snow free winters. In fact much of our urban areas are many degrees warmer than the open country side and are essentially zone 4 rather than zone 3 or even 2 for most of the province

Be careful to cut all lily stems to soil level in the fall and move some soil or compost over the cut surface to discourage bulb eating voles and give extra frost protection.

**HYBRIDS**

1. L A Hybrids (crosses between Asiatic lilies and Easter lilies) are just as hardy as Asiatic lilies and behave in a very similar way.
2. Orienpets (crosses between Oriental and Trumpet lilies). These big imposing lilies are hardy but touchy. They grow well in the cities but in rural areas the bulbs should be placed 8 – 10 inches deep in well manured (peat) soil and mulched over each fall. These lilies can grow up to 5 – 6 feet tall.
3. There are lots of other hybrid types, such as Asia x Trumpet, Oriental x Asia and Species lilies giving us new and exotic lily crosses with cultivated types. All, with care, will thrive in Alberta.

**MARTAGONS**

This is a lily or to be exact a group of 5 species of lilies and very many inter-species crosses that constitute what we call Martagons. Martagons, unlike the other lilies that have been described will actually naturalize under Alberta garden conditions.

## THE ALBERTA REGIONAL LILY SOCIETY NEWSLETTER

THE BULBLET VOLUME 32, NUMBER 1 Spring 2017

Most other lilies take 1 – 2 years to flower from seed, martagons need 3 – 7 years to flower from seed. Martagons are slow growing but most multiply quite readily, i.e. one bulb → 2 bulbs → 4 bulbs. Their prime advantage over all the other types of lilies is that they are hardy to zone 2 and unlike the other sun loving lily types they will grow in full sun to full shade.

1. Martagons may not need to be moved for 10 – 15 years, even if they form large clumps of 30 or more stems.
2. Martagons grow under deciduous trees and shrubs and multiply, most other lilies do not.
3. Mice, voles and pocket gophers do not eat martagon bulbs and they are not a top choice for deer. Other lily types are readily eaten by such rodents.
4. While martagons will grow in full sun they do best in half shade and they will even do well on the north side of a house.
5. If martagons are established in an open woodlot setting, soon you will see seedlings in the under growth. With time these seedlings will grow to be mature flowering stems in 3 – 7 years.
6. All the aforementioned lilies can be fall or spring planted, except for martagons. Martagons are best planted in Alberta from late August until early October so that the warm soil allows them to re-root.
7. Martagons planted in late October or early spring tend to be very wimpy in their first year or so and may die back early.
8. Many types of lilies may occasionally decide not to emerge in a given year, especially so with martagons. A vigorous clump may, for reason unknown, decide not to emerge for 1 or 2 years.
9. All lily types, including martagons, can be attacked by lily beetles.
10. If martagon scales, or for that matter scales of any lily come adrift after purchase or transplanting, place the scales an inch or so above the newly planted lily bulb. In a year or so these scales will produce small bulbs (bulbils), which can develop eventually into a mature plant.



*Pink Peach in the Fred Fellner Bed  
at Olds-  
photo by Olds*

