



TORONTO MASTER GARDENER

INVASIVE PLANTS FACT SHEETS

.....

LILY OF THE VALLEY

.....



SUPPORTED BY
THE INVASIVE SPECIES CENTRE



Invasive
Species
Centre



WHY IS LILY OF THE VALLEY A PROBLEM

Lily of the Valley is invasive in natural areas and spreads by both seeds and rhizomes and forms large colonies which out-compete native species for moisture, sunlight, nutrients and space.

IDENTIFICATION

Leaves are basal, usually two, oval-ovate with pointed tips, parallel veins and smooth edges (entire), held on a single stalk.

LILY OF THE VALLEY (*Convallaria majalis*)

WHAT IS LILY OF THE VALLEY

Lily of the Valley is a perennial herbaceous groundcover plant native to Asia and Europe. It grows from underground rhizomes that spread horizontally and often with amazing speed. Lily of the Valley has broad, green leaves and delicate, sweet-smelling white flowers that resemble tiny bells on stalks. They stand about 18 cm tall. It can tolerate full sun to full shade but prefers partial shade and rich well drained moist soil. All parts of the plant are highly poisonous including the red berries. If ingested the plant can cause abdominal pain, nausea, vomiting and irregular heartbeats.



Flowers are a single raceme of six to 16 white, nodding, bell shaped and pleasantly scented.



Fruit is a single red to orange red berry.



MANAGEMENT FOR THE TORONTO GARDENER

Do not plant Lily of the Valley. Once established, it is difficult to remove and must be removed in its entirety with all the roots before it sets seed. You may need to do this for several years before the seed bank in the soil is depleted. It can be difficult to remove the rhizomes in their entirety as they break easily and even a small piece may resprout (this may be avoided if soil is dug to a depth of 2 feet (60 cm) and screened to remove roots and rhizomes but this is very labour intensive). However, with persistent pulling the plants carbohydrate reserves should eventually be exhausted. Roots and other reproductive parts should be disposed of by bagging and putting in the trash (reproductive parts of invasive plants should not be included in yard waste).

Another highly effective method is to smother the plants. If deprived of light the plant will be unable to photosynthesise and will eventually die. This may be done with either a weighted tarpaulin or thick mulch on top of cardboard. This may take one to two years to be effective.

A final option in areas with full sun is solarization. Ideally this will take place over four to six weeks during hot summer months. Cut the plant to ground level, water the ground deeply until wet, and cover the area with clear plastic. Use caution with this method as the heat can kill or damage other plants including trees or large shrubs whose roots extend beneath the area.

If you see Lily of the Valley or other invasive species in the wild, please contact the Invading Species Hotline at 1-800-563-7711, or visit [EDDMapS Ontario](https://www.ontario.ca/govt/eddmap) to report a sighting.

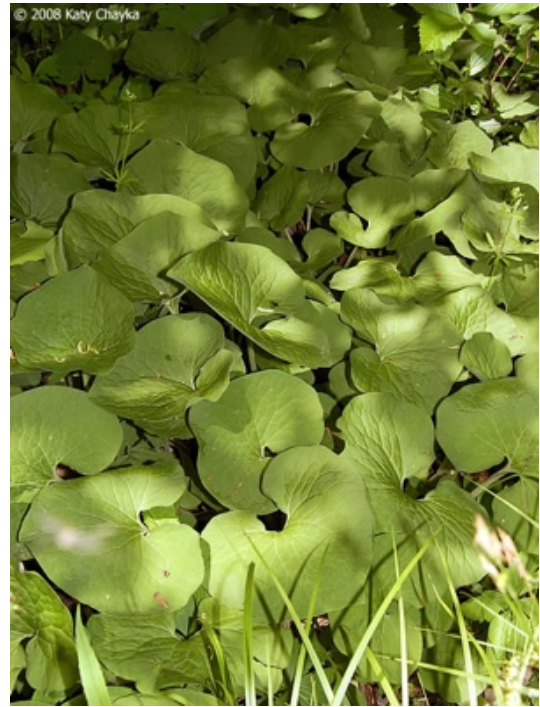
SIMILAR NATIVE PLANTS AND ALTERNATIVES

Canada mayflower (*Maianthemum canadense*) is sufficiently similar in appearance to also be known as false Lily of the Valley. Leaves are somewhat broader and the white flowers are a terminal cluster.



CANADA MAYFLOWER
(*Maianthemum canadense*)

There are also many other attractive native ground covers which can be used as alternatives to Lily of the Valley. These include:



WILD GINGER
(*Asarum canadense*)



BIG LEAF ASTER
(*Aster macrophyllus* syn. *Eurybia macrophylla*)



**WOODLAND/WILD
STRAWBERRY**
(Fragaria spp.)



BUNCHBERRY
(Cornus canadensis)



WOOD ANEMONE
(Anemone quinquefolia)

REFERENCES

Credit Valley Conservation, CVC Priority Invasive Plants, accessed at: <https://cvc.ca/wp-content/uploads/2011/07/11-150-priorityinvasives-11-list-web.pdf>

Cymbaly, Lauren, Invasive Alien Plant Species Found in the Carolinian Zone. 2007. Accessed at: https://caroliniancanada.ca/legacy/Documents/student_assistantship_program/Reports/Invasive%20Alien%20Species%20Found%20in%20Carolinian%20Zone.pdf

Illinois Wild Flowers, Convallaria majalis, accessed at: https://www.illinoiswildflowers.info/weeds/plants/lily_valley.htm

Ontario Parks, Invasive Species, accessed at: <https://www.ontarioparks.com/documents/content/10/172>

Toronto and Region Conservation Authority, Invasive Plant List, accessed at: <http://www.trca.on.ca/dotAsset/36890.pdf>

PHOTO CREDIT

Photos courtesy of :

Peter M. Dziuk and Katy Chayka (Minnesota Wildflowers: <https://www.minnesotawildflowers.info>)

Helen Battersby and the Toronto Master Gardeners (as marked in individual copyright information)