



Lilium – lilies – enhance almost any garden with a sense of refined beauty and grace. The large blooms will be arranged in a pendent, upright, or horizontal manner on multi-flower stems. The form of the flower varies with species – but the most common are trumpet, turk's cap, flat, vase-shaped, and bowl-shaped. As an added bonus, many will delight with a sweet and heady fragrance. The elegance and grace of lilies can add fool us into believing that they are difficult to grow in an everyday place, with an everyday gardener in attendance.

But – oh, not so! This genus, with well over a hundred species, has a long history of breeding going back hundreds of years, and offers many opportunities for success in the northern garden. But even though this genus has its origins in the northern hemisphere, don't be lulled into blind choices. There are many that are not cold hardy for us. And by all expert accounts, generalized recommendations are next to impossible given the wide species diversity and the broad range of potential growing site conditions.

For the Midwestern region – Asiatics (*Lilium auratum*, *L. leichtlinii*, *L. henryi*, *L. regale*, *L. rubellum*, *L. speciosum*, and *L. tigrinum*) may prove to be the most successful in the home garden. Oriempets (OT) are a result of relatively recent crosses made between Oriental and Trumpet lilies. These offer some opportunities for interesting color, form, and fragrance for northern gardens.

So, how does one make sense out of all of the choices? By good site evaluation, a bit of research into the optimal growing conditions required by any considered species, and of course, some judicious shopping. Nothing can be more disheartening than to plant with care and not receive flowers for your grand efforts and expectations – so choose wisely with an eye toward cold hardiness when purchasing.

The structure of the lily bulb is important to understand for optimal handling and treatment. They are true bulbs with somewhat thick, overlapping scales. Some species produce stem bulbils throughout the growing process that can be harvested after a few years for propagation purposes. But, unlike tulips, lilies do not have a protective sheath, or tunic, surrounding the bulb – so handle them carefully as

bruising is easy and can provide openings for disease and insect entry.

Lilies never go completely dormant and need available moisture in a well-drained soil throughout the year. Planting should be done as soon as possible upon receipt as these are not good shelf keepers. If, for some reason, you must wait to plant the bulbs, be sure to leave them in the moisture retentive packing material as they will desiccate quickly when left open to the air. If left to desiccation, you run the unfortunate risk of loss.

Soil requirements are simple. A well-drained – no wet feet tolerated - neutral garden soil with plenty of organic matter, in a sunny site will provide a good start. For optimal growth, provide sun for the heads and shade for the feet. This can be easily accomplished by inter-planting with other perennials or low shrubs. (Do check each species chosen as some prefer slightly acidic sites and some like a bit of top shade, especially *Lilium martagon* and some of the lighter colored flowers.) Planting depths will vary according to species chosen, and with a few exceptions, most will follow the three times rule.

To follow the three times rule, loosen and prepare the soil deep enough to allow the bulb base to gently rest at a depth of about three times the height of the bulb. An exception is *Lilium candidum*. This species needs to be planted just under the soil surface – at one half to one inch deep. Application of a balanced (or bulb, if available) fertilizer is a good idea. Two applications, based on label directions, should be made after shoot emergence and prior to bloom bud development. Once buds are developed no fertilizer should be applied until after bloom fade.

Daily care, in general, for lilies is quite minimal if planted appropriately. Provide water equal to an inch of rainfall per week – augmenting nature as needed. As flowers develop and fade, remove them, leaving as much of the stem and leaf material as possible to continue photosynthesis until fall freeze. At that point, gentle removal of all top foliage is recommended. Again – lilies do not go totally dormant so be sure that adequate moisture is available until hard soil freeze.

Container planting of lilies is just as easy as in-ground planting as long as the container is deep enough to accommodate the deep rooting structure. With proper planting, fertility, and water provision, (and if frost heaving is eliminated through winter insulation), they should last for three or more years in a container without much effort.

Pests and diseases are no stranger to the *Lilium* genera. Some can be moderated with a bit of forethought and some proactive cultural practices. Aphids may develop as the season warms. If they appear, a properly placed stream of water from the garden hose may be enough to knock them back – or if needed, insecticidal soap will work wonders for control. Slugs and snails love the shaded root zones also loved by lilies but can be controlled with beer baits or chemical bait traps.

If the plants begin to look a bit weak in structure before flowering you may have plants that need a bit more soil to cover developing stem roots (a species specific issue, check your purchase). If plants look weak after flowering, you may have removed too much foliage to allow for adequate photosynthesis. Next time, leave a bit more material intact so that the plant can feed itself. Other problems may need a bit of chemical assistance.

One of the tougher ones to deal with is *Botrytis* on new shoots – if they start to develop a grayish moldy appearance and begin to rot back, they may need some fungicidal treatment early in the cycle to survive. If your lilies develop a mottled, yellowish pattern on the foliage, have it checked for mosaic virus. This virus is not treatable, is spread by insects, and should be removed before infection is allowed to spread to any other lilies in your garden.

So – what to do with those beautiful lilies available for spring/Easter? Those that are widely available are often *Lilium longiflorum* ‘Nellie White’, ‘Ace’, or Georgia’. And while extremely beautiful for indoors, none of these are guaranteed hardy for outdoor use in the northern zone climates.

If you want to try (and why not give it a whirl) to get an “Easter” lily to grow outdoors, a few site considerations should be thought out in advance. Choose a location that is somewhat protected from the winter elements, on a slight slope, if possible, to minimize early and late season

cold damage. *Lilium longiflorum* grow best in full sun when planted in a good, loose textured, well drained soil, relatively high in organic matter in an area that receives average moisture. Carefully remove the plant from the container and place into the chosen spot of prepared soil, disturbing the root area as little as possible. If the plant is happy throughout the summer (a bit of balanced fertilizer will help), you may be rewarded with a second bloom in the fall. After the foliage has died back in the fall, and the ground has frozen solid, apply a few inches of quality mulch to give a bit of extra winter survival help. If no chances are to be taken, the entire plant can be dug up, repotted, and brought in for the winter. Just make sure it has an adequate cool, dormant period before forcing an early spring bloom.

If you plant fragrant lilies – enjoy them indoors. They do extremely well as cut flowers. For prolonged enjoyment, both in bloom time and in reduction of allergy issues, remove the pollen prior to bringing indoors.

Most lilies will do fine out of water and in cool storage for several days. Just rejuvenate with a fresh, sharp cut and place in slightly warm water.