

Japanese Irises Demystified

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Japanese iris properly known as *Iris ensata* (zone 4-9) are placed in the series *Laevigatae* together with *Iris laevigata*, *Iris pseudacorus*, *Iris versicolor*, and *Iris virginica*, all of which are commonly referred to as water loving irises. Some of these irises can and do thrive with their rhizome below the water line. Generally however, *Iris ensata* which naturally grow at the edge of a water way will suffocate and die if its crown is located under water, or a winters ice for long periods of time. However, the crown and root zone of this iris for optimum growth still demands to be constantly moist, wet in the spring and moist thru the summer. Depending on your soil and weather, one to two inches of water a week will usually suffice.

The soil needs to be slightly acidic with a PH factor of 5.8 to 6.8, and rich in organic matter. The soils favored by *Iris ensata* are clay loam based, which are also rich in essential minerals. However these soils are usually too tight and compacted, this leads to the plants starving for oxygen. This can be rectified by first loosening up the soil to a good 10 to 14 inches, and adding compost, preferably 20 to 30 percent by volume. Subsequently this needs to be done at every transplanting. It is also wise to move your plantings to new locations within the garden to give the soil a rest from mono culturing.

The following year after transplanting into a rich blend of composted soil you will probably need to add a side dressing of fertilizer. Because of heavy watering, extra nitrogen is usually called for and is needed. This can be taken care of by adding a slow time released commercial fertilizer such as a 10-5-5 and or working in well composted manure in the early spring and again right after bloom. We and other growers frequently lightly apply 21-0-0, being sure to water deeply just before and after the application so as to not burn the plant.

Iris ensata is an iris that requires a minimum of six hours of direct sun light to bloom properly. In maritime climate zones the plant will bloom and grow well in full sun. However, in warmer areas the late season bloom of *Iris ensata* would benefit from high filtered shading during the heat of the afternoon. This would also hold true to a plant being grown in an enclosed garden space, deck, or patio area with any reflective heat.

Understanding the growth habit of *Iris ensata* is half the battle of growing this large plant successfully in the garden. Unlike its close related relatives in the *laevigatae* family, whose rhizomes

spread out horizontally looking for new soil to root in, *Iris ensata* rhizomes grow vertically in the soil, stacking up each year on top of each other. This growth habit by the third and fourth year can place the crown of the plant well above the soil line, making it difficult to keep moist. By the fourth year the new rhizomes become over crowded, smaller and weaker and with no new soil for the rhizomes to root in the plant usually starts to perish. However, this is not true with all varieties, as some seem to thrive longer, while others need to be divided every two years. Still, a good rule of thumb is to lift the plant, divide, discard the old rhizomes, root ball, and soil every three or four years and plant back into new amended soils. Mulching your plantings can be very beneficial, as this helps to keep the soil cool and evenly moist and will suppress weed growth. A yearly layer of well composted manure will also benefit the plant with nutrients.

Winter time cleanup is made easy with a serrated bread knife, cutting the foliage back to within four to six inches of the ground. It is best, not to wait for spring to do this, but before the snow collapses the foliage over the crown of the plant, thus eliminating a winter hiding home for voles probably the most destructive pest to Japanese Irises. One or two of these rodents can decimate or totally destroy several crowns in a garden setting. Other pests of *Iris ensata* (besides the occasional bird that will land atop the tall bloom stalks) include slugs, snails, iris borer, and thrips. These pests can be regional, it is best to contact your local iris club and or agricultural extension agent on the best method to deal with them.

Yes, this is a lot of work, but to see a healthy two or three year old crown of *Iris ensata* with lush foliage in full magnificent bloom is well worth the effort and a sight to behold.

Container growing practiced in Japan for centuries will only give you a few blooms per plant. However, many find this method of cultivation is easier to manage the soil and constant water needs of *Iris ensata*.

Use at minimum a one or two gallon poly container (or larger) filled with a peat compost based potting mix, and some slow released acid base fertilizer such as Osmocote. The single or double rhizome is planted just one inch deep. The potted plant is then watered daily along with your bonsai collection, or placed in a tray of shallow water to keep it constantly moist.

The container should be shielded from direct sun so as not to overheat the roots and rhizome, this can be accomplished by using a shingle leaned up to shade the container. At Mt Pleasant Iris Farm we have been experimenting and have found that by placing the poly container inside of a slightly larger heavy ceramic or clay container will also accomplish this very well. The ceramic container and the poly container need to have drainage holes at the bottom, so the water can drain and not drown the plant. We have found with this double potting method, even in the hot summer sun, while the ceramic container is warm to the touch the inside poly container and soil remains cool.

This method of displaying your *Iris ensata* can be very decorative by using different shaped and colored containers. These containers can then be strategically placed within the garden, on the patio, or deck. They could also be placed in a water feature, as long as only the bottom one or two inches of the container is submerged. Remember that the rhizome of the plant needs to be above the water line to

survive. A larger heavier decorative container (with drainage holes) could also be used to hold a larger five gallon or several one to two gallon poly containers. This could easily be elevated in the center of a Koi pond, not only keeping the fish out, but also deterring the raccoons from digging and tipping over the poly containers held within it.

Some people have also said large collections of *Iris ensata* could be kept by placing the poly containers in a child's wading pool. Though not very sightly, if you choose this method, be sure to drill several holes into the sides two to three inches from the bottom. This will ensure the water level stays below the rhizome to prevent suffocation and drowning.

Another method to keep the plants well hydrated is illustrated on the back of Kamo's floral photo poster of *Iris ensata* Number 1, from Japan. The illustration shows four by four, or six by six timbers being laid down supporting a poly liner. A thin layer of sand or pea gravel is laid down to support the containers, and then flooded creating a large tray of water. Heavy rains or irrigation would then just overflow over the timbers before reaching the level of the rhizomes in the containers.

I can envision a very formal or informal garden setting with a structure such as this being built, lined with river rock to hide the poly liner and timbers. Soften the edges with ferns, lilies, hemerocallis, and other perennials or shrubs. Add some well-chosen decorative containers to hide the poly containers, and add a selection of your favorite *Iris ensata*. You would now be able to enjoy a very inexpensive and an easy to maintain water garden. In winter time the foliage of *Iris ensata* would be cut back to four or six inches. The poly container lifted from the decorative container or shallow pool, buried and heavily mulched out in the garden to winter over. The decorative container would be brought in out of the weather to protect from freeze damage. In milder winter areas both containers and plant can winter over in the open garden.

In the spring when new growth is just starting a light application of fertilizer is added to the potted plant and watered in. This can be a completely water soluble acid based or a special dry formulation made for pot culture. Within one to two weeks after enjoying your bloom, cut the entire plant back to six or eight inches. Lift the plant from the container discarding the potting soil. Washing the rhizome will clearly let you see where to make your divisions. Following the central spent bloom stem down to the old rhizome (this is what you will discard) you should see one to two new increases starting to form on each side, cut and separate your new plants from the old rhizome and roots, repotting each individual new start into separate containers filled with fresh new potting soil. By the end of the summer the new plants will be back up to blooming strength for next year when the process is started all over again after bloom.

Either planted in the garden or in a container, if the requirements of frequent division and loose rich moist acidic soil are met *Iris ensata* will give you not only a great foliage plant but a magnificent display of bloom in the early summer landscape. Give a cultivar or two a try and see for yourself why Japan for centuries has held this plant to such high esteem.