Canadian Iris Society (Canadian Iris Society founded 1946)

Growing Bearded Iris

by Christopher Hollinshead

This is intended as an introductory information source for the cultivation of bearded irises. The iris species as a whole is a remarkably resilient group of plants with few natural insect enemies or diseases. Irises will usually grow adequately with very minimal attention, however with a little attention and assistance they can become outstanding centres of attention in your garden.

Location and soil

Bearded irises require well-drained soil and a sunny location (6-7 hours plus of direct sunlight per day). Diseases are very likely to occur if the location is shaded or if the soil is wet and poorly drained. Irises grow best in a well-prepared soil with the ground dug deeply and a fertilizer such as 4-10-12 worked into the bed. Do not apply a high nitrogen content fertilizer as this will cause a lush growth and render the plant very susceptible to bacterial soft rot.

If you have a large enough garden possibly you may want to create flowerbeds exclusively for irises so that they are treated to their optimum growing conditions.

Planting

The best time to plant new irises or to divide and replant overgrown clumps is in late July and through the month of August. Planting later in the autumn may result in an insufficient root growth before winter and an increased chance of the plants being heaved out of the ground by frost action. Irises will normally bloom the year after planting. They may be successfully planted in the springtime but fewer flowers should be expected that year.

Bearded irises grow from rhizomes, which are thick underground stems that grow horizontally just below or at ground level. True roots grow from the lower surface of the rhizome and penetrate the ground to quite a considerable depth. The main growing point is at the terminal end of the rhizome but lateral buds will be found on the sides of vigorous rhizomes. When planting, set the rhizome just below the surface of the ground so that the top is exposed and with the true roots spread out into the soil below. Water the new plants every second day for the first ten days then cut back to once a week. Note that this is for new plantings only. Established iris clumps do not require water other than what they receive from natural rainfall. Three rhizomes may be planted together to obtain a good-sized clump more quickly. The downside to this is that you must be prepared to divide the plant sooner. Spacing of plants varies with space available but usually individual rhizomes are planted 16-18 inches apart and clumps 24-30 inches apart. This allows good air circulation around the plants and proper sun exposure.

Dividing and Replanting

Iris clumps should be dug up, divided and replanted every 3-4 years, as when the clumps become large and overcrowded, flower production is greatly reduced. Use a garden fork and carefully dig the planting out of the ground. Next wash the remaining soil off and pull apart the root tangle. Then divide the rhizomes into single plants with a leaf fan on each, using a small sharp knife if required. Discard the old and any diseased rhizomes. The leaf fans should then be cut down to approximately 6 inches. The retained sections should be allowed to dry overnight to allow cuts to seal up before replanting. This will minimize chances of disease invading the rhizomes.

Culture of Plants

In the early springtime clean and remove all debris from the garden. Inspect the plants and clear out any old leaves, etc. that may have collected over the winter. As irises grow vigorously during the first two months of the season, now is the time to apply a complete fertilizer such as 4-10-12. Approximately one handful around each clump and worked into the soil should be enough. The addition of agricultural gypsum and alfalfa pellets has also found to be beneficial. Watering is not required as irises receive adequate moisture from natural rainfall. After blooming, remove the flowerstalks cleanly at the junction with the rhizome. Do not remove or cut back the leaves unless they are dead or badly spotted as they nourish the plants during the remaining growing season. Just after the bloom period, at the end of June, you may wish to apply a second application of fertilizer. Cultivate the soil between the irises frequently during the summer to prevent weed growth, being careful not to injure the rhizomes. In the very late autumn cut back the

leaves 8-10 inches from the ground and remove all the dead leaves and any other garden debris. This keeps the plants free of materials that retain moisture and disease that may damage the rhizomes. Irises are considered winter hardy, but in areas of Canada with more severe climates, a cover of straw and/or cut evergreen boughs is beneficial as they protect the irises from damaging freeze-thaw action.

Iris Diseases

Leaf spot, the most common iris disease is very seldom fatal to the plants affected but it does disfigure the leaves and is unpleasant to look at. Typically, leaf spots are oval in shape surrounded by a yellow margin. Left unchecked these will spread until a considerable area of the leaf is damaged and the disease will spread to others. The removal of dead leaves and surrounding debris is the best natural preventative measure. A fungicidal spray provides good control if desired.

Bacterial soft rot is probably the most destructive iris disease. It attacks the rhizomes and turns them into a rotten foul smelling mass. The disease is caused by natural soil borne bacteria entering the rhizome. Conditions which cause the plants to be susceptible are: too much nitrogen in the soil, too much water, garden debris around the plants or an inadvertent injury to the rhizome. Indications of this disease are a sudden falling over of the leaves or stalk due to the readily apparent fact that the base is rotten.

To treat this problem, dig up the affected plant and cut or scrape away the rotten parts of the rhizome to healthy tissue with a small sharp knife. Do not replant immediately but expose the cut area to the sun and the open air for a day or two. Alternatively, the rhizome may be soaked in a solution of 10% bleach (1 part bleach to 9 parts of water) for approximately 1 hour. This disinfects the wound and will help speed healing. A dusting with sulphur or gypsum is also helpful.

Iris Borer

The iris borer is an insect that may selectively attack and damage iris plants. The adult insect is a seldom seen nocturnal grey-black moth which lays its eggs in the late summer on any debris or dead leaves near the iris plants. The small larvae hatch in the spring and crawl up the iris leaves where they then bore in between the leaf surfaces. Small holes and chewed leaf edges are the usual first telltale signs of their presence as the larvae eat their way down and into the rhizome. Once inside the rhizome, the larvae can cause much damage as they hollow out the rhizome. In August they leave the iris rhizome and pupate in the soil where they hatch into the adult moths and begin the cycle again. The best form of treatment is prevention. This may be accomplished by fall and spring removal of possible infested debris and a couple of early spring sprayings with Cygon 2E, a systemic pesticide.

Iris Types

Iris flowers are generally identified by a structure of three upright "standards", three lower segments named "falls" and thick bushy beards found in the uppermost areas of each of the falls. Thus, we have one of the most popular group of irises known as bearded irises.
The different groups of bearded irises are as follows:

- **Miniature Dwarf Bearded** (MDB) 2-8 inches in height
- **Standard Dwarf Bearded** (SDB) 9-15 inches in height
- **Intermediate Bearded** (IB) 15-25 inches in height
- **Border Bearded** (BB) 15-26 inches in height
- **Miniature Tall Bearded** (MTB) 15-26 inches in height
- **Tall Bearded** (TB) 27 plus inches in height

The Tall Bearded irises are easily the most well known and popular group. The other groups provide great interest in that they flower in the month prior to the tall bearded, thus extending the iris season to two months as well as providing variety of height and form for your garden.

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