

## Bamboo

Bamboos are members of the grass family, distinguished from other grasses by their woody stems, branched growth and often by their large size. Bamboos are graceful, airy plants that are easy to grow, but some may take a lot of management to control unwanted spread. There are forty-five genera of bamboo, which includes about 1200 species, many tropical, with a wide range of forms. They range in size from dwarfs that are only 12 inches tall to giant types that tower up to 60 feet tall. A few bamboos have variegated foliage and some have very attractive canes of rose, burgundy, yellow, orange, gray or black. Although many types of bamboo are tropical there are also many that grow in temperate regions as well. Some species are successfully grown as far north as New England. The selection of desirable types of bamboo is much greater for southern gardeners than in the north where winter is the limiting factor. They are found growing in many parts of the world but are most common in southeast Asia, China and Japan. Bamboo in the Orient is harvested for food, paper and timber. In the United States, it is grown as an ornamental.

The flowering habits of bamboo are not well understood. Some bloom every year while others bloom only once in fifty or one-hundred years and then die depending on the variety and climate. Some species have never been known to bloom.

### GROWTH TYPES

There are two basic types of bamboo; clumping and running. Individual bamboo canes are called culms. The clump type of bamboo grows in large clumps and is relatively slow in spreading. The root system of a single clump can be rather extensive and quite competitive with surrounding plants. Running types of bamboo, however, are very invasive and very competitive with other plants. They can take over large areas, some varieties spreading more than 100 feet from the mother plant in an amazingly short time. The running types of bamboo SHOULD NOT be planted unless a physical barrier of copper, stainless steel, or concrete, buried a minimum of 3 feet deep in the soil, is used.

In spite of the problems which the running types of bamboo cause in the landscape, they still have appeal because of their appearance and quick screening. The clump types of bamboo have the same aesthetic appeal but are not very invasive and therefore may have



*Bamboo. Photo: caes.uga.edu*

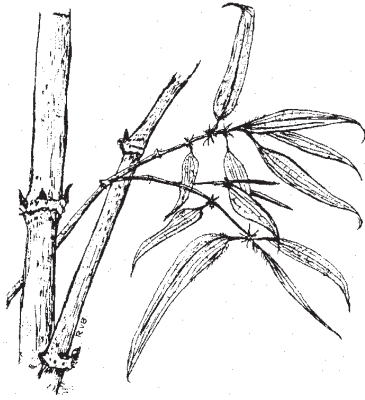
a place in the home landscape. They can be used as specimens, screening or the low dwarf types as a groundcover. Bamboos are especially attractive when planted next to a pond or a stream.

In addition to their use in the landscape, many bamboos are also good for growing in containers indoors or out to decorate large areas such as sun rooms, atriums, porches and patios.

### CULTURE

Bamboo grows best in a fertile, well-drained soil rich in organic matter. The soil pH should be 6.5. Most Maryland soils require periodic liming to maintain this pH. Bamboo, however, is quite adaptable and will grow fairly well in even poor soils, but will not tolerate water-logged soils. Since bamboo is an evergreen or semi-evergreen it is very prone to winter burn. In some winters the temperatures and the wind will cause the entire tops to die to the ground. Bamboo grown in a wind-sheltered location can survive lower temperatures better than bamboo grown in the open. Bamboo plants that are damaged or killed to the ground during winter recover but never attain their maximum size.

Most bamboo species grow best in full sun (five hours or more). Even species that prefer full sun will survive partial or full shade. They will grow more slowly and will not run as extensively.



Occasionally, bamboos need some grooming to remove shedded leaves that have lodged in the canes. Remove them by shaking the canes. Leaves that fall to the ground can be left as a natural mulch. Old dead canes should be removed as needed. After a hard winter there may be many to remove.

Propagation of bamboo can be done in the spring before new growth starts. Cut sections from the perimeter of the clump or lift the entire clump and divide it. It often takes much physical effort to divide a clump of bamboo.

Bamboos in northern areas have no insect or disease problems. In the southern United States aphids, scales, cane borers, fungal and bacterial leaf spots, smut and rust are occasional problems.

## CONTROL

Running-type of bamboo, if neglected, will travel and become very invasive. It is this type of bamboo, in uncontrolled situations, that has given bamboo a bad reputation. However, restricting unwanted bamboo spread can be accomplished through sturdy barriers and by cutting back new shoots. In Maryland, bamboo has a distinct period of shooting, March through May. If cut back at this time, new shoots will not grow.

Bamboo can also be grown outdoors in large, above ground containers. This actually is an excellent method of growing all types of bamboo. The hardy types usually tolerate our winter temperatures. In some winters the top growth may die completely but the roots will survive in above ground containers. Underground containment with concrete, metal or other impenetrable material can be effective if buried 36 inches deep.

Clump types of bamboo that have reached the desired maximum size are rather easy to restrain by mowing closely to the clump, spading around the perimeter or occasionally rototilling around them.

Sometimes people need to completely eliminate an existing stand of bamboo. Selective lawn weed killers will not control bamboo since they are designed to kill only broadleaf plants, not grass. Therefore, a non-selective herbicide must be used. To do this, cut all the stalks to the ground and allow the new growth to emerge and develop leaves during the summer. In October spray the mature foliage with a non-selective herbicide containing glyphosate (ie: Round-up or Kleen-up) at the 2% rate. Repeat the application in 14 days. Be careful to protect non-target plants from any over spray.

## **SELECT VARIETIES**

There are hundreds of bamboos currently available but only a few are outstanding enough to use in the landscape. The running types can be used only if there is an understanding of their need of containment. Since most of the desirable clumping types are primarily not tolerant of temperatures below 15 degrees F., Maryland gardeners do not have as much selection as the gardeners in the South.

The following list contains a select number of species chosen for their attractiveness and hardiness.

### Running Types:

*Pleioblastus viridistriatus* (*Arundinaria viridi-striata*) - An attractive, variegated yellow and green, low-growing running bamboo that reaches only about 18-24 inches. It can be very invasive and must be controlled. It is excellent for growing in containers outside or indoors. It will grow equally well in full sun or shade. During hot dry summers it actually does better in the shade.

*Phyllostachys aureosulcata* - Golden Groove Bamboo. A running type of bamboo with stems that are grooved and grow in a 'zigzag' pattern. Height is up to 20 feet. This is another very invasive type that must have control. The safest way to grow this bamboo is in large containers. It is very suitable to growing indoors. The young tender shoots are edible.

*Sasa veitchii* - Kuma Bamboo. This is a small, four-foot high running type of bamboo. It is invasive but easier to control than other running types by cutting the runners. The leaves are dark green which develop buff-colored leaf margins in the fall and winter. This bamboo actually prefers the shade.

*Shibataea kumasasa*. (No common name). This is the least invasive of the running types. It grows 24-36 inch tall zig-zagged canes. It grows best in moist soils and is shade tolerant.

### Clump Types:

*Fargesia nitida* (*Sinarundinaria nitida*) - Chinese Mountain Bamboo. Typically a 12 foot tall bamboo with bright green leaves and bluish colored stems. The better forms have very dark brown or black stems. This is strictly a clump forming bamboo and not invasive. It forms thick clumps in full sun or partial shade. This variety is prone to winter burn. It should be planted out of strong winds and afternoon sun.

*Fargesia spathacea* - Umbrella bamboo. A clumping bamboo with a delicate and graceful habit of growth that grows to 12 feet in height. It is very similar to *Fargesia nitida* but with a more arching habit of growth. It requires a sheltered spot in winter and prefers shade.

### **Dwarf Running Types:**

*Pleioblastus pygmaeus (Arundinaria pygmaea)* Pygmy Bamboo

The dwarfest of the hardy bamboos, it is only 12 inches high with dark green leaves. The canes are bright green with purplish tips. It is a vigorous spreader and needs control to prevent it from taking over nearby plants. It is tolerant of shade.

*Pleioblastus humilus* var *Pumilus (Arundinaria pumila)*

A larger dwarf type growing to 2 1/2 feet tall. It has purplish canes with white deposits at each node the leaves are dark green. It also is a rapid spreader and will need control. It is tolerant of shade.

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