

College of Agricultural and Environmental Sciences College of Family and Consumer Sciences



# Growing Bamboo in Georgia

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Michael Hotchkiss 311 W. Main Street Marshallville, GA 31057 (478) 952-4075 mike.w.hotchkiss@gmail.com man can sit in a bamboo house under a bamboo roof, on a bamboo chair at a bamboo table, with a bamboo hat on his head and bamboo sandals on his feet. He can at the same time hold in one hand a bamboo bowl, in the other hand bamboo chopsticks and eat bamboo sprouts. When through with his meal, which has been cooked over a bamboo fire, the table may be washed wtih a bamboo cloth, and he can fan himself with a bamboo fan, take a siesta on a bamboo bed, lying on a bamboo mat with his head resting on a bamboo pillow. His child might be lying in a bamboo cradle, playing with a bamboo toy. On rising he would smoke a bamboo pipe and taking a bamboo pen, write on bamboo paper, or arry his articles in bamboo baksets suspended from a bamboo pole, with a bamboo umbrella over his head. He might then take a walk over a bamboo suspension bridge, drink water from a bamboo ladle, and scrape himself with a bamboos scraper (handkerchief).

Quoted from A Yankee on the Yangtze. William Edgar Geil. London: Hodder and Stoughton. 1904. In Yangtze Patrol. Kemp Tolley. Annapolis: U.S. Naval Institute Press. 1971. Page 268. Source:http://www.geocities.com:0080/Vienna/5048/bamboo.html

#### Acknowledgment

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#### Foreword

Bamboo is an essential plant of life for many people around the world. It is used in many ways, including structural support for housing, as rebar in concrete, paneling, floor tiles, musical instruments, fishing poles, hunting, furniture, toys, rafts, bridges, clothing, baskets, scaffolding, medicine, food, water and soil conservation; and it makes thousands of agro-forestry products. Taiwan alone uses 80,000 tons of bamboo shoots annually, creating a projected \$50 million industry.

Native in Southeast Asia, Africa and the Americas, bamboo is a perennial, woody, shrub/tree-like plant. It grows from the hottest areas of the tropics, the subtropics, to snow-covered mountains in temperate zones. Bamboo is a member of the grass family *Poaceae*, formally called *Gramineae*. Approximately 70 genera make up more than 1,200 species.

Sadly, there are only a few books written about bamboo. One of the best sources of information is available online at http://www.americanbamboo.org.

This booklet is written in an attempt to filter through much of the available information and make a simple, user-friendly information guide on growing bamboo in Georgia, which has a wide variety of soils and temperate zones. However, due to huge differences in growing conditions and bamboo species, each selected species should be grown on a small scale and tested before investing large amounts of money.

The following information is written as a general guide. Bamboo species described in this publication are believed to grow well in most areas of Georgia. This list is not comprehensive and does not imply that other species won't grow well. Just like other plants, each bamboo species has unique characteristics that may require special care. There are always exceptions to the rule and further research of each species is advisable.

#### Information

Most of the pictures (except where noted) were taken by David Linvill at the Bamboo Farm and Coastal Gardens in Savannah, Ga. The 50-acre Bamboo Farm and Coastal Gardens showcases more than 60 different species of temperate bamboo and is open Monday through Sunday. Self-guided tour brochures are available that show many of the bamboo species and other rare plants. Admission is free. For more information, contact garden personnel at:

Bamboo Farm and Coastal Gardens 2 Canebrake Rd. Savannah, GA 31419 (912) 921-5460 http://www.ugaextension.com/bamboo/

#### Characteristics of Bamboo

Bamboo is one of the fastest growing plants on earth. Some species can grow more than 1 meter a day and grow 1/3 faster than the fastest-growing tree. Depending on the species, mature bamboo can be as short as 1 foot or more than 120 feet tall and have a 12-inch diameter.

Flowering is very diverse, with some species flowering annually and others only flowering every 100+ years. The entire grove of some bamboo species dies after flowering, while others don't. Typically, bamboo has three lodicules (scales at the base of the ovary), six stamens and three stigmas.

There are three major types of bamboo: (1) clumpers (sympodial), 2) runners (monopodial) and 3) reeds. This guide covers the clumpers and runners.

Clumping bamboos are non-invasive and only spread an inch or so in diameter yearly. Many homeowners consider running bamboo a weed because it spreads quickly by underground rhizomes and can be invasive. Rhizomes grow up to 5 feet a year and groves can double in size every year. Root barriers should be installed to prevent bamboo growth in unwanted areas.

#### Glossary

**Clone**: Plants reproduced vegetatively from a single parent. All of the plants should be genetically the same as the parent plant.

**Culm**: The main stem of the bamboo, also called the cane.

**Culm Sheath**: A type of leaf surrounding the young shoot, which is sometimes used in identifying bamboo species. It protects the shoot when sprouting from the soil.

**Cultivar**: Usually a mutation of an accepted variety that has a distinguishing feature.

**Internode**: Segment of the cane between the nodes.

**Monopodial**: Temperate bamboo that produces uderground rhizomes and side buds that grow upward and produce a new culm.

**Node**: Jointed area of the stem that often has buds.

**Pachymorphic**: Description of clumping bamboo rhizome growth.

**Rhizome**: An underground, food-storing stem used in reproduction. Sympodial rhizomes are tropical clumping types and monopodial rhizomes are temperate running types.

**Rhizome sheath**: The husk-like protective organ attached basally to each rhizome node.

**Shoot**: Bud development before it becomes a culm with branches and leaves.

# Preventing Running Bamboo from Spreading

The easiest way to prevent unwanted bamboo growth is to install a root barrier between the bamboo grove and the bamboo-free zone. Root barriers must be installed properly. Dig a trench approximately 36 inches deep. Use rolls of fiberglass or 60 mil polypropylene in the trench. Leave about 2 inches of the barrier above the soil to discourage rhizomes from growing over the top of the barriers.

#### Ground Preparation for Groves

Generally, bamboo is planted in the spring. Apply lime and fertilize according to soil test results. Apply 3 to 6 inches of soil amendments or compost on the soil surface and incorporate everything to a 12-inch depth, if possible. A soil pH of 6 to 6.5 is desirable. See University of Georgia Cooperative Extension Bulletin 577, "Home Gardening," for information on starting a garden, which is essentially what you are doing when starting a bamboo grove. Have your soil tested for bermudagrass, which has approximately the same nutrient requirements as bamboo.

#### Fertilizing Bamboo

**Groves** - Although many bamboo species will grow in acid soils with little nutrients, a well-balanced fertilizer including pH adjustments with dolomitic limestone is suggested. Dug plants should not be fertilized after planting until the bamboo is well established, usually after the first year, to prevent root burn.

**Pot Culture** - Bamboos are heavy feeders. Follow the label directions on water-soluble fertilizers (like Peters or Miracle Grow) and use the high dosage range. Slow-release fertilizers for pots may cost more, but are time savers. Up to 16 hours of supplemental light for indoor plants will be beneficial.

#### Watering Bamboo

Although many bamboo species are drought tolerant, watering for establishment is essential. Water bamboo one to two times weekly (depending on soil type) for the first three to six months until it is fully established. Applying a 2- to 3-inch-deep mulch layer will help conserve moisture. In general, bamboo needs about 1 inch of water every seven to 10 days, depending on weather conditions. The edges of the bamboo leaves roll up when then the bamboo needs watering.

#### Planting Bamboo

Always plant the top of the bamboo rootball slightly higher than the soil line. Commonly, running bamboo rootballs are planted approximately 15 feet apart in a grid system. The hole should be dug twice as wide as the rootball. Fill the hole with the soil that was removed from the hole. Do not add any compost or soil amendments. Pack the soil tightly and water heavily to remove any air pockets.

#### Pruning Bamboo

There are no hard and fast pruning rules. Some people prefer a dense-looking grove, while others remove canes to develop a more open appearance. A general rule of thumb is to remove canes that are five to seven years old. Always remove dead canes. Use a sharp pair of shears or handsaw to cleanly remove the cane at the soil line.

#### Bamboo as a Food

Newly emerged bamboo shoots are often used for food. Bamboo is best eaten fresh, but it can be canned or frozen. Fresh bamboo has a crisp, sweet flavor and can be eaten as soon as shoots are harvested, although some species have to be boiled or soaked in water to remove an acrid taste.

Bamboo has the same nutritional value as onions and is a good source of fiber. It is usually used as an extender since it takes on the flavor of the food it is being cooked with. An established bamboo grove will produce 10,000 to 20,000 pounds of shoots annually, depending on the variety.

#### Cold-Tolerant Bamboo

If area temperatures get below 10 degrees Fahrenheit, you should grow cold-hardy bamboo species. A dry, silvery color is an indicator of cold injury. Visit the American Bamboo Society Web site (www.bamboo.org/abs/SpeciesSourceListPages/ColdHardyBamboos.html) for a list of cold-hardy varieties.

#### Falling Leaves

Although bamboo is an evergreen, there is a considerable amount of leaf drop in the spring as new leaves develop. You can leave the leaves on the ground as a mulch and fertilizer.

#### Insects and Diseases

Most bamboo is resistant to insects and diseases, although some species are susceptible to scale insects, red spider mites and rust. Many bamboo growers don't believe mites are a problem until they are brought into the grove on new plants. For this reason, it is recommended that new plants be put into quarantine, sprayed with a miticide and inspected closely before being set in their new site. Contact your county Extension agent at 1-800-ASK-UGA1 for recommended controls.

(See images on page 8.)

Propagating Clumping Bamboo (Bambusa multiplex cultivars and species)

Although it can be difficult, there are several ways to propagate clumping and running bamboo, including seeding, single node cuttings, trench layering and clump separation. Each bamboo species has different characteristics and different propagation requirements, although clumping types lend themselves to an easier, more time-consuming method than running types. Use the following measurement recommendations as guides only.

Seeding - This method is by far the easiest and most prolific way to obtain new plants, but seed imported from outside the United States must be quarantined for one year. The bamboo flowering cycle can be between one and 150+ years. As a rule, bamboo does not set many viable seed even though the whole grove may flower gregariously. Storage life is short, even under the best conditions. If you are fortunate enough to obtain seed, it should be sown as soon as possible. In a greenhouse starting bed, use any good seed-starting medium. Set the seeds 4 inches apart and deep enough to be well covered. They will germinate in about three weeks, and should be shaded for the first summer.

Culm cuttings - Use ½- to 2-inch diameter culms that are two to three years old. These culms are usually located on the perimeter of the clumps. Cut the culm flat, and as close to the ground as possible. Remove the top portion down to the ½-inch diameter cane. Cut the cane about 1 inch above the node. Drop below the node approximately 4 to 4½ inches and make a cut. Continue cutting the cane until reaching the maximum diameter for the propagation stock. Remove the very small branches and reduce three to five of the very largest branches to the second node from

the culm. These cuttings can be placed flat in the starting medium or set at a 20-degree angle. In both cases, the medium should cover the node completely. The branches do not have to be completely covered. New growth should appear in about six weeks.

Trench layering – Trench layering can be done from late March into early June. Use the lower 20 or so nodes on one- to two-year-old strong culms located on the outer edge of the grove. Remove all of the small branches and shorten three to five of the main branches on the second node. Cut the culm through about 2/3 of its diameter, just above the soil line. Dig a trench approximately 6 inches deep and place the lower 20 nodes of the stripped canes into the trench. Cut the top off, leaving only one full branch with leaves above the soil line. Cover the lower 20 internodes with soil. In about three months, shoots should appear at each node.

**Dividing** - Remove the plant from the pot. The pot may need to be cut to get the plant out. Inspect the plant and determine where to cut into the rhizomes to do the least damage. The soil from the rhizomes may need to be washed off to make this decision easier. Using a stiff spade or an old saw, make the cuts and repot. If the plant is heavily root-bound, cut the plant in half or make three or four sections, depending on the size of the plant. It is better to have two plants that live than three that do not. Plant immediately and water thoroughly. Shade bamboo planted outside the first year.

#### Propagating Running Bamboo

Rhizome cuttings - Select a plant on the outer perimeter of a grove. Loosen the soil around the plant to determine the direction the rhizome is growing. After determining the direction, carefully uncover as much of the rhizome as possible. Use care when exposing the rhizome so as not to damage any of the viable buds. Two- to three-year-old material should be used. The rhizome buds and roots should be bright and vigorous. If the rhizome is dark or spotted, it is probably over three years old and should not be used.

Sever the rhizome, taking care to leave a sufficient amount intact to continue to support the mother plant. Using a stiff spade or your hands, start at the severed end and lift from under and along the sides. After removal, keep the material moist and out of the wind and sun. January through March is generally the best time to dig rhizomes, depending on the sprouting time of the species selected.

For bench culture, cut the rhizome into 12- to 14-inch lengths with two or more viable buds. Set in trenches and cover with 2 to 4 inches of medium. Firm the soil over the propagated plantings, water-in well, and keep moist and warm. Single node cuttings can be done in pots. Shoots should begin to emerge in about four to six weeks.

Two-year nursery culture - Ideally, a nursery should be started with rhizomes from two- to three-year-old plantings. This is not always possible and sometimes older rhizomes must be used; however, a satisfactory nursery can be developed by consolidating the few plants and rhizomes that do develop the first two years from this planting and multiplying these on a two-year production cycle. A two-year program is necessary because one season's growth does not produce enough satisfactory rhizomes.

Cut the rhizomes into 14- to 16-inch lengths and place them end-to-end in parallel rows spaced 3 feet apart, and in furrows 5 to 6 inches deep. This spacing allows for aggressive competition and ease of removal by tractor and plow.

For a 1-acre planting, 29,000 feet of rhizomes are required for these specifications. Under average conditions, in two seasons, this planting will produce about one plant unit (with one or more culms) per foot of nursery row, which equals about 15,000 plants per acre. In addition, 50,000 to 75,000 feet of rhizomes can be produced for replanting or sale.

It is not necessary to apply inorganic fertilizer at planting, as the quantity of nutrients rhizomes take from the soil is negligible because the rhizomes will be living on stored food. If the soil is subject to leaching, the fertilizer would probably be lost before the plants could benefit from it. Incorporating manure into the soil before planting will provide a gradual supply of nutrients.

Apply fertilizer approximately three months after planting; by then, the rhizomes will have developed roots. Thereafter, scheduled applications should be made in February, June and September. Bamboo is a heavy feeder. Any fertilizer formulated for turf will work. Weed control is a must the first season, but may not be possible the second season due to the emergence of new shoots.

After two growing seasons, harvest plants and rhizomes from late February to early March, depending on climatic conditions in the area. Make one pass



Cane or Culm (left) on new shoot (middle), and week-old shoot (right)



Bamboo flowers (seeds have been spent)



Typical cold injury symptoms on bamboo: dry, silvery-type color.

#### Insects and Disease



Bamboo spider mite: colony, eggs, webbing Photo: Oregon State University Extension Urban Entomology Web site



Fungus on bamboo



Mite injury on bamboo leaf Photo: Oregon State University Extension Urban Entomology Web site



Scale on bamboo



Paper wasp nest

### Clumping Bamboo

Bambusa dolichomerithalla Green Stripestem



Bambusa multiplex Alphonse Karr













Bambusa multiplex Fernleaf







Photos: Frank Linton

### Clumping Bamboo

Bambusa multiplex Fernleaf Stripestem





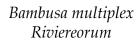


Photos: Frank Linton

Bambusa multiplex Golden Goddess



Photo: Frank Linton





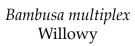
Bambusa multiplex Silverstripe

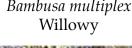




### Clumping Bamboo











Running Bamboo

Chimonobambusa tumidissinoda





Photos: Frank Linton

Photos: Frank Linton

Phyllostachys aurea holochrysa Golden Golden





Running Bamboo

Phyllostachys bambusoides Giant Japanese Timber Bamboo Madake





Phyllostachys vivax Vivers Bamboo



Phyllostachys nigra Black Bamboo





Sasa veitchii Kuma-Zasa



Phyllostachys nigra Henon





Running Bamboo

Phyllostachys rubromarginata Red Margin Bamboo





Pseudosasa japonica Arrow Bamboo







Sinobambusa tootsik albostriata





Photos: Frank Linton

with a plow along one side of the row. Clear each row of all plants and rhizomes before proceeding to another row. Move the material to a shaded area and keep it moist. Remove rhizomes for the next planting from the plants, cut to length, and cover with a moist medium or heel in. Be sure to leave enough rhizome to support the original plant. The plants and rhizomes can be potted or heeled in for several weeks as long as they are kept moist and covered with a proper medium. Removed plants that are to be potted or sold should have rhizomes with at least two viable buds attached.

The size of the culm produced depends on the amount of food stored in the rhizome and root system. A rhizome 2 to 14 inches in length will produce at least one culm averaging 2 feet in height the first season. During the second season, it can produce shoots that will attain heights of 4 to 10 feet. The culm height and rhizome spread depends on species, soil type, fertilization and climatic conditions. Larger species may take six to 10 years to develop a rhizome system capable of supporting mature shoots.

#### Digging Single Plants

**Single plant removal** - S. Sato, an expert on Moso bamboo culture, has said that a bamboo planted by one man takes 10 years to make a grove, but a large bamboo plant requiring 10 men to plant makes a grove in one year. So, bigger is better as far as bamboo transplanting is concerned, but it is more expensive and more labor intensive.

Generally, a plant with a rhizome 2½ feet long works well for transplanting large propagules. After being severed and lifted from the soil, the rhizome is the sole support of the plant until the root system becomes re-established. In all cases, enough rhizome needs to be lifted with the plant to carry it through to the time of re-establishment. Select two- to three-year-old plants from the perimeter of the grove or planting since the digging will be easier and most of the younger plants will be found there.

Dig the area around the plant to about a 2½-foot diameter using a heavy steel spade or other heavy digging instrument. Cut all of the rhizomes around the plant. Usually, but not in all cases, all of the rhizomes will be found within 6 to 18 inches of the soil surface. When two plants are growing within 6 inches or so of each other, they should be dug as one plant. Separating the two sometimes kills both plants unless one is quite small.

When the root ball is loose in the hole, use a shovel or other levering device to lift the plant from the hole. It is not wise to lift the bamboo by its culm, as the culm may break where it is attached to the rhizome. Keep as much soil attached to the root ball as possible to prevent over-drying. When plants are dug at the proper time, branches do not have to be removed; however, if the leaves begin to curl upward, then some of the branches must be removed to balance the shoots with the roots. Small plants dug for nursery planting usually do not need to have branches removed, although these same plants do not need more than four leafy branches. If branches are removed, don't break them off at the culm. Use hand pruners or lopping shears to cut them to prevent injury to the culm. When a culm is cut, it dies from the point of cut to the first node below it. The cane below the node will not die.

Leave enough soil on the root ball to cover the roots. This is almost impossible when digging by hand. For this reason, the plants should be moved to the shade and kept moist until potted or set out in the nursery. Plants can be kept for some time by heeling them in a moist medium.

Make the planting hole about twice as large and the same depth as the rootball. Bamboo always shows the ground line clearly: the aboveground part is green and the belowground plant is yellow. Plant to cover the yellow part. Some bamboo will grow adventitious roots from the culm, which will help the plant recover its growing vigor. If soil has been lost from the rootball, root rhizomes are exposed, or the rootball is planted in dry soil, a method known as "water culture" can be used at planting. Water culture involves putting water in the planting hole, adding soil and making mud. Place the plant in the hole, then add more soil and water until the hole is filled. As with all plantings, it is important to pack the soil firmly around the root ball to remove any air pockets that could kill true roots and rhizome. Always water-in well.

Bamboo can be dug at any time of the year, but the risk of the plants dying is much greater when they are producing new shoots or during summer months. The best time to transplant is just before new shoots emerge. In Georgia, and most of the Southeast, transplant time will range from early February to mid March. Bamboo requires about 1 to 1½ inches of water per week on well-drained soils. Water bamboo in half-inch increments every few days for the first three or four months until it has established a self-sustaining root system.

# Recommended Clumping Bamboo for Georgia

Listed below are just a few species and varietal recommendations. There are many more from which to choose. Most of these bamboos require full sun, but some prefer partial shade.

Bambusa dolichomerithalla - 'Green stripestem'
Bambusa multiplex - Hedge bamboo
Bambusa multiplex cv 'Alphonse Karr'
Bambusa multiplex cv 'Fernleaf'
Bambusa multiplex cv 'Fernleaf stripestem'
Bambusa multiplex cv 'Golden Goddess'
Bambusa multiplex ssp 'Riviereorum' - Chinese Goddess
Bambusa multiplex cv 'Silverstripe'
Bambusa multiplex cv 'Tiny Fern'
Bambusa multiplex cv 'Willowy'

#### Clumping Bamboo

**Scientific Name** - *Bambusa dolichomerithalla* - cv 'Green stripestem'

**Common name** - Green stripestem

Type - Clumping

**Minimum Temp** - 15° F

Maximum Height - 35 feet

Maximum Diameter - 2 inches

Use - Ornamental, utilitarian, agricultural

**Comments** - Yellow-green culms striped with dark green

**Images** - Page 9

**Scientific Name** - *Bambusa multiplex* **Common Name** - Hedge Bamboo

**Minimum Temp** - 12° F

Maximum Height - 25 feet

**Maximum Diameter** - 1½ inches

**Use** - Ornamental, windbreaks, utilitarian, agricultural tools, paper pulp

**Comments** - Node has large number of branches down the culm base, making a dense hedge.

Hardiest of the *Bambusa*.

**Images** - Page 9

**Scientific Name** - *Bambusa multiplex* cv 'Alphonse Karr'

Common Name - Alphonse Karr

**Type** - Clumping

**Minimum Temp** - 12° F

Maximum Height - 25 feet

Maximum Diameter - 1½ inches

Use - Ornamental

Comments - Each node bears many branches, which make dense hedges. Culms and branches are bright yellow with irregular longitudinal, narrow, dark green stripes.

**Images** - Page 9

**Scientific Name** - Bambusa multiplex cv 'Fernleaf'

Common Name - Fernleaf

**Type** - Clumping

**Minimum Temp** - 12° F

Maximum Height - 20 feet

Maximum Diameter - ½ inch

Use - Ornamental

**Comments** - Small size, 10-20 closely spaced, two ranked leaves, culms often revert to the larger leaves.

**Images** - Page 9

**Scientific Name** - *Bambusa multiplex* cv 'Fernleaf stripestem'

Common Name - Fernleaf stripestem

**Type** - Clumping

**Minimum Temp** - 12° F

Maximum Height - 12 feet

Maximum Diameter - ½ inch

**Comments** - Similar to 'Fernleaf' except culms are reddish or yellowish and striped with green.

**Image** - Page 10

Scientific Name - Bambusa multiplex cv 'Golden Goddess'

Common Name - Golden Goddess

**Type** - Clumping

**Minimum Temp** - 12° F

Maximum Height - 10 feet

Maximum Diameter - ½ inch

Use - Ornamental

Comments - Dwarf form and similar to 'Fernleaf' but with larger leaves. Culms tend to be yellowish and sensitive to cold. A good indoor plant

**Images** - Page 10

**Scientific Name** - Bambusa multiplex ssp 'Riviereorum'

Common Name - Chinese Goddess

Type - Clumping

**Minimum Temp** - 12° F

Maximum Height - 6 feet

Maximum Diameter - 1/4 inch

Use - Ornamental

Comments - Solid culms, tiny leaves

Image - Page 10

**Scientific Name** - Bambusa multiplex 'Silverstripe'

Common Name - Silverstripe

Type - Clumping

**Minimum Temp** - 12° F

Maximum Height - 25 feet

Maximum Diameter - 1 1/4 inches

**Use** - Ornamental, utilitarian such as for tools, fences, poles, etc.

**Comments** - Light green culms striped with dark green.

Images - Page 10

Scientific Name - Bambusa multiplex cv 'Tiny Fern'

Common Name - Tiny Fern

Type - Clumping

**Minimum Temp** - 12° F

Maximum Height - 3 feet

Maximum Diameter - 1/8 inch

Use - Ornamental

 $\label{lem:comments} \textbf{Comments} \textbf{-} A \, dwarf \, form \, with \, leaves \, is \, often \, less$ 

than 1 inch long

**Images** - Page 11

**Scientific Name** - *Bambusa multiplex* cv 'Willowy'

Common Name - Willowy

Type - Clumping

**Minimum Temp** - 12° F

Maximum Height - 20 feet

Maximum Diameter -34 inch

Use - Ornamental

Comments - Culms droop or arch; small, narrow

leaves

**Images** - Page 11

## Recommended Running Bamboo for Georgia

Listed below are just a few species and varietal recommendations. There are many more from which to choose. Most of these bamboos require full sun, but some prefer partial shade.

*Chimonobambusa tumidissinoda -* prefers 60 percent shade

Phyllostachys aurea holochrysa - 'Golden Golden' Phyllostachys bambusoides - 'Giant Japanese Timber Bamboo,' Madake

Phyllostachys nigra - Black Bamboo

Phyllostachys nigra - 'Henon'

Phyllostachys rubromarginata - Red Margin Bamboo

*Phyllostachys vivax* - 'Vivers Bamboo' *Pseudosasa japonica* - 'Arrow Bamboo'

Sasa veitchii - 'Kuma-Zasa' (needs shade)

Sinobambusa tootsik albostriata

#### Running Bamboo

Scientific Name - Chimonobambusa tumidissinoda

Common Name -none

Type - Running

**Minimum Temp** - 10° F

Maximum Height - 20 feet

Maximum Diameter - 11/4 inches

**Use** - Crafts, and shoots for food

**Comments** - Rare Chinese bamboo with inflated culm nodes, prized for dried shoots and walking sticks.

Note: Needs 60% shade

Images - Page 11

Scientific Name - Phyllostachys aurea holochrysa

Common Name - Golden Golden

**Type** - Running

**Minimum Temp** - 10° F

Maximum Height - 27 feet

Maximum Diameter - 1¾ inches

Use - Crafts, utilitarian, shoots for food, ornamental

**Comments** - Culms stay green to gold and then switch to yellow and golden orange

**Images** - Page 12

**Scientific Name** - *Phyllostachys bambusoides* 

Common Name - Giant Japanese Timber Bamboo,

Madake

Type - Running

**Minimum Temp** - 5° F

Maximum Height - 72 feet

Maximum Diameter - 6 inches

Use - Medicine; shoots for food, buildings and crafts

Comments - Most-used bamboo in Japan

Images - Page 12

Scientific Name - Phyllostachys nigra

Common Name - Black Bamboo

Type - Running

**Minimum Temp** - 10° F

Maximum Height - 30 feet

Maximum Diameter - 2 inches

**Use** - Ornamental, medicine, shoots for food, building

materials

Comments - Culms turn black after 6 months

**Images** - Page 12

Scientific Name - Phyllostachys nigra, 'Henon'

Common Name - Henon

Type - Running

**Minimum Temp** - 0° F

Maximum Height - 65 feet

Maximum Diameter - 4 ½ inches

**Use** - Building houses, structures, bridges, shoots for food, crafts, medicine, utilitarian and agricultural tools.

**Comments** - Culms are green and larger than black bamboo. Distinctive culms are rough and whitish

green.

**Images** - Page 13

Scientific Name - Phyllostachys rubromarginata

Common Name - Red Margin Bamboo

Type - Running

**Minimum Temp** - -5° F

Maximum Height - 55 feet

Maximum Diameter - 2 ¾ inches

Use - Crafts, building houses, structures, bridges,

shoots for food, utilitarian, textiles

**Comments** - Good quality wood, edible shoots, good cold and dry wind tolerance, good culm

production.

**Images** - Page 13

**Scientific Name** - Phyllostachys vivax

Common Name - Vivers Bamboo

**Type** - Running

**Minimum Temp** - -5° F

Maximum Height - 70 feet

Maximum Diameter - 5 inches

**Use** - Building houses, structures, bridges, shoots for food, crafts, medicine, utilitarian and agricultural

tools, textiles.

**Comments** - Resembles P. bambusoides except with thinner wall culms; has a powdery white band beneath each node at sheath fall. Gray-green when mature.

**Images** - Page 12

Scientific Name - Pseudosasa japonica

Common Name - Arrow Bamboo

Type - Running

**Minimum Temp** - 0° F

Maximum Height - 18 feet

Maximum Diameter - ¾ inch

Use - Make arrows

Comments - Culms are erect with large leaves (up to 1 foot long by 1.5 inches wide), less invasive than most running bamboos, does well in tubs and

pots.

**Images** - Page 13

Scientific Name - Sasa veitchii

Common Name - Kuma-Zasa

**Type** - Running

**Minimum Temp** - 0° F

Maximum Height - 5 feet

Maximum Diameter - 1/4 inch

Use - Ornamental

Comments - Large dark green leaves turn white along

margins. **Note**: Needs heavy partial shade.

Image - Page 12

Scientific Name - Sinobambusa tootsik albostriata

Common Name - none

**Type** - Running

**Minimum Temp** - 10° F

Maximum Height - 30 feet

Maximum Diameter - 1 ½ inches

**Use** - Can be trimmed into different shapes

**Comments** - Yellowish white striped leaves

**Images** - Page 13

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