

## Bamboos at Suncrest Nurseries Inc.

Since the purchase of Wintergreen Nursery and its plant collection in 1992, bamboos have been a major pursuit at Suncrest. Our offerings have grown over the past decade from a base of perhaps forty to about ninety species and cultivars. Original selections have been made from seedling batches at the nursery, and a network of friends has provided many exciting new cultivars for trial. Given the current surge of public interest in the group, we expect this trend to continue for some time.

### Features of the Group

The bamboos are giant woody grasses. They have a variety of habits, but all involve the production of major culms, or stems, from branched underground rhizomes. When the rhizomes are short and the culms closely set, the overall impression is usually that of a fountain; bamboos with this habit are known as “clumping” types. When the rhizomes are extended (in extreme cases, for several feet at a stretch), the result is a thicket, its density dependent on the actual spans between shoots, the frequency of branching of the rhizomes and the thickness of individual culms. Bamboos with this habit are often referred to (and often mislabeled) as “running” bamboos, though many would be more appropriately described as “creeping”. In either case, the culms can vary in height from under a foot to 70' or more. Each one springs from the ground and rises to full height in a single season. The culms are usually branched along their upper reaches, sometimes profusely so, and the initial branches may themselves rebranch several times. The leaves are often set in opposing rows at and near the branch ends. The leaves themselves range from under an inch to well over a foot long and vary in form from narrow and rib-bon-like to broadly oval. The upper surface is usually dark and often shiny, colored a deep to pale green or distinctly blue- or grey-green. The lower surface is usually lighter and duller, even chalky in appearance.

Bamboos normally flower only after many years, usually several decades, revealing their alliance to other grasses with large clusters or open panicles of petal-less spikelets. Some species actually die after setting huge quantities of seeds. Others are weakened for a short period, then gradually resume normal vegetative growth. There have been many flowerings of popular bamboos in the last two decades, resetting their biological clocks and providing copious material for new horticultural selections.

### Uses and Culture

Bamboos are revered by gardeners around the world for their distinctive forms and textures. The clumping types make elegant fountains. Sometimes the weight of great sprays of branchlets and leaves bends the culm tips almost to the ground. The more slender-stemmed of the “running” types form natural hedges and screens with little effort on the gardener's part. Others like the larger *Phyllostachys* take on the appearance of groves of trees. Regardless of growth habit, the culms may be either various shades of green or highly colored (gold, maroon and even black are not unusual) and have a satiny sheen. The swollen nodes give added interest with waxy, sometimes multicolored rings. Larger, darker leaves make a dramatic statement, while smaller leaves, especially those borne in open sprays, give a wonderfully delicate impression, like oriental paintings come to life.

Besides the aesthetic pleasure they provide, bamboos have many strategic uses in the garden. Hedges and screens have been mentioned. They also superbly fill the role of specimen shrub or tree (or in some cases, a whole grove). They are sometimes used simply to fill large spaces with pleasant foliage. With adequate watering and periodic division, they make outstanding subjects for large tubs and decorative boxes. And they have a utilitarian side. Bamboos have been successfully employed for erosion control on large banks and other open areas, and even for filtering polluted runoff from agricultural and other operations.

Bamboo culture is generally quite straightforward. The first important step is to choose a bamboo sufficiently hardy for your climate (or make a conscious decision to protect it in winter). All of the bamboos we offer will thrive outdoors at least along the coast, but some can only survive with protection where winter temperatures can dip below 25 °F. On the other hand, there are many species, including some of quite tropical appearance, which can endure temperatures of 10°F or below. Other considerations are summer heat and drying winds. Species of cool mountain forests, like some *Fargesia* species, may be scorched and disfigured by continually hot, dry air. Others, like many *Phyllostachys*, thrive even in the Central Valley as long as they are adequately watered.

Regarding actual care and feeding, the bamboos revel in the conditions given many popular leafy shrubs and trees. Most thrive in either sun or light shade near the coast. As one moves inland, with hotter, drier summers, some will perform much better with shading from an overhanging tree, while others continue to revel in full exposure. Most bamboos should have reasonably well-drained soil, though there are plenty of exceptions. Watering is often a negotiable matter, with plants growing larger or smaller according to the gardener's generosity. However, few bamboos are genuinely drought tolerant. Their demands for nutrients are moderate but should not be neglected. A nutrient-starved plant will show its resentment with stunted growth and pale, yellow-tinged leaves.

Individual requirements are included in the descriptions which follow for each genus and some times (especially in the case of cold hardness), for individual species.

## Selections Currently Grown at Suncrest Nurseries

**ARUNDINARIA.** This was once a large group of Asian and North American bamboos. However a recent wave of botanical reclassification has put most of the species familiar to gardeners (those also listed at one time as *Sasa*) into the genus *Pleioblastus*. Bamboo buffs are by now used to finding new names every few years on their favorite plants. Those still in *Arundinaria* are of the running type, with elongate rhizomes, but vary from fearsome spreaders, best contained in concrete tubs, to well-behaved natural hedges. Sun or shade near the coast, best in part shade in land, most soils, moderate watering. Hardy as shown.

***anceps*** (*Yushania anceps*). An elegant bamboo, with slender stems growing nearly erect to about 15'. The older stems are dark green to brown, with straw-colored bracts. It produces broad sprays of branchlets carrying narrow leaves, usually 2½-4" long, with pale undersides. '**Pitt White**' is a popular British selection with particularly long, gracefully drooping leaves. The stems may arch over almost to the ground from their weight. This is one of the least aggressive of the group, making fine informal hedges and container specimens. 0°F.

***argenteostriata***. See *Pleioblastus argenteostriatus*.

***disticha***. See *Pleioblastus distichus*

***gigantea* ssp. *tecta***. This plant once covered large areas in the southeastern U.S. Little of it now remains. It forms broad thickets, with bright green to yellow culms that rise to about 8'. Leaves are broad, up to 10" long, and light green in color. Be low 0°F.

***graminea***. See *Pleioblastus gramineus*.

***simonii***. See *Pleioblastus simonii*.

***variegata***. See *Pleioblastus variegatus*.

***viridistriata***. See *Pleioblastus viridistriatus*.

**BAMBUSA.** Wide spread, mostly in the tropics. A group of clumping (short-rhizome) bamboos, now enjoying renewed popularity with California gardeners. They vary enormously in size, form and texture. Many are too tropical even for California, being injured even by slight frosts. Several, however are useful ornamentals here. All are easily grown, though varying drastically in size and other features according to their cultural regimen. Sun to moderate shade, most soils, variable watering. Hardiness varies as shown below. The following give a reasonably broad representation of the group.

***glaucescens* (*multiplex*)**. Though quite variable, this species has several distinctive features. The plants form compact clumps. The stems are slender and bear sprays of short branchlets along the upper nodes. 2-4" leaves are arranged in neat, opposing rows on the branchlets. The selection '**Alphonse Karr**' has beautiful pink stems in new growth, these changing gradually to gold or light orange with dark green stripes. There is also a '**Green Alphonse Karr**' with only lighter and darker green shading. '**Golden Goddess**' is similar though usually smaller growing, with yellow stems and dense brushes of leaves. '**Silverstripe**' is more open in habit, more vigorous and ultimately larger. The stems follow a distinctly zigzag path and bear open sprays of cream-variegated leaves. '**Rivierorum**', Chinese goddess bamboo, is the smallest of all in stature and has the tiniest, most closely spaced leaves. With full exposure and occasional watering, the smaller selections will stay below 8' (4-6' in the case of 'Rivierorum'), the larger probably 10', while shady conditions, rich soil and regular watering can double their size. These are excellent plants for screening and hedges, and thrive even when rootbound in containers. About 15°F.

***oldhamii***. Clumping timber bamboo. Though still moderate by the standards of some tropical species, this is certainly as large a bamboo as most gardeners could desire, reaching 40-50' with age and forming impressive clumps. It has thick dark green canes aging yellowish green, with conspicuous nodes and lustrous large, dark green leaves, lighter beneath. Hardy to around 20°, though plants have resprouted from the base after harder freezes.

***textilis*** Weaver's bamboo. This is one of the new objects of considerable attention among bamboo buffs, due to its combination of clumping habit and relative hardiness. It grows from a tightly packed (which is not necessarily to say, narrow) base, with many arching culms 20-40' high and up to 2" in diameter. They are thin-walled and flexible enough to be widely used for baskets and thatching, but still reasonably strong. The culms are attractively exposed below, with open sprays of rather stiff, deep green leaves above. It is reputedly hardy to 15°F. or less.

**ventricosa**. Bud dha's belly bam boo. In ter me di ate in scale be tween the last two spe cies, this one can reach 40' or more un der lush con di tions but usu ally stays much smaller. The bright green stems fol low a some what zig zag course and may, in age or un der stress by ex po sure and drought, de velop gro t esque swell ings be tween the nodes. The 6" leaves are bright green and softly shiny. In my mind, this is the most el e gant of all the bambusas. Hardy to 20°F. or less.

**BORINDA boliana** (pre vi ously listed as *Himalayacalamus "intermedius"*). This one seems to have puz zled even tax o n o mists un til very re cently; who knows whether this will be its last change of iden ti ty. The plant is in many respects similar to the blue bamboo (*Drepanostachyum / Himalayacalamus falcatum*). It forms com pact clumps with erect stems, 15' high or more on ma ture plants. Young stems ap pear to have been dusted with blue chalk. Later they show a light blue-green over all. Wiry branch lets 1-2' long hold airy sprays of dark green 3-4" leaves. This should be come a pop u lar bam boo among coastal gar den ers. It is more sun tol er ant than other spe cies. Its har di ness is poorly tested; as sume about 25°F.

**CHIMONOBAMBUSA** China and Ja pan. Run ning bam boos of vari able height, branch ing habit and fo liage, though all of those in cul ti va tion are highly or na men tal. The two which fol low may be grown in sun or light shade, in most soils with mod er ate to reg u lar wa ter ing. Hardy to 20°F or below.

**marmorea**. Mar bled bam boo. One of the smaller spe cies, gen er ally un der 6' tall, this one also makes ex ceptionally dense thickets useful for informal hedges. The arch ing stems are dark green chang ing to nearly black. Youn ger shoots show lengths of bare stem al ter nat ing with pale, pink-striped bracts (when they first emerge, they are also ed ible and sweet). The short branches are held nearly erect to cr e ate nar row brushes of shiny 3-5" leaves. The se lec tion '**Variegata**' has ir reg u lar cream strip ing. The major draw back of this beau ti ful bam boo is its pro pen sity for in vad ing ad ja cent plantings, though it is much more eas ily re moved than some *Phyllostachys* spe cies.

**quadrangularis** Square-stemmed bam boo. More stiffly erect and con sid er ably larger than the last (up to 20'). It also has rel a tively thick stems, nearly square at the swol len nodes, and broad sprays of branches car ry ing long, nar row, bright green leaves. An el e gant bam boo.

**CHUSQUEA**. Bam boos. Mex ico to south ern South Amer ica. An un usual group of clump ing Amer i can bamboos, inhabiting both subtropical and temperate regions. Some are free standing, fountain-like shrubs. Oth ers have long, flex i ble stems which snake over other shrubs and trees. Their most distinctive fea ture is a dense cir cle of slen der branch lets, and some times larger branches from which new plants de velop, at each of the up per nodes. This gives them nearly the ap pear ance of a gi ant *Equisetum*. They are el e gant container subjects, though the size of the container needed will vary according to species and se lec tion. Sun or light shade, rea son ably well drained soil, reg u lar wa ter ing. The fol lowing have re cov ered af ter bouts of 20-25°F, the se ver ity of the dam age de pend ing on the sud den ness of the freeze.

**breviglumis**. A sturdy bam boo with arch ing, dark green stems to 15' or more. The nodes are en larged and partly cir cled by brushes of mostly 6-12" branch lets. The leaves are small and bright green in color.

**coronalis**. This is de scribed in a pub li ca tion of the Amer i can Bam boo So ci ety as "pos si bly the most beau ti ful bamboo in cul ti va tion" (actu ally, there are quite a few con tend ers at this poin t). It clumps freely but main tains a nar row base, from which wand-like stems arch to 10-20', of ten lean ing down to touch the ground. Along the mid dle and up per nodes are sprays of wire-like branch lets car ry ing tiny bright green leaves.

**foliosa**. This is one of the most dra matic of the chusqueas (or per haps of the bam boos in gen eral). It is a ro bust plant, grow ing up to 15' high, the sturdy culms stand ing bolt up right when young and gradu ally arch ing over with the weight of the fo liage. Each widely spaced node has a broad clus ter of 1-2' branch lets which form great puffs of nar row, dark green leaves, each up to 8" long. One would use this plant in the land scape much in the man ner of the larger bambusas, for ex am ple *B. textilis*. It has en dured tem per a tures of around 20°F. and may be hardier still.

**pittieri**. This spe cies has gained con sid er able pop u lar ity since the flow er ing of an old plant at the U.C. Botanical Garden in Berkeley and subse quent pro duc tion of thou sands of seed lings. It has grace fully arching stems and dense circles of drooping branchlets creating an almost continuous brush of soft, bright green 2" leaves. This should prove to be one of the best of the clump ing bam boos for coastal gar dens.

**DREPANOSTACHYUM**. Hi ma la yas. A group of showy, clump ing bam boos, most of which have been as signed to sev eral other gen era at one time or an other. Now they are on the march again, and I will soon have to change their list ing (*Himalayacalamus* their prob a ble des ti na tion). They have grace ful, slen der

branched stems bearing elegant sprays of narrow, deep to bright green leaves. All of them are easily grown, though most are attractive with protection against hot afternoon sun. Most soils, moderate to regular watering. Those listed below are hardy to 20-25°F. when established, though their ultimate limits are not well tested.

**falcatum** (*Himalayacalamus hookerianus*). Blue bamboo. A plant of moderate growth to about 20', with smooth, openly branched culms, colored a stunning, nearly turquoise shade when young. They are also marked with purplish bands above and below each node. The leaves are 5-8" long and rich, dark bluish green in color.

**falconeri** (*D. sengteeatum*). This species flowered several years ago, and many died, though not before setting copious seeds. Now we are able to offer not just random seedlings but some or na mentally superior forms from the new generation. This is a particularly graceful species, growing up to 15' high. It has slender arching green stems and open sprays of narrow, nearly sickle-shaped, bright green leaves.

**hookerianum** (*Himalayacalamus falconeri* 'Damarapa'). Candy-stripe bamboo. A taller species, possibly attaining 30' in the garden. It is one of the most colorful of the bamboos. The new culms are dark green with both pink and yellowish stripes, as well as pinkish bracts. Against these are set billowy masses of velvety deep green leaves, 4-7" long. Some leaves have a few narrow cream-yellow stripes, but this feature seems to come and go.

**FARGESIA**. Fountain bamboo. A group of showy, clumping bamboos mostly native to China. They are typically of moderate size, beginning their new round of growth with spear-like, unbranched shoots in the fall. These form clusters of branchlets bearing clouds of attractive, bright green to bluish green leaves the following spring. They are easily grown in sun or shade near the coast but need some shading and sheltering from hot, dry winds inland. Most soils, moderate to regular watering. They are among the hardiest of the clumping bamboos.

**dracocephala**. If you happen to own a giant panda and are wondering what to feed it, this will do nicely, as it does in the wild. Beyond that, it is an attractive orna mental, growing 10-15' high. It makes dense clumps of strong but slender stems, dusted with white wax when young. The leaves are 2-4" long, narrow and deep green in color. It is one of the hardiest of the genus, reportedly to be low 0°F.

**fungosa** (*Borinda fungosa*). This is a recent arrival from north eastern Yunnan, China. The plants were raised from seeds generously provided by the late Dr. Xue Ji-ru of the South western Forestry College to members of the 1993 Yunnan Bamboo Expedition group. It grows 10-15' tall, the stems erect at first but bowed over, some times nearly to the ground, by masses of dark green 4-7" leaves. The cream to light pink bracts on the new shoots are an added orna mental feature. We have selected for propagation individuals with deep chocolate and maroon culms and are offering them under these color designations. I would guess it to be hardy to 15°F. or less.

**murielae** (*Thamnocalamus spathaceus*, *Sinarundinaria murielae*). Umbrella bamboo. China. A dense, slender stemmed bamboo growing 8' or more tall. The branches carry broad sprays of light green 3-4" leaves, giving a decidedly lacy appearance. It is an excellent plant for large containers, though slow to get established. The original plants cultivated in California have been flowering and declining over the past several years. However, we are now raising a new generation of seedlings. Further selections will be made from these. Hardy to 10°F. or less.

**nitida** (*Sinarundinaria nitida*). China. This is certainly one of the most beautiful of the bamboos, and well suited in scale to the home garden. It makes close thickets of exceptionally slender purplish stems, 6-12' tall and well exposed below. Narrow leaves 2" to 3½" long, colored dark green above and bright bluish green below, are presented in lacy, open sprays. Adaptable to containers as well as to protected spots in the open garden. Too much sun, heat or drought causes the leaves to curl. Hardy to 0-10°F.

**HIBANOBAMBUSA tranquillans**. Among the most graceful of the bamboos, *Hibanobambusa* is claimed to be a hybrid genus, possibly involving species of *Pseudosasa* and *Pleioblastus*. The plants spread slowly by rhizomes, with slender, arching, sparsely branched stems, usually 4-6' high. The leaves are lance shaped, up to 6" long, dark and softly shiny on their upper surface. 'Shiroshima' is an outstanding cultivar. Its leaves are striped with yellow and cream-white. These are beautiful subjects for containers and oriental gardens. Best with light shade, moderately well drained, non-alkaline soil, and moderate to regular watering. Probably hardy to 10°F. or less.

**HIMALAYACALAMUS** (See also *Drepanostachyum*). Himalayan region. A group of elegant clumping bamboos, some of which you may have known under *Drepanostachyum*. Others are newly discovered and

described. They make compact, slowly spreading colonies. The stems are usually slender but erect at first, sometimes bowed out later into broad fountain by the weight of the foliage. They are often beautifully colored, with contrasting markings at the nodes. There are several to many slender branchlets at each node, carrying lacy sprays of narrow leaves. Most of them need some shading and protection from wind to look their best. Reasonably well drained, preferably acid soil and constant moisture suit them well. Hardiness will vary, though few of them will endure hard freezes outside.

**asper** (*Neomicrocalamus microphyllus*). If you can get past fear of the name, you will find this to be one of the most beautiful of all bamboos, period. It forms well-behaved, many-stemmed clumps. From the performance of my own plant at home, I will guess it to be ultimately 15-20' tall. The stems are slender and heavily tinged with red when mature. The branches are up to 2' long, open and airy, making a lacy presentation of narrow, deep green 3" leaves. Its hardiness has been tested here only to the mid 20s; the final minimum is unknown.

**OTATEA acuminata** var. **aztecorum**. Mexico. Mexican weeping bamboo. One of the most elegant of all bamboos. It has slender, arching stems up to 10' long in younger plants, considerably stouter and taller in old, established plants. They are widely branched and carry a thin veil of very narrow, bright green 3-6" leaves. This is a beautiful subject for containers, although it looks fairly shabby (or may even be deciduous, given hard freezes) in winter. Recently all material of the original clone in California flowered, and many died. From these have come thousands of seedlings, and a chance to make new selections. '**Chica**' (I had a change of heart about an earlier name) is a dwarf clone with many slender stems from the base and small, very narrow leaves. It should be ideal for small tubs, while the typical form is an elegant plant for larger containers. Sun or (preferably) light shade, reasonably well drained soil, moderate to regular watering. Ultimately hardy to 18°F or less when established, though damaged by any hard freeze.

**PHYLLOSTACHYS**. China, Japan, Himalayan region. These include perhaps the commonest bamboo of the trade (*P. aurea*), some of the largest of the timber bamboos, and a variety of lesser-known, highly ornamental species of various shapes and sizes. They are of the running type, but to a highly variable degree. The main stems are usually somewhat zigzag in growth, flattened or channeled on alternate sides between the nodes, and carrying 2-3 major branches at each upper node. The leaves often have a lush, deceptively tropical appearance. Culture varies, though most thrive in sun or shade, most soils, and a wide variety of watering and feeding regimes. The following are hardy to 10°F. or less.

**aurea**. Golden bamboo. We grow this old favorite in response to popular demand, though with reservations. It is one of the species most responsible for the bamboos' reputation as fear some in vaders. The typical form makes impenetrable thickets—wonderful for barriers and giant hedges, a nightmare to control in the smaller garden. The culms are up to 20' tall and 2" in diameter. They are bright green when young but gradually change to a dull gold. The branches bear generous sprays of 2-4" leaves, dark green under ideal conditions but pale and yellowish under stress. More interesting are some selected forms with unusual features. '**Koi**' is distinguished by dark green grooves on an otherwise typical, golden stem. 0°F.

**aureosulcata**. Golden groove bamboo. An extremely hardy species with several features of interest. It may reach 30', though it is usually much less. The stems are relatively slender and often follow a zigzag course. Between each pair of nodes runs a golden yellow groove. Leaves are up to 6" long, narrow and softly shiny. The variety **alata** is similar but has a distinctly zigzag pattern of growth. The grooves are colored green instead of gold. '**Spectabilis**' is about what the name implies—an exceptionally showy selection. The stems are patterned in reverse of the typical form, golden overall with deep green grooves. Below 0°F.

**bambusoides**. Madake. This is the classic timber bamboo. It is moderate in growth and innocent-looking when young but can eventually reach a height of 70' and a stem diameter of 6". Fortunately, in our climate it is usually much smaller. It has elegant bright green stems with conspicuous rings at the nodes, and large, softly shiny leaves. '**Castillon**' ('Castillonis', *castillonii*) is a selected clone growing about 30' tall, smaller than typical forms but still impressive. The stems are up to 2" in diameter, golden yellow overall with striking dark green grooves. It has the same towers of lush, dark leaves as other forms. We have also received a selection, identified only as of the *P. bambusoides* complex, perhaps a form of *P. vivax* or another related species. It has smaller leaves but otherwise, nearly identical features to typical *P. bambusoides*. The selection long known as '**Slender Crookstem**' is considerably smaller than typical *P. bambusoides*, with many slender stems. These grow in a marked zigzag pattern. About 0°F.

**dulcis**. Sweetshoot bamboo. This bamboo is valued for its sweet shoots, which have little of the bitter substances common in other species. It grows as much as 40' high, with green stems over 2" in diameter. It makes large, attractive brushes of deep green leaves up to 5" long. Below 0°F.

**mannii** (cv. 'Mannii?'). An Indian species of distinct habit. It makes dense hedge-like thickets, with rather slender, well-branched stems 15-20' high. The leaves are dark green, narrow and up to 6" long. The whole plant has a bright, clean look and is valuable for screens and natural hedges. 10°F. or less.

**nigra**. Black bamboo. One of the best-known and best-loved of the bamboos. It forms large thickets of 8-20' stems, each green when young, becoming polished and nearly black in age. The branches arch gracefully, presenting open sprays of dark green leaves up to 5" long. The selection '**Bory**' has stiffer, straighter culms with brown spotting which creates a tortoise shell pattern. '**Henon**' (*henonis*) is more like one of the timber bamboos, with greyish green culms up to 50' high and 3" in diameter. All are hardy to around 0°F.

[**praecox**]. The brackets indicate some question about its identity. As a young plant, it is distinguished by its profuse habit, resulting in dense thickets, and slender, well-branched stems. If it is truly *P. praecox*, it should reach about 30' in height, with stems up to 3" in diameter. The young shoots should be edible and choice. The leaves are about 4" long, dark and shiny. With annual division, it makes a very attractive specimen for tubs. Allowed to roam, it is an impressive bamboo for the open garden. Probably 0-10°F.

**pubescens** (*heterocycla, edulis*). Moso bamboo. Eventually one of the truly gigantic timber bamboos (up to 70'), Moso is relatively restrained in its youth. It makes a thick hedge of slender, intricately branched stems with short, broad, satiny leaves. Along the ultimate branchlets, each node has a white, waxy ring and a collar of short, bristly hairs. I have selected some of the most promising plants from two large seedling batches and decided to name one for distribution. This is '**Shining Light**', distinguished by particularly large, bright green, very shiny leaves. All are elegant subjects for large tubs, as well as the open garden, and among the hardiest bamboos.

**viridis** (*mitis*) '**Robert Young**'. A vigorous grower, forming thickets of 15-30' stems, each bright green when young, aging yellow-green with darker green stripes. They are well-branched above to make a lush display of shiny 3-5" leaves. The foliage color is best in light shade.

**PLEIOBLASTUS**. China and Japan. This is the new repository for most of the bamboos you thought you knew as *Arundinaria*. They are variable in size and spread, though most are capable of forming large thickets, smothering nearly any other plant in their path. The best remedy is usually either drought or containment in large tubs or planter boxes. They have rather slender stems, branched above to display sprays of ornamental lance-shaped leaves. They thrive in sun or part shade (the variegated types should be shaded in hot-summer areas), in most soils, with moderate watering. Hardiness varies as shown.

**argenteostriatus** (*Arundinaria argenteostriata*). The most delicately textured of the species we have grown to date. It has very slender, profusely branched stems, 3' tall or less, and sprays of small, heavily cream-striped leaves. 10°F. or less.

**chino**. A Japanese species with stems 6-12' high and leaves up to 10" long in wild forms; most of the horticultural selections are considerably smaller. The stems are branched above, presenting broad sprays of attractive leaves. The leaves are smooth and deep green above, lighter and sometimes hairy beneath. The cultivar '**Murakamianus**' is alleged to grow as much as 10' high (I think a more reasonable maximum here is 5'). It has 3" leaves which emerge mostly cream-colored, becoming mostly green with white stripes as they mature. '**Akebono**' shifts gradually from cream in new growth to deep green in mature leaves. 0°F. or less.

**distichus** (*pygmaeus* var. *distichus*, *Sasa disticha*). Dwarf fernleaf bamboo. Deceptively delicate in appearance, this is a potentially fearsome spreader, best kept in strong-walled containers. It grows 1-2' high and has slender stems, branched above. Dark, narrow 2-3" leaves are neatly set in opposing rows, elegant in effect. 10°F. or less.

**gramineus** (*Arundinaria graminea*). An other finely textured bamboo, reputedly growing to 12' but usually much less. The stems are slender though nearly erect, bearing rows of very narrow, grass-like leaves, 4-8" long, near their tips. It makes an attractive, filmy screen and an elegant subject for large tubs. About 10°F.

**hindsii** '**Yasui**'. A soldierly-looking bamboo, making thickets of straight, stout stems 10' or more in height. The younger stems have a chalky grey-green surface when the pale bracts fall away. The larger stems are branched mostly along their upper third, exposing the stems well. Neatly lining the branches are dark, straight, narrow leaves up to 8" long.

**linearis**. This is similar to *P. gramineus*, above, growing 8-12' high. The leaves are longer, stiffer and darker in color.

**simonii** (*Arundinaria simonii*). Medake. With straight, slender stems reaching 10-20', this is one of the most impressive of the group. Neat rows of narrow, dark green 4-8" leaves line the upper stems. We have traditionally grown both the typical form and the selection '**Heterophyllus**' (also sold as 'Variegatus', which properly belongs to another clone). The latter has narrower leaves, irregularly striped with cream. Both have flowered in the last several years, and our material of the typical form belongs to the new seedling generation. The shoots which appeared after flowering on 'Heterophyllus' have all lost their variegation. 0°F.

**variegatus**. A dense thicket former with erect 1-2', sparsely branched stems. The 4" leaves are irregularly striped with cream. -10°F.

**viridistriatus** (*Arundinaria viridistriata*, *A. auricoma*). This plant much resembles the last but has somewhat longer (up to 6") leaves, striped with light and dark green and bright golden-yellow. The yellow portions gradually shift to green as the leaves mature and are shaded by others still younger. The variety **chrysophyllus** is particularly beautiful. It has unstriped leaves, solidly golden yellow in new growth. 0°F.

**PSEUDOSASA japonica**. Metake or row bamboo. Japan. One of the hardiest of the bamboos, with several highly ornamental features. It makes dense thickets of slender, erect stems, usually 5-10' tall. The lower portions of the stems are covered with pale tan bracts. The upper bears clusters of glossy, deep green, drooping leaves up to 1' long. The variety **tsutsumiana** is smaller and more slender in all its parts. Both make fine specimens in large tubs and may be used as natural fences and hedges. They are seriously invasive only under the lush est conditions, in mild climates. Sun or part shade, most soils, moderate watering. Hardy to around 0°F.

**QIONGZHUEA tumidinoda**. Western China. A most unusual bamboo, perhaps not quite at home here but worth fussing over a bit. It might be described as "loosely clumping, slowly spreading to make small thickets. The stems rise to a height of 8-20' and are up to an inch in diameter. Their striking feature is their much-expanded, disk-like nodes. They have been used for many years in China as ornamental walking sticks. There are three branches at each node, with narrow, pointed, deep green leaves. The upper surface of each leaf is attractively shiny. An unfortunate trait, even in our mild climate on the coast, is that the leaves die back a little way from the tips and look bedraggled until the spring flush of new growth. However, the plants are reputedly hardy to 10°F. or less.

**SASA**. East Asia. A large group of bamboos, although most of the material once sold under this name is now included in *Pleioblastus* or *Indocalamus* (see these listings). They belong to the "running" category, forming dense, broad thickets by means of underground rhizomes. This makes them useful in informal hedges and in filling large empty spaces, but requires that they be restrained in mixed plantings. They have slender stems with one or a few branches at each node, and large, broad, conspicuously veined leaves. Sun or part shade, most soils, moderate to regular watering. Hardy to 0°F or less.

**kurilensis**. Reputedly the hardiest of all bamboos, coming from the Kuril Islands and other parts of Japan and Korea. It makes quickly spreading thickets, with profusely branched stems 3-8' high. An interesting feature is the prominent band of white wax at each node. The leaves are 3-8" long, deep green and shiny above, paler beneath.

**megalophylla**. Karl Boreis once gave me a flowering plant of a variegated clone of this species to revive. The doctor's best efforts failed, but several seeds sprouted, yielding some very attractive, though entirely green leaved, seedlings. All are quite dense, with shorter rhizomes than the other large leaved sasas. The stems arch out for a fountainlike effect. The leaves are up to 5" long, relatively broad, dark and softly shiny. We have dubbed the most compact clone '**Densa**'. These should be beautiful subjects for tubs.

**palmata var. nebulosa**. Highly ornamental, though—I am told—potentially a fearsome invader. It has slender stems up to 8' tall, standing quite erect and clothed in pale tan bracts. Broad, tapered leaves 1' or more long, dark green and softly shiny above, are clustered near the branch tips. It makes a beautiful specimen for tubs and other confined spaces but probably should not be turned loose in the open garden.

**tessellata**. See *Indocalamus tessellatus*.

**veitchii**. A smaller (under 3') but more vigorously spreading plant. The shiny, dark green leaves, up to 8" long, dry around the margins in fall and winter giving an attractive variegated effect.

**SASAELLA *masamuneana* forma *albostriata*** (also seen as *masamuneana* var. *albostriata*). An elegant small bamboo, whose genus name literally means, "little sasa". It seems less vigorous than most of the sasas but spreads in the same manner, by underground rhizomes. The stems are erect, rising 1' to 3' (6' in the ABS *Source List*), and attractively covered when young with a white, waxy powder. Each bears several leaves up to 6" long, shiny and dark green above with cream colored margins and some irregular cream striping elsewhere. It is certainly one of the prettiest dwarf bamboos I have seen. Sun or (preferably) part shade, most soils, moderate to occasional watering. Probably hardy to 10°F or less.

**SEMIARUNDINARIA *fastuosa***. Narihira bamboo. Japan. A slowly spreading, controllable bamboo, useful as a single specimen or in hedges and screens. It grows 10-25' tall, depending on cultural conditions, with straight, sturdy, dark green stems. The stems take on dramatic red tints when exposed to the sun. They have many rather short branches above, creating distinct columns. The branchlets thickly set with dark, shiny 3-6" leaves. Sun or shade, most soils, moderate watering. Hardy to 0°F. or less.

**SHIBATAEA *kumasaca*** (*S. kumasacina* in many texts). Japan. A beautiful small bamboo, of officially of the running category but of very moderate growth ("walking", perhaps?). It has slender stems generally under 3' tall, closely branched and densely clothed with dark green, pointed-oval leaves, 3-4" long. It is one of the most attractive of the bamboos for containers. Sun or part shade near the coast, part shade inland, well drained soil, moderate to regular watering. Hardy to 10°F or less.

**SINOBAMBUSA *tootsik* forma *albostriata*** ('Variegata'). China. A thicketing bamboo (officially, "running", but this does not convey the density of the colonies). The culms are cylindrical and up to 1½" in diameter, rising 15-30'. They are well branched above, with thick sprays of rather stiff, narrow leaves. These are 3-5" long, shiny above, dark in background with cream-yellow stripes. It is useful as a tall screen or hedge, and a beautiful specimen in large tubs. Sun or light shade, most soils, regular watering. Hardy to 10-15°F.

**THAMNOCALAMUS**. Himalaya, South Africa. A small group of clumping bamboos, each with unusual or notable features. Their stems have decorative pale bracts and generous sprays of slender branchlets at the nodes. The leaves have a noticeably checkered pattern of veining. The following are well-behaved bamboos for individual display, screens and hedges. Both thrive in sun or shade near the coast, part shade inland, in any reasonably well drained soil, with moderate watering. Their hardiness is as shown below.

***aristatus***. Himalaya. This is an unusual clumping bamboo, making erect, narrow thickets. The stems are slender and openly branched, growing 8-15' high. The lower stems are exposed and show close-lying, pale bracts against a light green background. They take on an attractive red dish cast in the sun. The upper portions display sprays of dark, narrow 3-5" leaves. Hardy to 10°F. or less.

***tessellatus***. South Africa. This is a somewhat stiffer plant, with straight 10-20' stems. These present a striking contrast between dark green or purplish internodes and pale greyish tan bracts, which nearly cover the younger branchlets. The leaves are up to 5" long and rather stiff. They are prominently veined, deep green above and blue-green beneath. 15°F. or less.

**YUSHANIA *maling*** Himalaya. If you are a long-time bamboo enthusiast, you probably first knew the Mexican weeping bamboo (now *Otatea aztecorum*) as *Yushania*. Times and taxonomy have changed, and the yushanias are now all plants of South and East Asia (and under heavy contention between Chinese and European botanists). This one is a clumping bamboo, growing 10-30' high. The stems stand erect, with a noticeably rough texture and pale bracts which last for several years. The leaves are 4-7" long, rather stiff, narrow and dark in color. Though it lacks the grace of some of the fargesias, this can be a useful bamboo for tall screens and well-behaved hedges. Hardy to 20°F. or less (how much less is not well tested).