



## Bamboo

The bamboos are a subfamily (Bambusoideae) of flowering perennial evergreen plants in the grass family (Poaceae). Careful estimates indicate that there may be as many as (90) genera and (1000) species.

#### SYSTEMATICS & TAXONOMY

- Bamboos have long been considered the most primitive grasses.
- Bamboos have three classifications (Olyreae) New World herbaceous species

(Bambuseae) tropical woody bamboos

(Arundinarieae) temperate woody bamboos

#### DISTRIBUTION

- Bamboo species are found in diverse climates, from cold mountains to hot tropical regions.
- They occur across East Asia through to Northern Australia, west to India and the Himalayas.
- Also, in sub-Saharan Africa, the Americas, from the USA mid-Atlantic states, south to Argentina and Chile.



#### ECOLOGY

- Bamboos include some of the fastest-growing plants on Earth, with reported growth rates up to (36 in.) in 24 hours.
- Some of the largest timber bamboo can grow over (98ft.) tall, and as large as (9.8-11.8 in.) in diameter.
- A typical height range, that would cover many of the common bamboos, grown in the United States is (15-39 ft.)



#### ECOLOGY (cont.)

- Unlike all trees, bamboo culms emerge from the ground at their full diameter and grow to their full height with no branching.
- Then the branches extend from the nodes and leafing out occurs. In the next year , the pulpy wall of each culm slowly hardens.
- This brief life means culms are ready for harvest and suitable for use in construction within about three to seven years.



#### Ornamental Bamboos

- The two general patterns for the growth of bamboo are clumping (sympodial) and running (monopodial).
- Clumping bamboo species tend to spread slowly as the growth pattern of the rhizomes is to simply expand the root mass gradually.
- Running bamboos need to be controlled during cultivation because of their potential for aggressive behavior.
- Bamboos seldom flower, but once flowering takes place, a plant declines and often dies entirely.



The ornamental plant sold in containers "Lucky Bamboo is an entirely unrelated plant, Dracaena sanderiana.

#### CULTIVATION

- Bamboo is not difficult to grow, prefers but does not need rich moist soil, and has been grown in hydroculture.
- Young and newly established plants require watering until well established 2-3 years.
- Many species have striking variations, the culms may be yellow, gold striped with green, brown, dark purple or glossy black.
- Bamboos are naturally robust and rarely suffer from diseases in temperate climates.



#### CULINARY

New culms of bamboo contain a toxin that produces cyanide in the gut, but proper processing renders them edible.

Bamboo is used in numerous Asian dishes and is available in supermarkets in sliced forms, in both fresh and canned versions.

Khorisa- bamboos shoots fermented with turmeric oil and cooked potatoes

Gulai Rebung - sliced thin and boiled with coconut milk

Lumpia – fried wrapped bamboo shoots with vegetables



#### Medicine, Construction, Textiles



- In India, the fermented bamboo paste is known as a folk remedy for the treatment of impotence, infertility, and menstrual pains.
- Bamboo, like true wood, is a natural composite with a high-to-weight ratio useful for structures . The woody culms are rich in silica, which is the source of their toughness.
- The usual process, by which textiles labeled as being made of bamboo are produced, uses only rayon made from the fibers with heavy employment of chemicals.

# When you plant bamboo in your garden consider:

- I.D. the species, and know the growth pattern, clumping (sympodial) or running (monopodial).
- If it's running surround the plant or grove with a physical barrier. Typically, concrete and HDPE plastic are the materials to use to create the barrier which should be placed in a 60-90 cm. ditch around the planting.
- This barrier should angle out at the top to direct the rhizomes to the surface.





### Thank You Richard for the photo!

