

Bonsai – A Review

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ABSTRACT

The fascination of the indoor plant propagation started in china. The technique of growing single specimens of trees in pots has attracted the world's attention to increase the panoramic beauty of interiors. This review paper focuses on the technique of propagating bonsai.

Keywords: bonsai, indoors, propagation, single, specimen

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INTRODUCTION

The National Bonsai and Penjing Museum, part of the U.S. National Arboretum in Washington, D.C., is the only museum of its kind in the world that allows the general public to enjoy and learn about these interesting living art forms free of charge. This is the primary true bonsai museum anywhere in the world, and it is additionally the biggest and most extensive one in the western world, says arboretum chief Tom Elias. "We have the finest collection of mature bonsai outside of Japan." The museum opened in 1976, when the Nippon (Japan) Bonsai Association donated 53 bonsai to the people of the United States to commemorate the nation's Bicentennial. Presently, more than 200,000 individuals yearly visit the museum's collection gathering of 150 plants situated in three structure houses. "Newcomers are always amazed by the beauty of the collection and often become repeat visitors," says curator Jack Sustic.

HISTORY

"Bonsai first appeared in China over a thousand years ago on a very basic scale, known as punsai, where it was the practice of growing single specimen trees in pots. These early specimens displayed sparse

foliage and rugged, gnarled trunks, which often looked like animals, dragons and birds.... With Japan's adoption of many cultural trademarks of China – bonsai was also taken up, introduced to Japan during the Kamakura period (1185–1333).

There is much discussion lately about Ayurveda and its traveling herbalists taking potted herbs and plants with them on their travels so that they may have ready access to the plants that they used in their medicine. A brief history of Ayurveda follows; "Ayurveda is the oldest system of medicine in the world. The old Classic Atharva Veda (800 B.C.) records the Eight Divisions of Ayurveda: Internal Medicine, Surgery of Head and Neck, Ophthalmology and Otorinolaryngology, Surgery, Toxicology, Psychiatry, Pediatrics, Geriatrics and the Gynecology. Around 500 B.C., Sushruta, a master who built up the agent strategies of rhinoplasty (plastic surgery), formed the Sushruta Samhita which portrays a particularly made surgery.

In 100 A.D., the doctor Charaka changed and supplemented the Atreya Samhita; the Charaka Samhita is a noteworthy work on inside drug. Amid 400 A.D., Ayurvedic works were converted into Chinese

language; by 700 A.D., Chinese researchers were contemplating drug in India at Nalanda University. Indian thought, and also affecting Chinese otherworldly existence and theory through Buddhism, extraordinarily impacted Chinese medication and herbology through Ayurveda in 800 A.D.

THE BONSAI COLLECTION

The Chicago Botanic Garden's bonsai collection is noticed by bonsai experts as one of the best public collections in the world. It incorporates 185 bonsai in twenty styles and more than 40 sorts of plants, including evergreen, deciduous, tropical, blooming and fruiting trees.

Assembling the Collection

Predominantly contain of donated specimens, the collection includes gifts from local enthusiasts and Midwest Bonsai Society members. In 2000, Susumu Nakamura, a Japanese bonsai ace and longstanding companion of the Chicago Botanic Garden, gave 19 of his finest bonsai to the gathering. This gift empowered the accumulation to progress to world-class status.

Caring for the Collection

When not on display, the bonsai in the Chicago Botanic Garden's collection are housed in a secured greenhouse that has both outdoor and indoor facilities. There the bonsai are watered, fertilized, wired, trimmed and repotted by staff and volunteers. A few times each year, bonsai ace Susumu Nakamura goes from his home in Japan to give direction to the care and preparing of this essential accumulation [1].

What Is a Bonsai?

Japanese and Chinese languages use the same characters to represent bonsai (pronounced "bone-sigh"). One character means "pot" or "tray," and the other means "to plant." Bonsai are ordinary trees and shrubs that have been trained in

pots to grow into naturally beautiful shapes. Most bonsai are small enough to sit on a table, and although they are designed to look like full-sized trees, or groups of trees. To achieve this illusion, a bonsai artist must understand how a tree grows in nature and then use his or her skills to encourage the tree to develop the characteristics of old age even though the tree isn't necessarily old. Bonsai artists train and dwarf trees via pruning, trimming and wiring plants with a clear sense of the final design of the tree. Each tree is designed to have a front (intended for viewing) and a back [2].

BONSAI STYLES

In the Japanese bonsai tradition, each bonsai must conform to a clearly defined style. There are more than 100 recognized styles in bonsai, but most experts consider five basic styles to be essential – formal upright, informal upright, slanting, cascade and semi-cascade. The Chicago Botanic Garden's bonsai collection includes specimens in a range of 20 different styles. This guide will help you become familiar with the essential bonsai styles and their Japanese names [3].

Formal Upright (*Chokkan*)

A bonsai tree trained in the formal upright style mimics the growth of a tree under perfect natural conditions. The most important requirement for this style is that the trunk must be perfectly straight, tapering naturally and evenly from bottom to top. The best species for planning in the formal upright style are larches, junipers, pines and spruces due of their really diminished shape.

Informal Upright (*Moyogi*)

In nature, trees bend or change their growth direction in response to their environment. They might grow away from the wind or other trees, or may grow toward sunlight. The casual upright bonsai style represents this characteristic bend of a tree trunk in a defective situation. In the

casual upright style, the highest point of the tree, its pinnacle, is generally situated straightforwardly over its base, so the general impact is that of an upright tree.

Most species of sturdy plants are suitable for training in this style, but the most popular are maples [4].



Slanting (*Shakkan*)

Trees slant naturally as a result of exposure to buffeting winds or deep shade when they are young. A bonsai tree trained in this style displays a trunk that leans to the left or right to imply a difficult childhood. Some bonsai trees that have been prepared to inclination look as though they will fall over due to the edge at which they lean. No need to worry, though these trees have strong roots growing under the soil that support the tree's weight. The slanting bonsai style is similar to the informal upright, but in this style the tree's apex is not directly over its base [5].

Cascade (*Kengai*)

The cascade style of bonsai reminds us a weather-beaten old tree clinging to a cliff face. In this style, the tree's developing tip reaches out underneath the base of its compartment. A cascade bonsai has all the earmarks of being battling against the gravity or searching out inadequate daylight. The windswept style is most adequately connected to conifer types of trees. The semi-cascade (*han-kengai*) bonsai style is similar to the cascade style.

In this form, the tree grows over the rim of the container but does not drop below the container's base. Many species of plants will adapt to cascade training, as long as they are not strongly upright naturally. Juniper is most favorite for training in the cascade and semi-cascade styles.

Broom (*Hokidachi*)

A broom-style bonsai looks like a conventional handmade broom, turned upside down. Branches fan out from the top of a single straight trunk. This style imitates one of the common natural shapes of trees. Because of the broom shape is most common in nature, broom-style bonsai trees are often considered to be the most realistic-looking. The broom style, though, is considered an advanced technique and is difficult to achieve. Deciduous trees are the best candidates for training in this style, especially those with fine branches and leaves. The elm is the most popular species of tree used for growing and training in the broom style.

Windswept (*Fukinagashi*)

The windswept bonsai has the majority of its living branches confronting a similar

bearing, a preparation strategy making the dream of a tree that experienced grew up in an exceptionally windy place. At the point when done well, windswept bonsai trees can look as though they are as yet being lashed by the wind. The windswept impact can be connected to fundamental bonsai styles of trees, including formal or casual upright, inclining or semi-course trees.

You may see a bonsai that fits into more than one styling category because of a combination of techniques. The windswept style is most effectively applied for conifer species of trees. The effect is more difficult to achieve convincingly with deciduous trees because their leaves face in all directions [6].

Forest (Yose-ue)

Forest-style bonsai plantings consist of several trees of the same species growing in a single pot. In the Japanese tradition, trees are always planted in odd-numbered groups that are said to echo the randomness of nature. Despite, a bonsai forest is viewed from outside, the style is meant to give the viewer the sensation of actually being within a forest.

PLANTS FOR BONSAI

Any significant plant can be prepared into a bonsai in the event that it can adjust to the shallow pots and limited development that bonsai require [7]. Most bonsai are a hardy outdoor plant that needs a period of cold dormancy in the winter to thrive, but they should be protected from the harshest winter conditions. Some of the most popular species have retained so for centuries among bonsai enthusiasts. They offer special features such as flowers, attractive bark, small foliage or seasonal fruits and cones. They consist the following plants:

Azalea (Rhododendron) – They are easily trained into tree form and can be used for most styles. In late spring, they produce

spectacular flowers. Several flower colors are available.

Beech (Fagus) – Deciduous beeches tend to be grown in informal bonsai styles. They require very special and delicate technique in styling [8].

Fig (Ficus) – This tropical family consist some species that have been trained to grow as indoor bonsai. Still, these plants should be kept outside when the weather allows.

Juniper (Juniperus) – Apparently the easiest genus for a beginner, evergreen juniper is readily available and can be trained in most styles.

Maple (Acer) – Two main species of maple are used in bonsai: Japanese maple (*Acer palmatum*) and trident maple (*Acer buergerianum*). These deciduous plants are easy to care for, and many display stunning fall colors.

Pine (Pinus) – Pines make up beautiful bonsai, but are not ideal for a first tree because they are difficult to train. The best pines are varieties with short needles because they support the illusion of a full-sized tree [9].

TOOL BOX FOR BONSAI

Bonsai requires very few tools. These tools, however, make certain jobs or tasks easier and quicker. Tools can range from a few to a hundred dollars. The range of quality (and price) in tools is immense and it is suggested that you buy the best *basic* set of tools that user can afford. User will come to appreciate them with time, and, if you care for them, they will last you a long, long time. There are three tools that are essential to even beginning the process of shaping a tree for bonsai. User needs a pair of scissors which will allow you to do the fine work of trimming in a small space. These scissors should be sharp and must only be use for bonsai work. User

may want to try a small set of pruning shears to start with. Eventually, you will want a pair of shears made especially for bonsai work. Possibly the most important tool you can have in bonsai.

Growing is a pair of concave cutters. Concave cutters allow user to cut branches off of the tree and leave behind a concave wound. The injury will mend considerably speedier than a straight cut, and will unfeeling over so as to make it exceptionally hard to tell a cut has been made by any stretch of the imagination. These cutters are a fundamental piece of your gathering. User will in the long run require a couple of wire cutters, despite the fact that these won't should be bought quickly. In the event that you put wire on, you will in the long run need to take it off. These wire cutters enable you to slice the wire straight up to the tree's rind, without hurting the tree. These too are essential [10].

CONCLUSION

The review paper provides insight about bonsai, the technique for culturing the bonsai. The factors to be taken into consideration while propagating bonsai. The major tools used in bonsai culturing. The various bonsai trees propagated till date.

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