



# Bonsai

## A Demand of Future

**<sup>1\*</sup>Anil Kumar, <sup>2</sup>Sevan Das Khunte, <sup>3</sup>Dharmendra Kumar Gautam, <sup>4</sup>Awadhesh Kumar and <sup>4</sup>Alok Kumar**

<sup>1\*</sup>Department of Horticulture, SHUATS, (U.P.)

<sup>2</sup>Department of Fruit Science, College of Agriculture, IGKV, Raipur (C.G.)

<sup>3</sup>Department of Horticulture, SVPUAT, Meerut (U.P.)

<sup>4</sup>Department of Horticulture, ANDUAT, Ayodhya (U.P.)

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## Introduction

The word Bonsai is derivative of two words bon and sai where bon means shallow pot and sai means plant which is translated as tray planting. Bonsai is an art of growing trees, symmetrically in miniature containers, occasionally in amalgamation with rocks of several forms,

by treating them with several methods to reproduce appearance of naturally occurring large and aged trees or landscape in miniature form. Nowadays, the need for bonsai is mounting swiftly and has attained the status of an elite sector in landscape gardening industry.

## Bonsai styles

There are various styles of bonsai, which has developed over a period of time. The principals of classical bonsai styles are as follows.

1. **Winding/Kyokkum/Moyogi style:** In this type of bonsai plants maintains a very natural look owing to the curving nature of the trunk. The branches are small in size towards growing point as well as at the edges of the curve.
2. **Raft/Ikuabuchi style:** This form of bonsai style produces an effect of fallen trunk, where roots grow downwards, while branches shoot upward. The finishing notion is relatively original, where all spring arise from a horizontal trunk.
3. **Windswept/Fukinagashi style:** In this form of bonsai style branches grow only on one side of the trunk. This imparts the sense of the blowing repeatedly from one direction.
4. **Broom/Hokidachi style:** In this style the bonsai looks like unturned broom. The branches are spread in the form of a fan which might inhabit half of the total elevation of the tree and the trunk is upright.
5. **Oblique/Leaning trunk style (Shakakn):** In this style the trunk inclines to one side; branches are placed horizontally in all directions. The roots on the surface are clearly observable in the side opposite to the inclination.
6. **Formal upright style (Chokkan):** In this style the branches grow uniformly and horizontally over the upright straight trunk.
7. **On the rock:** A piece of rock is kept properly in the container eventually to be held by the roots which still sinks into the soil. Once the small tree starts growing it's called rock planting.
8. **Multiple trunks style/Clump shaped (Kadudaki):** Trunks with numerous shoots are permitted to produce a single root. Usually, they should make up an odd number however if only trunk appears, they should be of different sizes.
9. **Woodland (Yose ue):** In this style, a number of individual plants of the same species are laid out in a single container in correct proportion.
10. **Cascade style (Kengai):** In this style, the branches are allowed to grow over the edges of the container. The container for this style is high enough to demonstrate cascade effect to its best advantage.
11. **Twisted trunk style:** The trunk diminishes in size at the top and gives a twisting in the appearance upon itself while the branches break out in all directions.
12. **Mini bonsai/Disc bonsai:** The plant height is often not more than 8 to 15 cm.

## Characteristics of plants suitable for bonsai

The appropriateness of plants to develop a bonsai depends on various factors-

1. The plant should be hard enough to be able to grown in a small container for

- several years with all the manifestations of a living plant.
- The trunk should produce a natural look.
  - The branches should nurture in its natural but creative forms.
  - The growth and appearance of the plant should harmonious with the profile of the container.

#### Pots or containers for bonsai

The containers used for bonsai differ in material, shape and size. Small ceramic/terracotta pots square, rectangular, oval or round shape are used for bonsai. Occasionally small cement containers are also used but are not suitable to handle

#### Plants suitable for indoor bonsai

Few examples of plants suitable for indoor bonsai are-

- ❖ *Ficus retusa* (Fig Tree)
- ❖ *Nandina domestica* (Sacred Bamboo)
- ❖ *Podocarpus chinese* Yew (Buddhist Pine)

#### Tropical plants

Members of the genus *Ficus* are among the most versatile, while many succulents can also be grown in as bonsai.

***Ficus benjamina*:** also known as weeping fig is a popular indoor tree that imparts itself to the classical, upright form. It is one of the few tropical plants that are established as "true" bonsai. The miniature cultivars like 'Too Little' are also suitable for bonsai. It forms aerial roots and can be shaped as a banyan tree.

***Ficus neriifolia*:** It is one of the most useful plants for bonsai. The small leaf is in excellent scale for bonsai and the tree has good branch framework, base root and excellent aerial root formation.

***Schefflera arboricola*:** also called as Hawaiian umbrella tree is a popular, hardy plant that is best for irregular, banyan or roots-on-rock forms. Since it can sprout on old wood, an old specimen can be pruned back to a stockier shape with thick trunk and roots. It tolerates root exposure very well, is drought-resistant and requires a

- The miniature plant showing seasonal variations in growth and flowering is a very interesting feature of bonsai.
- Plants with low height and tough trunk, thick at the base are good for bonsai plant.

owing to their heavy weight. The selection of the shape and colour of container depends upon the style and type of plant used for bonsai making. Rectangular and oval shaped containers are ideal for bonsai.

- ❖ *Sageretia theezans* (Chinese Bird Plum)
- ❖ *Serissa foetida* (Tree of a Thousand Stars)

moderate amount of light. Under high humidity environment, it produces aerial roots and as a result can be given a shape of banyan tree.

***Crassula ovata*:** the plant is a very vigorous and drought-resistant. The miniature cultivars like the baby jade plant (*C. ovata arborescens*) are considered to be best plant for a first bonsai. This plant will sprout on old wood. Thus, an old specimen can be pruned back to a stockier shape with thick trunk. It is kept dry in winter and placed outdoors in summer for full growth. Its roots are thin which cannot be exposed.

***Portulacaria afra*:** the dwarf plant looks like a baby jade plant and is used likewise.

***Dracaena marginata*:** this plant has an interesting palm-like shape. It can sprout on old wood.

***Schlumbergera*:** this cactus does not have a real trunk but easily lends itself to a cascade-type bonsai shape. It can tolerate darkness and may be used as accent plants.

## Bonsai-cultural practices, care and maintenance

### Cultivation from seed:

It usually requires long time to produce perfect bonsai.

### Cultivation from vegetatively propagated plants:

This method is exceedingly practical and frequently used. It is done by taking cuttings from the matured shoots, layering, grafting and budding methods.

### Time of planting

The bonsai plants are usually grown in February-March or July-August however, the best time is before the opening of new buds. The temperate plants like cherry, peach and plum are planted in spring

### Potting and repotting

For preparing a bonsai from the natural stunted plant /dwarf plant obtained from a nursery, it is indispensable to prune the roots.

Commonly one-third of the roots are pruned and the tap roots may also be pruned if there is a profuse growth of fibrous or lateral roots. The dispensable branches are removed before planting. The basic principle involved in bonsai making is to limit and slow down the growth of the plant through selective pruning of roots and branches. It is essential to provide

### Training and Pruning

After planting, the plants are trained based on the style of bonsai. The branches or stem can be bent in the desired direction and shape with the help of a copper wire or polythene tape which is removed once

### Management

#### Planting medium

Generally, the planting medium comprises of two parts of loam soil, one part of fine leaf-mould and a little coarse sand. The medium for growing bonsai should have good drainage. Bone meal or superphosphate in minute quantity should

### Seedlings from local origin/countryside:

Seedlings of mature trees of local origin are used. For collection of these seedlings are gently lifted without causing any injuring the taproot. Thereafter, the seedlings are to be planted immediately to prevent drying. After collection, 2-3 years old seedling from the field, immerse the roots in a bucket of water or emulsion of clay and water.

(February-March) before new leaves appear on the plants. Potting of bonsai should not be done during winter or in harsh hot months.

ample but balanced nutrition to the plants. For proper and healthy but slow growth of the bonsai regulation of water is also an important aspect. Before potting the plant, the style of bonsai needs to be considered. Based upon the style of bonsai the method of planting in the container and the training of the plant is done. The old bonsai needs to be repotted after 2 to 3 years depending upon the plant species and its growth. The repotting is done in the identical method as the potting.

the plant has acquired the desired shape. Pinching once or twice should be done while the branches are pruned occasionally to maintain the shape of the tree.

be added to the growing medium. The medium should be sterilized with steam or chemical like formaldehyde. Often the soil in the pot is covered with moss and few small stones are placed to impart a natural look.

### Nutrition

A mixture of NPK or liquid manure prepared with oilcake can be applied once a week after a month of potting excluding during the active growth or dormant stage of the plant. Application of bone meal or superphosphate is useful in flowering while potash is beneficial for fruiting.

### Irrigation

Regular irrigation is required in bonsai however water logging should be avoided. Irrigation at the time of flowering is beneficial in bonsai plants except in bougainvillea as frequent watering can

cause shedding of flowers. Conifers like pine and juniper need less water than other species.

### After care of bonsai

Hoeing of soil should be done when soil becomes hard. Regular weeding, pinching and pruning, control of insects and diseases should be done whenever required. Balanced nutrition and ample sunlight are indispensable after-care of bonsai. Repotting of old bonsai after every 2-3 years is also useful in maintaining bonsai.

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