

MINIATURE CREATURE CREATES BACKBONE OF INNER EYE (BONE'S-EYE: BONSAI) IN NORMAL AND HOLISTIC HORIZON

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ABSTRACT

Bonsai is the Japanese and East Asian art of growing and training miniature trees in containers, developed from the traditional Chinese art form of pénjǐng (盆景). Penjing and bonsai differ in that the former attempts to display "wilder," more naturalistic scenes, often representing landscapes, including elements such as water, rocks or figurines; on the other hand, bonsai typically focuses on a single tree or a group of trees of the same species, with a higher level of aesthetic refinement. Similar versions of the art exist in other cultures, including the miniature living landscapes of Vietnamese the Tang dynasty, when penjing was at its height, the art was first introduced in China.

The loanword "bonsai" has become an umbrella term in English, attached to many forms of diminutive potted plants, and also on occasion to other living and non-living things. The term should be reserved for plants that are grown in shallow containers following the precise tenets of bonsai pruning and training, resulting in an artful miniature replica of a full-grown tree in nature. In the most restrictive sense, "bonsai" refers to miniaturized, container-grown trees adhering to Japanese tradition and principles.

Purposes of bonsai are primarily contemplation for the viewer, and the pleasant exercise of effort and ingenuity for the grower. By contrast with other plant cultivation practices, bonsai is not intended for production of food or for medicine. Instead, bonsai practice focuses on long-term cultivation and shaping of one or more small trees growing in a container.

A bonsai is created beginning with a specimen of source material. This may be a cutting, seedling, a tree from the wild (known as Yamadori) or small tree of a species suitable for bonsai development. Bonsai can be created from nearly any perennial woody-stemmed tree or shrub species that produces true branches and can be cultivated to remain small through pot confinement with crown and root pruning. Some species are popular as bonsai material because they have characteristics, such as small leaves or needles, that make them appropriate for the compact visual scope of bonsai. The source specimen is shaped to be relatively small and to meet the aesthetic standards of bonsai, which emphasizes not the entirety of grand sceneries but rather only the tree itself. When the candidate bonsai nears its planned final size, it is planted in a display pot, usually one designed for bonsai display in one of a few accepted shapes and proportions. From that point forward, its growth is restricted by the pot environment. Throughout the year, the bonsai is shaped to limit growth, redistribute foliar vigor to areas requiring further development, and meet the artist's detailed design. The practice of bonsai is sometimes confused with dwarfing, but dwarfing generally refers to research, discovery, or creation of plants that are permanent, genetic miniatures of existing species. Plant dwarfing often uses selective breeding or genetic engineering to create dwarf cultivars. Bonsai does not require genetically dwarfed trees but rather depends on growing small trees from regular stock and seeds. Bonsai uses cultivation techniques like pruning, root reduction, potting, defoliation, and grafting to produce small trees that mimic the shape and style of mature, full-size trees.

KEYWORDS: Vaman Avatar, Miniature, Pruning, Defoliation, Grafting.

Etiology: The word "Bon-sai" (often misspelled as bonzai or banzai) is a Japanese term which, literally

translated, means "planted in a container". This art form is derived from an ancient Chinese horticultural practice,

part of which was then redeveloped under the influence of Japanese Zen Buddhism. The essential element of Zen Buddhism is found in its name, for zen means

“meditation.” Zen teaches that enlightenment is achieved through the profound realization that one is already an enlightened being.^[1]



Figure-1: Bonsai.

Origin: There are several tropical and subtropical trees that you can grow indoor. The most common, and the easiest to care for, is the Ficus Bonsai. Ficus is a genus of about 850 species of woody trees, shrubs, vines, epiphytes and hemiepiphytes in the family Moraceae. Collectively known as fig trees or figs, they are native throughout the tropics with a few species extending into the semi-warm temperate zone. The common fig (*Ficus carica*) is a temperate species native to southwest Asia and the Mediterranean region, which has been widely cultivated from ancient times for its fruit, also referred to as figs. The fruit of most other species are also edible though they are usually of only local economic importance or eaten as bushfood. However, they are extremely important food resources for wildlife. Figs are also of considerable cultural importance throughout the tropics, both as objects of worship and for their many practical uses.



Figure-2: Indoor bonsai.

The Ficus is tolerant of low humidity and is very resilient, making it an excellent choice for beginners. In essence, any plant that can be grown in a small container can be cultivated as a bonsai. The most popular varieties include a type of pines called shohaku; maples, whose leaves change their color in autumn; flowering trees, like the cherry and plum; and fruit-bearing trees, like the quince and persimmon. Bonsai's purpose is to evoke reflection on the viewer's part and ingenuity on the grower's part. It originates from the ancient Chinese tradition of penjing, or penzai. In the 6th century, Japanese Imperial and Buddhist students visited China and began to bring back goods, including plant-filled containers. The term Bonsai in Japanese literally means 'planted in a container', and the plant is believed to bring good luck and harmony. They say that if you receive bonsai trees as gifts rather than buying it yourself, fortune would doubly smile at you. Back in 12th Century India, Bonsai was known and practiced as Vaman Vriksha Kala, or the art of miniature trees. The word is said to have been derived from 'Vamana' the 5th Avatar of the Hindu God Vishnu. In this Avatar, he appeared as Dwarf Brahmin Priest. Ayurvedic practitioners especially benefited from this art.

While the word bonsai is of Japanese origin, the concept of this art form actually took root in China. Since the Yin and Zhou dynasties nearly 3,000 years ago, people in China have cultivated ornamental plants to imitate natural scenery within gardens – a craft known as penjing.



Figure-3: Vamana avatar & Bonsai.

Premna- This is the part of Indian Heritage and it belongs to us so it will be available in your area, It is a very popular plant for bonsai training due to its small leaves and the trunk texture, This plant will grow very best in the condition of high humidity and good light.

Three mindblowing facts of bonsai

1. The smallest bonsai tree in the world can fit in the palm of your hand.
2. The most expensive bonsai tree in the world was sold for \$1.3 million.
3. The history of bonsai cultivation dates back to 2000 years ago.

The tree's growth is restricted by years of pruning, wiring, re-potting, and grafting, and the plants need to be

checked on and often watered every day. The skills required to grow these trees plays a huge part in their value.^[2]

Life span: Without this meticulous care, your bonsai would quickly deplete the resources available in its shallow container and die. But in the right conditions, a bonsai tree can easily live to over 100 years-old. Some can even live for centuries, all the way up to a thousand years!

Size: The optimum size of bonsai may be only 30 to 60 cm in height, but miniature sizes of below 25 cm have also been preferred. Bonsai of minimum 10 years old are period, but of 100 and even 200 years of age are available and are highly valued as 'venerable' specimens.



Figure-4: Smallest Bonsai, Most Expensive Bonsai & Oldest Bonsai.

Spirituality: Bonsai have long been respected in the ancient art of Feng Shui for their ability to draw life energies into a room, sharing them gladly with all who pass through. Feng shui sometimes called Chinese geomancy, is an ancient Chinese traditional practice which claims to use energy forces to harmonize individuals with their surrounding environment. The term feng shui means, literally, "wind-water" (i.e. fluid). From ancient times, landscapes and bodies of water were thought to direct the flow of the universal Qi – "cosmic current" or energy – through places and structures. More broadly, feng shui includes astronomical, astrological, architectural, cosmological, geographical and topographical dimensions.

Bonsai Plants & Vastu Shastra: As a focus of sight, conversation, and living forces, a Bonsai can quickly spread joy and contentment to all who see it. Vastu shastra does not recommend bonsai plants. Even if they are quite attractive, keeping them at home is not recommended. The lifecycle of the inhabitants will be disrupted because the plant's growth is inhibited in bonsai plants. You may also experience a slowdown in your career or business. Cactus, bonsai and other thorny plants, with the exception of roses, must be removed immediately from the house as they bring in negative energy. They could have a negative impact on familial ties. It also brings in bad luck. You should water these as

their growth level. These bonsai trees are known for their beautiful shape and delicious fruit. The fruits are rich in nutritional value, and you can have them for breakfast. Papaya fruit bonsai trees adore the full sun and high humidity.

Rules Of Bonsai

1. Height should be six times the diameter of the trunk.
2. No crossing branches, or branches that cross the trunk. Trunk should lean slightly toward the viewer to avoid the feeling of instability in the tree and creating a welcoming feeling like a person bowing in respect.
3. The tree should be placed behind the mid line of the pot, and to the left or right of the center line. Trunk should flare at base to visually anchor the plant.
4. Soils should be uniform, not layered. Roots should radiate from the flare.

If a bonsai tree is unhealthy for any reason in time it will die, all life forms have a limited amount of stored energy and once that is depleted it's all over. The most important rule is, never water on a routine. Ignore the label attached to your Bonsai tree which states you need to water every some amount of days. The best practice is to monitor your tree and its soil, and only water when it's needed.^[3]



Figure-5: Peepal Bonsai and Aesthetic Bonsai giving positive vibes.

Trim in season: After new growth, seasons have occurred, cut down the leaves on your Bonsai tree to allow for new growth. This motivates rapid growth and gives space for denser leaves to be brought forth. As a general rule of thumb, the pruning should only be done to 1/3 of your tree's foliage at every trimming. The term Bonsai in Japanese literally means 'planted in a container', and the plant is believed to bring good luck

and harmony. They say that if you receive bonsai trees as gifts rather than buying it yourself, fortune would doubly smile at you. That also makes these miniature. The peepal bonsai is sacred in Hinduism and Buddhism since it's said that Guatama Buddha reached enlightenment under a peepal tree. They're celebrated as symbols of good fortune, happiness, and long life plans a perfect gifting item.

Common names for bonsai size classes

Table-1: Bonsai Size.

Large bonsai		
Common name	Size class	Tree Height
Imperial bonsai	Eight-handed	152–203 cm (60–80 in)
<i>Hachi-uye</i>	Six-handed	102–152 cm (40–60 in)
<i>Dai</i>	Four-handed	76–122 cm (30–48 in)
<i>Omono</i>	Four-handed	76–122 cm (30–48 in)
Medium-size bonsai		
Common name	Size class	Tree Height
<i>Chiu</i>	Two-handed	41–91 cm (16–36 in)
<i>Chumono</i>	Two-handed	41–91 cm (16–36 in)
<i>Katade-mochi</i>	One-handed	25–46 cm (10–18 in)
Miniature bonsai		
Common name	Size class	Tree Height
<i>Komono</i>	One-handed	15–25 cm (6–10 in)
<i>Shohin</i>	One-handed	13–20 cm (5–8 in)
<i>Mame</i>	Palm size	5–15 cm (2–6 in)
<i>Shito</i>	Fingertip size	5–10 cm (2–4 in)
<i>Keshitsubo</i>	Poppy-seed size	3–8 cm (1–3 in)

Dimensions of Bonsai Plants: Vastu shastra does not recommend bonsai plants. Even if they are quite attractive, keeping them at home is not recommended. The lifecycle of the inhabitants will be disrupted because the plant's growth is inhibited in bonsai plants. You may also experience a slowdown in your career or business. In most cases the ideal length of the pot should be about 2/3 the height of the tree. If the height of the tree is shorter than its width, the length of the pot should be about 2/3 the width of the spread of the tree. Although they are beautiful to look at, these plants are not particularly auspicious. Bonsai vastu experts say that it is best to avoid placing this plant anywhere at home. It symbolises slow or stunted growth and might interfere with the lifecycle of the inhabitants. Bonsai trees are

planted in small pots with minimal space for water and nutrient reserves. That means you need to water and fertilize your tree regularly. Make sure your Bonsai gets plenty of light, water, and fertilize when needed and your tree is sure to thrive!

Defoliation is the complete or partial removal of the leaves of a bonsai tree. The technique is used to reduce the leaf size thus making the replacement leaves smaller and in better scale to the tree's size. Defoliation is often done 3 weeks prior to exhibiting or photographing the tree. To do so, simply prune branches and shoots that have outgrown the intended canopy shape using twig shears or normal cutters.



Figure-6: Manoj Kumar Bonsai established.

Using the right Bonsai tools will help significantly. Don't be afraid to prune your Bonsai regularly, it's important to force the tree to distribute growth more evenly and develop dense foliage. Bonsai is a gravitational N-body tree-code that runs completely on the GPU [graphics processing unit]. This reduces the amount of time spent on communication with the CPU. The code runs on NVIDIA GPUs and on a GTX480 it is able to integrate ~2.8M particles per second. Ayurvedic practitioners especially benefited from this art. One of the trickiest parts of caring for bonsai is getting the amounts of watering and humidity just right. Traditionally bonsai are kept in small pots without much room for soil nutrients or moisture retention. Constant monitoring and appropriate watering or misting is important. Keep the newly wired tree out of direct sunlight for 2-4 days and water as needed. After 2-3 months, when the tree has formed to the desired shape, carefully remove the wire.^[4]

Miniature Bonsai - trees of this size can be as small as a 1-inch seedling or as tall as 8 inches.

Medium Bonsai - trees at this level are between 10 to as many as 36 inches in height.

Large Bonsai - any trees under this category range between a height of 30 to 80 inches tall. Giving or receiving a bonsai tree as a present is considered to represent a unique way of expressing friendship, love or respect. Gifting someone a plant represents a living connection between those individuals. Gifting a bonsai should be saved for people with great patience who enjoy expressing their artistic side. A "Jin" is a bare-stripped part of branch, a "Shari" is a barkless part of trunk, and an "Uro" is a hollow, irregularly-shaped wound in the trunk. In nature, deadwood is created when a tree is hit by lightning, exposed to sustained periods of drought or when branches snap due to ice stress, wind or weight of snow.

Not only will a bonsai tree provide companionship, but it will also be a great source of joy and satisfaction. Although bonsai trees need a certain amount of attention

and care, they are a perfect gift for someone who doesn't have time to spend with a pet. Many of us find it difficult to buy a gift for our loved ones.

Bonsai trees are an intricate part of feng-shui since it is highly recommended to place a living creature in your feng-shui friendly environment. Plants are considered wonderful for increasing the flow of Qi, however, bonsai trees are absolutely superior, compared to other possible alternatives. It is the traditional symbol of tranquillity and balance and, thus, the perfect plant for your relaxing space. The Bonsai tree can be the ideal décor piece for each and every bedroom, and with its delicate and very fine leaves and shapes, it has an extremely soothing look about it. Growing bonsai does not harm the environment in any way. These trees do not deprive other plants of resources or pollute. If anything, recreating nature within your home is beneficial to the environment. Bonsai are trees and plants grown in containers in such a way so that they look their most beautiful – even prettier than those growing in the wild. Bonsai (literally means "Tree in a pot") has been valued in Japanese households over centuries. Their origin is traced back to Zen Buddhism when Chinese monks developed the dwarfed trees in monasteries as a spiritual practice to inculcate peace and tranquillity. While the word bonsai is of Japanese origin, the concept of this art form actually took root in China. Since the Yin and Zhou dynasties nearly 3,000 years ago, people in China have cultivated ornamental plants to imitate natural scenery within gardens – a craft known as penjing.

Therapeutic efficacy of Bonsai: Bonsai can be used as an art therapy tool during psychodynamic therapeutic interventions maintenance of good mental health. Bonsai is generally considered to be relaxing and is practiced by many to relieve stress and as an expression of art. The aim was to establish bonsai as an art therapy tool to overcome trauma.

Manoj Kumar, 44, born in Delhi, India, he is among the most experienced Bonsai artist in India, and being considered as one of the pioneer Indian Bonsai artist.^[5]



Figure-7: An 800 year-old Bonsai tree at Shunkaen.

Medicinal importance: One of the many reasons why bonsai plants are one of the best plants for homes or offices is that they help in purifying the air in their surroundings. Bonsai helps in curing sore throats, coughs, fatigue and tiredness. 1. Purify air: Plants are widely known to reduce indoor air pollutants and purify

air indoors (including the ficus tree, a popular bonsai breed). Be aware that some species filter better than others. 2. Lower stress: Active interaction with indoor plants can lead to lower blood pressure and reduce feelings of psychological stress.

Some of the herbs you can use for Bonsai are



Figure-8: Rosemary Bonsai.

Rosemary: *Salvia rosmarinus* commonly known as rosemary, is a shrub with fragrant, evergreen, needle-like leaves and white, pink, purple, or blue flowers, native to the Mediterranean region. Until 2017, it was known by the scientific name *Rosmarinus officinalis*. It is a member of the sage family Lamiaceae, which includes many other medicinal and culinary herbs. The name

"rosemary" derives from Latin *ros marinus* (lit. 'dew of the sea'). Rosemary has a fibrous root system. Upon cultivation, the leaves, twigs, and flowering apices are extracted for use. Rosemary is used as a decorative plant in gardens. The leaves are used to flavor various foods, such as stuffing and roast meats.



Figure-9: Thyme Bonsai.

Thyme: Thyme (*Thymus vulgaris*) is an herb with a distinct smell. The flowers, leaves, and oil are commonly used to flavor foods and are also used as medicine.

Thyme contains chemicals that might help bacterial and fungal infections. It also might help relieve coughing and have antioxidant effects.^[6]



Figure-10: Verbena Bonsai.

Lemo Verbena: *Aloysia citrodora*, lemon verbena, is a species of flowering plant in the verbena family Verbenaceae, native to South America. Other common names include lemon beebrush. It was brought to Europe

by the Spanish and the Portuguese in the 17th century and cultivated for its oil.



Figure-11: Sweet Bay Laurel Bonsai.

Sweet Bay Laurel: *Laurus nobilis* is an aromatic evergreen tree or large shrub with green, glabrous (smooth) leaves. It is in the flowering plant family Lauraceae. It is native to the Mediterranean region and is used as bay leaf for seasoning in cooking. Its common names include bay tree bay laurel, sweet bay, true laurel,

Grecian laurel, or simply laurel. *Laurus nobilis* figures prominently in classical Greco-Roman culture. Worldwide, many other kinds of plants in diverse families are also called "bay" or "laurel", generally due to similarity of foliage or aroma to *Laurus nobilis*.^[7]



Figure-12: Lavender Bonsai.

Lavender: *Lavandula* (common name lavender) is a genus of 47 known species of flowering plants in the mint family, Lamiaceae. It is native to the Old World and

is found in Cape Verde and the Canary Islands, and from Europe across to northern and eastern Africa, the Mediterranean, southwest Asia to India. Many members

of the genus are cultivated extensively in temperate climates as ornamental plants for garden and landscape use, for use as culinary herbs, and also commercially for the extraction of essential oils. The most widely cultivated species, *Lavandula angustifolia*, is often

referred to as lavender, and there is a color named for the shade of the flowers of this species. Lavender has been used over centuries in traditional medicine and cosmetics.



Figure-13: Terragon Bonsai.

Sage French Tarragon: Tarragon (*Artemisia dracunculus*), also known as estragon, is a species of perennial herb in the family Asteraceae. It is widespread in the wild across much of Eurasia and North America and is cultivated for culinary and medicinal purposes. One subspecies, *Artemisia dracunculus* var. *sativa*, is

cultivated to use the leaves as an aromatic culinary herb. In some other subspecies, the characteristic aroma is largely absent. Informal names for distinguishing the variations include "French tarragon" (best for culinary use), "Russian tarragon," and "wild tarragon" (covers various states).

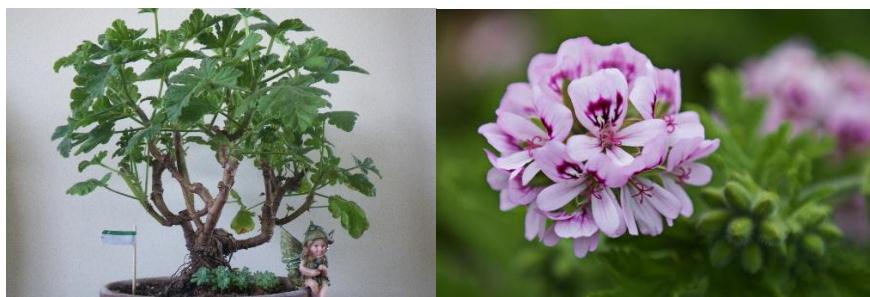


Figure-14: Geranium Bonsai.

Scented geranium: *Pelargonium* comes from the Greek *pelargos* which means stork. Another name for *pelargoniums* is stork's-bills due to the shape of their fruit. The specific epithet *graveolens* refers to the strong-

smelling leaves from Geraniaceae family. *Pelargonium graveolens* is a *Pelargonium* species native to the Cape Provinces and the Northern Provinces of South Africa, Zimbabwe and Mozambique.^[8]



Figure-15: Oregano Bonsai.

Oregano: Oregano (*Origanum vulgare*) is a species of flowering plant in the mint family Lamiaceae. It was native to the Mediterranean region, but widely naturalised elsewhere in the temperate Northern Hemisphere. Oregano is a woody perennial plant, growing 20–80 cm (8–31 in) tall, with opposite leaves 1–4 cm (1/2–1+1/2 in) long. The flowers which can be white, pink or light purple, are 3–4 mm (1/8–3/16 in) long, and produced in erect spikes in summer. It is sometimes called wild marjoram, and its close relative, *O. majorana*, is known as sweet marjoram. Both are widely used as culinary herbs, especially in Turkish, Greek, Spanish, Italian, Hispanic, and French cuisine.

Oregano is also an ornamental plant, with numerous cultivars bred for varying leaf colour, flower colour and habit.

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CONCLUSION

Bonsai is the art of growing ornamental, artificially dwarfed varieties of trees and shrubs in pots. It is an ornamental tree or shrub grown using the art of bonsai. Bonsai trees that can bring positive energy, clean air and to detoxify your home. You don't need any extra effort for growing a few bonsai trees. Because it is as easy as maintaining any other plants, either in your garden or indoors. Very often bonsai trees are considered as living art forms. People in Japan, China etc. hand over bonsai trees to their next generation as ancestral properties. According to them, these are equally important to any other material gifts. Keeping such a valuable thing in our home will definitely bring positive energy. Moreover, nature is aware about the air purifying properties of plants. Those who are not having enough space for outdoor gardens, bonsai trees are best alternatives. Really bonsai is the miniature form of trees, that exactly resemble natural ones. Moreover, the word bonsai

literally means plants that grow in containers. Surely, we can grow our own bonsai trees easily through simple steps. Always remember the following points before you start your own. Select native plants, that can easily adapt to the particular climates. Give proper caring at various stages of training, mostly like pruning, wiring, repotting etc. Never forget that your bonsai trees are unable to survive fully indoors. Hence, to maintain its health and beauty, keep the plants outdoors occasionally. Over watering as well as shortage of water, can make your bonsai trees unhealthy. Use potting medium with ingredients mixed in the right proportions for, proper drainage. Feeding the plant with a diluted fertiliser at regular intervals, is essential for keeping your bonsai healthy. Throughout its life time, we have to care the plant properly.

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