

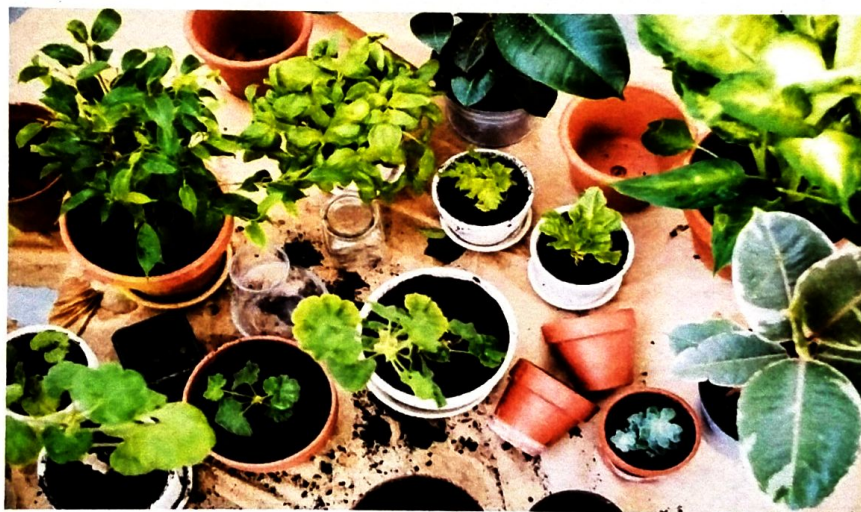


Dr. V. S. Krishna Govt. Degree College (A), Visakhapatnam

NAAC Re accredited with A Grade

Department of Botany

PLANT NURSERY PROJECT



Submitted by

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Mentor : Dr.K. VIJAYALAKSHMI, Lecturer in botany

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ACKNOWLEDGEMENT

Now a days peoples are developing new styles of homes ,gardens ,works and so many for all beautifications is the most important and that only through the natural for the plant nursery plays a significate role in the beauty purpose of landscaping

I am happy to do this project I know the importance and the uses of a so many plant nursery in landscaping of the gardens, houses etc..... so

I would like to express my special thanks of gratitude to my project guide **DR.K. VIJAYA LAKSHMI** madam as well has our principal **DR.I. VIJAYA BABU** sir who gave me the golden opportunity to do this wonderful project on the topic study on plantation which also help me in doing a lot of research and I came to know about so many new things I am really thankful to them.

Secondly, I would also like to thanks my parents and friends who helped me a lot in finalizing this project within the limited time frame.

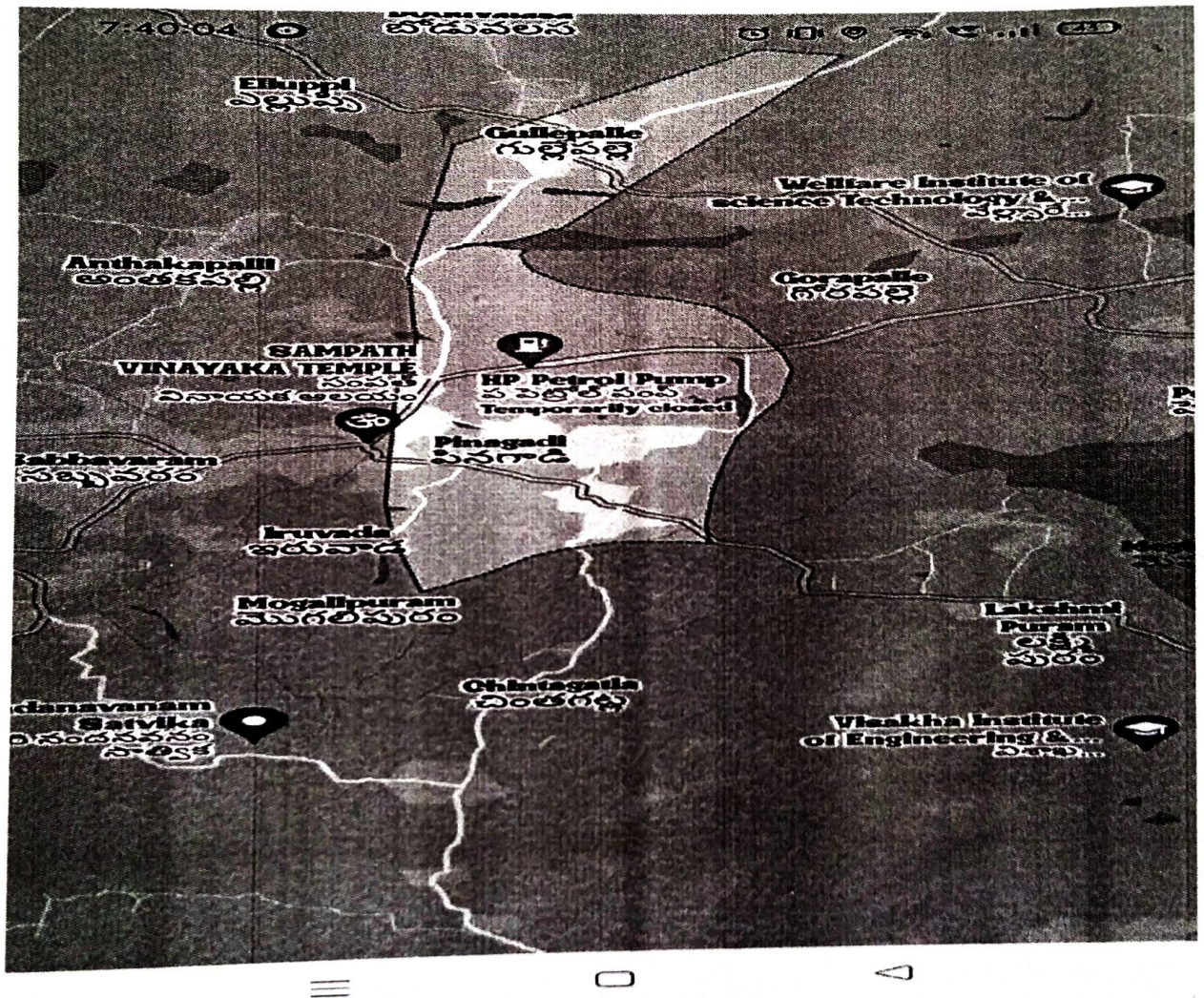
I would like to express my sincere thanks to my department of botany for making me knowledge on the project report

Date :

Place: **VISAKHAPATNAM**

Part -A

Village map



Pinagaadi village map

INTRODUCTION ABOUT NURSERY

AIM:- nursery, place where plants are grown for transplanting, for use as stock for budding and grafting, or for sale. Commercial nurseries produce and distribute woody and herbaceous plants, including ornamental trees, shrubs, and bulb crops.

Nurseries are two types: They

are : 1. Temporary Nursery.

2. Permanent Nursery.

Temporary Nursery:-

Those nurseries which are made for the time being i.e. for one or two years are called temporary nurseries e.g. Shisham nurseries at Changa Manga.

These nurseries are usually made in felling coups so that after felling, regeneration can be done easily or in those areas where afforestation work is needed.

Soil for these nurseries should be fertile because we do not give fertilizers to these nurseries.

These nurseries are raised along roadside and canal-side plantations.

Advantages of Temporary nursery:

- Temporary nurseries are at the time called flying nurseries i.e. these can be shifted to any site.
- Low capital cost
- Reduced transport cost
- Within climatic site conditions • Skilled labour is not required
- Near planting site.

Permanent nursery:-

Those nurseries which are not temporary but remain year after year are called permanent nurseries.

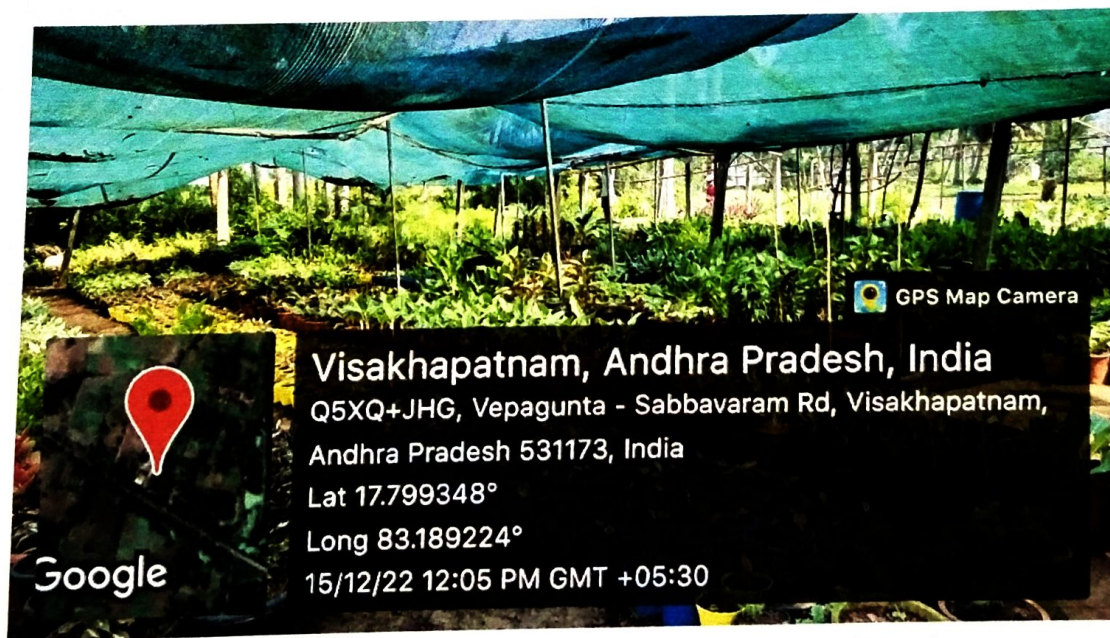
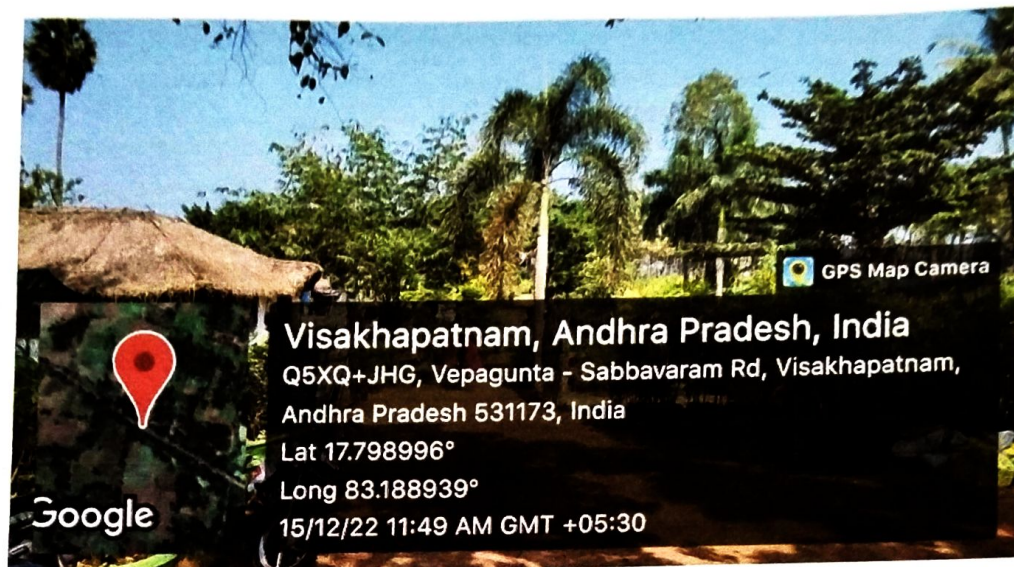
Such nurseries should be centrally located so that the distribution of plants may be easy.

It should be near headquartered so that it should be protected and supervised during work.

These nurseries should be manured and fertilized from time to time.

Advantages of Permanent Nursery

- It is well designed
- It has a good water supply
- Provide required no. of plants
- Provide the required size of plants



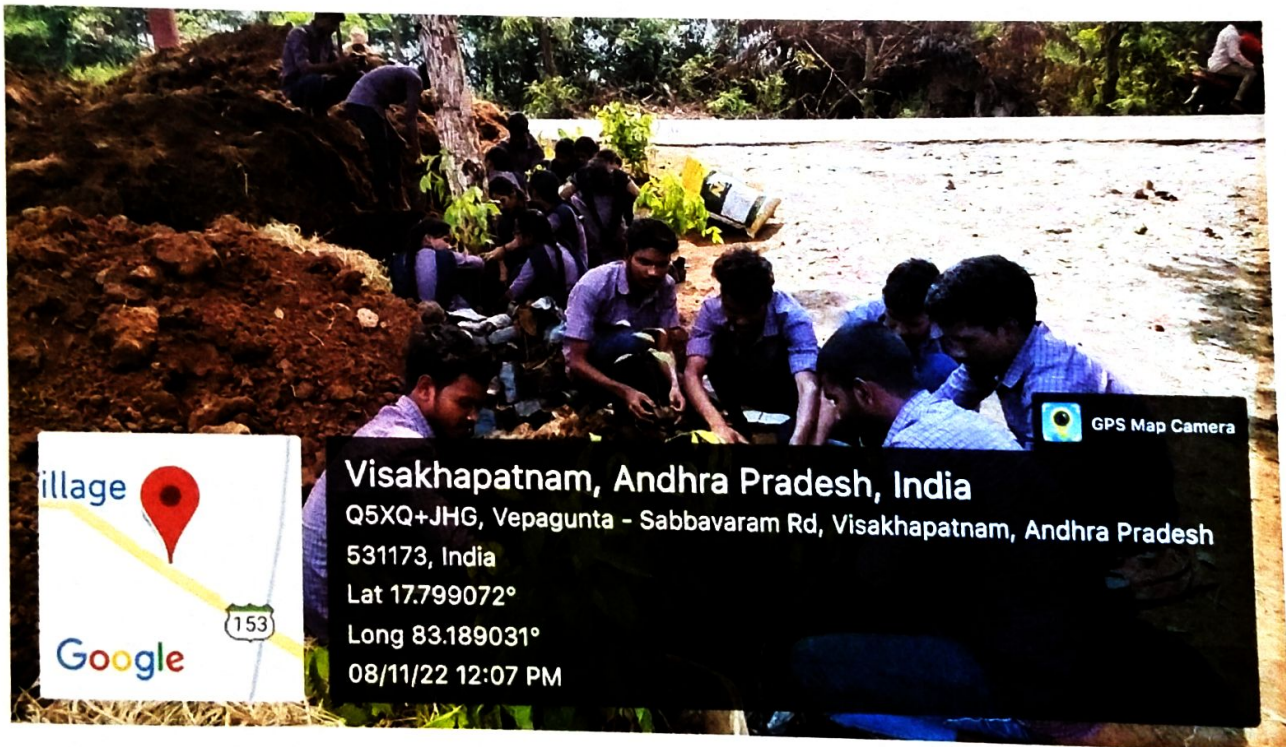
Preparation of soil mixing

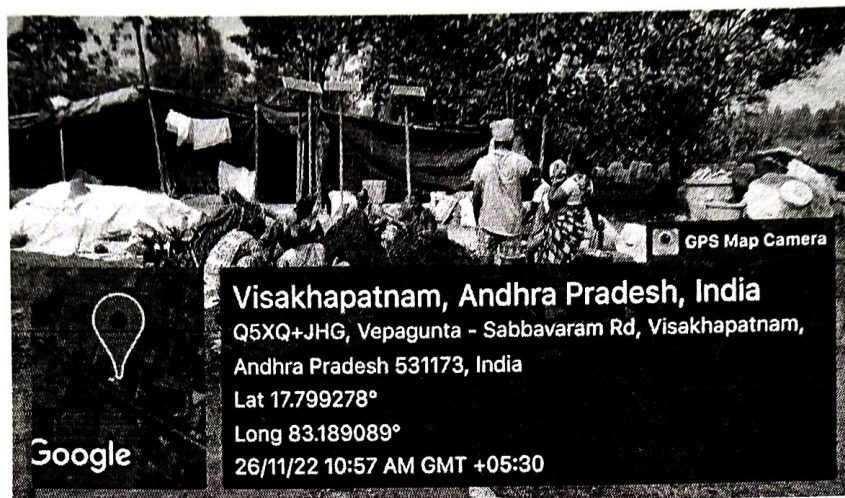
Potting Mix : prepare Perfect Potting Mix with 5 easy DIY steps

Potting mix or soil mix or pot mixture is a growing medium for young and potted plants. Everybody loves to have green plants and colourful flowers in and around their home. You may also have a desire to have a lush Green Balcony. But in fact, many enthusiasts don't get the desirable growth of potted plants due to one or other reason. Among these different reasons for poor pot plants, improper making of growing media is one of the main reason.

Potting Mix is a mixture of garden soil , river sand , compost and other materials in a proper ratio to get good growth of potted plants.

It is used as a growing media by gardeners worldwide for growing pot plants and in balcony garden. Potting Mix can be made with soil or without soil as per need and availability. Moreover one can even buy this from market but why to spent scarce money if you have knowledge. As ' every mother has a secret recipe ' , this is also true in case of making Potting Mix. You will become more expert in making the mixtures with your gardening experience.





PREPARATION OF COCOPEAT

How to Make and Use Cocopeat at Home - An Easy Step-by- Step Guide

Do you know why coconut tree is also called "Kalpavriksha" - because it's a tree that not just gives food but also firewood and shelter. Wondering how? Well, we might know it for the coconut and tender coconuts but did you know that the outside layer of husk that surrounds the shell of coconut consists of fibers which are removed from the shells to make ropes, carpets, doormats, brushes, mattresses and the powdery dust which remains after preparing the above makes for coco peat that can be used in gardening. The coconut fronds are used in thatched roofs in rural areas and have many different uses. The incredible truth is that no part of the coconut used goes to waste! Every part is beneficial to us and man has learned to put them to good use.

So coming to the topic...

What is Cocopeat?

Cocopeat is a byproduct that remains after the extraction of coconut fibers from the husks or shells. It is also called "coir fiber pith" or "coir dust".

Cocopeat is full of nutrients and is an excellent gro medium.

How to Make Cocopeat at Home

Cocopeat can be made easily at home and one can ensure it is clean and pure without any added adulterations. Cocopeat is biodegradable and eco- friendly and an amazing growth medium.

Steps to prepare:

1. Collect coconut husk and store them in a clean place.
2. After pulling out fibers, dry them. Then chop or cut them into small pieces with help of a good pair of scissors or cutters.
3. Grind them in a mixer grinder to a fine powder. The coco fiber will be separated as fluff.
4. Remove the fibers out of coco peat powder with the help of a sieve.
5. Manually remove the fibers from atop the sieve.
6. You can use a good stainless steel soil sieve. • This resultant peat should be washed with water to remove excess salts.
7. Soak the peat in water for about an hour.
8. Squeeze out excess water with hands.
9. Dry it in direct sunlight for a day. Coco peat is ready to be used.
10. You can fill it in a planter and start planting



Process of plantation

Propagation is the process of creating new plants. If you have ever planted a seed or stuck a stem in water until it forms roots that you stuck it in a pot or planted it in the garden, you have experienced propagation. Some plants are easier than others to propagate and different methods work better with different plants. The technique you select will depend on the type of plant you wish to propagate and the amount of time and effort you want to put into it.



I. CUTTINGS

– Stem cuttings The most common propagation method for ornamentals and woody shrubs. Starts with about 3 " stem dipped in rooting hormone, placed in a container filled with dampened growing medium for a few weeks.

Leaf cuttings – houseplants, herbaceous plants (perennials, annuals and biennials) & woody plants –

a leaf or part of it is placed in the soil with the side closest to the stem pointing down – “great for propagating many plants from one”

– Root cuttings are usually taken from woody plants or perennials, while they are dormant, during November through February, when there is not as much going on in the garden. Usually done outdoors.

– With all cuttings, place them in a container with wet paper towels to keep them moist until you get to where you’re going to plant them. Be sure to take more than you think you’ll need, as probably many will not root.



LAYERING :- effectively clones the plant. Layering is done naturally by many plants through runners, offshoots, or when a stem drops to the ground and gets covered by soil.

Here are a number of layering techniques:

– **Simple layering** – stem is wounded, stapled, and covered



BONSAI PLANTS

Bonsai gardening originated in China more than 2,000 years ago before becoming popular in Japan. The art form reflects contemplative ideas of nature, elements, and change, uniquely expressed on a small scale. With regular care and attention, many prized specimens grow so old that they're handed down from one generation to the next.

How to Begin Bonsai Gardening....

Bonsai plants are grown and trained in shallow pots, so they often need daily watering in warm weather.

In the winter, tender bonsai need to go indoors or in a greenhouse; hardy plants can stay outdoors as long as they're protected from drying wind and direct sun.

Step 1: Prep Root Ball

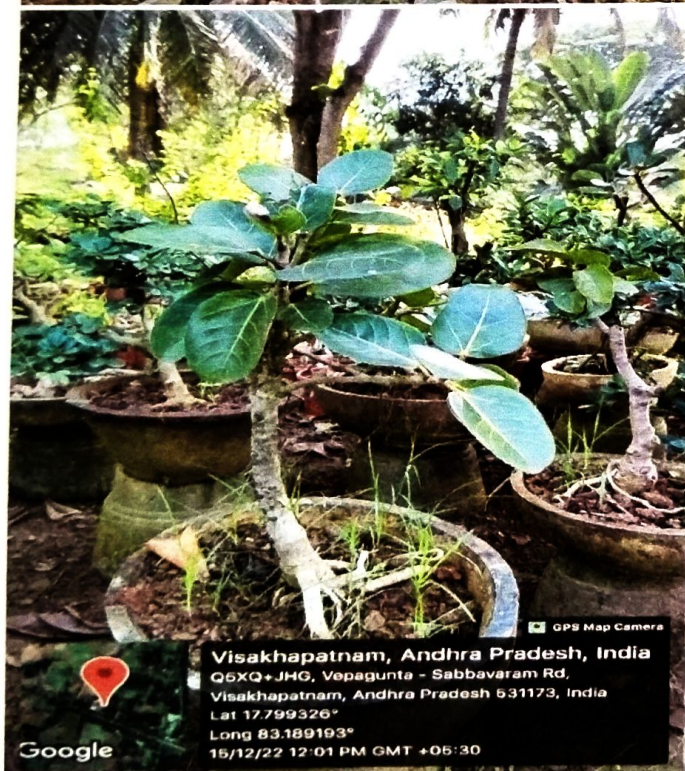
Remove the plant from its nursery container, and cut off the bottom two-thirds of the root ball. Rake through the soil on the surface to expose some roots. Moisten all the roots using a spray bottle.

Step 2: Put Root Ball in Pot

Remove dead branches and branches that distract from the vision you have for your tree. Remove any dead roots and any large roots that will interfere with potting. Position the plant in the pot, and work the soil in around the roots. Top the soil with gravel or moss, and water well.

Step 3: Start Shaping Tree

Decide which branches would benefit from shaping. To achieve the desired shape, wrap wire snugly but not so tightly that it inhibits growth (this will help guide the branch to grow in the direction and shape you want). Remove the wire when the branch has grown enough to hold its new shape.



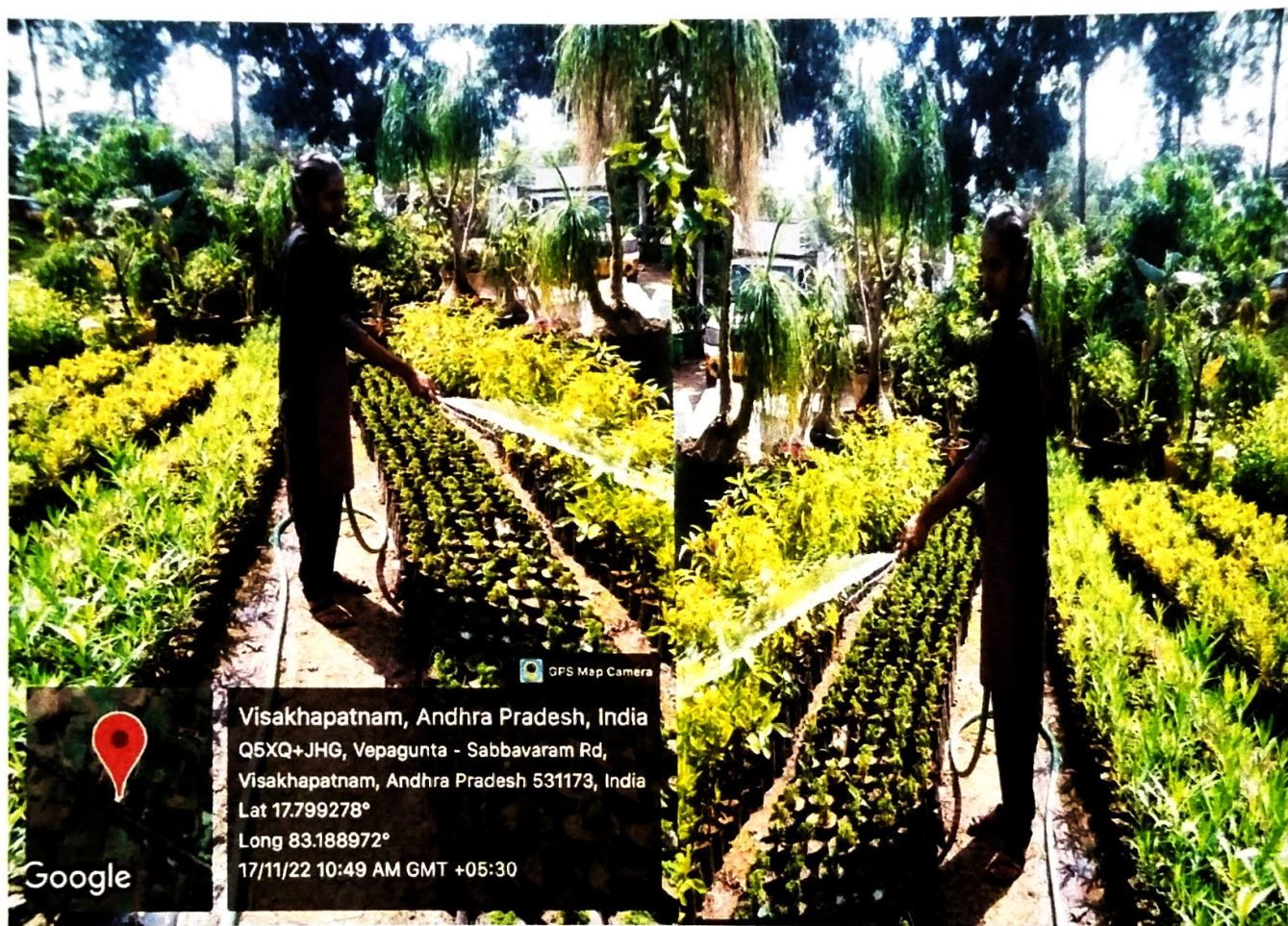
Bonsai Care After Planting

Once you've planted your bonsai, you'll have to treat it a little differently than a regular houseplant.

Follow these tips to keep it in top shape.

Watering

Type-A plant parents won't love this tip, but it's the best way to ensure your bonsai gets the right amount of water.



Fertilizing

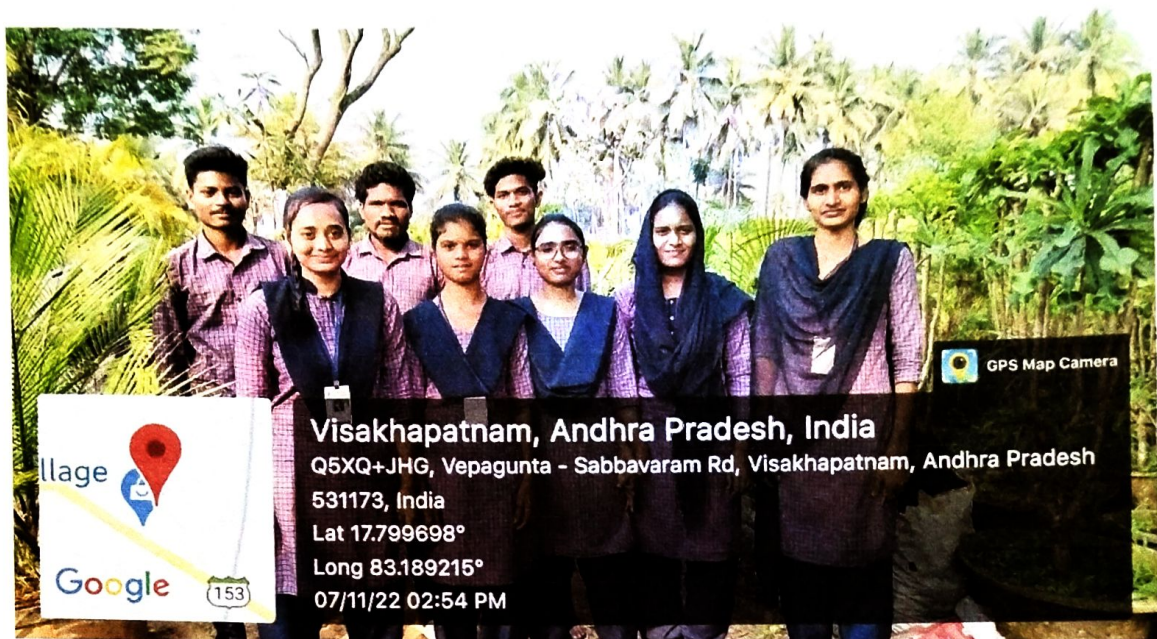
As a rule of thumb, most bonsai trees should be fertilized throughout their growing season (early spring to mid-fall). **Soil**

Most bonsai soil mixes are a combination of Akadama (hard-baked clay), pumice, lava rock, and soil.

Aquaponics

Aquaponics is a food production system that couples aquaculture (raising aquatic animals such as fish, crayfish, snails or prawns in tanks) with hydroponics (cultivating plants in water) whereby the nutrient-rich aquaculture water is fed to hydroponically grown plants.







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PLANT NURSERY PROJECT



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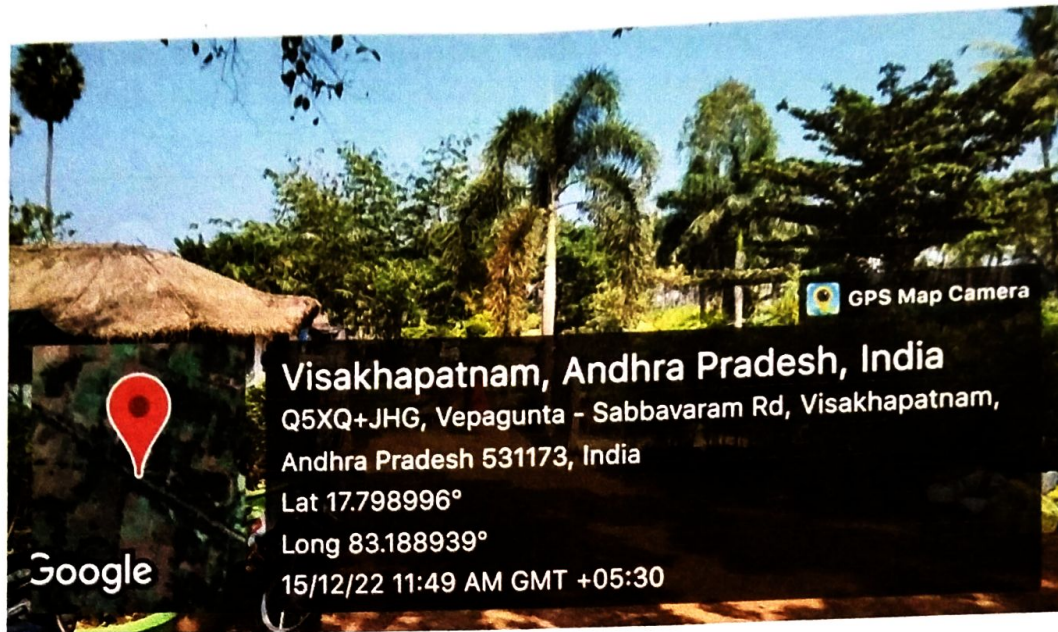
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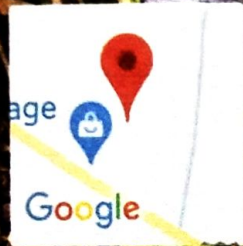


Preparation of soil mixing

Potting Mix : prepare Perfect Potting Mix with 5 easy DIY steps

plant, you should keep your hands and tools as clean as possible to reduce the chance of an infection entering the plant. Scrub your hands with anti-microbial soap and put on latex gloves.





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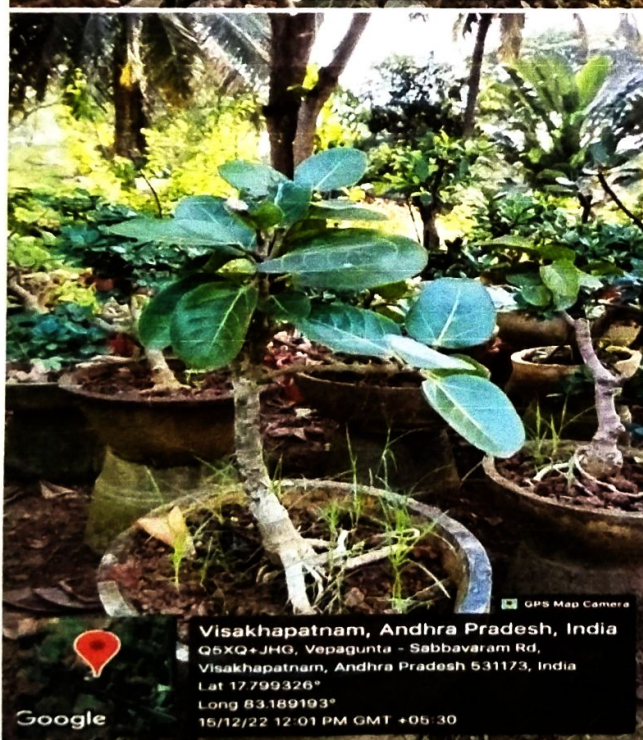
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GPS Map Camera









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PLANT NURSERY PROJECT



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Plant nursery project



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6. You can use a good stainless steel soil sieve. • This resultant peat should be washed with water to remove excess salts.
7. Soak the peat in water for about an hour.
8. Squeeze out excess water with hands.
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Fertilizing

As a rule of thumb, most bonsai trees should be fertilized throughout their growing season (early spring to mid-fall).

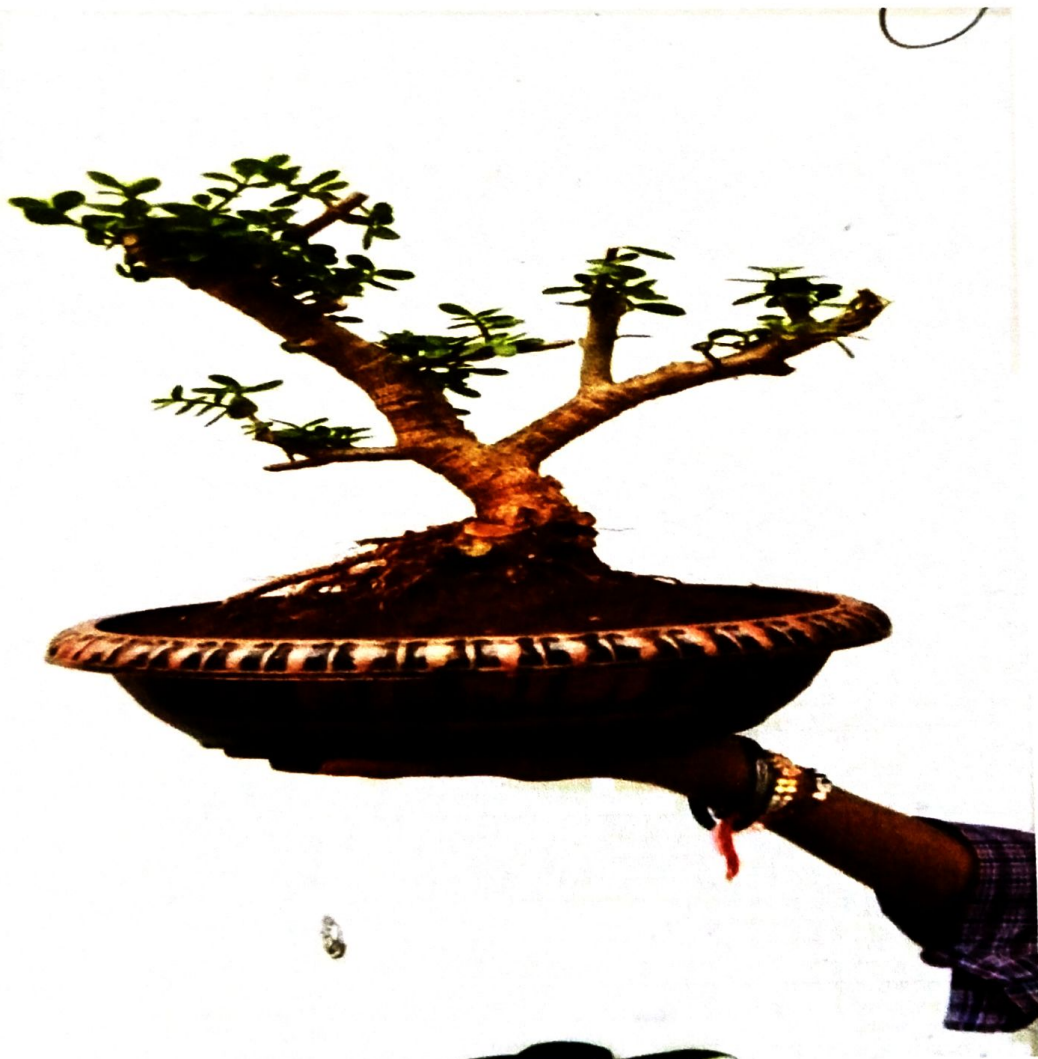
Soil

Most bonsai soil mixes are a combination of Akadama (hard-baked clay), pumice, lava rock, and soil.

Repotting

Most young bonsai trees need to be repotted every two years, while more mature trees can stay in the same pot for up to five years.









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PLANT NURSERY PROJECT



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