
Additional Document

Green Edible Christmas Tree



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Introduction

Traditional Christmas trees often require cutting down living trees, contributing to deforestation and habitat loss. This edible indoor vertical-growing Christmas tree offers a sustainable alternative that preserves natural resources. Artificial trees, while reusable, are often made from petroleum-based plastics that can end up in landfills.

This edible tree eliminates the waste associated with discarded Christmas trees. By utilizing recycled, reused materials and organic elements, this product encourages a mindful and eco-conscious approach to Christmas celebrations. The unique and eye-catching design is bound to spark conversations and inspire others to explore more sustainable holiday traditions.

Link of the video

<https://drive.google.com/file/d/1vWiAiQxtK4H9qAKwiZvdHDwYcQ6Q520H/view?usp=drivesdk>

Link of the Photos

https://drive.google.com/drive/folders/1vrQ5fZ4Q_X7g0zYJ91qd9GjlurMM9o0H



After Use

After the Christmas season, this can act as a growing source of fresh herbs and vegetables throughout the year. This eliminates the need to dispose of the tree and encourages a connection with nature beyond the holiday season. By growing our own herbs and vegetables from this structure (tree), people can save money on groceries and enjoy fresh, homegrown produce. The harvested vegetables and herbs can be donated to shelters or communities. This ensures that the bounty of our tree goes to those in need, spreading joy and nourishment during the holiday season. Also, this product can serve as an educational tool, demonstrating the importance of sustainability and inspiring others to adopt more eco-friendly practices in their own lives.

As an indoor vertical farming Christmas tree



02 Materials

Base –

Reused plastic lids, Glass bottles and reused wood dowel for support.

Edible Elements

Vegetables - Salad lettuce, Bok choy

Herbs - Water spinach , Gotukola ,

spinach



Decoration Materials

**Main Star using
color papers**



**Santa face
(Reusing materials
like bottle lids and
color papers)**



**Bell
(Disposed
Nescafe cups)**



**Cinnamon &
Star anise
decoration**



**Small star
Using coconut
spathe**



05. Process

1. Preparing the Base Structure

Gather Materials

- Begin by collecting and thoroughly cleaning a stack of used plastic container lids. It also needs sturdy central support, such as a reused wooden dowel and repurposed bottles.

Create Tiers

- Arranging the plastic lids of different sizes in concentric circles on a flat surface to establish the desired number of tiers (four lids) for the tree.

Assemble the Base

Use support wood dowels to confidently attach the lids to the central support, creating a robust and stable tiered structure. It can be covered with some cotton clothes to get aesthetical look.



2.Planting Green Vegetables and Herbs

Selecting Plants

To enhance the vertical garden, choose a diverse array of fresh, edible greens and herbs, such as lettuce, Gotu kola, and water spinach.

Placement

Carefully plant each selected plant on the respective tiers of the tree after putting organic soil.



Water Retention

When planting directly, ensure optimal drainage by creating small holes in the bottom of the lids

3. Attaching Decorations and Lights



- Elevate the tree's aesthetic by using cinnamon sticks, disposed paper cups, and vibrant paper cutouts. Hang small, lightweight ornaments from the lids to add an extra touch of charm.
- **Position LED grow lights around the base of the tree for a captivating glow. By making sure the lights are suitable voltage and safe for use around plants. Choose LED grow lights with a spectrum suitable for leafy greens and herbs. with a good balance of red and blue wavelengths. Position the assembled tree on a sturdy base, such as a large plate or decorative tray, to ensure it remains upright and secure, and to collect excess water it will be helpful.**

Eco-Friendly Aspects

Reducing Plastic Waste

The foundation of this tree is built entirely from reused plastic lids. This innovative approach repurposes waste materials that would otherwise end up in landfills, giving them a new life as a festive centerpiece. By utilizing discarded plastic, this project helps to reduce plastic pollution and minimize our reliance on single-use plastics.

Reusing and Recycling Decorations

The paper decorations, such as those made from paper cups and colored paper, can be reused in future holiday seasons or for other craft projects and they are biodegradable. Organic decorations like cinnamon sticks and Star anise can be composted, returning nutrients to the soil.

Zero-Waste Concept

The most significant eco-friendly aspect is the edible nature of the tree itself. After the holiday season, the fresh vegetables and herbs can be harvested and consumed, eliminating the need to dispose of the tree and minimizing food waste.

Promoting a Circular Economy

This approach encourages a circular economy model where resources are used efficiently and waste is minimized.

Educational Value



This product can be used as an educational tool to teach children and adults about the importance of recycling, reusing, and reducing their environmental impact.

This product demonstrates that it is possible to celebrate Christmas with joy and wonder while minimizing our environmental impact. By this innovative edible Christmas tree serves as a constructive example of how creativity can lead to sustainable Christmas celebrations.

The spirit of giving is beautifully exemplified by the act of donating freshly harvested vegetables and herbs to local shelters, and community organizations. By sharing the harvest, we can significantly impact those in need, especially during the Christmas season when many are struggling to put food on the table.

This generous practice not only provides essential nourishment to families and individuals facing food insecurity but also fosters a sense of community and connection. Each donation serves as a reminder that we can come together to support one another, transforming our bounty into a source of joy and sustenance. As we spread kindness through these contributions, we help create a more compassionate world, ensuring that everyone can experience the warmth and nourishment of the season.

Other than that by incorporating these elements, we can transform our edible Christmas tree into a catalyst for positive environmental change, inspiring our community to embrace sustainable practices and make a difference for our planet.



05

Conclusion

This project exemplifies that we can celebrate Christmas with joy while actively minimizing our environmental footprint. The "Tree without a Tree" competition encourages us to recognize the impact of small changes and to adopt sustainable practices. Let's embrace this opportunity to celebrate in a way that honors nature and inspires a positive, sustainable future for all. Embracing sustainable practices and embracing innovative solutions, we can create festive traditions that are both beautiful and beneficial for our planet.