



**BIOECO-UP** 

# CULTIVATING MUSHROOMS

# ON WOOD

An eco-friendly approach to Fungi Farming

Cultivating mushrooms on wood is an innovative, sustainable method of producing edible and medicinal fungi. This technique, often referred to as log or woodchip cultivation, harnesses the natural relationship between mushrooms and wood, their native substrate, to create a low-impact, high-yield form of agriculture.

To care for mushroom growing kits, ensure a high air humidity of at least 75%, proper ventilation, and temperatures between 15-20°C. Place the kit in a naturally humid area or inside a large, moistened plastic container with a water-retaining material at the bottom. Avoid direct sunlight and do not fully close the container. Spray the container walls with water twice daily without spraying the mushrooms directly. After harvesting, soak the kit in water for 12-24 hours to encourage new growth.

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# WHY CULTIVATE MUSHROOMS ON WOOD?

Mushrooms, particularly varieties like Shiitake, Oyster, and Lion's Mane, thrive on dead organic material, making wood an ideal growth medium. This method offers several benefits:

## SUSTAINABILITY:

Wood-based cultivation mimics natural processes, allowing for organic and eco-friendly farming practices. It utilizes byproducts of forestry and tree maintenance, thus reducing waste.

#### LOW RESOURCE USE:

Unlike other agricultural practices, growing mushrooms on wood doesn't require fertile land, making it suitable for areas with poor soil quality. It also minimises the need for synthetic fertilizers and pesticides.

## **BIODIVERSITY:**

Cultivating a variety of mushrooms can support local biodiversity, offering habitats and nourishment to various organisms within the ecosystem.

#### HOW TO CULTIVATE MUSHROOMS ON WOOD?

**SUBSTRATE PREPARATION:** Select hardwood logs or woodchips from species like oak, maple, or beech. The wood should be fresh to ensure it's free from competing fungi.

**INOCULATION:** Drill holes in the logs and insert spawn plugs, or mix spawn with woodchips. The spawn serves as the seed material, which will colonize the wood.

**INCUBATION:** Place the inoculated logs or woodchips in a shaded, moist area. The environment should be kept at optimal humidity to encourage mycelial growth.

**HARVESTING:** Depending on the mushroom species and environmental conditions, mushrooms will begin to fruit within several months to a year after inoculation. Harvesting can continue periodically for several years with proper care.

#### **CHALLENGES AND CONSIDERATIONS**

While cultivating mushrooms on wood is an eco-friendly option, it does come with challenges. It requires patience, as the colonization and fruiting processes take time. Environmental conditions such as temperature, humidity, and light levels must be carefully managed to ensure successful cultivation. Additionally, sourcing quality spawn and maintaining disease-free conditions are critical for a healthy yield.



# CONCLUSION

Cultivating mushrooms on wood offers a sustainable alternative to traditional agriculture, aligning with ecological values and contributing to a more resilient food system. By understanding and applying this method, growers can produce nutritious, delicious mushrooms while positively impacting their local environment and promoting circular bioeconomy.

