





# 04

## Growing Mushrooms as Companions



## LESSON 04

# In This Lesson, You Will Learn

- Benefits of growing mushrooms with your vegetables
- 5 easy ways to grow mushrooms in the vegetable garden
- Which mushrooms make good companion plants for vegetables and fruit
- How to turn your mushroom planting into a perennial planting

# 01

When you think of fungi you probably don't think of encouraging it in the garden.





# 02

But just like the human microbiome that is key to health and longevity, your garden is a place of high beneficial microbe activity, including fungi.



# 03

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Mushroom in the garden benefit plants by breaking down woody mulch, providing plant nutrients, fighting soil pests, and attracting beneficial soil creatures like worms.



# Benefits of Mushrooms in the Garden

- › Mushrooms protect the microscopic microbial landscape
- › They prevent runoff of chemical and bacterial contaminants into waterways
- › They remediate waste sites
- › They kill nematodes and other root pests
- › They can prevent weeds from taking over



# Mushrooms increase vegetable yields

Paul Stamets (Fungi Perfecti) has reported a 2-fold increase in brassica yields and a 3-fold total food production increase when the vegetables were grown in the same bed as elm oyster mushrooms.





**Fungi cycle nutrients that  
nourish new life in the soil.**



**Fungi break down compost  
and make the nutrients more  
available to plants**







Mushrooms speed up the breaking down of compost and mulch into rich soil for plants



Mushroom mycelium attracts earth worms to your garden, increasing available fertility for plant roots





# Edible Mushrooms to use in an established garden



- **Shiitake** (*Lentinula edodes*)
- **Oyster** (*Pleurotus ostreatus*)
- **Wine Cap** (*Stropharia rugosoannulata*)



# Ways to use mushrooms

Inoculate logs with mushroom spawn

1. Once the mycelium is through the log use as the sides of garden beds
2. Logs will fruit when the temperature and humidity are correct.

[This publication from Cornell will guide you in log cultivation.](#)





# Ways to use mushrooms

Mulch garden beds before planting with hardwood chips or grain straw.

1. Inoculate hardwood chips or grain straw with mushroom mycelium
2. Plants may be transplanted directly into the garden bed by pulling the mulch aside.
3. Once the mycelium is through the substrate, mushrooms will fruit on the straw





# Garden Giant can be used under fruit trees

1. Rake away any debris or dead leaves to expose the top soil.
2. Mulch under fruit trees with hardwood chips or grain straw or a combination.
3. Inoculate hardwood chips or grain straw with mushroom mycelium
4. Garden Giant will colonize the mulch and fruit when the temperature is right.





**Log cultivated mushrooms are over when the log is decomposed. A given log might fruit for 3 to 5 years before it is spent.**



**When grown on a straw or wood chip much, the mushrooms will come back year after year, as long as you keep feeding the mushroom bed with fresh straw or hardwood chips.**



# Where to find mushroom spawn?



Canada:

[Grow Mushrooms Canada](#) (BC)

[Mycoboutique](#) (Quebec)

[Mycosource](#) (Ontario)



# Where to find mushroom spawn?



USA:

[Mushroom Mountain](#) (SC)

[North Spore](#) (ME)

[Fungi Perfecti](#) (WA)

[Field and Forest](#) (WI)



# Where to find mushroom spawn?



EU: [Nackrosgarden](#)

UK: [Ann Miller](#)





“Modern science now recognizes that we are an ecosystem, that we live in an ecosystem, and we are born from an ecosystem. Mycelium is a foundation of nature’s land based food webs. Understanding the role of mushrooms and their mycelia in ecosystems empowers their use in naturopathic medicine in ways that bolster conventional medical practices”

**Paul Stamets, Fungi Perfecti**



# **WARNING**

Mushrooms should always be cooked before consuming. Do not consume mushrooms more than 3 days in a row. Give your body a break to avoid stomach upset.

When you grow mushrooms in your garden know what the mushrooms look like when mature so that you can safely identify them before harvesting and eating them.



# Homework

1. Determine if mushrooms are a good fit for your garden.
2. Locate mushroom spawn in your area
3. Order spawn, if desired. Expect it to take 2 to 4 weeks.
4. Prepare your garden area by sourcing wood chips or grain straw.



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