FUNGI!!

GROWING SPECIALTY MUSHROOMS

START A WINE CAP MUSHROOM PATCH



Food forest swale path inoculated with wine cap mushroom spawn

Wine Cap: King Stropharia

True to its name, wine cap mushrooms are a pleasure to consume and a breeze to grow. Also known as Garden Giant or King Stropharia, this mushroom can grow as big as five pounds! They are succulent, taste meaty, slightly nutty, and delicious. Very easy to grow—and no chainsaw is needed! Unlike the log-culture method of growing mushrooms,wine cap inoculation can be started Throughout the season and only needs wood chips and dappled light to flourish. And, boy, are they fast to fruit! A planting in early spring can fruit that same season, although occasionally they can take a full 12 months to bear fruit.

I get my wood chips dropped for free from a local arborist. All I ask is that they are not pine or from the side of the highway (sprayed with chemicals). The fresher, the better; but chips up to three months old will still work fine.

Materials :

- ° Cardboard
- Wood chips
- Spawn
- Straw

The Mushroom Patch

The wine cap mushroom patch can be any shape you'd like. You can make it a new mulch ring for a much-loved tree or as a stamp shape under a set-

ting of deciduous trees. I often fashion mine as I do for food forest patches, about 10 feet by 10 feet. If the site is not completely bare to the soil, I put down cardboard first to reduce competitor fungi then dump the wood chips on top about two inches thick. If the chips are not moist, be sure to wet them thoroughly with a hose as they go down. For the



Wine cap mushroom.

LIFE WITHOUT FUNGI

We would not exist if it were not for fungi. The handsome shiitake, glorious oyster, and many other tasty characters belong to a group called saprophytic fungi. These guys are the first ones on the scene when a tree dies. They start the process of decomposition and ultimate soil building. If it weren't for this crew of fungi, we would be living on a mile high pile of wood, not down here digging in the rich earth.



first planting, you will start with a bag of sawdust spawn from a supplier. After that, you should never again need to buy spawn, as the patch easily self-propagates.

A 5.5-pound bag of sawdust spawn, which runs about \$25, will cover at least 50 square feet. With that in mind, sprinkle out half the total dose of sawdust onto the moist chips. Next, drop on another two inches of moist chips and add the second half of the spawn to the top. Mix in the spawn on top a little with a metal rake or by hand. Last, sprinkle on fresh straw and water down. Do not worry if the straw begins to sprout; it will only help the wine cap trap more moisture.

Keep the patch moist as you would your garden. Expect flushes of mushrooms throughout the season from late spring to fall; wine cap has a wide range of fruiting temperatures (40°F to 90°F). After the first fruiting, either feed the patch more wood chips or scoop a bucketful from the mycelium-rich patch and start a new one, using a ratio of approximately 1:20 (or one bucket of spawn to 20 buckets of new chips). Or let it go and plant right into the rich compost it has created.

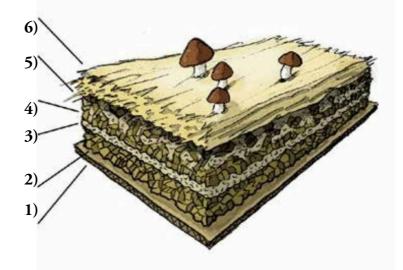
Without continued feeding, the patch will expend itself into fertile compost and stop fruiting. To re-feed the original patch, just dump on 2 to 3 inches of moistened fresh chips, mix in well, and recover with straw. In mid-summer, once the mycelium has run through the chips, I take a bucketful of mycelium and spread it under my garden veggies, particularly the tomatoes and zucchinis, forming donut shapes around the base of the plants. The leaf coverage and moisture of the plant is just right for the wine cap to thrive

Wine Cap Mushroom Patch.

6) Straw

5) Other ½ of sawdust spawn (mixed in)

- **4)** 2" of wood chips
- **3)** $\frac{1}{2}$ of sawdust spawn
- 2) 2" of wood chips
- 1) Cardboard



and fruit. It also boosts the plants' nutrient uptake. Then, when I'm out harvesting my dinner, I'm able to easily add in tasty mushrooms!

Siting

Unlike the log culture, your wine cap mushroom patch would like a little interface with light. I place my patches under deciduous trees that interface with the lawn, where moisture seems to naturally cycle.

I have also successfully grown wine caps under a shade cloth rigged up out in the middle of a sunny garden. And I have failed when trying to grow them in deep shade, though I did get an awesome compost pile from it. Even a few hours of direct sunlight will not undo the wine cap, but instead help stimulate the moisture flow to the surface where the mycelium is growing.

Wine caps aren't the only shroom that can be grown on woodchip patches. When I cut the driveway through the woods to the circular

GEEKY SIDE NOTE OF MYCELIUM'S BENEFITS IN THE GARDEN:

Even if you never harvest a mushroom, you'll be creating the most amazing compost on the planet! By incorporating fungi into your landscape and gardens, you boost yields and heal soils. You can forget about fertilizing. Apart from loosening the soil and adding moisture retention, these guys pump carbon dioxide that the plants chug like fuel. It's a dance between plant and fungi, a little sugar flow, or biochemical love exchange.



Straw bale house I'm building, I marked it along contour and sited it to pull down the fewest number of trees possible. The trees that did come down got cut into mushroom logs and totem chunks; the rest were chipped into mounds approximately 5 feet by 10 feet by 2 feet high. Into these mounds, which now run all along my drive, I stuck a fruiting oyster totem log round essentially, a huge spawn plug— and chucked straw over the top. Now all I have to do as I come up the drive is slow down, lean out the truck door, and harvest massive clumps of shelf oysters for the table. Some I let go to release spores and inoculate the surrounding forest debris, eventually saving me from having to do anything but just hike around with my big ol' mushroom-harvesting bag.

Notes

- Use mesh bags to harvest mushrooms in so that you are further spreading spores as you walk about.
- o Since the wine cap is grown on the ground around other terrestrial fungi, be sure to identify it well before eating.





If you like this and are keen to learn more, head over to our <u>online Mushroom course</u> for a visual treat and all you need to know to grow !



WIN, WIN, WIN!

Working with fungi is one of the rare win, win, win scenarios where every step of the process has a myriad of benefits. By thinning trees for growing mushrooms, you help rebalance the forest; by inoculating wood with fungi, you speed up the soil building process; and by spreading more fungi in the landscape, you strengthen ecosystems and increase runoff filtration. On the economic side, growing mushrooms for market is as lucrative as a legal crop gets. Local farmers markets and restaurants pay top dollar for outdoor fungi. Value add the harvest into a bottled sauce or oil and you'll be rolling.



This is a snippet from the Fungi chapter of Micheal Judd's book, Edible Landscaping with a Permaculture Twist

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THANK YOU!

We hope you've enjoyed this short intro to the fantastic and amazing wine cap mushroom.

It gets more delicious the more you explore..

Check out the Growing Gourmet Mushrooms Mini Course - 25% off!



For more resources, videos, books, and courses on easy to grow fruits, mushrooms, food forests, and much much more visit:

www.EcologiaDesign.com

Stayed tuned to for new guides, videos and courses that will help make your life more fruitfull!



Blessings, Michael & Ashley Judd



WHO IS MICHAEL JUDD?

Michael Judd has worked with agroecological and whole-system designs throughout the Americas for over two decades, focusing on applying permaculture and ecological design. His projects increase local food security and community health in both tropical and temperate growing regions. He is the founder of Ecologia Edible & Ecological Landscape Design, Project Bona Fide, an international nonprofit supporting agro-ecology research, and co-founder of SilvoCulture, a Maryland based nonprofit which is helping plant 1 million nut trees in the Mid-Atlantic region. He is also the author of For the Love of Paw Paws book and online course.

Michael lives with his family on a permaculture haven nestled along the foothills of the Blue Ridge Mountains near Frederick, Maryland. The Judds' homestead consists of 25 acres of mixed woodlands, food forests, gardens, and a nursery designed for experimentation and education.



Above: Michael Judd in a PawPaw Patch Below: The Judd Homestead during PawPaw Fest



