

# Garden Giant Mushroom Patch Instructions

Stropharia rugoso-annulata

The Garden Giant is a beautiful mushroom that can grow up to 8" tall with a cap as large as a foot across, and it tastes delicious! It is easy to cultivate in the garden—or just about anywhere outdoors. The Garden Giant is used in companion planting because it inhibits and

destroys destructive nematodes. It also adds nutrients to your soil and can be used in bioremediation to filter bacteria and nitrogen from soil and water runoff. Garden Giant can help protect plants in your garden! This mushroom has spiny cells (called acanthocytes) growing from its mycelium (mycelium is the long threads that are essentially the mushroom's roots). These cells protect the mushroom's mycelium and attack nematodes by clamping down on them and piercing them. The fungus then consumes the nematodes. This benefits other plants as well as the Garden Giant because nematodes can cause serious damage to crops. The Garden Giant will destroy Stubby-root (Trichodorus and Paratrichodorus), Root-lesion (Pratylenchus), Root-knot (Meloidogyne), and Pin (Paratylenchus) nematodes, among others.

#### Spawn Storage

- The bag of Garden Giant sawdust spawn can be stored for up to 1 month in a cool area. It can be stored in the refrigerator, a basement, garage, or any area that stays, on average, below 60° and above 34°.
- There is a filter patch built into the bag that allows for gas exchange. The Garden Giant mycelium is alive, absorbing oxygen, and emitting CO<sub>2</sub>. Keep this filter patch free of obstruction while storing your kit.
- Only open the bag when you are ready to use the sawdust spawn. The sawdust spawn should not be stored after the bag is opened because there will be an increased risk of contamination.

### **Planning your Patch**

**The best time of year to make your patch** is after the danger of frost has passed and at least one month before temperatures drop below freezing. Spring and summer are ideal times to create a patch.

**Site selection** can vary. Garden giant grows best in partial shade, but it can grow in full sun and full shade. Ideal locations include the vegetable garden (especially among taller plants which create shade during summer), edge of a forest, greenhouses, raised beds, orchards, ornamental gardens, or a bed designed just for the garden giant. One bag of sawdust spawn can be spread over a 16 square foot area (4'x4').

**Supplies** you will need include:

- A way to water the patch.
- Unwaxed carboard- Cardboard is your first layer when making your mushroom bed. It suppresses grass and weeds and is a source of food for mushrooms. Most cardboard boxes will work.
- Substrate- All substrates should be mold-free and as fresh as possible. A great place to find substrates (especially wood chips) is to check with landscape suppliers, mills, power companies, and arborists. You will need about ½ cubic yard of substrate. Include any one of these, or a blend of them:
  - > Hardwood chips or sawdust (nothing aromatic such as cedar, juniper, eucalyptus).
  - > Fir chips or sawdust. If using fir only use 50% in your mixture
  - Straw (not hay)
  - Corn stalks
  - Hardwood pellets (used for woodstoves and BBQs)
  - Rice or bean hulls
  - Compost

Our favorite combination is a mix of hardwood and fir woodchips with a topdressing of straw

## Making Your Mushroom Patch

**1.** A bag of spawn will make a 4'x4' mushroom patch. To prepare a spot for a mushroom patch, first clear out weeds, grass, and debris to get down to bare earth. Spread a layer of flattened, unwaxed cardboard on the ground. Thoroughly soak the cardboard, then broadcast half the bag of spawn evenly on top of your cardboard, breaking up any large chunks of the spawn.

**2.** Cover the spawn with 2 inches of your substrate, completely covering the cardboard, including over the edges of the cardboard. Spread out the substrate and even out the surface of the bed. Water the patch.

**3.** Sprinkle the remaining half of the spawn evenly over the substrate.

Cover the spawn with an additional 3 inches of substrate and water thoroughly.

Optional: top dress the patch with 2 inches of clean straw. The straw will keep moisture in the newly prepared patch.

**4.** Water the patch every day for the first week, then water once a week unless there is rain. It is ok if the top layer of substrate feels dry, but make sure the substrate underneath the top layer stays moist. Adjust watering as needed.

Examples of a few garden giant patch we have made at the farm:



Here's a garden giant patch topdressed with straw and located between a pathway & flower garden



Garden giant patches next to garlic. The garden giant patches are serving multiple purposes: proving us mushrooms, helping keep the garden healthy & suppressing weeds



We surrounded our greenhouse with a garden giant mushroom patch







#### Maintenance

**Watering** is very important. The mushrooms need water to grow and thrive. It is important to not let your mushroom patch dry out, but it is important not to over-water or you will create an anaerobic environment and the mushrooms will not survive. During periods with no rain, water once a week until you have thoroughly watered the patch. For example, during summer I water my patch once a week for about 2 hours with an overhead sprinkler.

**Growing**: Within a couple months, you will start to see mushroom mycelium spreading through the substrate and into the soil. How long mushrooms take to appear depends upon the climate and season the patch was made. Usually, mushrooms will appear 2-3 months after the patch was made. When mushrooms appear, lightly water the mushrooms daily so the growing mushrooms do not dry out. The mushrooms generally fruit in late spring through summer.



Mycelium growing on wood chips







All of these garden giant mushrooms are ready to harvest. As you can see, the purple color of their cap can vary depending on where the mushrooms are growing. Sunlight will cause their cap to be a lighter shade of purple. Be sure of your identification before consuming mushrooms. Harvest by grabbing the mushroom's stem and pulling up. Cut off the stem butt and bury in the substrate. The stem butt has live mycelium growing at the end of it.

**During winter**, top dress your mushroom patches with a 6" layer of straw, leaves, wood chips, or any other organic matter to insulate the patch from freezing temperatures.

**In the spring** use a rake to remove the topdressing that was added during winter. Replenish the mushroom patch by topdressing with a few inches of fresh substrate.

After your mushroom patch has been established (this takes 2 years) you can dig up some of the mycelium from your established patch and use it as spawn to create a new mushroom patch in a different location. Follow the directions above for making a mushroom bed.



# **Cooking With Garden Giant**

Garden giant has a meaty texture and a rich, umami flavor. They are great in most dishes. Cooking tips: \*Cut into medium-sized strips, brush with olive oil, balsamic vinegar, herbs, salt and pepper, and grill. \*Cut into thin strips and sauté in olive oil or butter for 15 minutes then add as a topping to any dish. \*Dice into small pieces and simmer in soup or sauce for 20 minutes.

\*Dice into small pieces, sauté for 10 minutes, then add a few eggs, diced vegetables and cheese for an amazing omelet.

#### **Ricotta-Stuffed Garden Giant Caps**

- •4-6 Large Mushrooms
- •2 Tablespoons Olive Oil
- •3 Tablespoons Minced Onions
- •2-4 Garlic Cloves, Minced
- •3 Tablespoons Chopped Fresh Parsley
- •1 Hot Red Pepper, Minced (Optional)
- •3 Tomatoes, Chopped (Sun-dried Can Be Substituted)
- •1 Cup Ricotta Cheese
- •5 Tablespoons Grated Cheese, Your Choice
- Olive Oil For Brushing

Salt to taste

- 1. Preheat oven to 375° F, remove the mushrooms stems (setting aside the caps for later) and thinly chop the mushroom stems.
- 2. In a heavy frying pan, heat the olive oil and then add the mushroom stems and onion, cooking until softened.
- 3. Add the garlic and hot pepper and cook another minute or two.
- 4. Allow the mixture to cool and then add the parsley, tomatoes, and ricotta cheese and season with salt and pepper. This is your filling.
- 5. Lightly oil a baking sheet and place the mushroom caps on it, gills side up. Brush the caps lightly with olive oil, spoon the filling in, and sprinkle with the grated cheese.
- 6. Bake 20 25 minutes or until the mushrooms are tender when pierced with a knife and the tops are lightly browned.

