

Method for Cultivating Stropharia Mushrooms



Stropharia or Red Wine Cap Mushrooms (*Stropharia rugoso-annulata*) are a native mushroom to the Northeast that can be found naturally in garden beds, lawns, and forest edges. It is also quite easy to cultivate and a nice candidate for those looking for mushrooms to grow in their gardens on a substrate of woodchips or straw.

We are beginning research at Cornell to study some of the variables in Stropharia cultivation, as many have had success with this mushroom though in a wide range on contexts and conditions. After inoculation fruiting can occur in as little as 2 months and as much as a full year.

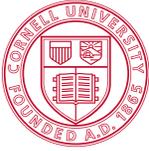
For inoculation, you will need to acquire several layers of organic materials and layer them to create optimal conditions.

Materials:

- Somewhat fresh (less than a year old) **woodchips** of mixed species, with no more than 50% of the composition being from coniferous species (trees with needles) about two wheelbarrow loads OR a fresh straw bale
- 5 gallon bucket of sawdust, or shavings
- 5 gallon bucket of finished compost (optional)
- Saw dust spawn from a producer (see our website for a list)

Location:

Stropharia will tolerate a wide range of light conditions, but seem to grow best in part to full sun or “garden shade” where they are allowed to grow under the shade cast by plants in full sun conditions. Fruiting and maturation of the mushrooms can happen rather quickly, so it is recommended to inoculate beds that are often visited. DO NOT inoculate garden areas that are tilled, instead choose permanent beds of edibles or ornamentals.



Procedure:

1. Measure out a spot that is approximately 16 square feet of bed space. This is approximately what a 5 lb bag of spawn will inoculate; you can inoculate one continuous section or multiple smaller areas; make sure no inoculation is small than 4 square feet or a quarter bag of spawn.
2. Inoculation can occur as early as April or as late as September, with spring being the preferred time as it often results in fruiting in the same season.
3. To inoculate, remove organic matter down to “bare soil”. Add about 1/2” of sawdust or wood shavings and spread evenly. Layer the spawn on top of this, breaking it up into fine particles while also leaving some chunks in the bed. On top of this, layer about 4” of woodchips or straw. Soak the bed thoroughly with water.

Maintenance:

Stropharia require little maintenance and can live and fruit for many years. In dry seasons water patches as you would plants in a garden. It is best to add 2 – 4” of fresh woodchips or straw in the Fall to provide fresh feedstock and protect the mycelium from damaging frosts. Once a patch has colonized and area for one full season, the mycelium can be divided into multiple handful chunks and spread into other areas of the garden.

Harvesting:

It is important to properly identify Stropharia mushrooms before harvesting as there are many mushrooms that can emerge from mulched garden beds. That said, Stropharia is rather simple to identify with the following characteristics:

- A reddish-brown cap that changes from dark to light as the mushroom matures
- Gills that begin light black and turn darker as the mushroom matures
- A “king crown” ring around the stem
- The stem is fibrous and full of air pockets.
- No noticeable bulge where the mushroom meets the ground.

The only sure way to identify a mushroom is by taking a spore print. The Stropharia mushroom leaves a black-purple spore mark. When in doubt, DON'T EAT A MUSHROOM. Always eat small amounts the first time you are trying a new species. Consult our identification factsheet for more information.