

Appendix A

Glossary

Ambient air temperature: The air temperature all around, outside the log.

Bark Blow-off disease: Caused by *Hypoxylon* spp. and results in decreased yields or total loss of the log. Appears initially in the form of small black dots in the grooves of the bark. It eventually develops into hard black pustules in the bark. Generally this fungus enters the wood prior to inoculation. Its growth can be prevented by keeping the bark of the logs dry before inoculation.

Caps: The top portion of the fruiting body of shiitake mushrooms.

Colonize: The establishment of the spawn within the log.

Contamination: The invasion of foreign or weed fungi into the log.

Cord: A volume of wood with logs 4 feet long, stacked 4 feet high and 8 feet long. An average hardwood cord of wood weighs between 5,800 and 6,000 pounds. About 240 logs that are 40 inches long and 3 to 8 inches in diameter make up a cord.

Dormant: This is when a tree is alive but not actively growing. Deciduous trees or those that lose their leaves are usually dormant from the time they are in full fall leaf color until bud break in the spring.

Dowel spawn: Spawn that is cultivated on wooden dowels 5/16 inch in diameter and 3/4 inch long.

Fruiting: When the spawn has sufficiently completed spawn run and the environmental and log conditions are adequate for that strain, shiitake mushrooms will fruit or produce a fruit body. The fruit body is the mushroom.

Fruit body: The mushroom.

Fungal cultures: A single organism or strain of shiitake or other fungus.

Fungus: Life form that is a parasite of living organisms or feeds upon dead organic material.

Hardwood: Wood of a broad-leaved tree possessing true vessels in contrast to the softwood of a needle-bearing conifer that lacks vessels.

Inoculation: The introduction of spawn into a medium, logs, sawdust, etc.

Inoculum: The spawn or fungus.

Laying the logs: The placement of the shiitake logs after they have been inoculated.

Laying yard: The location where inoculated logs are placed until fruiting and sometimes until the log has completely decomposed.

Mature laying yard: The location where inoculated logs that have completed their initial spawn run are placed.

Mycelia: plural of mycelium.

Mycelium: The vegetative part of a fungus made of a mass or network of threadlike tubes.

Pinning: The initial fruiting stage of the mycelium as the fruiting body begins to protrude out of the log or other media.

Sawdust production: The production of shiitake mushrooms in an artificial log made up of sawdust, grains, and other materials. Generally, sawdust production is an indoor operation.

Shade cloth: Material used to provide shade for the logs. It can be made up of many types of material including burlap, spunbonded polyester, and vinyl.

Shiitake mushrooms: *Lentinula edodes*, commonly known as the black mushroom used in Oriental cooking.

Spawn: Pure culture mushroom mycelium on a suitable sterilized substrate such as various agars, grains, or wood chips used for inoculation.

Spawn run: Incubation period of shiitake mycelium prior to fruiting.

Spores: A small reproductive body that comes from the gills of the mushroom. It is similar in purpose to a seed.

Trichoderma: An undesirable green mold, which frequently contaminates logs under conditions of high moisture, poor ventilation and/or dry conditions.

Weed fungi: Fungi other than shiitake that invade a log inoculated with shiitake spawn.