

Growing Shiitakes, Easy Project with Long-lasting Results

By

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My husband and I reminisced recently about growing shiitake mushrooms (*Lentinula edodes*) in our woods. About 15 years ago, friends showed us how to drill holes in oak logs, inoculate them with shiitake spore, and seal the holes with wax. We propped the mushroom logs against two old sawhorses and watched carefully through the winter for signs of incubation. Finally, the following summer, the logs began to produce mushrooms. We enjoyed delicious shiitakes for about four years.

Virginia Cooperative Extension (VCE) Publication ANR-102P covers the basics of growing shiitake mushrooms for home and commercial production. The publication includes the most commonly used techniques, as well as problems, pests, and production controversies.

Growing shiitakes for home use is an easy undertaking with pleasant results. There are two basic techniques for growing shiitakes: in bags of compressed sawdust or by inoculating logs with mushroom spawn, which is the simpler method. The log production technique is described in the article.

If you decide to start shiitake production this winter, now is the time to begin looking for appropriate trees. Cut logs from live hardwoods after leaves drop in the fall and before spring buds open. Healthy, white oak logs with more sapwood than heartwood are considered the most desirable. If white oak is not available, you can use beech, sweetgum, hickory, or other hardwoods. Logs should be about 4 feet long and 4 to 6 inches in diameter. You may choose to inoculate the logs immediately after cutting, or wait for 4 to 8 weeks. Several regional suppliers of shiitake mushroom spawn are named in the VCE article.

You can purchase spawn either packed in sawdust or as dowel-rod plugs. Drill holes with a 12 mm bit, about 4 to 6 inches apart, in rows around the entire circumference of the log. The rows should be 1 to 2 inches apart. If you use sawdust spawn, push a thimble-sized amount of spawn into each hole and seal with hot paraffin. Tap plug spawn into the holes with a mallet.

After inoculation, stack the logs or lean them against a structure, such as an old sawhorse, to minimize contact with the ground. An area with 60 to 85% shade is necessary for incubation. Then you will wait for 6 to 18 months. You may need to wet the logs at intervals if the weather is very dry. Check the ends of the logs every few weeks for the appearance of white mottling. Once mottling occurs, the mushrooms will begin to fruit. At this point, you can hasten the process by soaking the logs in cold water for 24 hours.

For the best flavor, harvest the shiitakes before the caps open completely. Your logs should continue to produce mushrooms throughout the year for 3 to 4 years, or until the sapwood has

been consumed. Slugs and snails are the most frequent pests, along with beetles, deer, and small mammals.

Growing shiitake mushrooms is an easy gardening project. Shiitakes will add flavor and texture to meals, and, according to the American Cancer Society (ACS) website, may help to lower cholesterol and boost the body's immune system. And you won't need a soil test.

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