

Shiitake Mushrooms

Tuesday, November 10, 2009

Shiitakes are a tasty, easy to grow, mushroom originally from the well-tended forests of Japan. They grow on hardwood logs, making them a great crop for farms with woodlands. As the garden chores wind down, we find other jobs to do, and this week is mushroom time.

Many small trees in the forest will never grow big because they're too close to bigger trees. Thinning these out helps the ones that are left. We felled 10 white oaks and cut them into 45 logs about four feet long. The diameters ranged from four to six inches.

Although they can grow on other hardwoods, shiitakes prefer the oak family. Mushrooms help logs decompose, and you'll notice different kinds on decaying branches in the woods. We can't use downed wood because they already have mushroom roots growing on them. Fresh cut logs are necessary so as not to have contamination by other mushroom species.

Spore prints from a mature mushroom are grown in a sawdust medium to make spawn, which is like mushroom roots. I bought six pounds of the spawn for \$60 from mushroom people (866) 521-1555. We inoculate logs with it and let them set for several months until the spawn has spread throughout the log.

Moisture is all-important. The trees are cut after their leaves have fallen. The logs are brought to the barn where we drill holes in them with a 7/16 inch drill bit and a high-speed drill. The holes are an inch deep. They are eight inches apart in rows three inches wide down the length of the logs.

Immediately after drilling, we stuff the holes full of spawn, packing it in tightly with a small dowel. Then the holes are coated with hot wax to seal it from the air. The ends of the logs are also sealed with the wax. Now we have a fresh cut, moist, log inoculated with spawn and waxed to hold off the moisture.

The next step is waiting nine months while the logs, stacked in the barn, have the spawn run through them. White rings on the ends of the logs indicate that the spawn run is completed, and it's time to fruit. Fall plugged logs will be ready next summer.

Mushrooms are produced in response to stress, such as lots of moisture or cold weather. A cool

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rain will bring them on, but we can trick them into fruiting by soaking the logs in cold water for a day. We use a horse trough, a pond or a creek. The soaked logs are then leaned up against a board nailed between two trees in the wood lot. They like about 70% shade.

In a week, the logs are filled with mushrooms, some of which can grow as big as your hand. They are cut off close to the log with a knife. The logs are then rested for a few months before soaking and fruiting again. They'll make mushrooms for several years, eventually turning the logs into sawdust. We have piles of logs from 10 and 12 years ago that we still find shiitakes on every now and then.

We stir fry them with onions and use them in omelets, soups and casseroles, or with anything that benefits from a mushroom. Shiitakes are a beautiful, tan color with a mandala appearance on top. With a reputation for strengthening the immune system and fighting cancer, shiitake mushrooms have become quite popular. They are easy to dry for long-term storage.

When I first grew shiitakes I excitedly brought some to the local coffee shop. I explained the process to my neighbors, who seemed genuinely interested. They'd never seen them before, so I offered them some, but they refused saying, "We ain't eating any of your mushrooms, Poppens."

Forests are a valuable resource for the ecosystem, and mushroom culture allows us to improve our woodlands while getting a crop from it. It's good to have work to do in the off-season. Many people will be happy next summer that we spent a few days managing the wood lot with an eye for another food crop.