



Make Room For Mushrooms

By Dawn Pettinelli, UConn Home & Garden Education Center

Arriving home from work one evening, I noticed a rather heavy box left on my doorstep. Upon closer inspection it turned out to be an indoor mushroom growing kit – portobellos to be exact. I love mushrooms and the thought of having several pounds of these delectable, meaty morsels growing within tossing distance to the sauté pan had me inspecting the contents and reading the instructions within minutes of carrying the box inside the house.

Turns out, growing mushrooms indoors is pretty easy. Different species do have different cultural requirements but they seem to mostly be for either the medium they grow in or the temperature required for growth and development. Mushrooms are fungal organisms. There are many different kinds of fungi but they can rather broadly be grouped into three groups. Decomposers break down organic materials into their original components which can then be recycled back into the soil. Mycorrhizal fungal organisms form beneficial relationships with plants. Pathogenic fungal organisms cause disease problems in plants and also in animals.

Most of the mushroom species that are available for indoor growing are the decomposer species, also referred to as saprophytic fungi. The mushrooms are the fruiting bodies of fungal organisms. They produce spores from which white masses of mycelium form which then give rise to more mushrooms and the cycle repeats itself. Mushrooms are very old organisms with one mushroom fossil dating back 420 million years! You would think that we would know quite a bit about fungal organisms since they have been around such a long time but there are many things about fungi that scientists haven't figured out yet – like what do mushrooms use sunlight for? They are not able to photosynthesize yet they grow towards the light just like plants.

With the spread of the global marketplace and growing interest in functional foods, the number of mushroom species available even in the local grocery store has exploded in recent years. A walk through the produce aisle brings you face to face with Shiitake, portobello, crimini, oyster as well as the common white button mushrooms. Not only are

mushrooms a scrumptious culinary choice but some mushrooms are believed to produce compounds that can stimulate the immune system, fight diseases and add essential minerals, nutrients and other healthy compounds to one's diet.

Interest in growing mushrooms has spread to the point where it is actually quite easy to purchase indoor kits. I found some at my local agricultural supply store. The kit consists of a bag of growing media which is usually sawdust, grain straw, compost or other organic substance, the mushroom spawn, and growing directions.

For some species of mushrooms the organic growing substrate is already inoculated with the mushroom spawn while others contain a separate bag of it which is mixed in by the lucky recipient. This happened to be the case with the portobello mushroom kit I received. Both the growing medium and the inoculated spawn mix needed to be moistened and then mixed together. Then I just needed to keep the kit around room temperature and keep the medium adequately moist, and I was picking my portobellos about a month later. Most of the mushroom kits will have 2 or 3 flushes of mushrooms, each averaging 2 pounds or more, over the course of about 3 months. After your kit stops producing, you can add it to the compost pile or bury it in hardwood bark mulch and you may even revitalize it and get a few more mushrooms.

Fervent mycologists of the gardening variety may even consider cultivating a bed or mushrooms – they are usually grown in compost/hardwood bark mulch patches – or even inoculating hardwood logs.

Some of the most popular mushrooms for indoor growing include the aforementioned portobello, nameko, enokitake, oyster, Shiitake, Lion's mane and crimini. There are a number of places to purchase mushroom kits from online. A good web site to visit on mushroom growing is <https://attra.ncat.org/product/mushroom-cultivation-and-marketing/> It is geared towards commercial cultivation but contains good cultural information as well as many resources.

If you have any home & garden questions, contact the UConn Home & Garden Education at (877) 486-6271 or www.ladybug.uconn.edu or your local Cooperative Extension Center.



