

Oyster cap mushrooms

GASTRONOMES will no doubt be aware of the presence of an increasing range of exotic mushrooms on the supermarket shelves. In the far east, oyster cap mushrooms (*Pleurotus ostreatus*) are cultivated on short lengths of tree trunk. However, there is no need to go to all this trouble. You just need a toilet roll. Mystified? Then read on...

Materials

Kettle for boiling water
Saucer
Soft paper toilet roll
(it is important to use unbleached paper)
Pleurotus ostreatus starter culture, 50 g
(available from the NCBE)
Cling film or a large plastic bag

Practical details

1. Place a new, clean toilet roll on a saucer.
2. Carefully pour boiling water from the kettle into the centre of the toilet roll, until the paper is thoroughly moistened. Leave the toilet roll to cool down for 10–15 minutes. *The boiling water will help to partially sterilize the paper.*
3. Remove the cardboard tube in the centre of the toilet roll. Funnel the *Pleurotus* starter culture into the middle of the paper.
4. Cover the inoculated toilet roll loosely with *Cling film* to stop it drying out, and leave it in a warm (25–30°C) dark place for about a fortnight, until a dense white mycelium completely covers the paper. *The Pleurotus fungus will grow through the paper, breaking down the cellulose and using it as an energy source. After two weeks the toilet roll will look like a white Stilton cheese and smell strongly of mushrooms.*

5. Put the still-covered toilet roll into a refrigerator at about 4°C for 48–96 hours. *This brief cold shock will trigger the production of fruiting bodies (mushrooms).*
6. Remove the toilet roll from the refrigerator and unwrap it. Leave the toilet roll in a cool (8–14°C), light and airy place (a window sill from which inquisitive neighbours can see it is ideal). *It is important that the toilet roll does not dry out. A hand sprayer may be used to moisten the paper from time to time. After 12–17 days oyster mushrooms start to be produced; the exact time depends upon the temperature, humidity and ambient light intensity.*

Safety

The very large inoculum suggested here should ensure rapid growth of oyster mushroom mycelium which will out-compete any chance contaminants.

It is advisable to pick the mushrooms before they start to produce many spores. This is best done when the margin of the developing mushroom has unrolled, becoming flattened and slightly undulating.

Further activities

This activity lends itself to simple observational work, but may be extended to an investigation of, for example, the effect of light or the duration of the cold shock on the induction of fruiting. Alternatively, the superb recipe below can be attempted.

Leek and oyster mushroom terrine with hazelnut vinaigrette

Recipe kindly supplied by John Watson, Head Chef at the Albany Hotel, Edinburgh

1.2 kg trimmed leeks, cut into 13 cm lengths
100 g oyster mushrooms, blanched and drained
a bunch of chervil
vinaigrette made with hazelnut oil
salt and freshly ground pepper

Slit the leeks lengthwise and wash well. Tie into equal bundles and cook until tender but still 'al dente' — about 3–4 mins in boiling water. Refresh in a large bowl of iced water, then drain well, squeezing out excess water.

Line a 4 x 6 x 3 inch terrine with foil and pack leeks in firmly. Season well as you make alternating layers of green and white leeks and drained mushrooms, ending with a layer of leeks which should be above the level of the terrine. Place a piece of board or stiff card, cut to fit the inside of the terrine, and covered with foil, over the top layer of leeks and invert the whole terrine on to a flat dish. Weight down the terrine with a kilogram weight and refrigerate for 6 hours or more to compress leeks.

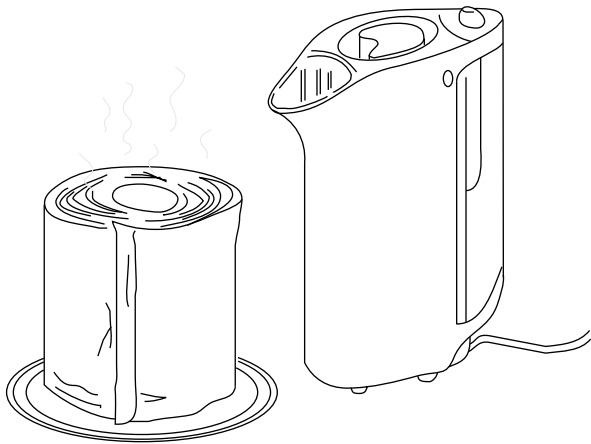
To serve, unmould the terrine on to a serving dish and remove foil carefully. Decorate with chervil sprigs. Serve with hazelnut vinaigrette.

ADDITIONAL INFORMATION

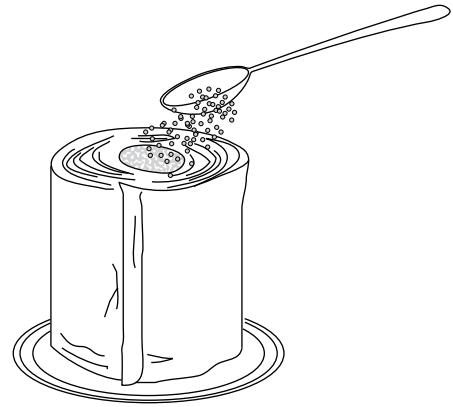
This idea was originally suggested in the following article: Dickinson, C.H. (1988) 'Home-grown oyster caps' *Mycologist*, 2, (4) 172–173.



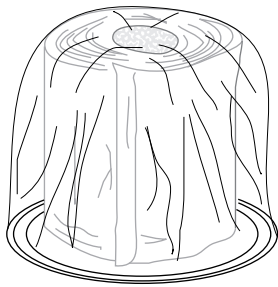
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Moisten the toilet roll with boiling water



When the paper has cooled, remove the inner cardboard core, and fill the centre with oyster mushroom starter culture

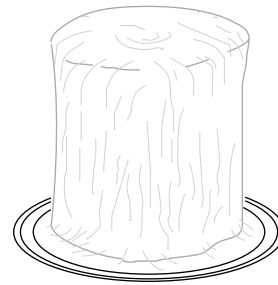


Cover the toilet roll with *Cling film* to stop it drying out

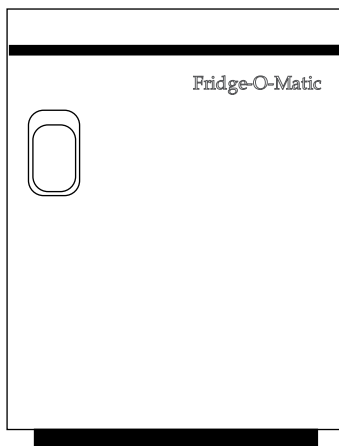
Keep in a warm, dark place at about 25°C



2 weeks later ...



White fungal growth visible on surface



Place the toilet roll in a 'fridge for 48 hours to trigger the production of fruiting bodies (mushrooms)

Keep the toilet roll at 8–15°C



Do not let it dry out!

3 weeks later ...



Fully-grown oyster mushrooms, ready to harvest