# Urban Mushroom – Value Addition (Part 2)

One of the ways of adding value to mushrooms is making the mushroom seed which is referred to as spawn. Spawn is the mushroom planting material.

Value can be added to mushrooms by making spawn using grains such as maize, millet and sorghum can be used as a medium. The first stage is making sure that the grain is of good quality and not broken. Fully colonized culture is white and fluffy while contaminated spawn will have black, yellow or green spots.

## Spawn production

First boil the grains to help remove air and soften it. The grains are then dried and limestone is added to control the pH of 6.8- 7.1. This is to help prevent seeds from sticking together.

Mixed grains are then put into clear glass bottles for easy monitoring of growth process. The bottles are used for sterilization at temperatures of 121 degrees celsius at 1.5 bar at can withstand.

## Conditions required

The sterilization process is to kill all harmful micro organisms in the sorghum as well as the bottle used. The bottles are sealed with cotton wool which acts as an air filter to prevent steam from getting in. After sterilization, the mushroom culture is introduced into the bottle for it to be grown in the grains. This process is done in a graph box to prevent contamination.

## Inoculation process

First sanitize your hands and tools used in the process, then light a flame to kill micro organisms harbouring around the area. Grains inside the bottle are loosened then flamed. The loose grains are introduced into a new bottle and flamed again then return the cotton wool.

After this you can remove the bottle from the graph box and indicate the inoculation date on the bottle. It takes a period of one month for the culture to colonize the material.

## More caution

Temperatures for incubation should not exceed 23°C-25°C as it could mess the entire culture. Relative humidity should be about 80 percent to prevent grains from drying out.