

Package of practices for Management of wet bubble disease (*Mycogone perniciosa*) in button mushroom

Wet bubble pathogen (*Mycogone perniciosa*) of button mushroom has a world-wide distribution and can cause severe crop losses. Infected fruit bodies, spent mushroom substrate, farm yard manure, substrate material, ground water etc. are the major sources of inoculum. Disease transmits through contaminated irrigation water, air, casing soil, picker's hands, insects (like flies and mites). If the pathogen infects mushroom before the differentiation of stipe and pileus, the sclerodermoid masses are formed. Whereas, infection after differentiation results in the production of thickened stipe with deformation of gills. *M. perniciosa* produces small thin-walled phialoconidia on *Verticillium*-like conidiophores and bicellular conidia which are commonly referred to as either aleuriospores or chlamydo spores. Use standard crop management practices and be the earliest to jump to any disease control strategies.



Wet bubble disease

- Proper pasteurization of casing at 65°C with 65% moisture
- Treat empty room with 2% formalin and maintain the temperature between 35-40°C or
- Use foot dips
- Harvesting should be done from new rooms to older rooms
- Use light trap for monitoring and controlling fungal gnats. Drench with 2% formalin before disposing off the bags.
- Dispose off spent mushroom substrate in pits away from mushroom farm and cover it with layer of soil
- Disinfect the machinery, equipment and the corridor following the route of transportation, the nets, cloths and other inventory with 2% formalin solution before starting work.
- Keep clean the room where the casing soil is stored along with the area adjacent to it.
- Alternatively, a spray of 0.8 percent formalin on to casing surface, immediately after casing, can be effective. However, this concentration can be injurious if used at later stage in crop.
- There are some specific chemicals, which are permitted to be used against wet bubble disease by the competent authority of the respective country like iprodione and prochloraz- Mn by spanish legislation, carbendazim and thiophanate methyl permissible in European countries, thiabendazole and thiphanate methyl permissible in USA etc. However, in India none of the fungicides have the label claim.