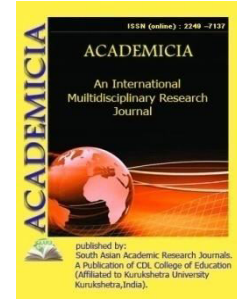




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## AN OVERVIEW ON THE CULTIVATION AND BREEDING OF MUSHROOM

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### ABSTRACT

*Mushrooms are a nutrient-dense, environmentally friendly crop with many therapeutic properties. Edible mushroom production is very important in today's world, given the globe's rapidly growing population and severe environmental pressures. However, when compared to other crops, progress in mushroom breeding and production is relatively restricted. This may be owing to a lack of prior understanding of the crop's genetics and breeding system. Due to this fungus's mainly secondarily homothallic life cycle, traditional mushroom breeding has proven challenging. As a result, the genetic diversity of the grown strains is restricted. In addition, establishing an effective genetic transformation method and disease resistance in mushrooms is a difficult job. Knowledge about the gene organization and functions will be accessible when the mushroom genome is sequenced, which will aid in the development of better marker aided*

*selection breeding systems. This will result in better strains, which, along with improved growing methods, will lead to increased production and quality.*

**KEYWORDS:** *Breeding System, Cultivation, Disease Resistance, Mushrooms, Transgenic Breeding.*

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