

CONCLUSION

After thorough evaluation of the review of available resources & field survey with regard to taxonomic status, it is reflected that the mushroom diversity of this region are under explored. The nutritional, biochemical, antimicrobial and taxonomic study of the representative five mushroom species reflects that the mushrooms are very rich with respect to nutritional, proximate and antioxidant parameters like protein, carbohydrate, fat, ash, different beneficial fatty acids, amino acids, bioactive compounds. The potentialities of extracts from these mushrooms in inhibiting microbes and molecular docking study of the bioactive components also shows that there is a huge scope of formulation of therapeutic deliverables. *Cantharellus subamethysteus* which is one of the studied species is found to be reported for the first time from India in the present study. Thus one species in five specimens is found to be first report. If elaborate survey, followed by nutritional, biochemical and proper taxonomy is done, there is enough scope for delimiting new species in this region. This scope can be capitalized for exploring the therapeutics and other commercialization ventures with the edible mushrooms and only therapeutic use with the non edible mushrooms. The value addition of mushrooms for their wonder bioactive components, like additional vitamin D biosynthesis and others can be explored. Thus immense scope of the study remains as potential deliverables to the society in near future.