



# **REVIEW OF RESEARCH**

# ISSN: 2249-894X IMPACT FACTOR : 3.8014(UIF) VOLUME - 6 | ISSUE - 6 | MARCH - 2017

# FEW MEDICINAL PROPERTIES FROM SELECTED WILD MUSHROOMS OF SHIMOGA FOREST REGION OF KARNATAKA, INDIA

Dr. Ashok Chittaragi

Department of P. G. Studies & Research in Applied Botany, Mycological Laboratories, Bio-Science Complex, Jnana Sahyadri, Kuvempu University, Shankaraghatta, Shivamogga (Dist), Karnataka, India.

# ABSTRACT

Point the healthy benefits of 6 wild eatable mushroom species were broke down. Youthful and developed sporocarps of 6 regular wild palatable mushrooms were gathered from various areas in the Western Ghats of Shimoga locale. System these were investigated for proximate mushrooms examination of dietary benefits. Naturally experienced entire mushrooms fruiting bodies were shade dried and finely powder and extricated with 250 ml of 95 % solvents like Oil ether, Chloroform and Methanol utilizing Soxhlet mechanical assembly. The large scale supplement profiles when all is said in done uncovered that the wild mushrooms contains



the dampness in scope of (83.6-90.43 %), dry issue (4.76-11.46%), protein (25.71-36.51 %), fiery debris (4.45-10.29 %), lipid (1.4-2.79 %), fiber (3.77-11.44 %) and sugar (37.38-48.63 %). For every example, neighbourhood and vernacular names were noted. Hence, these supplement substance uncovered that mushrooms were low vitality, sound sustenance and may likewise be utilized as a protein strengthening diet. Healthfully they are a significant wellspring of wellbeing sustenance, which is low in calories, and wealthy in starches, basic amino acids, fiber, significant nutrients and minerals.

The present examination was completed in the woods of five regions of Western Ghats of Karnataka which incorporates Shola hills of Sringeri, timberland of Hosanagar, Kodachadri woodland of Kollur, Bhadra back and timberlands of Chikmagalur regions speaking to four unique living spaces, for example, grass, litter, wood and soil separately. The fruiting assortments of macrofungi were gathered between August 2011 and August 2012. In a broad review a sum of 135 types of macrofungi having a place with 56 genera and 34 families were specified. Relationship of species was observed to be plenteous with litter pursued by wood, grass and soil separately Members of the family Agaricaceae were observed to be prevalent trailed by Polyporaceae, Marasmiaceae, Mycenaceae and Russulaceae. Types of macrofuring having a place with 18 different families were likewise recorded.

**KEY WORDS:** Nutritive esteem, Vernacular names, Wild large scale organisms, Medicinal mushrooms, Sporophores, Western Ghats.

#### **INTRODUCTION**

Mushrooms are a heterogenous gathering of organisms with individuals from both Ascomycotina and Basidiomycotina. Mushrooms are involved around 230 genera and 5000 species. Of these in excess of 2000 species are accounted for to be palatable all through the world and around 283 of these are accounted for to be accessible in India [1]. Numerous mushrooms have likewise been utilized in prescription for a considerable length of time; particularly in Asian nations where a ton of work has been done on restorative parts of a few eatable mushrooms [2]. A large portion of the examination has been malignancy related, however studies directed have demonstrated that mushroom separates additionally bestow decrease of pulse and cholesterol focus, upgrade of the safe framework, antiviral and calming properties, treatment of anaphylactic stun, hostile to HIV properties and an expansion of oxygen usage and cancer prevention agent properties [3]. Basidiomycetes mushroom have been esteemed as both sustenance and drug for a large number of years. They have high nutritive and restorative qualities and add to a sound eating regimen due to their rich wellspring of nutrients, minerals and proteins [4]. In addition to the fact that mushrooms provide sustenance, yet their waste can be reused into manures and added substances that improve tree estates and soil conditions. They are low calorie sustenance with next to no fat and are exceptionally appropriate for fat people [5]. Numerous genera of mushrooms are eatable and are wealthy in basic supplements, for example, starches, proteins, nutrients, mineral, fat, strands and different amino acids [6].

A noteworthy piece of the populace expends mushrooms in view of their simple accessibility, enhance, substantial taste and therapeutic esteem [7]. The wild mushrooms were more extravagant wellsprings of protein and had a lower measure of fat than business mushrooms [8]. Wild mushroom protein likewise contains significant measures of unimportant amino acids, for example, alanine, arginine, glycine, glutamic corrosive, aspartic corrosive, proline and serine. It very well may be utilized for the sustenance to take care of the ailing health issue [9]. Mushrooms by and large have the vast majority of the qualities of nutritious nourishment as they contain numerous fundamental supplements in great amount [10]. Eating mushroom is a noteworthy menu in their nourishment culture; however its accessibility is occasional. Our essential intrigue is in things that are regularly found in much extraordinary sums in mushrooms than in many types of nourishment, and even in things not found at all in different sustenance. In any case, we likewise need to make reference to that mushrooms are generally excellent healthfully and to clarify what makes them so great. Any sustenance with high healthy benefit must be considered "wellbeing nourishment". Various audits have been distributed on the dietary benefit of mushrooms, so we will not harp regarding the matter here [11], [12], [13]. It is along these lines fundamental that endeavors ought to be made to acquaint new therapeutic mushrooms with create less expensive medications. Mushrooms still speak to an enormous undiscovered wellspring of basically novel intensifies that may fill in as lead for the advancement of novel medications [14]. The present examination depicts the current circumstance putting accentuation on the significance of the mushrooms chased in the wild and all the more especially the nourishing and environmental methodology of gather. This examination was in this way gone for deciding the healthy benefit of some wild types of mushrooms.

# **MATERIALS AND METHODS**

#### Study area

Shimoga locale is a piece of normally rich biodiversity malnad area of Karnataka known as Malenadahebbagilu. It is arranged between 13° 27' and 14° 39' N lat and 74° 38' and 76° 34' E long. The land territory of the region is around 10, 58,000 ha with a woods region of 3, 27,000 ha. The normal precipitation is around 140 cm; temp is avg. of max 30.5°C and min of 19.6°C and RH 60 to100 %.Vegetation can be

characterized into tropical wet evergreen backwoods, tropical semi evergreen woodland, soggy deciduous timberland, dry deciduous woods and tropical thistle woods [15].

#### **Collection of Specimens**

The examples were gathered from woods and slopes of Shimoga area. The examples were painstakingly removed by delicately lifting them up and holding the stipe tenderly yet solidly near the rhizomorph, accordingly conveying some dirt alongside it. This is to abstain from harming the tissue of the mushroom. Every example was deliberately named before transporting to the research facility. The examples were air-dried and put away in straightforward polythene packs that were inexactly kept to consider appropriate air circulation of the examples. Recognizable proof was finished by contrasting their morphological, anatomical and physiological attributes and monographs with depictions given in the manual [16] and furthermore through the electronic information on ID keys of mushrooms [17]. Every one of the examples were saved at the herbarium of mycology research facility, Department of Applied Botany, Jnana Sahyadri, Kuvempu University, Shimoga, Karnataka, India. The investigation was made at a similar Department and the Central Coffee Research Institute (CCRI) Balehonnur, Chikamagalur locale of Karnataka, India.

## Preparation of the mushroom extract

Naturally experienced entire mushrooms were shade dried and finely powdered. Twenty five grams of the powder were separated with 250 ml of 95 % solvents like Oil ether, Chloroform and Methanol utilizing Soxhlet contraption. The build up was separated and thought to a dry mass by vacuum refining; the filtrate in this way got was utilized as mushroom extricate.

#### Analysis of materials for Nutritive value

For assurance of nutritive esteem, the accompanying parameters were considered by utilizing the mushroom material.

## **CONCLUSION**

Taking everything into account, the tried mushrooms have sugar and protein content in rich amount and with low fat substance. The fiery remains and fiber substance were not exactly different nourishments of plant and creature birthplace. Generally speaking, the rich healthful arrangement makes wild mushrooms. Along these lines, mushrooms are promising nourishment that may beat protein vitality lack of healthy sustenance issue to people. The protein, fiber, starches, slag and fat substance in mushrooms make them a much looked for after perfect vegetable by diabetic, malignancy and cardiovascular patients. The current ecological issues of a worldwide temperature alteration and environmental change would unfavourably influence the recovery and development example of the sensitive growths which requires a particular miniaturized scale atmosphere. Therefore, the high dietary quality and special kind of these mushrooms are probably going to be lost if these wild edibles are not appropriately reported.

#### ACKNOWLEDGEMENT

We thank the Chairman of the Department of Applied Botany, Jnana Sahyadri, Kuvempu University Shankaraghatta-577451 for giving lab offices and consolations. Further, we likewise genuinely thank to Central Coffee Research Institute (CCRI), Balehonnur, Chikmagalur locale, Karnataka for giving lab offices.

# REFERENCES

1. Chadha, K. L. and Sharma, S. R. Mushroom research in India-History, Infrastructure and Achievements. In: KL Chadha (Eds.). Adv. Horticulture, MPH (Malhotra Publishing House): New Delhi: pp. 1-8 (1995).

2. Bhat, S. P., Chandran, S. M. D. And Ramachandra, T. V. Status of Forests in Shimoga, Central Western Ghats, Lake. 7: 1-10 (2012).

3. Manoharachary, C., Sridhar, K. R., Singh, Adholeya, T. S., Suryanarayanan, S., Rawat. and Johri, B. N. Fungal Biodiversity: Distribution, Conservation and Prospecting of Fungi from India. Carr. Sci., 89(1): 58-71 (2005).

4. Rajaratnam, S. and Thiagarajan, T. Molecular characterization of wild mushroom. Eur. J Biol., 2(2): 369-373(2012).



# Dr. Ashok Chittaragi

Department of P. G. Studies & Research in Applied Botany, Mycological Laboratories, Bio-Science Complex, Jnana Sahyadri, Kuvempu University, Shankaraghatta, Shivamogga (Dist), Karnataka, India.