

Highly Nutritious Wild Edible Mushroom of Gadchiroli Forest

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Abstract: The economy of Gadchiroli district is mostly based on forest resources. Near about 79.36% of Gadchiroli district is covered by forest. A wild edible variety of Mushroom which is locally known as 'Satya' arises during rainy season and consumed by the people delightfully. During the survey, in Wadsa forest as well as in Korchi forest area, edible mushroom varieties such as *Lepiota Americana*, *Panaeolus ephincitrinus*, *Polyporus albellus*, *Panaeolus cyanescens*, *Agaricus* and *Pleurotus* are occurred.

Keywords: Mushroom, Korchi forest, Wadsa forest, *Panaeolus cyanescens*, *Pleurotus*.

1. INTRODUCTION

India is a rich treasure of mineral resources and wild macromycetes is one of them. The total number of fungal species in India is 27,000. From ancient time, they have been consumed by man for its texture and pleasing flavor. The mushroom protein contains high percentage of all nine essential amino acids (Chang and Miles, 2004) and as well as commonly occurring non-essential amino acids. They possess a great nutritional value with high amount of proteins, minerals, fibres, trace elements, vitamins and cholesterol. They have been used as folk medicine since thousands of years. A wide range of therapeutic potential including anticancer, antimicrobial and antidiabetic properties are separated (Rai et al, 2005). The diversity of mushroom occurring in Maharashtra was largely studied by Trivedi, (1972) in Vidarbha region and Sathe and Deshpande (1950) in western region. The study occurring in Melghat has been initiated again at NFCCI (Senthilarasu et al. 2010). They are the sources of various bioactive substances like antibacterial, antifungal, antiviral, antioxidant, anti-inflammatory and anticoagulant. The mushrooms are fruiting bodies of fungi specially of Ascomycetes and Basidiomycetes. During the past few decades, the report of an edible mushroom have been published by number of workers. In one study 1997-2000 conducted in 25 district of central India, the tribal people yielded 150 mushroom species out of which 53 species are as general forms regularly consumed by tribals of MP and Chhatisgarh. The number of species have been reported to be edible in all over India by Bahl (1973). The Gadchiroli district which is situated in the south eastern corner of Maharashtra and is bounded by Chandrapur district to the west, Gondia district to the north, Chhatisgarh state to the east and Telangana state to the south and southeast. During the rainy season peoples usually buy and consume wild edible variety of mushroom which is locally known as 'Satya'.

2. MATERIALS AND METHOD

Two patches of forest of Gadchiroli district of Maharashtra in India was selected for the study. One was the Korchi area which is reserve forest area and the second forest area was Wadsa. The survey of mushroom of both the areas was carried out generally at early morning. The survey method adopted according to standard technical method. The survey of different part of forest and other habitats rich with organic matters of forest was undertaken during the August- September

2016. The standard method of collection, preservation and identification were followed. The identification of mushroom sample was done on the basis of its morphological and taxonomical characters. The collected specimens were dried at 48-50^o c. at overnight and kept in plastic boxes with silica gel to keep out humidity. Each specimen was labelled indicating numbers, date of collection, locality and its uses. During the investigation, the checklist of wild mushroom was prepared so that it will helpful for the study of variety of the wild mushroom.

The external characters of mushroom species were studied in the laboratory for identification and fruiting bodies were photographed by the help of camera and the fungi species were classified properly.

3. RESULTS AND DISCUSSION

It was observed that the environmental conditions prevailing in the area of Korchi and Wadsa region of the Gadchiroli district favoured for the occurrence of various mushroom species. During the number of visits to these area some edible species of mushroom were identified and collected like *Lepiota Americana*, *Panaeolus ephincitrinus*, *Polyporus albellus*, *Poluporus elegans*, *Panaeolus cyanescens*, Agaricus and Pleurotus. The collected and identified species of mushrooms Agaricus and Pleurotus were most dominating which are locally known as 'Satya'. Tagade and Kawale (2014) reported number of species belonging to genera under Agaricales . Deshmukh (2004) reported number of mushroom species in India and Atri et al. 2000 had done taxonomic studies of Agaricus. Pradip et al.(1998) worked on the diversity of mushroom. Ramesh and Pattar (2010) had also reported antioxidant and antimicrobial activity of mushroom.



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