



**An Investigation Into A Number Of Different Types Of Analytic
Diversity of Poisonous Mushroom from Kondi, (North Solapur) (MS),
India**

R. R. Tembhurne¹ & V. S. Kamble²

¹*Sangola College, Sangola*

²*Associate Professor, Sangola Mahavidyalay, Sangola.*

Corresponding Author - R. R. Tembhurne

DOI - 10.5281/zenodo.10431953

Abstract:

The present study is an attempt to study diversity of macrofungi from Kondi, tehsil Solapur North, Maharashtra state, due to availability of fine literature, in this study authors are come across with three different species belongs to the three different families. The division Basidiomycotina includes all poisonous mushrooms.

Keywords: *Basidia, Basidiospores, Spores, Periphyses, Poisonous Mushrooms*

Introduction:

Fleshymushrooms are the fruiting bodies of macro fungi, which is grow in decaying places like bunds, water channels, manure heaps, grassy grounds fields, soil, dung, forests, roots, bark, wood, stems, leaves, fruits and seeds (Kues and Liu 2000). The numbers of countries utilizes the fleshy mushroom traditionally as a delicious nutritional food and medicinal purposes (Saiqa et al. 2008). Generally environment not free from fungi human associated with this in daily life. Some of the people in the world looks fungi in the form of awful and slimy things, no redeming with their future, people generally love the fleshy fungi but

afraid to handle it so overall fungi neither not good nor better in them moreover poisonous and some of the edible. The present study is an attempt to find only poisonous fleshy fungi. The fungi also plays a crucial role in the area of biotechnology, food, antibiotics, nutrient cycling, agriculture, biofertilizers, textiles and bioremediation industries (Danielson et al.1989).

Material and Methods:

Study Area:

The Kondi village come under the Solapur North Tehsil of Solapur district Maharastra state, geography of study region between 17.10 to 18.32 degrees

north latitude and 74.42 to 76.15 degrees east longitude respectively, the district place situated south east and come under the belt of Bhima and Seena basins drain with its tributaries, Researcher focus this area for the study of mushroom because no one can listed above three mushroom before from Kondi North Solapur area. The village Kondi located in tehsil Solapur North of district Solapur Maharashtra, India. It is stayed near about 14 km away from Solapur, people complete their all economic need to connect with this district place, the village scattered in 1974.15 hectares areas, climatic condition raises partly cloudy, temperature require 31⁰ C, average rainfall in this region is 542.2 mm, the village surrounded by subtropical evergreen forest, in kharif season bajra, sunflower, groundnut and in the rabi season crops like jowar, gram and safflower are grown in Black, Coarse Gray and Reddish type of soil, so soil is the most important natural source for development of various type of micro-organisms including edible and non-edible fleshy mushroom.

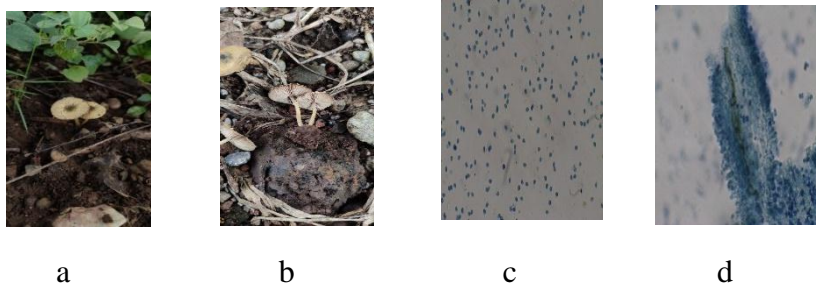
Collection of mushrooms:

Mushroom were collected with the help of scissor, digging tools, hunting

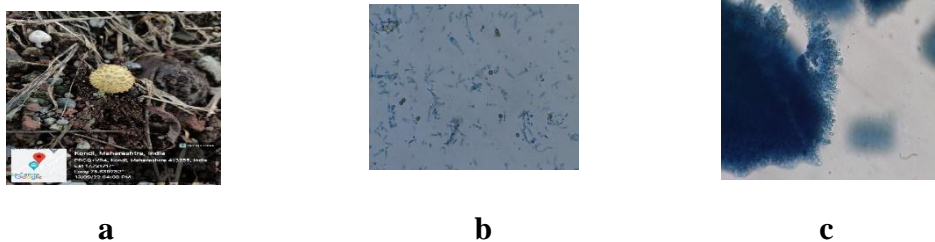
knife and rigid plastic bottle as well as polythene bags. At the time of collection period some of the important character are noted in the field book. Photography is carried out with different angle this is helpful in future study also. At the time of mushroom collection opportunistic sampling of mushroom protocol was taking into consideration (Mueller et al. 2004). When brought all the collection from wild area in the laboratory immediately floristic characterization is carried out on the basis of fruiting body, cap, flesh, odor, gills, stalk, partial and universal ring, spores and edibility as describe earlier by (Kumar et al. 2015) and lastly identified method is fallowed to utilized some literature of Hard (2013), Largent & Stuntz (1977), Singer (1986), Lodge et al. (2004), (Simon and Schuster's, 1980,1981 and 1989), (Peter Jordan, 1995,), the book like Mushroom and their Habitat, American Publishers,

Results:

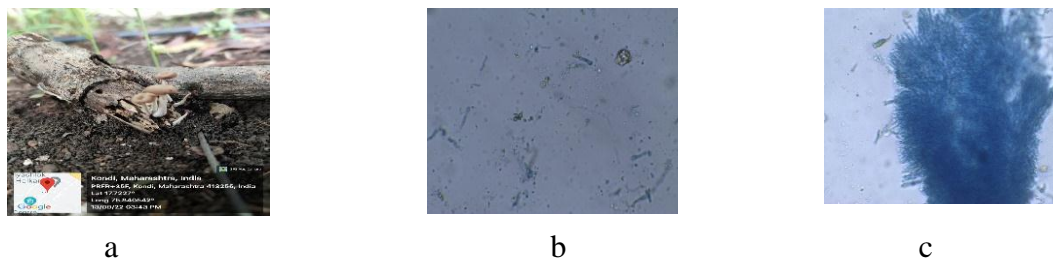
In the present study *Termitomyces microcarpus*, *Cyptotrama asprata* and *Lentinus crinitus* of Fleshy Mushroom was first time newly recorded genus and species from the study area.

1. *Termitomyces microcarpus* (Berk. & Broome) R.Heim (1942)

Termitomyces microcarpus (Berk. & Broome) R.Heim (1942) Fig-1: a-Habit b-Spores c-Basidia and Basidiospores

2. *Cyptotrama asprata* (Berk.) Redhead & Ginns (1980)

Cyptotrama asprata (Berk.) Redhead & Ginns (1980). Fig-2 a-Habit b-Spores c-Basidia and Basidiospores

3. *Lentinus crinitus* (L.) Fr. (1825)

Lentinus crinitus (L.) Fr. (1825) Fig.3 a-Habit b-Spores c- and Basidia and Basidiospores

Description:1. *Termitomyces microcarpus*

(Berk. & Broome) R.Heim (1942),

Family: Lyophyllaceae

Fruiting body solitary, scattered, total height 2.2-3.4 cm, large, medium, light, Cap 0.1-0.4 cm in length, 0.9- 1.8 cm across, Flesh when exposed in the air it is turn in to yellowish white to dark olive

blackish brown in color, texture smooth, rough, soft, watery, spongy, corky, fleshy, delicate; Odor mushroom have distinctive taste, mild, flavor pleasant; Gills crowded, seceding, free, Partial ring absent, Universal veil absent; Spores blackish white in color, limy, Edibility poisonous.

2. *Cyptotrama asprata* (Berk.) Redhead

& Ginns (1980), **Family:** Physalacriaceae

Fruiting body total height 2.9 cm, large, white, Cap aculeate, fruit of dhatura, globose, Flesh white, Odor mushroom have distinctive taste, mild, flavour pleasant; Gills crowded, adnate, Stalk rhizoidal, equal, Partial ring absent; Universal veil absent; Spores smooth, globose, spherical, Edibility poisonous.

3. *Lentinus crinitus* (L.) Fr.

(1825) **Family:** Polyporaceae

Fruiting body growing on decaying wood, Cap hygrophonous, soggy, Flesh brown, Odor mushroom have distinctive taste, mild, flavour pleasant; Gills brown in color, Stalk rhizoidal, club shape, Partial ring absent, Universal veil absent; Spores blackish to yellowish brown, Edibility poisonous.

Discussion:

In the present study, three genera with one species each were recorded. *Termitomyces microcarpus*, *Cyptotrama asprata* and *Lentinus crinitus*, respectively belongs the family of them belongs to different families like Lyophyllaceae, Physalacriaceae and Polyporaceae respectively, which come under the division Basidiomycotina.. The species come under the division Basidiomycotina are poisonous, Kirk et al. (2001). In present study, all the three species are poisonous.

References:

1. Alexopoulos, C.J. & C.W. Mims. 1979 : Introductory Mycology ed. 3. *John Wiley & Sons*, New York.
2. Augusto Rinaldi, Vassili Tyndalo, The complete book of mushroom. 1st edition "Variaa Grandi Opere" September 1972.
3. Danielson R M, Visser S. 1989- Host response to inoculation and behavior of introduced and Indigenous ectomycorrhizal fungi of jack pine grow on oil tailings. *Canadian Journal of Forest Research*. 19,11, 1412-21.
4. Demystified (1986). The book like Mushroom and their Habitat, American Publishers David Arrora's Mushrooms
5. Hard ME. 2013- The Mushroom. MJP publication, Chennai, India
6. Kirk PM, Cannon PF, David JC and Stalpers J. 2001- Ainsworth and Bisby's Dictionary of the Fungi. 9th ed. CAB International, Wallingford, UK.
7. Kües, U., Liu, Y. Fruiting body production in basidiomycetes. *Appl Microbiol Biot echnol* 54, 141–152 (2000).
8. Kumar R, Bisht NS, Mishra G, Kalita K, Bezbaroa R. 2015- Micro and macro fungal diversity in langol herbal garden Manipur,

- India, Current Life Science. 1, 1, 24-34.
9. Largent DL, Stuntz DE. 1977- How to Identify Mushroom to Genus I, macroscopic features. Indiana University, Mad River Press, 86p.
10. Lincoff, Gary H. and Parioni Giovannied, Simon and Schuster's Guide to mushroom (New York 1981).
11. Lodge DJ, Ammirati J O' Dell TE, Mueller GM. 2004 - Collecting and Describilng Macrofungi. In Biodiversity of Fungi, Inventory and Monitoring Methods, Mueller, G.M, Bills, G.F. Foster, M.S. Eds. New York, Academic Press, 128-158p.
12. Mueller GM, Bills GF, Foster MS (2004) Biodiversity of fungi: inventory and monitoring methods. Elsevier Academic Press, San Diego.
13. Peter Jordan, The mushroom guide and Identifier, Anness publishing limited 1995,1996, 2000.
14. Saiqa S, Haq NB, Muhammad AH. 2008- Studies on chemical Composition and Nutritive Evaluation of Wild Edible Mushrooms. Iranian Journal of Chemical Engineering. 27,151-154
15. Simon and Schuster's , Guide to mushroom By Giovanni Pacioni, U.S. Editor: Garry Lincoff five side Book published by Simon and Schuster Inc. New York, London, Toronto, Sydney and Tokyo, copyright 1981, originally printed in Italy under the title funghi in 1980 by ArnoldoMondadori, Editor S. p. A, Milano, Printed in Spain by ArtesGrafucas Toledo S. A. D. L TO: 1973-1989.
16. Singer R. 1986- The Agaricales in modern taxonomy. Mycologia. 4, 912.