

## Occurrence of Five Species of Myxomycetes Belongs to Genus-*Comatricha* From South-East Maharashtra, India

**Tembhurne R. R.**

Sangola College, Sangola

Dist.-Solapur ( M . S . ) 413307

Email- [ramesh\\_tembhurne@rediffmail.com](mailto:ramesh_tembhurne@rediffmail.com)

**Kamble V. S.**

Asso.Professor, Sangola Mahavidyalay, Sangola

Email. [vidhinkamble16@gmail.com](mailto:vidhinkamble16@gmail.com)

designed as *comatricha typhoides* **Abstract:**

The present study was conducted to record the occurrence of Myxomycetes belonging to the genus *Comatricha*. The present study was conducted from south-east Maharashtra, including Sangali, Satara, Solapur, and Kolhapur districts. *Comatricha dictyospora*, *Comatricha longa*, *Comatricha longipila*, *Comatricha pulchella*, *Comatricha typhoides* were the five species of myxomycetes recorded in the present study. All the species are being reported for the first time in this region. Of these five species *Comatricha dictyospora* species of myxomycetes was newly recorded in India.

**Key Words :** Myxomycetes, Slime Moulds, Capillitium, Sporangia

### Introduction :

Myxomycetes are slime-molds associated with different types of micro and macro habitats such as barks, leaves, decaying logs, plant debris, etc. myxomycetes have the peculiarity of uniform spore size with spore ornamentation that is difficult to locate through the light microscope. More than 100 species of myxomycetes were recorded from tree bark and few of these are strictly restricted to the type of micro habitat (MICHELL, 2004). Very little literature is available about the status and diversity of myxomycetes. In south-east Asia, very few species of myxomycetes were recorded (Reynold and Alexopolous, 1971), Tembhrne (2011). The myxomycetes have existed for over 350 years (Baba, 2012). Nearly more than 1000 species of myxomycetes have been reported worldwide (Lado, 2001).

### Material And Methods:

The present study was carried out from south-east region of Maharashtra state to study the occurrence of myxomycetes belonging to the genus *Comatricha*. The present study was conducted in Solapur, Sangli, Satara, and Kolhapur districts. The present study region was unexplored and very few studies were conducted to study the diversity of myxomycetes. The collected species of myxomycetes were observed under a light microscope and identified by Taxonomic Keys and Plates from The Myxomycetes Book by George W. Martin and Constantine J. Alexopoulos. (2021), Martin and Alexopoulos (1969), Lister (1925), Hagedstein (1944), Farr (1976), were followed. Monographs on Indian Myxomycetes of Thind (1977), Lakhanpal and Mukerji ( 1981).

### Result And Discussions:

1. *Comatricha Dictyospora* (Celak. F., Arch. Nat. Land. Bohmen 7 (5) : 49. 1893.)

**Occurrence:** Solapur District ( Mohol Lamboti And Mangalweda)

The shape of sporangia is ovate to cylindrical, scattered to gregarious. The stalk is black and shiny. Capillatium in net like. The spores are brown in colour in the form mass and faintly reticulate. This is the newly recorded specie from India.

2. *Comatricha Longa* (Peck Anna. Rep. N. Y. State Mus. 43, 70, 1890.)

**Occurrence:** Sangali, Kolhapur, Solapur district respectively. *Comatricha longa* Peck, is distinguished by its drooping or pendent. The sporangia is black, stipe is short, peridium evanescent; sparse or narrow, brown or black capillitium with, uniformly verrucose reticulate spores.

3. *Comatricha Longipila* (Nann.-Brem. Acta. Bot. Neerl. 11: 31. 1962.)

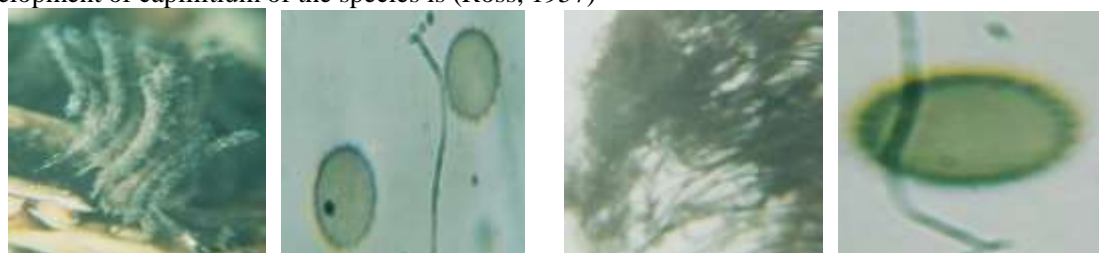
**Occurrence:** Kolhapur District. *Comatricha longipila* Nann.-Brem., is characterized by its fructification scattered to gregarious. The sporangia is cylindrical or oval in shape.; stipe is thin, black and smooth; peridium persistent at the base of sporangium columella pointed upwards; capillitium thin with cross bars, ends pointed and free ; spore minutely warted or spinulose.

4. *Comatricha Pulchella* (C. Bab.) Rost. The Mycetozoa : Append., 27, 1876.)

**Occurrence:** Kolhapur (Ichalkaranji). *C. pulchella* (C. Bab.) Rost. Often forms an extensive fructification on small twigs. The sporangia is dark brown, small, ovoid the spores are pale red capillitium and slightly smaller spores. Species seems to be widely distributed in India. Hagelstein (1944), recognized the variety *fusca* A. Lister, for the fruiting having capillitium more rigid, purple brown and pale grayish spores; and var. *gracilis* (Wingate) G. Lister, for narrow cylindrical sporangia, close uneven surface net of capillitium, faintly warted and pale violet gray spores of 5-7 µm in diam. But Martin and Alexopoulos (1969), did not recognize the varietal forms.

5. *Comatricha Typhoides* (Bull.) (Rost. In Lister, *Mycetozoa*, 120, 1894).

**Occurrence:** District Satara (Pratapagad). *Comatricha typhoides* (Bull.) Rost., is distinguished by its species elongated, cylindrical to ovate cylindrical sporangia. Peck is characterized by its fructification dark brown, hypothallus brown, spore dark purplish brown in mass and uniformly, warted. The patterns of development of capillitium of the species is (Ross, 1957)

1. *Comatricha dictyospora*2. *Comatricha longa*3. *Comatricha longipila*4. *Comatricha pulchella*5. *Comatricha typhoides*

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