

Taxonomy and Diversity of *Coniopsis* From the  
Nanded District of Maharashtra (M.S.) India.

Dr. Raibhole U.K. Department of Botany, Shivneri Mahavidyalaya Shivneri, Anantpur, Latur  
Marathwada India.

**Abstract** :- *Coniopsis* is the genus from order Aphyllophorales only valid species have been reported from India but the present study reports 3 species, the species are each described & the habitus spore are illustrated.

**Key word** :- Aphyllophorales- Polyporaceae Marathwada, Nanded District.

**Introduction** :- *Coniopsis* is smallest genus in order Aphyllophorales with more than 50 species. It is known to cause rot or fibrous rot of the hard wood trees, and known as member of Aphyllophorales.

Murr in 1905 established the genus *Coniopsis* with the type species & number of species has been described in the genus thereafter. The genus *Coniopsis* was divided into four sub-genus, *Coniopsis* and *Polyporus*, *Polystictus*, *Conicia* & *Trametes* by Murr 1908. The section was dedicated to the species Tomentose pileated fruit body.

Different taxonomic characters were used for identification by various authors, namely Ryvarde (1972), Berkely (1908), Corner (1947), Steyart (1972, 1880) worked extensively on the genus from nearly each of the world. He created many new species or transferred many new species of transferred many names to this genus & also removed several synonyms.

Ryvarde (1995) He concluded in judging the following morphological characters.

a. Shape & size of basidiocarp are doubtful and at least 3-5 collections should be examined.

b. Colour of pileus & stipe changes with age & should be carefully considered.

c. Pore size is a valuable taxonomic character as it is constant.

d. Colour of pore surface & context changes over time so specimens of different age should be examined.

e. Hyphal system is as majority species of *Coniopsis* has trimitic hyphal system.

f. Basidiospore may vary in size & shape. In India Ryvarde (1972) contributes to the study of this genus. Describing 3 species from Kerala & whereas some species are reported in different of various states.

#### Material and Methods :-

Collections of specimens was done in from Nanded district Marathwada. For the morphological observations thin hand sections were taken from the context and from the tube layer of each sample respectively. The sectioned material was treated with 5% KOH, washed with water & stained with 1% phloxine. These sections were again washed with water & finally stained with cotton blue. Lactoglycerine was used as mounting media. All the preparations were semi permanent. The slides were observed under cosmo compound microscope having a combination of 10x eyepiece & 10x, 45x and oil immersion.

The spores were observed under Olympus Bx-40 at 100x objective with phase contrast & demis sections at 40x objective of the same photographs were taken using Olympus Bx-40 equipped with photo micrography unit.

These species of polyporaceae were recorded in the Nanded district area. In manual form their identification were made and then they were put under 3 Taxa belonging to 1 Families.

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Key to the species of *Corioloopsis*  
 Basidiocarp mostly sessile, with  
 brown skeletal hyphae destriate  
 Basidiocarp mostly effuse & reflexed  
 Basidiocarp mostly pileate, appanate, pore surface and tubes dark  
 skeletal hyphae non-destriate  
 Pore surface greyish brown without any pruinose pores 1-3 mm wide  
 spores 10-15 mm long

Description of species:  
*Corioloopsis brunneo-lutea* (Berk.) R.V.V.  
 Norw. J. Bot. 19: 230, 1972. *Polyporus brunneo-lutea* Berk. Fung. J. Bot. 4: 163, 1854.

Basidiocarp: Annual, pileate reflexed & widely effused & almost resupinate. Upper  
 pileus up to 6.2 cm wide, 2-4 cm long, radially striate, scurfy white, with age becoming  
 appears conical & pileus become blackish.

Margin: Very thin & wavy. Pore Surface: Ochraceous to pale brown, pores round to  
 context: upto 1 mm deep, dark brown to bay. Hyphal system: Trimitic, generative hyphae  
 clamps, 1-3 cm wide, skeletal hyphae yellowish to pale brown, thick walled & 3-5 cm  
 binding hyphae rather rare & mostly golden yellow, 22-4 cm wide. Cystidia: absent  
 clavate, 20-30 x 5-6 cm with basal clamps. Basidiospores: cylindrical, hyaline, thin wall  
 12 x 2.5-4 cm.

Specimens examined: on dead thin branches of hard wood of *Eucalyptus citriodora* (MU-3)  
 Specimens examined: on dead thin branches of hard wood of *Eucalyptus citriodora* (MU-4)

Remarks:  
 Java, Philippines, Malaysia, Ceylon, India, Canada, Europe, Japan  
*Corioloopsis Caperata* (Berk) Murr.  
 N. Am. J. Bot. 9: 77, 1908. *Polyporus caperatus* Berk, Ann. Mag. Nat. Hist. Ser. 2, Vol. 1839

Basidiocarp: Annual sessile, appanate, dimidiate with a contracted base, elongate, reflexed  
 pores, conchate to flabelliform in pileate forms, 1-5 cm wide, upto 10 long, in later stages con-  
 fused, 1-4 mm thick.

Margin:  
 Thin, undulate, entire to lobed. Pore surface: ochraceous, cinnamon  
 chocolate brown, pores variable, medium to small, round to angular, 3-5 per mm, context  
 duplex with upper soft tomentum about 1 mm thick.  
 Hyphal system:  
 Trimitic, generative  
 dominating in the

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walled. Moderately branched & twisted 1-4 cm wide, cystidia absent, basidia clavate, 15-28 x 5-7  
6 µm. Basidiospores: cylindrical, 6.5-10 x 2.3-5 µm, thin walled hyaline.

Specimens examined: on dead hard woods of magnifera indica (MU-294)

Remarks: America, Mexico, Guya, Cuba, India, Japan, Europe, U.K. & Africa

#### Coriolopsis giffelia (P. S.) Ryv.

Norveg. Bot. 19 - 230, 1973; polyporus giffelia fr. Syst. Mycol. 1: 345, 1921

Basidiocarp: Annual, yellow, broadly sessile, upto 3.2 cm wide, 5 cm broad & 1 cm thick, semicircular or elongated often several imbricate pilei from a common effused resupinate part, corky to tough upper surface densely hispid to hispidula, first brownish, but soon dirty grey, azonate to azonate, more hispidula at the base, pore surface: grey brown to smoky brown, pores annular, thin walled, 1-3 mm wide, in longer tubes upto 10 mm deep, whitish to grey on inner walls, context mostly thin, more rarely upto 6 mm thick, grey to amber brown, black in KOH, then fading back to almost original colour.

Hymenial system: Fructic, generative hyphae thin walled, hyaline, clumped, 2-3.5 cm wide skeletal hyphae: tortuous, thick walled, to almost solid, light, golden brown, 2.5-3 cm wide skeletal hyphae: wide, cystidia absent, basidia clavate, 20-36.5 x 5-8 µm with a 1-2 µm clamp.

Basidiospores: Cylindrical, hyaline, thin walled, smooth 10-14.5 x 3-4.5 µm 11-ve.

Specimens examined: on dead thin branches, living dead trees of Eugenia-Jambolima (MU-215)

Remarks:

South America, Asia, Africa, Islands, Ghana, Japan, Mexico, Malaysia, India

#### Discussion:

In all 3 species of coriolopsis are described in the present study. As per the study Encalyptus citriodora & magnifera were found to be most susceptible hosts. The plantation of magnifera Indica from the Nanded districts was most susceptible & showed high incidence of infection causing threat to the plantation.

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