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A RARE SYNNEMATAOUS FUNGI FROM GHATANJI, (MS) INDIA.

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Abstract:

Present paper deals with a rare synnematous fungi from Ghatanji. FungiPodosporium is having synnamatatious conidiomata,conidia are slender, elongate, multiseptate, obclavate.

Keywords: - Synnematou fungi, conidia multiseptate, clavate, Podosporium new species.

Introduction:

During routine mycological survey of Ghatanji forest and near by area the author has collected a rare synnematou fungus viz *Podosporium* and on detailed morphological study, the specimen in question is treated as new species *Podosporium megasporium* sp.nov.

Materials and Method:

The collected specimens were wrapped in butter paper and bagged in envelope. By taking hand sections, semi permanent microscopic slides were prepared by using cotton blue as stain. Sections of the material were studied with the help of relevant keys and literature (Ainsworth *et al* 1973, , Barnett and hunter 1972, Jamaluddin*et al* 2004,). The specimen were deposited in Ajrekar Mycological Herbarium, Agharkar Research Institute (ARI) Pune 411004.

Podosporium megasporium sp.nov. (Plate 1, Fig.-1 a,b,c,d) (Etymology: After large size of spore)

Colonies effuse, brown, synnemata long straight measure 3.192-4.522mm in length; conidiophores synnematous, branched, brown, smooth septate measure 13.2-33.0µm in diam; conidiogenous cells produce blastospores monoteric, terminal to intercalary, clavate, conidia solitary dry,apical simple obclavate, brown, 5-9septate measure 62.7-227.7x19.8-33µm.

Collonies effuse brunne synnematae brunnea longae rigidea magnit 3.192-4.522 mm; conidiophore synnematous, nonramosa, brunnea, leviter, septata magnit 13.2-33.0µm in diametro; cellulae conidiogenae blastosporae, productae, monotreatae, terminaliter vel integrator, clavatae; conidia solitoria, aridi simlicibus clavatae, brunnae 5-9 septatae magnit 62.7-227.7x19.8-33µm.

Matrix:On dead stem of *Azadirachta indica* Juss legit MAS at BeloraGhatanji on 3/10/2003.No.AMH 9138.

Comparison between Podosporium species

Species	Synnemata	Conidiophore	Conidia	Reference
P.viticola	1.5mmin length	4-8µm broad	60-92x16-	Munjal&Kapoor
Munjal&Kapoor			20µm	(1963)
P.furcatum	1-2.5mm long	3-5µm thick	76-160x12-	Sharma & Panwar
Sharma &Panwar			23µm	(1986)
P.longatum	508-1102x134-	5.6-19.1x3.5-	62-118x6.2-	Chen&Tzean
Chen&Tzean	196µm	5.2µm	10.3µm	(1993)
P.compactum Teng	03-1.2mmhigh 15-40µm thick at base	3-4µm thick	25-58x8-12μm	Teng (1996)
P.megasporium sp.nov	3.192-4.522μm in length	13.2-33.0μm long	62.7- 227.7x19.8- 33.0um	Understudy

Detailed morphological study and comparative study of known species the size of conidia is larger, hence, treated as new species.

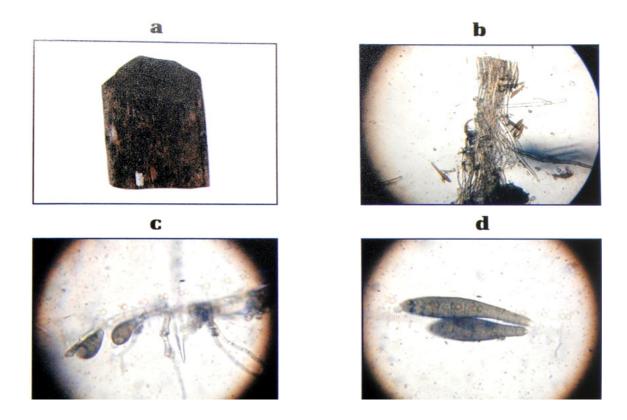


Figure. 1- Podosporium megasporium sp.nov.

a = Habit; b = Synnema and Conidia, c = conidiogenous cell with Conidia d = Conidia (45x)

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References:

Ainsworth, G.C, Sparrow, F. K and Sussman, A.S. (1973): The fungi an advanced Treatise VOL IV A taxonomic review with keys; Ascomycetes and fungi ImperfectiAcademic press New York .Pp.621.

Barnett, H. L. & B. B. Hanter (1972): Illustrated Genera of imperfect fungi. III Ed, BurgossPublishing Co. Minnesota. Pp.240

Chen and Tzean(1993):Anamorphic fungi *Podosporium elongatum.* Mycol. Res.**97**:Pp637-640

Jamaluddin, S. Goswami, M.G and Ojha, B.M. (2004): Fungi of India (1989-2001) scientific publisher (India) Jodhpur. Pp. 326.

Munjal, R.L. and Kapoor, J.N. (1963) :Hyphomycetes from Himalaya. Indianphytopath. vol.16: Pp.86-93.

Sharma R. and Panwar, K.S. (1986): A new species of Podosporium. Curr.Sci.55:21:1091-1092.

Teng, S.C. (1996): Fungi of China. Mycotaxon LTD. Ithaca. New York.