A Rare Mitosporic Fungi from Ghatanji (M.S.) India

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Abstract:

Present paper deals with the mitosporic fungi *Volutella agavella* sp.nov collected from Ghatanji. Ghatanji is an area not surveyed till now for mycological work. The geographical location of this area is between 20.13A^0 North latitude and 78.32A^0 East meter (898 feet) above mean sea level with average rain fall 988.3 mm. In recent survey many rare and interesting fungi were collected. *Volutella* is known for leaf spot disease *Volutella* blight caused by a species of *Volutella.* Morphological characters reveals that present specimen is distinct than existing one and treated as new species.

Introduction:

During routine surveys Hyphomycetes from Ghatanji region author has collected very interesting mitosporic fungi Haplosporella, Dinemasporium, Gyrothrix, Stauronema .Of these a rare and new species of Volutella is described here.

Materials and Method:

After proper indexing, thin hand sections were taken. The sections were studied with lactophenol cotton blue, with the help of keys(Barnett &Hunter1972,Ainsworth *et al* 1973)the specimen was identified as *Volutella*.Holotype is deposited in Agharkar Mycological Herbarium, Pune.On comparison with other species,the specimen understudy was proved to be different in some characters given under(Bilgrami *et al* 1991,Sarbhoy *et al* 1996 Jamaluddin *et* 2004, Dharkar and Subhedar 2006,Sharon Douglas 2008)

Result and Discussion:

Volutella agavella Sp.nov (Fig.1 A,B,C)

(Etymology:After Host *Agave americana* L.)

Infection spot dark brown, circular. Sporodochia disc-shaped, subepidermal, erumpent, embedded black,s stromatic measure 66.0-150.0x40.0-196.0µm.Setae brown, erect or slightly curved ,tapering towards tip,broad at base,septate 39.0-96.0x4µm.Conidiophore simple densely arranged 1-2 septate brown towards base,hyaline at apex measure 15.4-22.6x3.6-6.6 µm long.Conidia hyaline, unicellular, allantoid,f alcate, measure 19.0-22.4x2.5-4.8 µm.

Contagious maculae fusce brunneae, circuleris. Sporodochiis discodeis, subepidermalibus, erumpentibus, insidentibus stromati magnit66.0-150.0x40.0-196.0µm.Setae brunneae, erectae vel curvatae, latiores and basim et fastigate ad apicem, septate magnit39.0-96.0x4µm.Conodiophorii simplices, continuae densa 1-2 septati brunnei ad basim, hyalini late apicem magnit 15.4-22.6x3.6-6.6 µm. Conidia hyalina unicellularia, allantoideis falcate magnit19.0-22.4x2.5-4.8 µm.

Matrix :

On dead leaf of *Agave americana* L. (Fam :Asparagaceae) legit.M.A.S.at Ghatanji on 11-01-2006AMH No.9160. (Holotype). The comparative table reveals morphological distinctness

Table 1: comparison between the species of *Volutella*

Species	Sporodochia	Setae	Conidiophre	Conidia	Reference
V.cassicola Rao	120-300 µm	40-200x5-8 µm	16-30x4-6 µm	20-30x4-5 µm	Rao, V.G.1962
V.lini Mukarji *et al*	160X18.7-45.8 µm	50-200X5 µm	8-12X1.5 µm	8-14X1.2-1.6 µm	Mukarji *et al* 1968
V.kamati Anantha Narayan	0.3-0.5mm	38.5-11.8x4.3-7.5 µm	10.7-30.0x3.2-5.2 µm	15.5-23.5x4.3-5.3 µm	Anantha Narayan 1962
V.martynialla Dharkar& Subhedar	76-190.0x38.0-57.0 µm	38-76.0x4 µm	11.4-19.0x3.8 µm	15.2-19.0x3.8-4.1 µm	Dharkar& Subhedar 2006
V.agavella Sp.nov	66.0-150.0x40.0-196.0µm	39.096.0x4 µm	15.4-22.6x3.6-6.6 µm	19.0-22.4x2.5-4.8 µm	Understudy

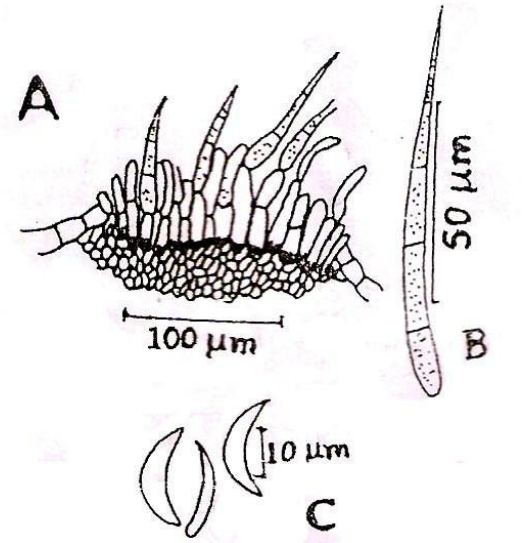

Fig.-1

Illustration

A Rare Mitosporic fungi from Ghatanji (MS) India *Volutella agevella* Sp. nov Sporodochia B) Setae C) Conidia

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