New record of Memnoniella levispora Subram on Ficus carica L from India

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ABSTRACT

The present paper deals with a new record of Memnoniella levispora Subram on Ficus carica L from India.

Key Words: Memnoniella levispor Subram, new record, Ficus carica.

INTRODUCTION

Ficus carica L. is a flowering plant belonging to family Moraceae, known as the common fig. It is the source of the fruit also called the fig, and as such is an important crop in those areas where it is grown commercially. Native to the Middle East and western Asia, it has been sought out and cultivated by man since ancient times, and is now widely grown throughout the temperate world, both for its fruit and as an ornamental plant.

The genus *Memnoniella* is established by Hoehnel with M. aterrima Hoehnel, which was later observed to be similar to *M. echinata* Riv. Near about four species of Memnoniella namely M. echinata Riv,; M. levispora Subram; M. subsimplex Cooke; and M. zingiberis Roa has been reported from India. The first Indian record of the Memnoniella levispora was made by Subramanian (1957) from Madras. The genus is characterized by colony black, velvety, conidiophore macronematous, mononematous, stipes unbranched or occasionally branched, each stipe of branch bearing at its apex a crown of phialides, phialides mostly clavate, conidia catenate, semi ennndogennnous, acrogenous, sporodochial. During the survey in the winter season of 2012, Jabalpur, the authors found M. levispora Subram caused disease on Ficus carica L.

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Fig. 1. Memnoniella levispora Subram on dead wood Ficus carica L.

The fungus was found on dead wood, stem and branches of F. *carica* after rainy season as black spots. In some cases its bark was removed as flecks and ultimately exposed wood was penetrated by the fungus and caused decay. This formed effused colony which are discrete dark brown to blackish with velvety. The fungus caused decay of the soft wood of decay stem in branches of F. *carica*



Fig. 2. Conidiophores with conidia (400X)



Fig. 3. Phialides (400X)

The colonies very variable in size, sometimes only a few mm. diam. at others completely encircling stems and extending along them for several centimeters, brown when young and black when old, (Fig.1). Conidiophores macronematous, mononematous, unbranched, rarely septate, sometimes swollen at the apex, up to 50 x 35 um diam, dark grew to black, often with scattered dark granule (Fig.2). Phialides mostly in groups of 6-8, up to $6-8 \times 4-5$ um.(Fig.3). Conidia often hemispherical, dark brown to black, smooth, up to 4-6um diam (Fig.4).

This fungus is commonly developed saprophytic colonization in dead leaves, stems and branched (Subramanium, 1957 and Rehana Begum *et. al.*, 1978). Munjal and Kapoor (1963) reported this fungus on *Musa* sp. from Uttar Pradesh. Rao and Mani Verghese (1980) also reported this fungus on *Spondias mangifera* from Kerala. A reviews of literature (Bilgrami *et, al.*, 1991; Jamaluddin *et, al.*, 2004) indicated that *Memnoniella levispora* Subram has not been reported on *Ficus carica* from India or elsewhere. Thus, this constitutes a new record of this fungus on *F. carica* from India.



Fig. 4. Conidia (400X)

The specimens collected from Jabalpur, Madhya Pradesh, India, in the winter season of 2012. The specimens have been deposited in the herbarium of Mycological Research Laboratory, Department of Biological Sciences, R.D. University, Jabalpur, India. On dead wood of *Ficus carica* L. Jabalpur, under the accession no: HDBJ# A.G.-1013. Leg. A.K. Gond.

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