New record of *Torula herbarum* (Pers.) Link. on *Alternanthera sessilis* L.

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ABSTRACT

The present paper deals with a new record of *Torula herbarum* (Pers.) Link. on *Alternanthera sessilis* L. from India.

Key Words: *Torula herbarum*, *Alternanthera sessilis* L., new record.

INTRODUCTION

*Alternanthera sessilis* L. is a problematic weed belonging to family Amaranthaceae. It is originated from tropical America but is now widespread in the tropics and subtropics of the world. It is perennial or under favorable circumstances a short lived annual plant, weakly erect with stems, or more commonly with lower stems with adventitious root at nodes, with many weakly erect branches, when inundate stems float lower stems may become partly hollow, may sometimes be tinged with purple longitudinal rows of hair on opposite sides of the stems, pubescent at nodes, bearing short petioles, leaves simple, opposite, sessile, variable in size and shape and small white flowers. During the survey in the winter season of 2008 – 2010 soyabean crop fields, Jabalpur, the authors found *T. herbarum* (Pers.) Link. caused disease on *A. sessilis*.

RESULTS AND DISCUSSION

The fungus has been recorded to develop black spots on dead stems, leaves and branches of *A. sessilis* in the winter season. In some cases its bark was removed as flecks and ultimately the exposed wood, penetrated by the fungus and caused decay. It forms effused colony which are discrete dark brown to blackish with velvety appearance. Its mycelium appeared superficial and immersed. The fungus caused decay of the soft wood of dead stem in branches of *A. sessilis*.

The colonies were variable in size, sometimes only a few mm diameter at others completely encircling stems and extending along them for several centimeters, olive when young and black when old, velvety (Fig.1A). Conidiophores micronematous or semi macronematous, straight or flexuous, 4.3 x 6-4 um thick except for the conidiogenous cells (Fig.1B). Conidia straight or slightly curved, more or less cylindrical, rounded at the ends, pale olive to brown, verruculose or finely echinulate, mostly 4-5 septate, strongly constricted at the septa, 12.9-17.3 x 4.3-6.4 um in size (Fig.1C).

*T. herbarum* (Pers.) Link. is considered to be a most cosmopolite fungus, is abundantly colonized on a variety of substrates in different parts of plant. This fungus has been commonly reported and developed saprophytic colonization in dead leaves, stems and branches. Agarwal & Sarbhoy (1984) reported this fungus on dead leaves and twings of *Phoenix dactylifera* from Rajasthan and Rao & Verghese (1980) reported on dead stem of *Polygonum* sp. from Kerala. It is also reported from soils (Agnihothurudu 1959). Sharma & Nema (1990) reported this fungus on dead stems of *Dolichos lablab* and *Thumbergia grandiflora* from...
Figure 1: (A) *Torula herbarum* (Pers.) Link. on dead stem of *Alternanthera sessilis* L.; (B) Conidiophores with conidia (400X); (C) Figure 3: Conidia (400X).
Jabalpur. A review of literature (Bilgrami et al. 1991; Jamaluddin et al. 2004) indicated that T. herbarum (Pers.) Link. has not been reported on A. sessilis. Hence, this is a new record from India.

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