



# INTEGRATED MANAGEMENT OF FUSARIAL WILT OF EGGPLANT (*SOLANUM MELONGENA*) WITH SOIL SOLARIZATION

M. R. CHAKRABORTY<sup>1\*</sup>, N. C. CHATTERJEE<sup>2\*\*</sup> AND T. H. QUIMIO<sup>3</sup>

<sup>1,2</sup> Mycology and Plant Pathology Laboratory, Department of Botany, UGC Centre of Advanced Study, University of Burdwan, Burdwan 713104, West Bengal, India.

<sup>3</sup> Crop Protection Cluster, Plant Pathology/Mycology Section, University of Phillipines, Los Banos, Laguna, Phillipines.

Accepted for publication September 29, 2008

## ABSTRACT

Wilt of eggplant (brinjal) caused by *Fusarium solani* is an ubiquitous and highly damaging plant disease in India. Several fungal antagonists and botanicals were tested for antimicrobial activity against the pathogen under *in vitro* and *in vivo* conditions. *Trichoderma harzianum* and *T. viride* specifically were found to have reduced the incidence of wilt disease effectively up to 86% and 83%, respectively. Among the biopesticides, preparations of *Azadirachta indica* and *Allium sativum* could reduce the incidence of the disease significantly. Soil solarization alone or with low dosages of a fungicide, biocide and bioagent resulted in complete reduction of the pathogen. Soil solarization integrated with applications of *T. harzianum*, bavistin and neem was the most effective treatment.

**Key words:** Biocide, brinjal, *Fusarium solani*, integrated disease management, soil solarization, *Trichoderma* spp.

---

\* Present address: Department of Botany, Kalyani University, Kalyani 741235, India.  
E-mail: crc\_mrc@yahoo.com

\*\* Corresponding author. E-mail: nc\_chatterjee@rediffmail.com