

## A Note on Penconazole - A New Triazole Molecule in the Control of Powdery Mildew of Chilli and Grapevine

Powdery mildew diseases are widespread and economically important. Powdery mildew pathogens (Erysiphaceae) are pathogenic on 7187 species in 1289 genera, 149 families and 44 orders of angiosperms as mentioned by Mehrotra (1980). He further stated that, in Afghanistan, the loss due to grapevine powdery mildew was 50-80% with common and destructive nature in India.

In view of the wide spread and destructive nature of powdery mildew of chilli caused by *Leveillula taurica* (Lev.) Am. and grapevine caused by *Uncinula necator* (Sch.) Burr. a new triazole molecule penconazole (Topas 10 EC) was evaluated @ 0.1% in comparison with carbendazim (0.1%) and untreated control during 1996-97 in farmers field in north Karnataka. Two

sprays were given using high volume sprayer starting from disease appearance stage.

The results revealed that powdery mildew disease index in chilli was 5.11; 12.50 and 65.00 per cent in treatments penconazole, carbendazim and untreated control, respectively accounting for 92.13 and 80.76 per cent reduction over control. In powdery mildew of grapevine disease index was 5.56; 7.08 and 36.0 per cent in treatments penconazole, carbendazim and untreated control, respectively accounting for 84.5 and 80.3 per cent disease reduction over control. In chilli, penconazole increased dry chilli yield by 13.30 per cent. In both the crops no phytotoxicity was observed. It can be inferred that penconazole (Topas 10 EC) a new triazole molecule is effective in reducing powdery mildew of chilli and grapevine without any phytotoxicity.

Department of Plant Pathology  
University of Agricultural Sciences,  
Dharwad -580 005

S.A. DESAI  
M.S. NAGARAJ  
K.S. NAIK

(Received: January,2001)

### Reference

- MEHROTRA, R. S., 1980, Powdery mildews. *Plant Pathology*. TATA Mc.Graw Hill Publishing Company Ltd., New Delhi, pp. 411-427.