

***In vitro* Evaluation of Fungicides against *Fusarium sacchari* Causing Pokkah Boeng Disease of Sugarcane**

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ABSTRACT

Pokkah boeng disease caused by *Fusarium sacchari*, is an air borne pathogen causing heavy losses in sugarcane production. Chemical control method is an effective and highly adopted approach of eliminating disease causing organisms. The present study was carried out to assess the efficacy of fungicides *in vitro* against *Fusarium sacchari* causing Pokkah boeng disease of sugarcane. The fungicides, viz., carbendazim, propiconazole, tebuconazole, difenoconazole, azoxystrobin, azoxystrobin + tebuconazole, trifloxystrobin + tebuconazole, azoxystrobin + difenoconazole, copper oxy chloride and mancozeb, were tested at two different concentrations (1000 ppm and 500 ppm) using poisoned food technique on potato dextrose agar medium. All the fungicides inhibited the fungal growth significantly, among which carbendazim, difenoconazole, azoxystrobin + difenoconazole, tebuconazole, propiconazole and trifloxystrobin + tebuconazole were highly effective at both the concentrations tested with 100% inhibition in mycelial growth followed by azoxystrobin + tebuconazole, copper oxy chloride and azoxystrobin at both concentrations tested. Mancozeb showed least inhibition *i.e.*, 22.47% at 1000 ppm and 2.58% at 500 ppm. The chemicals exhibited increased tendency of inhibition with increased concentration.

Keywords: *Fungicides, Fusarium sacchari and Poisoned food technique.*