EFFICACY OF FUNGICIDES TO CONTROL BROWN SPOT OF PADDY GRAINS

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ABSTRACT

Paddy grains infected by brown spot disease were collected from farmers' field in Batticaloa district, during Maha 1995/96. The samples were brought to Agricultural Biology Laboratory, Eastern University where the experiments were conducted.

In one experiment, infected seeds were surface sterilized by immersing for 2-3 mins. In 5% sodium hypochlorite solution and placed in fungicided amended Oat Meal Agar (OMA) media with Captan, Mancozeb and Hinosan, contained in sterile petridishes. They were incubated at room temperature for one week in a wooden incubation chamber. In another experiment infected seeds were soaked in solutions of the same three fungisides for six hours and placed in OMA pour plates which were also incubated as in the first experiment. Unamended OMA medium and untreated seeds were used as control, in the first and second experiments, respectively.

Fungicide Mancozeb completely inhibited mycelia development in paddy grains during the experimental period. Captan significantly inhibited mycelia growth and sporulation. There was no significant difference with respect to mycelial growth fungi, *Cochliobolus Iunatus* and *Cochliobolus sativus*, colonies were observed in paddy grains in both.

Moncozeb appears to be the most suitable fungicide to control brown spot disease in paddy grains. However, these fungicides are to be tested under field conditions before any conclusion is made.