Viral disease – VD 13

REACTION OF TEN MAISE CULTIVARS AGAINT SUGARCANE MOSAIC VIRUS

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ABSTRACT

Abstract : This study was aimed to determine the response or reaction of maize cultivar againts SCMV. The research was conducted in Maros Regency, South Sulawesi. The design of this research was Complete Random Design will ten varieties as treatments and ach funt has 3 replication three test have been implemented. Corn leaves showing SCMV sympton were crushed using mortar and pestle in aquadest (1 : 10 w/u) the plant sap was then mechanically inoculated to test plant by rubbing. The sap on the leaf sarface with carborandum. Our results indicated that cultivar Semar -2 was resistant againts SCMV and the cultivars: Pulet Takalar, Pulet Mexico, Wisanggeni were susceptible to SCMV.

Key word : sugarcane mosaic virus, resistance, inoculated, carborandum

Bacterial disease and others – BD 01

Validation test of *Xanthomonas campestris* pv detection on Chilli seed

Ineu Sulastrini

Abstrak

Bacterial disease and others – BD 02

Antagonistic Potency of Bacteria Isolated from Local Microorganism of Chayote Leaf [*Sechium edule* (Jacq.) Sw.] in Controlling Narrow Brown Leaf Spot Disease (*Cercospora oryzae* Miyake) on Rice.

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Abstract

Narrow brown leaf spot disease caused by *Cercospora oryzae* is one of the major diseases on rice. The use of antagonistic bacteria as bio-control agents is an alternative control method toward narrow brown leaf spot which is friendly to the environment.

The objective of the research was to find out the antagonistic ability of some isolates of bacteria from Local Microorganism (MOL) of chayote leaf against *C. oryzae* in vitro and the ability to suppress narrow brown leaf spot disease on rice var IR64 in glasshouse. The experiments were carried out in the Laboratory of Phytopathology and Glasshouse of the Department of Plant Pests and Diseases, Faculty of Agriculture, Universitas Padjadjaran from November 2008 to April 2009. There were three experiments i.e.: the test of antagonistic ability of the isolates in dual culture method on agar plates, the test of ability of the bacterial isolate to increase growth of rice, and the antagonism test on rice var IR64 in the glasshouse. The experiments were arranged in the completely randomized design consisted of 12 treatments and 3 replications for in vitro and growth test. Glasshouse
experiment consisted of 10 treatments and 3 replications.

Among the eleven bacterial isolates tested by dual culture, 7 isolates showed antagonistic ability against *C. oryzae* in vitro. The highest suppression was 53,7% shown by BDLS1 isolate. Four bacterial isolates i.e.: BDLS1, BDLS3, BDLS5, and BDLS6 were effective in suppressing narrow brown leaf spot (*C. oryzae*) on rice var IR64 in the glasshouse. All bacterial isolates had no ability to increase the growth of rice.

Keyword : Cercospora oryzae, MOL of chayote leaf, Rice, Antagonistic bacteria