Abstract

A TEMP TO MAINTAIN THE GROWTH AND YIELD OF PEPPER (*Capsicum annum* L .) IN YELLOW VIRUS ENDEMIC AREA WITH APLLICATION OF HEALTHY SEEDLING AND MAIZE BARIER

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The aim of this research is to study the influence of mulched seedling method and application of maize as a barrier crop to rate attack of pepper yellow disease and influence of pepper yellow disease attack to its growth and yield in yellow virus endemic area.

This research executed in July to December 2007 in Gintung countryside Kalibening village, Dukun district, Magelang regency, Central Java and at Management and Crop Production Laboratory, Faculty of Agriculture Gadjah Mada University. This research uses factorial device 2 x 2. The treatment is divided in 3 blocks as restating and each block form 4 combinations of treatment. As the fist factor is mulched seedling method (S), consisted of 2 levels those are seedling with part mulch (SI) and seedling with double mulch (S2). As the second factor is application of maize as a barrier crop (B), consisted of 2 levels those are without barrier (BI) and with barrier (B2). Data of the research were then analyzed using Analysis of Variance (ANOVA) with 95 % accuration level and followed with Duncan's Multiple Range Test (DMRT).

Results of this research indicate that there is no interaction between mulched seedling method and application of maize as a barrier to the rate attack of pepper yellow disease in yellow virus endemic area. Seedling with double mulch and with barrier cannot lessen significantly the intensity of pepper yellow disease yet, in pepper planting. The rate attack of pepper yellow disease can reduce yield quality in Kalibening village. Mulched seedling method and application of maize as a barrier indicate interaction and significantly influence to high accretion crop at age of 2 week after planting and chlorophyll content at age 8 week after planting. Application of maize as a barrier significantly influence to diameter of pepper stem at age of 2 and 8 week after planting.

Keyword: barrier, seedling, pepper, disease intensity