# Integrated Chili Management to Control Some Major Diseases in Brebes district, Central Java, Indonesia

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**ABSTRACT**

**Under the sponsorship of the ACIAR-Funded project on Chili Integrated Diseases Management, in Central Java, Indonesia; a preliminary participatory trial was executed to evaluate the effect of mulch and bio fungicide to control anthracnose and other important diseases in Brebes. Brebes, on the north-central coast of Java, is one of the most important chili pepper central production in Indonesia. Chili peppers is one of the most important crops in the region, with high market value, but subject to high risk due to pest and diseases Farmer seeks advice from District of Agriculture extension agents, on how to address major factors limiting marketable yield such as anthracnose, virus diseases and leaf spot. The trial evaluated application of straw mulch and/or bio-fungicide to raised production beds. Mulch utilization delayed and reduced virus infestation almost 50%, but did not affect significantly affect aphid incidence. Bio-fungicide treatments showed non-significant differences in aphid populations at at 38 dap-88 dap. Neither mulch or bio-fungicide affected incidence of Cercospora leaf spot. Highest yields were achieved in plots receiving both mulch and bio-fungicide, and earlier harvest maturity allowed the farmers to benefit from higher market chili prices. Chili plots treated by the bio-fungicide showed a similar capacity to produce chili fruit, and produced higher yields than plots receiving the conventional synthetic fungicide treatments. Mulch treatment did not significantly reduce anthracnose damage, while the application of bio-fungicide was significantly more effective than conventional synthetic fungicide treatment.**