ABSTRACT

THE EFFECT OF APPLICATION CHYTOSAN AGAINST COCOA POD ROT DISEASE SEVERITY

By

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The main disease that decrease in cocoa production is cocoa pod rot (*Phytophthora palmivora* Butl). *P. palmivora* can control by Chytosan.

Aplication chytosan done in the field cocoa owned by the farmers in the Village Wiyono Pesawaran from May to August 2011. The purpose of this reseach are to know that chytosan can affect against cocoa pod rot disease, to know the chytosan concentration that decrease cocoa pod rot disease severity and to know the affect of chytosan concentration to wet and dry seed weight. The research was arranged in random design group with six treatments those are chytosan concentration 2,5%, 5%, 7,5% and 10%, metalaxyl 2% and control without chytosan or metalaxyl. Each treatment was repeated three times and each group performed on three different trees. The results are 1) chytosan 2,5% until 10% can not affect inhibition cocoa pod rot disease severity on four weeks observation, but chytosan 7,5%, 10% and metalaxyl 2% can affect cocoa pod rot disease severity on fifth weeks observation 2) chytosan 7,5% and 10% are same as metalaxyl 2% in decrease cocoa pod rot disease severity that are 86,66%; 80,00%,

and 57,66%, 3) wet and dry weight seeds can not affect by chytosan 2,5% until 10 % but affect by metalaxyl 2%.

Key word : Chytosan, *P. palmivora*, pod rot , cacao.