

Controlling Cocoa Pod Borer, *Conopomorpha cramerella* (Snell.) and Cost Analysis Production at Cacao Plantation

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Abstract : The Cocoa Pod Borer (CPB), *Conopomorpha cramerella* (Snell.) is present on most of the larger cocoa producing islands in Indonesia. Various control measures CPB has been carried out by the farmers, but the results have not been effective. This study aims to determine the effect of application of *Beauveria bassiana* treatments and pruning technique to the control of CPB in the cocoa plantation people. Research using completely randomized design with 4 treatments and 3 replications, treatment consists of *B.bassiana*, Pruning, *B. bassiana*+pruning (Bb + Pr), as well as the control. The results showed that the percentage of PBK attack on cocoa pods in treatment (Bb + Pr) 3.50% the lowest compared to other treatments. CPB attack percentage in treatment *B.bassiana* 6.15%; pruning 8.75%, and 15.20% control. Results of the analysis of production estimates, the known treatments (Bb + Pr) have the highest production (1.95 tonnes / ha). The model results estimated production is $Y = 0,20999 + 0,53968X_1 + 0,34298X_2 + 0,31410X_3 + 0,35629X_4 + 0,08345X_5 + 0,29732X_6$. Farm production costs consist of fixed costs and variable costs, fixed costs are costs incurred by the farmer that the size does not affect the results, such as taxes and depreciation of production equipment. Variable costs are costs incurred by farmers who used up in one year cocoa farming activities. The cost of production in farming cocoa without integrated techniques control of CPB is Rp. 9.205.550 million/ha, while the cost of production with integrated techniques control is Rp. 6.666.050 million/ha.

Keywords : cacao, cocoa pod borer, pruning, *Beauveria bassiana*, production costs

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