

**The Effectiveness Substance of Neem and Wedusan  
Botanical Insecticides as Control of Cocoa Fruit  
Sucking Ladybugs (*Helopeltis antonii* Signoret.)  
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***ABSTRACT***

*The impact of the attack of the cocoa fruit sucking ladybugs (*Helopeltis antonii* Signoret) is getting higher resulting in control by considering costs and abundant raw materials. This study aims to determine the effectiveness of the plant-based insecticides substance a neem and wedusan as control of cocoa fruit podsucking ladybugs (*Helopeltis antonii* Signoret.). The research was carried out from May to August 2020 in Petungombo Hamlet, Sepawon Village, Plosoklaten District, Kediri Regency with a height of 701 meters above sea level (m asl). This study used a Complete Random Design Non-Factorial with the factors tested including: I0 (No Insecticide), I1 (5% Neem Leaf Botanical Insecticide), I2 (10% Wedusan Leaf Botanical Insecticide) and I3 (Neem Leaf Vegetable Botanical Combination 5% and 10% Wedusan Leaf Botanical Insecticide). Further testing uses the LSD test (Least Significant Difference) with a level of 5%. The results showed that isectisides substance a neem leaf and wedusan leaf botanical insecticide was effective against cocoa fruit podsucking ladybugs (*Helopeltis antonii* Signoret.) With the fastest LT50 value was a combination of both, 111 hours and had a significant effect on behavior changes classified as very low to low changes.*

**Key words:** *Botanical insecticide, *Helopeltis antonii*, Neem, Wedusan*