

**THE EFFECTIVENESS TEST OF NEEM EXTRACT (*Azadirachta indica*
A.) AGAINST MORTALITY AND EATING BEHAVIOR
OF TOBACCO LEAF ARMYWORMS
(*Spodoptera litura* F.)**

**Andrian Nur Munjiat, Irma Wardati, SP., MP (Supervisor 1),
Ir. Triono Bambang Wirawan, MP (Supervisor 2)**

*Plantation Cultivation Study Program
Agriculture Production Department*

ABSTRACT

*Study on the effectiveness of neem extract (*Azadirachta indica* A.) against tobacco leaf armyworms (*Spodoptera litura* F.) was conducted at the Plant Protection Laboratory of Politeknik Negeri Jember from March until July 2021. The aim of this study were to determine the effectiveness of neem extract against tobacco leaf armyworms' eating behaviour. This study used non-factorial complete randomized design (CDR) with 5 treatments, namely P0 (control), P1 (wet neem leaf extract), P2 (wet neem bark extract), P3 (dried neem leaf extract), and P4 (dried neem bark extract) with a concentration of 20 g/l with 5 repetitions. Parameters observed were tobacco leaf armyworms mortality (*Spodoptera litura* F), lethal time (LT_{50}), Changes in eating behavior, and Physical changes. The results showed that there was a significant difference in the eating behavior of the tobacco leaf armyworms (*Spodoptera litura* F.) and showed that the application of the neem extract vegetable insecticide (*Azadirachta indica* A.) was effective in controlling the tobacco leaf armyworms (*Spodoptera litura* F.) with an LT_{50} of 63 hours in the treatment of the wet neem leaf extract.*

Keywords: Effectiveness, neem extract, armyworms, mortality, eating behavior.