

ABSTRACT

POTENTIAL TESTING OF BANANA PEEL *ECO-ENZYME*, BANANA PUREE, AND BASIL LEAF EXTRACT AS ATTRACTANTS FOR FRUIT FLY (*Bactrocera spp.*) TRAPS IN TANGERINE PLANTATIONS

By

**Nurfatma Rohimah
195001049**

**Supervisors:
Dedi Natawijaya
Elya Hartini**

Tangerine (*Citrus nobilis*) are perennial fruit plants originating from Asia. In Indonesia, a tropical country, tangerine are known as fruits that are beneficial for meeting daily fiber and vitamin requirements. The main constraint for their cultivation is the presence of major pest, fruit flies (*Bactrocera spp.*). Fruit fly control can be done using attractants such as *eco-enzyme* containing organic alcohol, feed trap attractants that lure fruit flies with food aromas, and basil leaf attractants as plants containing fruit fly pheromones (*Bactrocera spp.*). These attractants can help reduce fruit fly populations and be used as environmentally friendly pest controls. This research was conducted in a tangerine orchard owned by local orange farmers in Talun village, Kadungora District, Garut Regency from March to April 2023. The research used Randomized Complete Block Design (RCBD) with 4 treatments and 6 replications, resulting in 24 experimental plots with a total of 144 traps. The tested treatments were A (control/no attractant), B (*eco-enzyme* attractant), C (banana puree attractant), and D (basil leaf extract attractant). The observation parameters in this study were the total number of captured *Bactrocera spp.* fruit flies, the number of each *Bactrocera spp.* fruit fly species captured, and the sex ratio of the fruit flies (*Bactrocera spp.*). The results showed that basil leaf extract is the most potential for captured fruit fly (*Bactrocera spp.*) in tangerine (*Citrus nobilis* Blanco) orchards.

Keywords: Attractant, *Bactrocera spp.*, tangerine, trap.