

**EFFECTIVENESS OF PETROGENOL USING COLOR TRAP
AGAINST FRUIT Flies (*Bactrocera Dorsalis*) ON RED CHILLI PLANTS
(*Capsicum annum L.*) VARIETY BAJA MC F1**

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ABSTRACT

*Red chili plants (Capsicum annum L.) are one of the leading horticultural commodities that are widely favored by the public and cultivated intensively by farmers, holding high economic value in Indonesia. (Prihatiningrum, 2021). However, in the production process, there is often a decline because this plant is frequently attacked by pests and diseases, one of which is the fruit fly pest. (Amirullah & Cheppy, 2019). The decline in fruit quality caused by fruit fly attacks is very significant. In addition, fruit fly attacks can result in crop failure due to fruit damage caused by the activity of imago and larvae. According to Sari et al. (2020), the level of damage caused by fruit flies on horticultural commodities can reach 100%. The damage caused by fruit flies leads to the appearance of fruit fly sting symptoms, such as black spots on the fruit and fruit drop before reaching the desired ripeness, thereby reducing both the quality and quantity of production. (Dwintha et al., 2021). Various methods are undertaken to address the decline in production caused by fruit flies. One of the techniques used is the application of color traps for fruit flies using petrogenol. The objectives of this research are: 1) To determine the effective dose of petrogenol for controlling fruit flies. 2) To identify the types and quantities of fruit flies trapped in the bottles. 3) To understand the attraction of fruit flies to the color of the traps. This research was conducted in July - August 2024 in Bandung Village, Diwek District, Jombang Regency, East Java. This study uses a two-factor factorial completely randomized design with three replications. The results of this research were that administering the attractant methyl eugenol at a dose of 1.5 ml had a significant effect in controlling male fruit flies (*Bactrocera dorsalis*). Providing yellow treatment had a significant effect on fruit fly catches. From the results of all total observations, 2 types of male fruit flies were obtained from the Genus *Bactrocera dorsalis* and *Bactrocera carambolae*, a total of 1,411 fruit flies were found on color traps on red chili plants, (*Capsicum annum L.*).*

Keywords: Color Trap, Petrogenol, Fruit Flies