

EFFECT OF TOBACCO EXTRACT CONCENTRATION AND FREQUENCY OF GIVING ON CHILI PESTS (*Capsicum frutescens* L.)

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ABSTRACT

Cayenne pepper (*Capsicum frutescens* L.) is a plant that is susceptible to pest attacks. Pest control is carried out using synthetic pesticides, but synthetic pesticide residues can poison the surrounding environment. Botanical pesticides are pesticides that come from plants, tobacco leaves contain 2 – 8% nicotine. Nicotine also functions as a nerve poison and is used as a poison in insects. This research aims to determine the concentration of tobacco leaf extract solution and the optimal frequency of application on chili plant pests. This research uses a split plot design (*Split Plot Design*) with two factors, namely factor 1 which consists of 3 treatment levels, namely 0 mL/L, 5 mL/L, 10 mL/L and 15 mL/L, factor 2 is the frequency of extract application consisting of once a week and once every two weeks. Data were analyzed using a variance test (ANOVA) with a level of 5% followed by Duncan's Multiple Range Test (DMRT) with a level of 5%. The 5 mL/L tobacco leaf extract treatment was significantly better for the peach aphid pest population and the level of leaf damage, while the 10 mL/L concentration was significantly better others for the thrips pest population and mite pest population. The frequency of application of tobacco leaf extract once a week was significantly better than once every two weeks for the whitefly and mite pest populations

Keywords: Chili Plants, Tobacco Extract, Pests