

**THE EFFECTIVENESS OF SOURSOP (*Annona muricata* L.) LEAVES
EXTRACTS TO SUPPRESS POPULATION OF WHITEFLY (*Bemisia
tabaci*) ON CHILI (*Capsicum frutescens* L.)**

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ABSTRACT

The chili plant (*Capsicum frutescens* L.) belongs to the eggplant family (Solanaceae). This plant is easily grown in lowlands and highlands. Chili plants have a very large demand. *Bemisia tabaci* is one of the pests that can reduce the production of chili plants because it is a vector of yellow virus. This study aims to determine the effect of soursop leaves extract on *Bemisia tabaci* attack and the most appropriate concentration of soursop leaves extract to overcome *Bemisia tabaci* attack on chili plants. This research was conducted in Cangkring, Poncosari, Srandakan, Bantul in March 2022 - July 2022. This research used a completely randomized design (CRD) with one factor, namely the concentration of soursop leaves extract. The concentrations of soursop leaves extract used were 6%, 8%, 10%, 12%, 14%, as well as negative control treatment (aquadest) and positive control (abamectin). The results of observations were analyzed using analysis of variance (ANOVA) at the 5% level. Soursop leaves extract concentration of 14% is an effective concentration to kill and inhibit the population development of *Bemisia tabaci*.

Keywords: Chili, *Bemisia tabaci*, soursop leaves extract concentration.