ABSTRAK

Isti Dewi Sapitri, 2022. Pengaruh Konsentrasi Ekstrak Daun Picung (*Pangium Edule*) Dalam Mempertahankan Pertumbuhan Dan Hasil Tanaman Buncis Tegak Balitsa 3 Terhadap Serangan Ulat Grayak (*Spodoptera Litura*). Di Bawah Bimbingan Ahmad Taofik dan Ida Yusidah.

Orang Indonesia banyak yang mengkonsumsi sayuran sumber protein nabati salah satunya ialah buncis. Buncis Tegak *Phaseolus vulgaris* L. ialah tanaman perdu semusim hasil introduksi Mexico-Guatemala kemudian menyeluruh ke wilayah sub tropis. Salah satu permasalahan pada saat peningkatan produksi buncis di Indonesia ialah adanya serangan hama ulat grayak (*Spodoptera litura)*. Ekstrak daun picung dilaporkan berfungsi picung sebagai pestisida nabati yang bersifat ramah lngkungan untuk mengendalikan serangan *Spodoptera litura.* Penelitian ini bertujuan untuk mengetahui pengaruh konsentrasi ekstrak daun picung (*Pangium edule)* dan konsentrasi terbaik terhadap pertumbuhan buncis tegak varietas Balitsa 3 dan populasi *Spodoptera litura.* Penelitian dilaksanakan pada bulan April sampai Mei 2021 di Desa Darma, Kec. Darma, Kabupaten Kuningan, Jawa Barat. Penelitian menggunakan Rancangan Acak Lengkap pada uji pendahuluan (in vitro) dengan 6 perlakuan yang diulang sebanyak empat kali dan Rancangan Acak Kelompok (RAK) pada uji utama (in vivo) dengan 5 perlakuan yang diulang sebanyak empat kali. Hasil uji pendahuluan (in vitro) menunjukkan adanya pengaruh dari aplikasi ekstrak daun picung terhadap bobot pakan, mortalitas larva, morfologi dan tingkah laku larva. Perlakuan yang terbaik adalah aplikasi ekstrak daun picung 30%. Hasil dari uji utama (in vivo) menunjukkan adanya pengaruh ekstrak daun picung terhadap mortalitas larva *S.litura* dan intensitas serangan dengan perlakuan yang terbaik yaitu aplikasi ekstrak daun picung 10%.

Kata kunci: Buncis Tegak, *Spodoptera litura,* Daun Picung, dan Konsentrasi.

ABSTRACT

Isti Dewi Sapitri, 2022. The Effect of Concentration of Picung Leaf Extract (*Pangium Edule*) on aintaining Growth and Yield of Upright Toddler Beans Plants Against Armyworm Attack (*Spodoptera Litura)* Supervised by Ahmad Taofik and Ida Yusidah.

Many Indonesian people consume vegetables as a source of vegetable protein, one of which is beans. Phaseolus vulgaris L. is an annual herbaceous plant that was introduced by Mexico-Guatemala and then spread to the sub-tropics. One of the problems when increasing the production of chickpeas in Indonesia is the attack of the armyworm (*Spodoptera litura*). Picung leaf extract is reported to function as an environ mentally friendly vegetable pesticide to control the attack of Spodoptera litura. This research aimed to determine the effect of the concentration of picung leaf extract (*Pangium edule*) and the best concentration on the growth of upright chickpeas of the Balitsa 3 variety and the population of Spodoptera litura. The research was carried out from April to May 2021 in Darma Village, Kec. Darma, Kuningan Regency, West Java. The study used a Completely Randomized Design in the preliminary test (in vitro) with 6 treatments which were repeated four times and a Randomized Block Design (RAK) in the main test (in vivo) with 5 treatments which were repeated four times. Preliminary test results (in vitro) showed the effect of the application of picung leaf extract on feed weight, larval mortality, morphology and behavior of larvae. The best treatment was the application of 30% picung leaf extract. The results of the main test (in vivo) showed that there was an effect of picung leaf extract on the mortality of *S. Litura* rvae and the intensity of attack with the best treatment being the application of 10% picung leaf extract.

Keywords: *Phaseolus vulgaris L, Spodoptera litura, Pangium edule,* and Concentration.