## OPTIMALISASI PERBANYAKAN PARASITOID Hadronotus leptocorisae SEBAGAI AGENS PENGENDALI HAYATI WALANG SANGIT (Leptocorisa oratorius F.) DENGAN REKAYASA EKOLOGI

Fri Maulina 1\* Novri Nelly², Hidrayani ² dan Hasmiandy Hamid²

<sup>1</sup> Program Studi Ilmu Pertanian Pascasarjana Universitas Andalas, Gedung Pascasarjana, kampus Limau Manis Padang. 25163 \*\*email: maulinafri@yahoo.co.id

<sup>2</sup> Jurusan Agroekoteknologi, Fakultas Pertanian Universitas Andalas Padang. Limau Manis Padang, Telp +62-751-7059580, Fax +62-751-7270, kode pos 25163.

## **ABSTRACT**

Temperature and host suitability in the laboratory are the determining factors in the parasitoid rearing activity in order to the fitness individual and can able introduced to the field. The objectives of the study were to obtain the best temperature and density of the host for the development of *Hadronotus leptocorisae* parasitoid in the laboratory. The result of the testing of the maintenance room temperature against the adult parasitoid H. leptocorisae showed that the temperature 25°C gives the best longevity. It was significantly different with the parasitoid adult which placed at the temperature of 20°C, 30°C or the room temperature (control). The averages of longevity are 22.6, 11.1, 10.5, and 12.6 days respectively. Testing of maintenance tube variation as follows (diameter ratio; tube height): A(1;7), B(1;9.5), C(2;10), D(1.5;12.5), E(2;14), F (2;17) and G(2.5;20) at 25°C temperature showed that no effect of tube size for the longevity of the adult parasitoid. Conversely, at room temperature, there was a difference between A, C, and E, F, G tube. There was a correlation between the size of the tube and the longevity of parasitoid adult H. leptocorisae at room temperature (R = 0.8). The density test of host resulted that the density of host of 20 grains differed by the density of 5 in finding a host within 6 and 1 minute, but there was no difference in parasitization to the host. It is recommended to conduct rearing activity at 25°C with 20 egg density.

Keywords: optimum temperature, fitness, host, density

