

INTISARI

Penelitian ini bertujuan untuk mengetahui tingkat resistensi *Nilaparvata lugens* Stal di Kecamatan Batang Asam Kabupaten Tanjung Jabung Barat terhadap insektisida abamektin dan dimehipo. Penelitian dilaksanakan di lapangan dan Laboratorium Pesticida dan Gulma Fakultas Pertanian Universitas Jambi. Populasi lapang *N. lugens* yang di uji pada penelitian ini berasal dari sentra padi di Desa Rawa Medang dan Desa Sri Agung Kecamatan Batang Asam Kabupaten Tanjung Jabung Barat dan *N. lugens* populasi standar (F41) berasal dari laboratorium. Penelitian menggunakan dua tahap pengujian insektisida terhadap *N. lugens* yaitu uji pendahuluan dan uji lanjut. Metode pengujian yang digunakan adalah metode celup pakan (Baehaki, 2016). Uji pendahuluan dilakukan pada *N. lugens* populasi lapang. Konsentrasi uji pendahuluan untuk insektisida abamektin yakni berkisar antara 0,1 – 1,3 ml/l, sedangkan insektisida dimehipo yakni berkisar antara 0,4 – 2,5 ml/l. Setelah melakukan uji pendahuluan kemudian di dapatkan konsentrasi untuk uji lanjut. Delapan taraf konsentrasi insektisida abamektin yang digunakan pada *N. lugens* populasi lapang Rawa Medang dan tujuh konsentrasi insektisida abamektin terhadap *N. lugens* populasi lapang Sri Agung. Delapan konsentrasi insektisida dimehipo terhadap *N. lugens* populasi lapang Rawa Medang dan sembilan konsentrasi insektisida dimehipo terhadap *N. lugens* populasi lapang Sri Agung.

Berdasarkan hasil penelitian nilai nisbah resistensi (NR) menurut Dono et al., (2010), *N. lugens* populasi Rawa Medang telah resisten (NR = 6,2) terhadap abamektin, sementara *N. lugens* populasi Sri Agung terindikasi resisten (NR = 2,9) terhadap abamektin. *N. lugens* populasi Rawa Medang dan Sri Agung terindikasi resisten terhadap dimehipo dengan nilai NR masing-masing sebesar 1,5. Namun, menurut Shen dan Wu (1995) nisbah resistensi *N. lugens* populasi Rawa Medang telah mengalami resisten rendah (NR = 6,2), sementara *N. lugens* populasi Sri Agung terindikasi rentan (NR = 2,9) terhadap abamektin. Sedangkan, *N. lugens* populasi Rawa Medang dan Sri Agung terindikasi rentan terhadap dimehipo dengan nilai NR masing-masing sebesar 1,5.

Kata kunci : *N. lugens*, resistensi, insektisida, abamektin, dimehipo

Abstrak

This research was aimed to determine the level of resistance of *Nilaparvata lugens* Stal in Batang Asam Subdistrict, West Tanjung Jabung Regency to the insecticides abamectin and dimehypo. The research was carried out in the field and the Laboratory of Pesticides and Weeds, Faculty of Agriculture, Jambi University. The field population of *N. lugens* tested in this study came from rice centers in Rawa Medang Village and Sri Agung Village, Batang Asam District, Tanjung Jabung Barat Regency and *N. lugens* standard population (F41) came from the laboratory. The study used two stages of insecticide testing against *N. lugens*, namely a preliminary test and a further test. The test method used is the feed dipping method (Baehaki, 2016). The preliminary test was carried out on the *N. lugens* field population. The concentration of the preliminary test for the insecticide abamectin ranged from 0.1 to 1.3 ml / l, while for the dimehypo insecticide ranged from 0.4 to 2.5 ml / l. After conducting the preliminary test, the concentration is then obtained for further testing. Eight concentration levels of the insecticide abamectin were used in the *N. lugens* field population of Rawa Medang and seven concentrations of the insecticide abamectin against *N. lugens* in the Sri Agung field population. Eight concentrations of dimehypo insecticide against *N. lugens* in the field population of Rawa Medang and nine concentrations of insecticide dimehypo against *N. lugens* in the field population of Sri Agung.

Based on the results of the research the resistance ratio (NR) according to Dono et al., (2010), the *N. lugens* population of Rawa Medang was resistant (NR = 6.2) to abamectin, while the *N. lugens* population of Sri Agung was indicated as resistant (NR = 2.9) against abamectin. The *N. lugens* population of Rawa Medang and Sri Agung indicated resistance to dimehypo with NR values of 1.5 each. However, according to Shen and Wu (1995) the resistance ratio of *N. lugens* in the Rawa Medang population has experienced low resistance (NR = 6.2), while the *N. lugens* population of Sri Agung is indicated to be susceptible (NR = 2.9) to abamectin. Meanwhile, *N. lugens* populations of Rawa Medang and Sri Agung were indicated to be susceptible to dimehypo with NR values of 1.5 each.

Keyword : *N. lugens*, resistance, insecticides, abamectin, dimehypo