THEO DÕI TÍNH MẪN CẢM CỦA RẦY NÂU *Nilaparvata lugens* Stal (HEMIPTERA: DELPHACIDAE) HẠI LÚA ĐỐI VỚI CÁC HOẠT CHẤT THẾ HỆ MỚI Ở ĐỒNG BẰNG SONG CỬU LONG

Observation of BPH's Susceptible to New Generational Insecticides in Mekong Delta

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Abstract

Brown planthopper (BPH) *Nilaparvata lugens* is the serious pest on rice throughout Asia countries. The major cause of recent outbreaks is proved to be the development of insecticide resistance. Thus, the authors had monitored insecticidal susceptibility with nitenpyram, dinotefuran and sulfoxaflor of susceptible strain and three natural BPH populations that were collected in Tien Giang, Can Tho and An Giang provinces, Mekong Delta. The experiments were conducted at Plant Protection department of Agronomy Faculty belonging to Nong Lam University of Ho Chi Minh city. The topically method was applied and numbers of BPH dead were observed the at 24h after treatment in order to count LD_{50} and Ri values. The data was analyzed by using PoloPlus software.

Results showed that: LD_{50} and Ri values of insecticides on three sources of BPH (An Giang, Tien Giang and Can Tho) were significantly higher than the susceptible strain. It can be concluded that BPH at these three sources were highly resistant to nitenpyram and beginning resistant to dinotefuran and sulfoxaflor at the time tested (from 2015 to 2016).

Generally, LD_{50} values of research BPH populations in 2016 were higher than in 2015 including susceptible resource. Need regarding that, two BPH populations of Can Tho and An Giang were higher than compared to 2015, and there were significant difference ($P<0.05$) with nitenpyram and sulfoxaflor. Except dinotefuran was not significant difference ($P=0,05$) between two years of three BPH populations in Tien Giang, Can Tho and An Giang.

***Keywords*:** Brown planthopper (BPH) *Nilaparvata lugens,* Pesticides, resistance, rice pests.