

**NGHIÊN CỨU TÍNH KHÁNG THUỐC CỦA NHỆN ĐỎ NÂU  
(*Oligonychus coffeae* Nietner) HẠI CHÈ TẠI THÁI NGUYÊN NĂM 2014-2016**  
**Acaricides Resistance of The Red Spider Mite (*Oligonychus coffeae* Nietner)  
on Tea Plants in Thai Nguyen Province**

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**Abstract**

Studies on artificial selection under laboratory condition with five acaricides, cross-resistance relationships were carried out with *Oligonychus coffeae* Nietner provide basic information for five acaricides resistance management program. Selections for resistance and susceptibility to five acaricides were performed in a population of *Oligonychus coffeae* Nietner, collected from a commercial tea plantations in Thainguyen province. After 12-20 selections for resistance and five selections for susceptibility, susceptible (S) and resistant (R) strains of to five acaricides were obtained. The resistance ratio (R/S) at the LC<sub>50</sub> reached 314-fold values of Abamectin. The toxicity of five acaricides was evaluated in the R and S strains, observing significant differences (at LC<sub>50</sub>) between R and S strains for milbemectin, fenpyroximate, Hexythiazox, Propargite and pyridaben. Significant correlation was detected between the LC<sub>50</sub> of abamectin and milbemectin, indicating cross-resistance between these acaricides (R/S : 314 – 244). No cross-resistance was detected for the acaricides fenpyroximate, propargite and pyridaben. The obtained results indicate that milbemectin should be avoided for managing abamectin resistance in *Oligonychus coffeae* Nietner.

**Keywords:** Acaricides, red spider mite *Oligonychus coffeae*, resistance, susceptibility