

Ecological and Evolutionary Aspects of Degree of Dominance in Miticide Resistance of *Tetranychus urticae*

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Degree of dominance in miticide resistances was assessed for fenpyroximate and pyridaben resistances in *Tetranychus urticae*. For this test, two strains of *T. urticae* have been established with continuous selections by fenpyroximate (FR resistant) and pyridaben (PR resistant). The susceptible (S) strain has been maintained with no miticide selection pressure. Three different ways of assessing dominance level were used in this study. First, the dominance based on the position of the mortality curve for heterozygous individuals relative to those for both homozygotes. Second, the mortality of heterozygous individuals relative to the for both homozygotes at a given concentration of the miticides, called effective dominance. Third, assessing dominance compared to the fitness of the heterozygotes to that of the two homozygotes at a given miticide concentration. Three different dominance levels in the resistance of *T. urticae* to fenpyroximate and pyridaben were estimated using simple calculation methods and the difference were compared and discussed.