ABSTRACT

A relatively new sampling scheme called the variable intensity sampling (VIS) has been proposed for a rice pest, the green leafhopper (GLH), Nephotettix spp. Taylor’s Power Law (TPL) coefficients a and b were used in developing the VIS plan. Population density estimations and decision making attributes were derived from data obtained from four experimental plots at Universiti Putra Malaysia for a sampling period of 73 days. Four sampling occasions were chosen for analysis. The data fit well the TPL and are represented as \( \ln s^2 = 0.24 + 1.30\ln\bar{x} \) (\( s^2 = \text{variance}, \bar{x} = \text{mean density} \)). A precision level of 0.25 and an economic threshold of 2 hoppers/hill were selected in developing this plan. The average sample number required in VIS ranged from 13 to 48. The VIS-TABLE for sampling and the VIS-CHART for determining the required sample size for GLH are presented.

**Keyword:** Green leafhopper; Rice; Sample plan; VIS; Taylor's coefficients; Malaysia