EFFECT OF PLANT NUTRIENTS AND INSECTICIDES INTEGRATION AGAINST RICE LEAF FOLDER, CNAPHALOCROCIS MEDINALIS (GUENEE)

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Abstract: Studies were carried to evaluate the influence of plant nutrients @ 50:30:20kg/ha (50% recommended NPK level), 100:60:40kg/ha (100% recommended NPK level) and 150:90:60kg/ha (150% recommended NPK level) on insecticide toxicity at 24hrs, 48hrs, 72hrs and 96hrs after spray against leaf folder, *Cnaphalocrocis medinalis* (Guenee) in *kharif* 2015 and 2016. Among the tested insecticides, Rynaxypyr 18.5%SC and Cypermethrin 25%EC recorded the highest percent mortality followed by Fipronil 5%SC, Monocrotophos 36%SL. Moderate toxicity was recorded by Imidacloprid 17.8%SL and Acephate 75%SP. Under different nutrient levels *i.e.*, 50%, 100% and 150%NPK leaf folder mortality was not affected in treatments Rynaxypyr 18.5%SC (90.83, 87.50 and 86.67% in *kharif* 2015; 90.00, 87.50 and 87.50% mortality in *kharif* 2016) and Cypermethrin 25%EC (85.00, 84.92 and 83.33% in *kharif* 2015; 83.00, 83.00 and 82.67% mortality in *kharif* 2016). Toxicity of Monocrotophos 36%SL (77.50, 71.67 and 66.67% mortality; 75.83, 71.67 and 67.50% mortality in *kharif* 2015 and 2016, respectively) was affected moderately with change in plant nutrition levels. Mortality of leaf folder in treatments Fipronil 5%SC (83.33, 74.17 and 65.00% mortality; 84.17, 74.17 and 65.83% mortality in *kharif* 2015 and 2016, respectively) and Acephate 75%SP (66.67, 58.33 and 50.83% mortality; 67.50, 57.50 and 50.83% mortality in *kharif* 2015 and 2016, respectively) were highly affected by different NPK levels *i.e.*, 50%NPK, 100%NPK and 150%NPK.

Keywords: Host plant nutrition, NPK levels, Insecticides, Rice leaf folder

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