

Effect of Aqueous Leaf Extracts on Natural Enemies in Rice Ecosystem

N V V N Mounika, C Sandhya Rani, C V Rama Rao, V Monoj Kumar and Ch Chiranjeevi

Department of Entomology, Agricultural College, Bapatla, A. P.

ABSTRACT

A field experiment was conducted and studied the effect of treatments *viz.*, Neem seed kernel extract (NSKE @ 5%, & 10%), Neem leaf extract (NLE @ 10%), Karanj leaf extract (KLE @ 10%), Custard apple leaf extract (CaLE @ 10%), Chilli pod extract (CPE @ 10%), buprofezin 25 SC @ 1.6 ml l⁻¹, flubendiamide 20 WDG @ 0.25 g l⁻¹ and untreated control on mirid bugs, spiders and coccinellids of rice ecosystem during *kharif*, 2019. Among the aqueous organic extracts, NSKE @ 5% found to be safer to mirid bugs and spiders while CaLE @ 10% found to be safer to coccinellids when compared to chemicals. The descending order of effect of treatments on mirid bugs was NSKE @ 5% (2.73) > KLE @ 10% (2.71) > CPE @ 10% (2.70) > NLE @ 10% (2.69) > NSKE @ 10% (2.67) > CaLE @ 10% (2.60) > buprofezin 25 SC @ 1.6 ml l⁻¹ (1.91) > flubendiamide 20 WDG @ 0.25 g l⁻¹ (1.67). The descending order of effect of treatments on spiders was NSKE @ 5% (1.10) > NSKE @ 10% (0.93) > CaLE @ 10% (0.80) > NLE @ 10% (0.77) > CPE @ 10% (0.73) > KLE @ 10% (0.67) > flubendiamide 20 WDG @ 0.25 g l⁻¹ (0.56) > buprofezin 25 SC @ 1.6 ml l⁻¹ (0.52).

Keywords: *Mirid bugs, spiders, coccinellids and aqueous leaf extracts*