



**RESEARCH ARTICLE :**

## Bio-efficacy of new insecticides against the management of leaf folder, *Cnaphalocrocis medinalis* (Guenee) (Lepidoptera: Pyralidae) in rice

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**SUMMARY :** Studies on the different chemicals evaluated for their bio-efficacy against rice leaf folder revealed that, acephate 75 SP @ 675 g a.i ha<sup>-1</sup> (92.30 % reduction with 0.14 larvae/ hill) followed by chlorantaniliprole 18.5 SC @ 41.62 ml a.i. ha<sup>-1</sup> (91.75 % reduction with 0.15 larvae/hill), flubendiamide 20 WDG @ 36 g a.i. ha<sup>-1</sup> (90.10 % reduction) and indoxacarb 15.8 EC @ 35.55 ml a.i. ha<sup>-1</sup> (88.46 % reduction) were found significantly superior in reducing the population of leaf folder larvae. Among the insecticides evaluated against per cent leaf damage, the lowest leaf damage was recorded in acephate 75 SP @ 675 g a.i ha<sup>-1</sup> (63.15 % reduction with 5.74 % leaf damage), flubendiamide 20 WDG @ 36 g a.i. ha<sup>-1</sup> (62.19 % reduction with 5.89 % leaf damage), chlorantaniliprole 18.5 SC @ 41.62 ml a.i. ha<sup>-1</sup> (61.36 % reduction) and indoxacarb 15.8 EC @ 35.55 ml a.i. ha<sup>-1</sup> (60.78 % reduction); besides recorded higher grain and fodder yield compared to rest of the treatments. Acephate 75 SP @ 675 g a.i ha<sup>-1</sup> was found to be the best insecticide in getting highest net profit and cost benefit ratio with lower leaf folder infestation (Rs. 64,264, 1: 2.79). Other insecticides such as indoxacarb 15.8 EC @ 35.55 ml a.i. ha<sup>-1</sup> (Rs. 62,037, 1: 2.65), flubendiamide 20 WDG @ 36 g a.i. ha<sup>-1</sup> (Rs. 62,307, 1: 2.64) chlorantaniliprole 18.5 SC @ 41.62 ml a.i. ha<sup>-1</sup> (Rs. 63,761, 1: 2.55), indoxacarb 14.5 SC @ 39.15 ml a.i. ha<sup>-1</sup> (Rs. 54, 642, 1: 2.31) and spinosad 45 SC @ 48.60 ml a.i. ha<sup>-1</sup> (55,103, 1: 2.28) were also recorded better cost benefit ratio and net profit.

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