

The Economic Threshold Level for Rice leaf folder, *Cnaphalocrocis medinalis* G. on Rice

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This study was carried out to determine the economic injury level of the rice leaf folder, *Cnaphalocrocis medinalis* G. The damage by leaf folders was simulated by cutting off 10, 30, 50, 70, and 90% of leaves before and after heading stage July 15th and August 15th, respectively. We found that when leaf folder infested the rice in the heading stage caused greater damage in terms of yield and factors consist of yields, and the economic threshold level was calculated to be at the damage level of 30% loss of leaves before heading stage and at 7% loss of leaves after heading stage. In the experiment where leaves were cut before the heading of rice, the linear relationships between the leaf cutting and each factors of yield were as following; for grain maturity the regression equation was $Y=-9.379X+83.630(R^2=0.4930)$, $Y=0.1385X+0.490$ ($R^2=0.9248$) for yield, and $Y=-4.8795X+81.116$ ($R^2=0.6648$) for head rice, whereas in the experiment where leaves were cut after the heading of rice, it was $Y=-23.014X+83.589(R^2=0.9153)$ for grain maturity, $Y=0.1408X+3.466$ ($R^2=0.8420$) for yield, and $Y=-13.795X +81.964(R^2=0.8979)$ for head rice. The damage aspects of rice plant with 53 leaves by leaf folders at different larval density, 1, 2, 3, 4, and 5 larva per plant were studied in pot experiment (24cm in diameter, 18cm in height). It was observed that during larval stage one leaf folder ate 6-7 leaves. The proportions of leaves damaged in the pot with one larvae were 1.3% and 6.7%, and those with 5 larva were 5.0% and 32.0%, at the 3rd and 20th day after the infestation, respectively.