

Effect of Food Sources on Growth and Reproduction of Rice Armyworm, *Pseudaletia separata*, (Lepidoptera: Noctuidae)

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The effect of food sources (corn, rice, Chinese cabbage, cabbage, sweet potato, soybean, and artificial diet) on growth and reproduction of rice armyworm, *Pseudaletia separata*, was investigated. Larval weight were heavier on rice and artificial diet than those on other food sources until 16 days after hatching. Durations of the development from eggs to pre-adult of the rice armyworm were 32.4 on corn, 38.0 on rice, 38.7 on Chinese cabbage, 46.0 on soybean, and 34.2 days on artificial diet, respectively. Pupation and emergence rates were the highest 82.7% on corn, and 89.3% on rice compared with other food sources. The longest longevity of the adult female was 12.6 days on rice, but there were not significantly different among the food sources. The average number of eggs reproduced per female were 816.6, 980.7, 472.5, 463.3, and 1049.1 on corn, rice, Chinese cabbage, soybean, and artificial diet, respectively. The intrinsic rate of natural increase(r_m) for rice armyworm was the highest on corn as 0.173. But it was not significantly different from artificial diet. Following these results, optimum food sources for rice armyworm growth were corn and artificial diet.