

ABSTRACT

Bactrocera sp. is one of the important pests that attack various types of horticultural crops, especially the fruit agricultural sector. Quantitative losses caused by fruit fly attacks are almost 50% so that it can affect the reduction in the amount of yield to crop failure if no control is carried out. Therefore, to suppress the population of *Bactrocera sp.* Control measures are needed. Alternative control that can control *Bactrocera sp.* is the use of vegetable insecticides with active ingredients derived from Noni fruit (*Morinda citrifolia* L.). The purpose of this study was to determine the effectiveness of noni fruit extract (*Morinda citrifolia* L.) on fruit fly mortality (*Bactrocera sp.*). This study used a completely randomized design (CRD) with 5 treatments and 5 replicates. The 5 treatments in this study were the concentration of extracts used, namely 0% as control, 40%, 50%, 60% and 70%. The results showed that the concentration of noni fruit extract had an effect on the mortality of *Bactrocera sp.* pests. Total mortality occurred at a concentration of 70% with a mortality percentage of 100%, at concentrations of 40% and 50%, mortality was 62.5% and 70%, respectively, while the use of a concentration of 60% mortality was 85%. The higher the concentration of noni fruit extract, the higher the concentration of noni fruit extract, the higher the mortality of *Bactrocera sp.*

Keywords: *Bactrocera sp.*, effectiveness, noni fruit extract, mortality.