The Effect of Vegetables on Growing Rate in Cricket *Gryllus mitratus* 10-50 Day Olds

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ABSTRACT

Cricket is one of potential animals that can be used as food sources, such as human food and feed of domestic animal because of its height protein contain. In Indonesian, there are 123 species of cricket. However, the species is cultivated*; Gryllus mitratus* and *Gryllus testaceus*. The cricket is consumption of many vegetables, such as , mustard green**,** mustard bitter, squash, cabbage. The aim of this research was to know the effect of mustard green, mustard bitter, squash, and mixture of mustard greens, mustard bitter, squash on growing rate in cricket *Gryllus mitratus*. The study was conducted in room of house, Kandang Limun Village, Bengkulu District from August until October, 2005. A number of cricket *Gryllus mitratus* used in the study were 200 cricket, 10 – 50 old days with 5 replications of which each replication consisted of 10 crickets. Parameter measured was the feed consumption (g), body weight growth (g), mortality (%) temperature and humidity of the chamber. The results showed that the mustard greens, mustard bitter, squash, and mixture of mustard greens, mustard bitter, squash were significant different ($P< 0.01$) on feed consumption in cricket *Gryllus mitratus*. The average feed consumption of mustard greens (1.664g) was not significantly different ($P>0.05$) to that mustard bitter (1.527g), and mixture of mustard greens, mustard bitter, l squash (1.605g), but it was significantly different ($P<0.01$) to that squash (1.099g). The average body weight growth was not significantly different ($P>0.05$) to mustard greens, mustard bitter, squash and mixture of mustard green, mustard bitter, squash. In conclusion, mustard green, mustard bitter, and mixture of mustard green, mustard bitter, squash was better body weight growth than squash.

Key words: cricket, mustard greens, mustard bitter, and squash

INTRODUCTION

In Indonesian, there are 123 species of cricket from 900 species classified in the world in the classification. From these 123 species of cricket, there are two species cultivated, namely *Gryllus mitratus* and *Gryllus testaceus* (Paimim, 1999*)*. Patton (1978) stated that cricket belong to omnivore insect that live in group, suitable for raise, and laboratory animal. In general, cricket is found in Asia Tropic, and not requently more live in humid dry, looses soil, agriculture soil and farm. It is like to live at range of temperature 20^0C – 32^0 C and moisture 60%-80% (Sukarno, 1999). Sukarno (1999) stated cricket have a good opportunity for development. Kumula (1999) stated that cricket can be used as feed sources of domestic animal, human food, materials of cosmetic.

The acceleration and development of insect were very influenced by many factors such as; sex, temperature, humidity and feed as well as feed quality (Chapman, 1975; Woording *et al*., 1979) in (Widiyaningrum, 2001). Widiyaningrum (2001), stated that species and kind of feed influenced on feed consumption. Ashari (1995), in Rahman (2002), The feeding of eggplant, bean and mustard greens is more like cricket than carrot, squash, and cabbage. And then, the cricket is feeding of mustard greens and bean faster of growth and eggs production than tubers. Widiyaningrum (2001), mustard greens and papaya leaf was give $7g^{-1}$ $cricket^{-2}day^{-3}$ produced palatability more efficient than leafy vegetables, cassava leaf and amaranth.

Base on the information, It is important to research the effect of many vegetables on growing rate in cricket *Gryllus mitratus*. The purpose of this research was to observe to influence mustard greens, mustard bitter, squash and mixture of mustard greens, mustard bitter, squash on growing rate in cricket *Gryllus mitratus*10 – 50 Day Old.