The Effect of Hatching Media on Hatching Capacity and Stadium Nymph in Cricket *Gryllus mitratus*

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ABSTRACT

Cricket is one of potential animals that can be used as food souces, such as human food and feed of domestic animal because of its hight protein contain. Cricket can be produced by laying eggs after the process of fertilization. Cricket do not incubate it's own eggs, but the incubation can take place in looses soil, sand, sock, cotton, and newspaper with the humidity of 70%-80%. The aim of this study was to know the effect of hatching media on hatchind capacity and stadium nymph I in cricket *Gryllus mitratus.* The study was conducted in a room of the Pandu house, Beringin Raya Village, Muara Bangkahulu Subdistrict, Bengkulu District from August until September, 2005. A number of the eggs of cricket *Gryllus mitratus* used in the study were 320 eggs with 4 replications of which each replication consisted of 20 eggs. Parameter measured were the first hatching body weight (mg), hatching ability (%), hatching weight (mg), hatching period (day), nymph period (day), the first nymp weight (mg), temperature and humidity of the chamber. The results showed that the hatchery of cricket eggs by using some haching media were significant different ($P<0.05$) on hatching ability and nymp I period. The average of hatching ability by the sand (70.00%) was not significantly different to that by the loose soil (73.75%) and combined treatments (71.25%), but it was significantly different ($P<0.05$) to that by the sock (86.25). The nymp I period by the sock was longer than the others. In conclution the sock was better to be used as hatching media of cricket eggs but it was not used for growing offspring of cricket.

Key words: cricket eggs, hatching media, hatching ability, and stadium nymph I.

INTRODUCTION

The cricket is a category as the pest of agriculture plant, because it is destroyof plant especially young leaf not only in farm but also rice cultivation (Rahman, 2002). Until now, there are 123 species of cricket is cultivated and it was difficult to differentiate between species because of almost the same (Paimin *et al.*, 1999).

Widyaningrum (2001), naturally, the cricket can be mating with many times (multi mating) with different male in species class. And then, fertility of female can increase in different male. The cricket is reproduction with lay eggs, it was become after mating. In observation, there are many technical for incubation of cricket egg. In tradition livestock Kebun Tebeng, Bengkulu District, the incubation of cricket eggs with paper as a media incubation. Besides this, livestock in Simpang Skip, Bengkulu District used cotton and paper for incubation.

The cricket is not incubation a lone, but it's need loose soil with humidity 70% - 80%. Widyaningrum (2001), state that male of cricket look for place of web and loose for lay eggs until many time. In generally, the male of cricket lay eggs in loose within 5 -15 mm (Kumala, 1999).

Base on the this information, It is important to research the effect of hatching media on hatching capacity and stadium nymph I in cricket *Gryllus mitratus*. The purpose of this research was to observe to influence hatchery media; sand, soil, combined sand and soil and web sock.

MATERIALS AND METHODS

The study was conducted in room of the Pandu house, Beringin Raya Village, Muara Bangkahulu Subdistrict, Bengkulu District from August until September, 2005.

The materials used in the study were box as a incubation, hand sprayer, hygrometer, soil tester, analytic scales, lux and filter. The eggs of cricket *Gryllus Mitratus* used in the study were 320 eggs, sand, soil, looses soil, sock.