

Saranya Rurkkhum 2010: Some Biology of Lesser Bamboo Rat (*Cannomys badius* Hodgson, 1841) in Dry Dipterocarp Forest at Nongwang Village, Tumbon Udomsap, Amphur Wang Nam Khiao, Nakhon Ratchasima Province. Master of Science (Biology), Major Field: Biology, Department of Zoology. Thesis Advisor: Assistant Professor Kantimane Punvichien, Ph.D. 116 pages.

The study of the lesser bamboo rat, *Cannomys badius* Hodgson, 1841, biology was done in the areas of Dry Dipterocarp Forest at Nongwang Village, Tumbon Udomsap, Amphur Wangnamkeaw, Nakhon Ratchasima Province. Twenty eight burrows were found in the sandy loam areas with individual lesser bamboo rats. They were 11 males respective with 17 females that their average body parameters were as followed: 200.91 ± 84.55 and 196.47 ± 31.81 g body weight, 17.05 ± 2.32 and 18.24 ± 1.67 cm body length, 5 ± 0.76 and 5.71 ± 0.79 cm tail length. Their burrows comprised mound of thrown up loose soil on the surface which the average amount was 8.36 ± 3.67 and the loose soil weight was 67.29 ± 47.30 kg. The burrows were also included with underground tunnels which were 20.52 ± 4.01 cm deep from the surface, the round nest chamber with 42.57 ± 18.87 cm deep and a hole for escape located near the nest chamber with 63.53 ± 26.01 cm deep. The underground tunnels performed parallel to the surface and a little bit larger than their body sizes. It was found that the length of underground tunnel was correlated with the body weight ($r=0.819$). Resemblingly, the temperature measured in the nest chambers was 27.11 ± 0.32 °C and on the surface was 27.89 ± 0.74 °C. According to the investigation of plant community surrounding the burrows, found 93 plant species and 23 plant species were revealed from 11 random areas which *Dipterocarpus tuberculatus* Roxb was the major species. In addition, 17 species were found as food of the lesser bamboo rats that *Vietnamosasa pusilla* (Chevalier & A. Camus) Nguyen was the main diet. For hematological examination, red blood cell count of the male respective with the female animals was 5.76 and 5.42 cell/ μ l while the white blood cell count was 5.77 and 4.5 cell/ μ l. From differential count, neutrophils were mostly observed, 62.45 and 72.65 %, respectively. The following were lymphocytes, 34.18 and 22.18, and monocytes, 3.36 and 4 %, respectively. Eosinophils were observed only 2 % in one animal while basophils were absence. The other blood parameters were also examined as followed: hemoglobin 14.49 and 14.96 g/dl, hematocrit 40.70 and 41.44 %, MCHC 35.59 and 34.97 g/dl and MCV 73.97 and 76.62 fl, respectively. Unfortunately, some of the animals have anemia. Perhaps, it causes from the plant roots eaten as diet. Moreover, the mite, *Haemolaelaps* sp. was noticed as ectoparasite without the evidences of any blood parasite and egg worms from their excrement.

Student's signature

Thesis Advisor's signature