DIVERSITY OF BEETLES (ORDER: COLEOPTERA) IN KAMPUNG PARIT TINGGI, KUALA PILAH, NEGERI SEMBILAN

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ABSTRACT

DIVERSITY OF BEETLES (ORDER: COLEOPTERA) IN KAMPUNG PARIT TINGGI, KUALA PILAH, NEGERI SEMBILAN

Beetles (Order Coleoptera) are the insects that have protected membraneous wings (hindwings) by the structure called elytra. The beetles are varies in size, colour, shapes and the elytra. Beetles can be found almost everywhere in the world due to their adaptation to many habitats and environments. A study in Kampung Parit Tinggi, Kuala Pilah in Negeri Sembilan was established from March 2018 until April 2018 in order to determine the diversity of beetles. There was no study about diversity of beetles established in Kampung Parit Tinggi. This study involving two habitats or sites which are Site A (forest area) and Site B (open area). Five times sampling is done at two sites by hand catching, using pitfall traps, malaise trap, yellow pan traps, and light traps. The malaise trap, pitfall trap and yellow pan traps were left in 24 hours while light traps were left for 5 hours. A total of 133 individuals were sampled during one month sampling. 65 individuals were sampled from site A while 68 individuals were sampled from site B. From 133 individuals, 104 samples of beetles were successfully identified to species level, while 15 samples of beetles were successfully identified to genus level, while 6 samples of beetles is successfully identified to family level. Another 8 samples of beetles were not successfully identified. There were 34 types of species sampled altogether. 5 families were determined from 30 species. Those family are Chrysomelidae, Coccinellidae, Nitidulidae, Scarabaeidae and Scolytidae. The Shannon-Wiener Diversity Index (H) for site A is 2.52 while for site B, 1.65. While the Margalef-Richness Index (R) for site A is 5.51 while for site B, 3.08. And the Evenness Index (E) for site A and site B are 0.79 and 0.63 respectively. The overall Shannon-Wiener Diversity Index for Kampung Parit Tinggi is 2.35 while the overall Margalef-Richness Index (R) in Kampung Parit Tinggi is 6.75. The overall Evenness Index (E) in Kampung Parit Tinggi is 0.68.