### TAXONOMY AND BIOACOUSTICS OF CRICKETS (ORTHOPTERA: GRYLLIDAE) FROM UNIVERSITI TEKNOLOGI MARA (UITM) PAHANG, KAMPUS JENGKA

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#### ABSTRACT

#### TAXONOMY AND BIOACOUSTICS OF CRICKETS (ORTHOPTERA: GRYLLIDAE) FROM UNIVERSITI TEKNOLOGI MARA (UITM) PAHANG, KAMPUS JENGKA

This study is specifically concerned with the taxonomy and bioacoustics of cricket under family of Gryllidae in UiTM Kampus Jengka. The problem statements of this research were the species and their bioacoustics characteristics of Gryllidae in this UiTM had never been recorded before. The goals of this study is to identify the species of cricket exist in this UiTM, to determine the bioacoustic characteristic and to compare stridulatory structure of cricket. The empirical part of this study was conducted from September until October 2016. In order to catch the cricket, random sampling by active sampling was used. Next, the sound of cricket was recorded and analyse. Then, taxonomic character were identified by observing under the microscope. Lastly, description of morphology was described. The result reveal, 43 individuals of cricket were collected from 3 subfamily, 6 genera and 16 species. The most major group of cricket are from subfamily Gryllinae, followed by subfamily Encopterinae and Trigonidiinae. Members of genus Teleogryllus shown the highest individuals that are 4 species. Members of subfamily Gryllus produce high-frequency (HF) of song. From this study, there are 10 species that were produced sound. 3 species were produced sound both in nature and captivity that are Nisitrus vittatus, Comidogryllus adina and Velarificterous micado. 7 species were produced sound in captivity that are Gryllus assimilis, Gryllus bimaculatus, Loxoblemmus doenitzi, Teleogryllus emma, Teleogryllus sp.1, Teleogryllus sp.2 and Velarificterous asperses. This sound produced can be related with the part of stridulatory structure of cricket.

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