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DNA Barcoding of *Hybos* Meigen, 1803 (Diptera: Hybotidae) from Northern and Northeastern of Thailand

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Abstract

Species of *Hybos* Meigen, 1803 (Diptera: Hybotidae) are important components of the insects community. The goal of this study was to test the efficiency of the mitochondrial cytochrome *c* oxidase subunit I (COI) barcoding region for species level identification of *Hybos* in Thailand. Four *Hybos* species were collected from 6 sites in North and North Eastern of Thailand. DNA barcoding identification analysis based on the best close match method performed well; with 100% of specimens agreeing with morphological identification. A phylogenetic tree based on the mitochondrial barcode sequences revealed a monophyly for all *Hybos* species.

Keywords: *Hybos*, DNA barcode, Cytochrome oxidase I, Hybotidae, Thailand