

Scanning Electron Microscope and Nucleic Acid Technique Aid the Identification and Diversity Study of Thai Rice-field Crab

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Summary

Rice-field crab, a home consumption animal in Thailand, was investigated for species identification and diversity. Crab specimens were collected from eight provinces in the north-east. Six *Esanthelphusa* species were found when identified by their morphological characteristics, particularly the gonopod of males using scanning electron microscope (SEM). Because of the morphology similarity between specimens resulting in the identification difficulty, the nucleic acid technique, random amplified polymorphic DNA (RAPD), was concurrently applied. The six species: sp.I, sp.II, sp.III, sp.VII, sp.XII, and sp.XIII, showed at least 6, 14, 20, 4, 11, and 2 RAPD patterns respectively, which reveal the crab strain and species diversity.

Keywords: SEM, RAPD, Rice-field crab