

Behavior of mangrove sesarmid crab *Neosarmatium smithi* derived from video recording.

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There is long term deviate on how leaf-eating crabs in mangroves adapt to nutrient poor plant diet. Previous studies tested the hypothesis that N-rich diet such as animal tissue, detritus and phytobenthos supplement the nutrient source, but contradicting results have been made. Further, few information is available on feeding behavior of sesamid crabs in mangroves. Behavior of *Neosarmatium smithi* was recorded using digital video camera in mangroves at Trang, Thailand, in Dec 2016 and Nov 2017. Total 33 hours were recorded; 2~4 hours each time of recording in daytime, and partially at night (using IR light). Crab behavior was classified into 5 types and time spent for each type were scored: 1) Remaining inside burrow: RIB, 2) Staying outside burrow: SOB, 3) Maintenance of burrow: MB, 4) Feeding on or dragging leaves into burrow: FL/DL, 5) Feeding on surface sediment: FS. Total of 86 individuals were recorded, and they spent majority of time in their burrows (mean RIB; 92%, 96%; 2016, 2017 respectively). Small percentage of time, but FS (1.2%, 0.35%), and FL/DL (0.18%, 0.04%) followed. No feeding on animal objects was recorded. We first recorded nighttime behavior of *N. smithi* and found that they are less active in terms of behaviors outside burrows. This finding generally consistent with *N. trispinosum* (Harada and Lee 2016), but exception is that FS was recorded in this study. FS tended to be higher frequency by the individuals inhabiting lower forest floor. Inter and intra species differences are yet to be studied.

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