琉球大学学術リポジトリ

タイ及びその周辺域における樹上性巻貝類（Amphidromus属）の多様性と進化

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Session 2: Biodiversity in molecular scales

Diversity and evolution of tree snails of the genus *Amphidromus* in Thailand and adjacent regions

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The genus *Amphidromus* Albers, 1850 is one of the most prominent tree snails in Tropical Asia, and characterizes the terrestrial molluscan fauna for this region, just like the genus *Liguus* for the Caribbean Islands and Florida, *Achatinella* for Hawaii, and *Patula* for the southern Pacific islands. Our observations of specimens of *Amphidromus* from a broad area of Southeast Asia (Thailand, Malaysia, Borneo, Singapore, and Indonesia) showed remarkable intrageneric variations in various phenotypic characters, such as coloration and direction of coiling of shells, anatomy of genitalia, and radula morphology. These variations, while raising a number of interesting questions regarding the evolution of *Amphidromus*, lead to serious difficulties in delimiting species within the genus appropriately. Indeed, species taxonomy of *Amphidromus*, chiefly or exclusively depending on shell coloration, has long been suffering serious confusions. Thus, I attempted a much more comprehensive approach to the apparent diversity of *Amphidromus* by combining analysis of the mitochondrial 16S ribosomal RNA gene sequence data and cladistic analysis of morphological characters. The major purpose of this study was to test some previous hypotheses on the taxonomy and phylogeny of certain morphologically defined forms of the genus. The results, while supporting monophyly of *Amphidromus*, yielded a number of new insights regarding the process of diversification, taxonomic and evolutionary significances of differential shell coilings, and the adequacy of the currently prevailing subgeneric classification.