

学 位 論 文 要 旨	
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題 目	Systematics of the scorpionfish genus “ <i>Neomerinthe</i> ” (Teleostei: Scorpaenidae) in the Indo-Pacific Ocean (インド・太平洋におけるフサカサゴ科マツバラカサゴ属の分類学的研究)
<p>A taxonomic study of the scorpionfish genus <i>Neomerinthe</i> Fowler 1935 (Scorpaenidae), based on morphological and molecular analyses, resulted in all valid species of the former being separated into four genera, viz. <i>Aplanis</i> gen. nov. (Indo-Pacific), <i>Neomerinthe</i> (Atlantic Ocean), <i>Neoscorpaena</i> Mandrytsa 2001 (southwestern Indian Ocean), and <i>Planis</i> gen. nov. (western Atlantic Ocean). The four genera are all closely related to <i>Pontinus</i> Poey 1860 (Atlantic, Indian and Pacific oceans), each of the five being distinguished by different combinations of presence or absence of branched pectoral-fin rays and swim bladder; and morphology of the lacrimal and suborbital spines. In this study, 14 valid species, including five new species, were recognized in <i>Aplanis</i>, two valid species in <i>Neomerinthe</i>, and a single valid species in both <i>Planis</i> [<i>Planis beanorum</i> (Evermann and Marsh 1900)] and <i>Neoscorpaena</i> [<i>Neoscorpaena nielseni</i> (Smith 1964)].</p> <p>Examination of the <i>Aplanis bucephalus</i> species group, characterized by presence of the lateral lacrimal spine and absence of the second preopercular spine, recognized four valid nominal species [<i>A. amplisquamiceps</i> (Fowler 1938), <i>A. bucephalus</i> (Alcock 1896), <i>A. kaufmani</i> (Herre 1952), and <i>A. megalepis</i> (Fowler 1938)], variously identified by the following characteristics: number of scale rows in longitudinal series below the lateral line, between the sixth dorsal-fin spine to the lateral line, and between the last dorsal-fin spine to the lateral line; number of pectoral-fin rays; and caudal peduncle length. On the other hand, <i>A. procurva</i> (Chen 1981) was shown to be a junior synonym of <i>A. bucephalus</i>, based on examination of both type and many non-type specimens.</p> <p>Five new species of <i>Aplanis</i> are described; <i>A. harenartis</i> sp. nov., differing from other congeners by a combination of characteristics, including presence of lateral lacrimal spine, absence of second preopercular spine, number of scale rows in longitudinal series and above lateral line, number of pectoral-fin rays, and body depth; <i>A. costata</i> sp. nov., <i>A. ignea</i> sp. nov., and <i>A. parallelaspina</i> sp. nov., all distinguished from other congeners by presence of both the lateral lacrimal and second pre-opercular spines, and differing from each other by a combination of characteristics, including preopercular spine morphology, number of pectoral-fin rays, and length of dorsal-fin soft rays; and <i>A. ornithoptera</i> sp. nov., distinguished from other congeners by the lack of both lateral lacrimal and second preopercular spines, and number of pectoral fin rays and scale rows above the lateral line.</p> <p>Notwithstanding their use to define species groups, a molecular genetic analysis indicated that presence or absence of lateral lacrimal and second preopercular spines may not reflect true phylogenetic relationships. However, each lineage within the genus was distinguished by ventral scale morphology and maximum body size.</p> <p>The synonymy of each valid nominal species of <i>Aplanis</i> is presented, together with species diagnosis, morphological changes with growth, distribution, habitat and depth, and list of examined specimens. A key to species of <i>Aplanis</i> is given.</p>	