



Description of a new *Coelorinchus* (Macrouridae, Gadiformes, Teleostei) from Taiwan, with notable new records of grenadiers from the South China Sea

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Abstract

Among recent collections of grenadiers procured from fishery ports in northeastern Taiwan were ten specimens of an undescribed species of *Coelorinchus*, which we here describe as *C. fuscigulus* **sp. nov.** One of the specimens was recorded previously as *C. cylindricus* Iwamoto and Merrett, 1997, but that species differs from the new species most notably in having a complete bony support of the anterolateral snout margin, compared with margin incompletely supported. Other differences include proportional measurements (preoral length, orbit diameter, distance orbit to preopercle, postorbital length of head, length of upper jaw, and body depth), scale row counts, and body markings. Three other species (*Coryphaenoides asper*, *Coelorinchus spinifer*, *Kumba gymnorhynchus*) recently collected by deepwater trawls in the South China Sea are the second records for the species; specimen data are provided for these species.

Key words: Taxonomy, *Coelorinchus fuscigulus* **sp. nov.**, *Coryphaenoides asper*, *Coelorinchus spinifer*, *Kumba gymnorhynchus*, Macrouridae, Taiwan

Introduction

Fish landings by commercial fishing vessels have long been valuable sources of scientific specimens for ichthyologists throughout the world. Fishing ports in Taiwan where deepwater trawlers offload their catches have been targeted recently for intensive sampling by staff and students of the Biodiversity Research Center of the Academia Sinica, Taiwan. Many of the trawlers towards the end of their fishing operations will fill out their holds by retaining all the bycatch after the more-valuable crustaceans and fishes have been picked out. The bycatch, which comprises a wide variety of fish and invertebrates, is ground into a meal and used in the aquaculture and poultry industries in Taiwan. The fishing ports of Tashi and Nanfangao in northeastern Taiwan have been particularly fruitful in providing many rare and unusual specimens of deepwater fishes, including many members of the grenadier families Macrouridae and Bathygadidae (see Chiou *et al.*, 2004a, b; Shao *et al.*, 2008).

The macrourid genus *Coelorinchus* was the most abundant in terms of species collected at these fishing ports. Shao *et al.* (2008: table 2) reported 21 species known from Taiwan. One of these, *C. cylindricus* Iwamoto and Merrett, 1997, was recorded from a single specimen taken from northeastern Taiwan in 400–600 m. The second author subsequently collected four other specimens for the ASIZ collection (two were recently transferred to CAS) and five others were found in earlier collections mis-identified as *C. cingulatus* or *C. brevirostris*. A close examination of those specimens and comparisons with the original description of the