**Dentex carpenteri**, a new species of deepwater seabream from Western Australia (Pisces: Sparidae)

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**Abstract**

A new species of sparid fish, Dentex carpenteri, is described from nine type specimens collected off Ningaloo Reef near Exmouth, Western Australia. Four valid species of Dentex are currently known in the western Pacific, Dentex abei and D. hypselosomus in the Northern Hemisphere, and D. fourmanoiri and D. spariformis in the Southern Hemisphere. These four species comprise the “Dentex hypselosomus complex”. Dentex carpenteri n. sp. is most similar to D. spariformis in overall body form, but differs from D. spariformis in having the posterior margin of the upper jaw not reaching or reaching slightly beyond a vertical at the anterior margin of eye; often with the greater part from the snout to the second infraorbital yellowish; deeper suborbital (9.7–10.9% SL); and a considerably deeper body (vs. posterior margin of upper jaw reaching clearly beyond anterior margin of eye; slight yellow region on snout; suborbital depth shallow (7.6–9.6% SL); and a less deep body in D. spariformis). The mitochondrial 16S ribosomal RNA genes (16S rRNA, 545 bp) of the above five species were analyzed using the Atlantic congener, Dentex macrophthalmus as an out-group, the results clearly indicating that D. carpenteri n. sp. is a valid and distinct species. A key to the “Dentex hypselosomus complex” is provided. The distributional information available for the five species from the western Pacific, including western Australia and the nearby eastern Indian Ocean, are discussed, with the species considered to be allopatric.

**Key words**: taxonomy, Sparidae, Dentex carpenteri, New species, Western Australia, southeastern Indian Ocean

**Introduction**


In the most recent taxonomic review of the sparid genus Dentex in the western Pacific (Iwatsuki et al. 2007), valid species were redescribed, and one new species was described (Iwatsuki et al. 2007), resulting in four species being recognized: Dentex abei Iwatsuki, Akazaki & Taniguchi, 2007 and D. hypselosomus Bleeker, 1854 in the Northern Hemisphere, and D. fourmanoiri Akazaki & Séret, 1999 and D. spariformis Ogilby, 1914 in the Southern Hemisphere, collectively known as the “Dentex hypselosomus complex” (Iwatsuki et al. 2007).

Dentex specimens from Western Australia were collected by the second author, who informed the first author of the specimens via photographs. Samples from this region were overlooked by Iwatsuki et al. (2007). The authors carefully examined counts, proportional measurements, and morphology of these new specimens, together with analysis of the mitochondrial 16S ribosomal RNA genes (545 bp), concluding that they represent an undescribed species of Dentex characterized by having the posterior margin of the upper jaw not reaching to or reaching slightly...