

Two Carangid Fishes (Actinopterygii: Perciformes), *Caranx heberi* and *Ulua mentalis*, from Kagoshima: the First Records from Japan and Northernmost Records for the Species

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Catches of two carangid fishes (Perciformes), *Caranx heberi* (Bennett, 1830) (two specimens: 251.5–260.0 mm fork length) and *Ulua mentalis* (Cuvier, 1833) (nine specimens: 203.6–244.0 mm), off Kasasa on the East China Sea side of Kagoshima Prefecture, Kyushu, Japan, represent the northernmost records of these Indo-West Pacific species. *Caranx heberi* has not previously been recorded north of the equator in the western Pacific, and the northernmost record of *U. mentalis* has been Taiwan. The Kagoshima specimens are described in detail and their biogeographic implications are discussed.

Key Words: Teleostei, Actinopterygii, Carangidae, *Caranx heberi*, *Ulua mentalis*, Japan, new records.

Introduction

In their catalog of Japanese fishes, Jordan *et al.* (1913) reviewed the previous literature related to Japanese fishes, including Temminck and Schlegel, Steindachner and Döderlein, and Hilgendorf, and listed 20 species of the family Carangidae from Japan (excepting the Ryukyu Islands), with the Japanese name for each. Wakiya (1924) later reviewed the carangoid fishes of Korea, Japan, and Taiwan in detail and recognized 74 species. Subsequently, Okada (1938) listed 66 carangid species from Japan (including the Ryukyu Islands) and Taiwan, 13 of which occurred only off Taiwan. Matsubara (1955) provided keys to 54 species of Carangidae from Japan, including the Ryukyu Islands.

More recently, Gushiken (1983) reviewed the carangid fishes of Japan and Taiwan, recognizing 57 species, and Senou (1993), who recognized 54 carangid species from Japan (including the Ryukyu Islands), illustrated and keyed all of the species. Thereafter, three carangid species, *Alepes djedaba* (Forsskål, 1775), *Scomberoides commersonnianus* Lacepède, 1801, and *Trachinotus mookalee* Cuvier, 1832, were recorded from Japan by Iwatsuki and Kimura (1996), Motomura *et al.* (1998), and Iwatsuki *et al.* (2000), respectively. Based on voucher specimens, Senou (2000, 2002) subsequently regarded 56 carangid species as occurring in Japanese waters, but failed to include *T. mookalee*. Accordingly, 57 carangid species in total are currently known from Japanese waters.

From November, 2006, to January, 2007, numerous carangid specimens with a