

New Fishes of Japan: Part 1

Japan is one of the smallest countries in the world, but the Japanese Archipelago extends north to south for more than 3000 km, which is almost equal to the length of the east coast of Australia. Japan also has the 6th largest EEC zone in the world. The long north-south archipelago coupled with the large EEC zone provide many diverse environments for fishes. In the northernmost part of Japan, the surface of the Okhotsk Sea is frozen in winter. At the southern end in the Ryukyu Islands, there are beautiful coral reefs supporting multitudes of tropical fish species all year round. In addition to various habitats in shallow waters, the deep Japan Trench exceeds beyond 8000 m depth, stretching along the Pacific side of the Japanese Archipelago. Considering these disparate and varied ecosystems, it is not surprising that the diversity of fishes in Japan totals about 3900 species (Nakabo, 2002).

Although Japan's fishes have been studied by ichthyologists since the 18th century, there are still many that are undescribed. More than 350 new species await description according to Matsuura and Senou (2004). Over the past several decades, 5-6 new species and about 15 new records of fishes have been reported annually from Japan (see the issues of *the Japanese Journal of Ichthyology, Ichthyological Research* and *the IOP Diving News*). These data clearly indicate that our understanding of Japanese fishes is far from complete and many new fishes need to be described by ichthyologists.

The papers in this volume report 27 new fishes (23 species and 4 subspecies), 24 of which occur in Japanese waters and 3 in Indonesia (Amboin), Australia (Queensland) and Fiji, respectively. Many of these new fishes, except for *Acheilognathus* (Cyprinidae), have wider ranges in the western Pacific. The new fishes presented here belong to 13 genera in 7 families. More than half of the new species are fishes of the family Gobiidae but this is not surprising given the small size of most gobies and their cryptic habits. The papers of this volume were submitted primarily by Japanese ichthyologists, but also included contributions from an ichthyologist in Canada and one in South Africa.

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Matsuura, K. and H. Senou. 2004. How many fish species in Japan—known vs. unknown—. *Biological Science*, 55(2): 79–86. (In Japanese.)

Nakabo, T. 2002. Fishes of Japan with Pictorial Keys to the Species. English edition. Tokai University Press, Tokyo. vol. 1, lxi+866 pp.; vol. 2, vii+883 pp.