

Genetic Analysis and Conservation Activities in *Pseudorasbora pumila*

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Dwarf topmouth minnow *Pseudorasbora pumila* (Shinai-motsugo in Japanese) is a rare freshwater cyprinid fish categorized into “Critically Endangered” in the Red List by the Ministry of Environment, Japan. Japanese Association of Zoos and Aquariums has been working on breeding and preservation of this species since 1995.

In 2012, we conducted molecular phylogenetic analysis of this species, and revealed two genetic groups, the Pacific side and the Japan sea side populations. The Japan sea-side population consisted of five subgroups. Based on the results, wild populations to be preserved in captivity have been reviewed, and *ex-situ* conservation considering genetic diversity is now encouraged. We will discuss several problems that prevent us from achieving the aim. We introduce regional conservation groups aiming *in-situ* conservation of the species, and involvements of zoos and aquariums in *in-situ* conservation and prospects of *ex-situ* conservation by them will be also discussed.