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## Redescription of *Ateleopus japonicus* Bleeker 1853, a senior synonym of *Ateleopus schlegelii* van der Hoeven 1855, *Ateleopus purpureus* Tanaka 1915, and *Ateleopus tanabensis* Tanaka 1918 with designation of a lectotype for *A. japonicus* and *A. schlegelii* (Ateleopodiformes: Ateleopodidae)

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### Abstract

Three nominal species of Ateleopodidae; *Ateleopus japonicus* Bleeker 1853, *A. purpureus* Tanaka 1915, and *A. tanabensis* Tanaka 1918, were taxonomically reviewed. Examination of many specimens, including the holotype of *A. tanabensis* and the newly designated lectotype of *A. japonicus* and *A. schlegelii*, revealed that their morphological differences can be explained by intraspecific variation and ontogenetic change within one species. Mitochondrial DNA analyses supported the results of the morphological study. Thus, *A. purpureus* and *A. tanabensis* are considered junior synonyms of *A. japonicus*. We have concluded after an examination of the relevant publications that *Ateleopus schlegelii* van der Hoeven 1855 is also a junior synonym of *A. japonicus*.

**Key words:** *Ateleopus japonicus*, *A. purpureus*, *A. tanabensis*, *A. schlegelii*, taxonomy, synonymy, pectoral-fin length, DNA analyses, lectotype designation

### Introduction

The family Ateleopodidae is widely distributed in temperate and tropical seas: Caribbean Sea, eastern Atlantic, Indo-West Pacific, and eastern Pacific off Panama and Costa Rica (Nelson 2006). The ateleopodid fishes comprise four genera, *Ateleopus* Temminck & Schlegel 1846, *Guentherus* Osório 1917, *Ijimaia* Sauter 1905, and *Parateleopus* Smith & Radcliffe in Radcliffe 1912 (Nelson 2006; Senou *et al.* 2008).

The genus *Ateleopus* can be separated from the other three genera by having 8–10 dorsal-fin rays (vs. three in *Parateleopus*), long pelvic-fin rays extending beyond pectoral-fin origin (vs. short pelvic-fin ray, scarcely reaching pectoral-fin origin or edge of opercle in *Ijimaia*), and first three rays of pelvic fin consisting of one elongated ray and two minute rudimentary rays attached to the base of the elongated ray (vs. three free rays in *Guentherus*) (Howell Rivero 1935; Smith 1986; Senou *et al.* 2008).

Eight nominal species are known in the genus (Eschmeyer 1998, 2015): *Ateleopus japonicus* Bleeker 1853, *A. schlegelii* van der Hoeven 1855, *A. indicus* Alcock 1891, *A. plicatellus* Gilbert 1905, *A. purpureus* Tanaka 1915, *A. tanabensis* Tanaka 1918, *A. natalensis* Regan 1921, and *A. barnardi* Poll 1953. *Ateleopus plicatellus* and *A. barnardi* were regarded by previous authors respectively as *Ijimaia plicatellus* (Gilbert 1905) and *I. loppei* Roule 1922. Therefore, the genus *Ateleopus* includes the following six valid species: *A. japonicus*, *A. schlegelii*, *A. indicus*, *A. purpureus*, *A. tanabensis*, and *A. natalensis*. Of these species, four are known from the western Pacific: *Ateleopus japonicus*, *A. schlegelii*, *A. purpureus*, and *A. tanabensis*. The two others, *A. indicus* and *A. natalensis*, are from the Indian Ocean.