

CHARACIFORMES – characins

Fishes of the ostariophysan order Characiformes resemble the cyprinid fishes (pp. 73–182) in general appearances, but usually possess teeth on jaws (vs. absent in cyprinids) and an adipose fin (vs. absent). Characiform fishes are greatly diversified in the freshwaters of Africa and the Americas. Although no

native species are known from the Eurasian countries, many characins are imported as aquarium fishes, due to its brilliant coloration. At least one species, *Piaractus brachypomus*, has been artificially introduced to the Mekong for aquaculture, and appears to be already established in the wild.

***Piaractus brachypomus* (Cuvier, 1818)** Exotic

Family: Characidae (FC: 119)

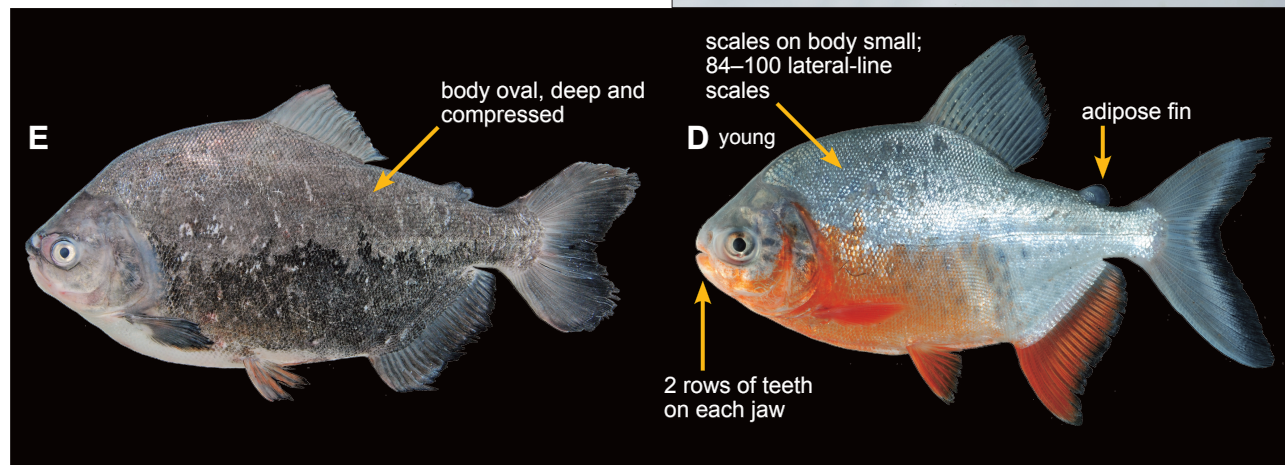
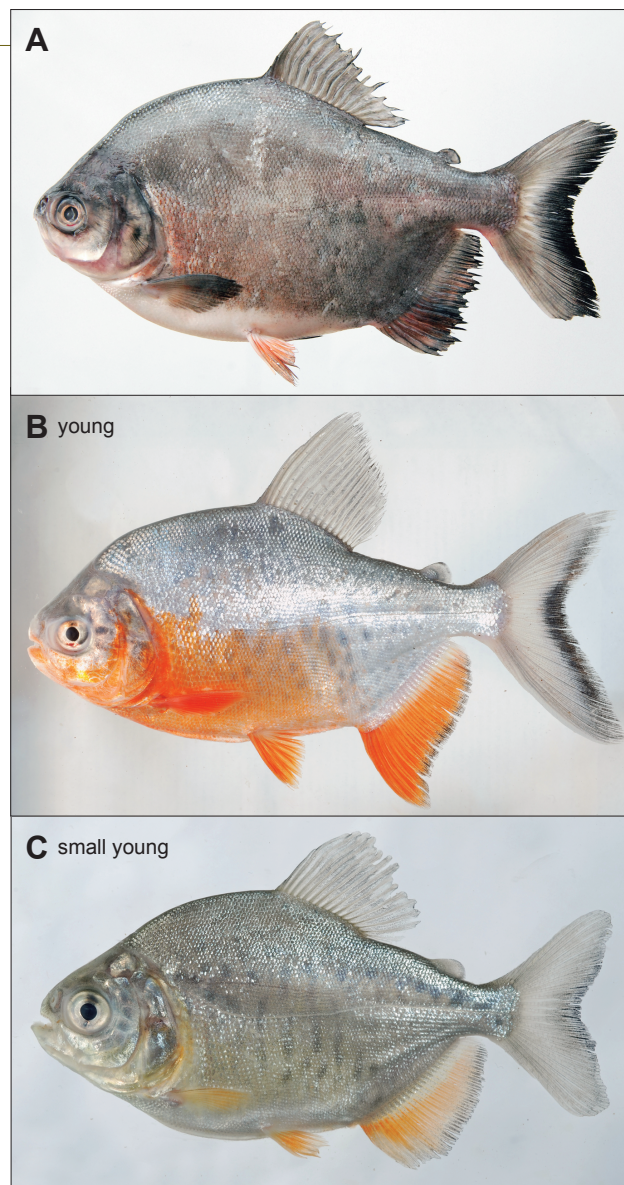
Size: 71 cm TL (Jégu in Reis *et al.*, 2003: 188).

Distribution: Mekong Basin in Laos, Thailand, Cambodia, and Vietnam (all introduced); originally distributed in Amazon Basin in South America, and introduced elsewhere in the world.

Notes: A large characid fish (*sensu* Nelson, 2006) with a deep and compressed body. Cultured specimens are now commonly seen in the fish markets throughout the Indochinese countries (see photograph on left page). It appears to be already established in the Mekong; young fish (see photos B and C) are sometimes collected from the slow-flowing turbid rivers, including the mangrove creeks.

Pacues of the genus *Piaractus* comprises 3 species, viz., *P. brachypomus*, *P. mesopotamicus*, and *P. orinoquensis* (Jégu in Reis *et al.*, 2003; Nico *et al.*, 2018; Escobar *et al.*, 2019), and the Mekong fish shown here can be identified as *Piaractus brachypomus* (*P. bidens*, a junior synonym) that has 84–100 lateral-line scales (vs. 107–128 and 72–89 in *P. mesopotamicus* and *P. orinoquensis*, respectively), 31–37 rows of scales above lateral line (vs. 50–60 and 23–30), and 33–37 rows of scales below lateral line (vs. 49–56 and 22–32) (Escobar *et al.*, 2019). Another pacu genus *Colossoma*, comprising a single species *C. macropomum*, resembles *Piaractus*, but has, e.g., more than 100 gill rakers on 1st branchial arch in specimens > 15 cm SL (vs. fewer than 40 in *Piaractus*) (see Nico *et al.*, 2018). Welcomme and Vidthayanon (2003: 27) reported the aquaculture of *C. macropomum* in central Thailand, and noted that the species was "potentially acceptable and may eventually be cultured in the Mekong Basin."

Piaractus brachypomus superficially resembles the world-famous carnivorous fishes "piranhas," belonging to *Serrasalmus* and the related genera of the same characid subfamily (*Serrasalminae sensu* Nelson, 2006). Fishes of *Piaractus* are herbivorous, and have 2 rows of molariform teeth on each jaw (vs. a single row of sharp, broadly triangular, blade-like interlocked teeth on each jaw in piranhas).



A) IFREDA-P 1306 (photo: PT); B and D) CTU-P 1431 (photo: LXT); C) CTU-P 1340 (photo: LXT); E) CTU-P 4750 (photo: LXT)

