

Ancistrus maracasae (Bristlenose Catfish or Jumbie Teta)

Family: Loricariidae (Suckermouth Armoured Catfish)

Order: Siluriformes (Catfish)

Class: Actinopterygii (Ray-finned Fish)



Fig. 1. Bristlenose catfish, *Ancistrus maracasae*.

[<http://www.aquasfera.org/atlas/d/13243-7/Ancistrus-maracasae-macho-04.jpg>, downloaded 20 February 2015]

TRAITS. All reports of other *Ancistrus* species in Trinidad are in error and are now referred to this species, *Ancistrus maracasae* (Boeseman, 1960; Phillip et al., 2013). The genus *Ancistrus*'s feature which differentiates it within the Loricariidae family is the presence of bristles, which are growths of tentacles on the snout, without basal odontoids (tooth-like structures composed of dentine) (Fig. 1). Sexual dimorphism (size or physical appearance dissimilarities between animal sexes) of *Ancistrus maracasae* exists in the location and length of these tentacles; the tentacles of males are found on top of the snout and are larger than those of females and juveniles which are located only along the snout margin (Fowler, 1946). A special characteristic of *Ancistrus maracasae* is the armour, covering a large part of the body, formed by dermal bone plates (in the

skin). The adult's maximum length is 13-15cm. *Ancistrus maracasae* has a smooth skin texture under its head and belly surfaces and appears dark brown with numerous pale gray to whitish spots. The dorsal or upper side is pale brown with dark to blackish bars crossing its body with three dark spots (Fig. 2).

DISTRIBUTION. Phillip et al. (2013) cite that *Ancistrus maracasae* is a native, national endemic species of Trinidad. It inhabits drainages south of the Northern Range; according to Mohammed et al. (2010) these drainages include the Caroni, Moruga and South Oropuche (Fig. 3). Mohammed et al. (2010) urge "that extreme caution must be taken in the acceptance of endemism due to Trinidad and Tobago's recent origin". *Ancistrus maracasae* is considered rare on the island of Trinidad as it is most abundant in the Maracas River (Jools, 2015) in which it was first sampled and named after. *Ancistrus maracasae* is limited by the presence of another similar species, *Hypostomus robinii*, due to their similar diets and morphological adaptations, although *H. robinii* is larger (Mohammed et al., 2010; Phillip et al., 2013).

HABITAT AND ACTIVITY. *Ancistrus maracasae* inhabits freshwater demersal (lives close to floor) tropical habitats from free-flowing, clear-water streams (Fig. 4) to very turbid, stagnant waters. This species thrives at an optimum temperature range of 20-27°C where the concentrations of dissolved salts and other total dissolved solids are low. Siluriformes are generally crepuscular to nocturnal but there are no published descriptions of activity in *Ancistrus maracasae* specifically.

FOOD AND FEEDING. *Ancistrus maracasae* is a benthic detritivore which feeds and breaks down plant organic matter (Phillip et al., 2013). *Ancistrus maracasae* utilizes a dual mechanism of oral suction due to structural transformations in the jaws to attach to substrates and to scrape dead organic matter from it while breathing (Fig. 2). To feed, *Ancistrus maracasae* first attaches itself to the hard substrate using its depressed body shape, paired fins, spines or odontodes on the ventral side of the body which reduces drag of torrential water when lying on a substrate. Secondly, the dual suction apparatus is used to further secure itself to the sometimes tilted substrate to protect itself from strong currents, and as dead plant matter filters down to the river floor or algae on surfaces are sucked up with a vacuuming motion using the suckermouth (Geerinckx and Adriaens, 2007). The food is converted to nutrients and returned to the environment. *Ancistrus maracasae* at times swims fast over the bottom of the river in search of falling debris. *Ancistrus maracasae* and *Hypostomus robinii* have diets and morphological adaptations for feeding which are similar (Mohammed et al., 2010) and are probably competitors.

REPRODUCTION. *Ancistrus maracasae* has a generation time of 5 years (Sharpe, 2015). The males of this species are very territorial. The male locates and cleans the place in which the eggs would be deposited, then leads the female to his nest by extending his dorsal and caudal fins. The females deposit approximately 20-200 sticky eggs in clusters on hard substrates and the male guards them for 7-10 days. During this period he may clean the nest and eggs, removing bad eggs and aerating the cluster by fanning them with his fins. The male may or may not feed during this time. After 4-10 days the eggs hatch and the juveniles adhere themselves to substrates to allow absorption of yolk sacs for 2-4 more days. After that they are free swimming and begin to feed on algae (Brough, 2013).

BEHAVIOUR. *Ancistrus maracasae* are relatively harmless to humans and other fish species. However, males are competitive and territorial to other males of the same species as they may flare the bristles on their nose and face each other. If a fight occurs they move around each other in a circular motion and attack each other's heads in an attempt to guard juveniles until they have reached maturity (fully grown).

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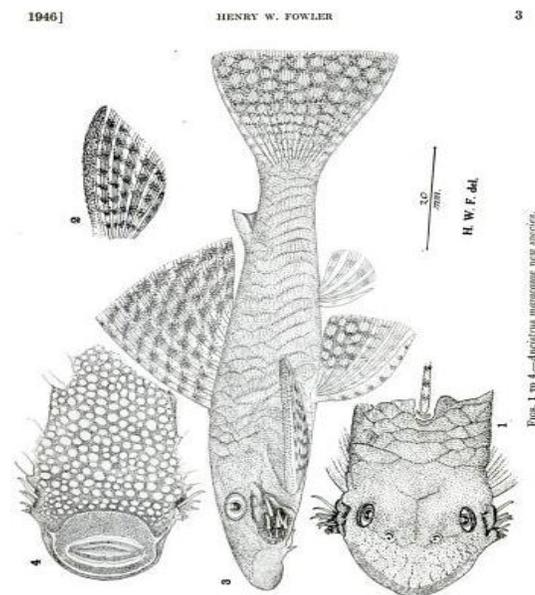


Fig. 2. Sexual dimorphism of *Ancistrus maracasae*.

[<https://books.google.tt/books?id=3blnc05bVoYC&lpg=PA2&dq=Ancistrus%20maracasae&pg=PA4#v=onepage&q&f=false>, downloaded 27 March 2015]

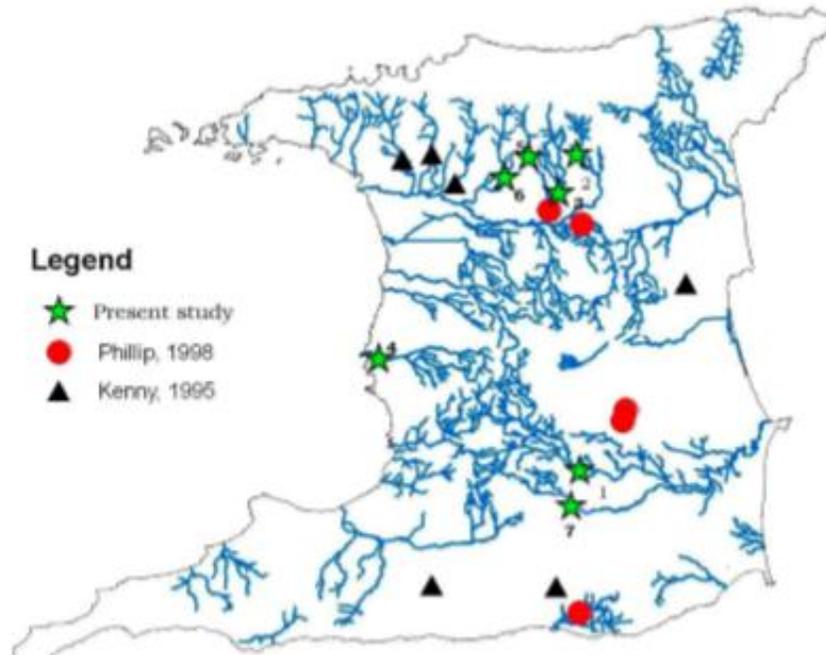


Fig. 3. Geographic distribution of *Ancistrus maracasae* in Trinidad.

[Page 44 Fig.1 of Mohammed et al. (2010)]



Fig. 4. Maracas River Trinidad, natural habitat of *Ancistrus maracasae*.

[[<http://www.planetcatfish.com/common/captions.php?search=Maracas+river>, downloaded 1 March 2015]

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