The coney *Cephalopholis fulva* (Linnaeus, 1758) is a medium sized member of family Serranidae (Subfamily Epinephelinae) (Craig & Hastings, 2007), reaching maximum lengths of about 40 cm. It is distributed in tropical reef areas of the western Atlantic from North Carolina (US) to São Paulo (Brazil), from near the surface down to 150 m depths (Heemstra & Handall, 1993; Menezes et al., 2003). It is a protogynous hermaphrodite, beginning life as female and changing sex at about 18 cm in length (Figueiredo & Menezes, 1980; Leite Jr. et al., 2005; Freitas et al., 2011).

The species is subject to intensive fishing at the central coast of Brazil (13 - 22º S), reaching the third most important place in commercial landings between May 2005 and January 2007. A total of 372 stomachs were examined. Main categories of food items were Teleostei and Crustacea. Analysis of Similarity (ANOSIM) showed no significant dietary differences related to fish size (Global R = -0.019, p = 0.85) and season (Global R = 0.006, p = 0.42). In the study region, *C. fulva* may be regarded as a small predator of fishes and crustaceans being a mesopredator i.e. predator in the mid-trophic levels.

**ABSTRACT**

Gathaz, J. R., Goitein, R., Freitas, M. O., Bornatowski, H. & Moura, R. L. 2013. Diet of *Cephalopholis fulva* (Perciformes: Serranidae) in the Abrolhos Bank, Northeastern Brazil. Braz. J. Aquat. Sci. Technol. 17(1):61-63. DOI:10.14210/bjast.v17.n1.p61-63. eISSN 1983-9057. This study presents data on the natural diet of *C. fulva* in the Abrolhos Bank. Specimens were obtained in commercial fisheries landings between May 2005 and January 2007. A total of 372 stomachs were examined. Main categories of food items were Teleostei and Crustacea. Analysis of Similarity (ANOSIM) showed no significant dietary differences related to fish size (Global R = -0.019, p = 0.85) and season (Global R = 0.006, p = 0.42). In the study region, *C. fulva* may be regarded as a small predator of fishes and crustaceans being a mesopredator i.e. predator in the mid-trophic levels.

**Keywords:** Coney, diet, Abrolhos.
Gathaz et al.: Diet of *Cephalopholis fulva* in the Abrolhos Bank

Figure 1 - Map of the study region (Abrolhos Bank) showing the emerging coralline reefs (gray), and the marine protected areas (polygons).

In the study region, *C. fulva* may be regarded as a small predator of fishes and crustaceans. These groups were also recorded as the most important preys of *Cephalopholis* spp. (e.g. Randall, 1967; Heemstra & Randall, 1993; Nakai et al., 2001; Dierking et al., 2009). On the other hand, variations in frequency of occurrence of these items may show differences for species congeners in other regions. For example, *C. argus* ate primarily fishes (97.7%) in Hawaii (Dierking et al., 2009), while *C. urodeta* ate primarily crustaceans in southern Japan (Nakai et al., 2001). The relative abundance of a particular prey item in a diet may be related to its abundance, escape capabilities (which is constrained by habitat particularities), preferential foraging (Heithaus, 2004), and habitat partitioning (Shpigel & Fishelson, 1989). For instance, *C. fulva* may even prey locally abundant cleaner fishes such as *Thalassoma noronhanum* (Francini-Filho et al., 1999).

The coney may face relatively intense predation from large fishes (e.g. large groupers and tuna) (Randall, 1967; Zavala-Camin, 2008), being a mesopredator i.e. predator in the mid-trophic levels. Following reductions in large fish populations and the cascading effects over lower trophic levels, mesopredators can have their abundances increased (e.g. Chan & Sadovy, 2002; Dulvy et al. 2004; Blanchard et al., 2005;). We demonstrate herein that *C. fulva* is an important predator of both benthic and demersal prey, but further work is needed to determine the mesopredator release and cascading effects.

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