



ICHTHYOFAUNA CAUGHT IN AUTUMN BY MANGOTE (SEINE NET) IN SANTA CRUZ CHANNEL, PERNAMBUCO, BRAZIL

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INTRODUÇÃO

The estuaries are essential habitats in the life cycle of many species of fish. They are important nurseries areas for the juveniles of many marine, estuarine and freshwater fish. One of the most productive estuarine system of Pernambuco is the Santa Cruz Channel, which is fishing ground of the fishing fleet of the Itapissuma city. Catches in the channel of Santa Cruz are composed of adult and young specimens, reflecting the abundance and vulnerability of those organisms in this ecosystem. It is necessary to monitor and manage those resources so that fishing is carried out in a controlled manner. The management of fisheries resources is linked to the balance between the production and availability of fish populations and the dynamics and intensity with which they are exploited. To characterization of the fishing fleet, the study of the dynamics of different types of fisheries, and the knowledge about the species and quantities caught, are important to manage the fisheries (HILBORN;WALTERS, 1992). Nevertheless, there is little information concerning to the small-scale estuarine fisheries.

OBJETIVOS

•Know about the species caught in autumn by seine net in Santa Cruz Channel; •Know the specie with the high catch in autumn in Santa Cruz Channel; •Know the lengths of fish captured by mangote in autumn.

MATERIAL E MÉTODOS

Samples of fish were gathered monthly from April to June of 2013 by mangote. The seine nets used by fishermen are 90 to 150 fathoms of length. The meshes used ranged from 8 to 15 mm. They are small, because they are also used to catch shrimp. The fish sampled were taken to the laboratory and identified using taxonomical identification keys (FIGUEIREDO; MENEZES, 1978). Fish classified as small (<100 mm); intermediate size (≥100 to <200 mm) and large (≥200 mm) following (LUZ *et al.*, 2012). The proportion of each species in the total catch was also calculated.

RESULTADOS

We sampled 306 fish, distributed in 4 orders, 10 families and 19 species. The Clupeiformes found are Clupeidae (*Opisthonema oglinum* and *Lile piquitinga*) and Engraulidae (*Anchovia clupeoides*, *Cetengraulis edentulis* and *Lycengraulis grossidens*). The Perciformes are of the Carangidae (*Chloroscombrus chrysurus*), Gerreidae (*Diapteuris auratus*, *Diapteuris rhombeus*, *Eucinostomus argenteus*, *Eucinostomus gula*, *Eucinostomus melanopterus* and *Ulaema lefroyi*), Haemulidae (*Genyatremus luteus* and *Pomadasy Corvinaeformis*),

Sphyraenidae (*Sphyraena guachancho*) and Gobiidae (*Gobionellus stomatus*) families. In the order Beloniformes were found the Hemiramphidae (*Hyporhamphus unifasciatus*) and Belonidae (*Strongylura marina*) families. Finally, in the order Pleuronectiformes we found the Cynoglossidae (*Symphurus tessellatus*) family. The family with the highest number of species was Gerreidae, but the one that stood out in number was the Clupeidae, mostly due to the high catch of Atlantic thread herring *Opisthonema oglinum* (33.49% of the total catch). The fish assemblages were composed mostly of small individuals, with more than 76.21% of them showing a standard length smaller than 100 mm. Only 1.94% showed standard length higher than 200 mm. The smaller fish species found was one *Eucinostomus argenteus* with 23.78 mm length. The greater was one *Strongylura marina* with 499.74 mm.

DISCUSSÃO

Those orders, families and species were also reported for the Santa Cruz Channel in other works published elsewhere (MOURA, 2009; OLIVEIRA, 1972). Lima and Quinamo (2000) also reported that *O. oglinum* was often caught in the Santa Cruz Channel in 1995. At that time the *O. oglinum* summed up to 66% of the total fish caught by the fishing fleet of Itapissuma. There are at least two hypotheses to explain the large difference between the proportion we have calculated and the one calculated by Lima and Quinamo (2000) for the mid 1990's: a) The abundance of Atlantic thread herring have decreased in comparison to the abundance of other species or b) The catch of other engraulids and clupeids caught were wrongly classified as Atlantic thread herring in 1990's. The high abundance of small and juvenile fish in the estuary can be explained by several factors. For example, living in the estuary reduces the osmotic pressure thus reducing stress (LUZ *et al.*, 2012). Estuaries also presents shelters and have less predators (BLABER; BLABER, 1980).

CONCLUSÃO

This diversity of fish in the Santa Cruz Channel is high. Most of the fish are small and juvenile, which is evidence of the Santa Cruz Channel importance as nursery area.

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