



## Scientific Note

### Occurrence of blackfin tuna *Thunnus atlanticus*, Lesson 1931 (Scombridae) in Saint Peter and Saint Paul Archipelago, Brazil

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**Abstract.** The first record of blackfin tuna in Saint Peter and Saint Paul Archipelago (0°55'02"N; 029°20'42"W) is presented through catches effected by the operating fleet in the area.

**Keywords:** new records, tuna, hand line, Atlantic archipelago, oceanic island

**Resumo. Ocorrência da albacorinha (*Thunnus atlanticus* Lesson, 1931), no arquipélago de São Pedro e São Paulo, Brazil.** Os primeiros registros da espécie *Thunnus atlanticus* realizados no arquipélago de São Pedro e São Paulo (0°55'02"N; 029°20'42"W) a partir de capturas efetuadas pela frota atuante na região.

**Palavras chave:** nova ocorrência, atum, linha-de-mão, Arquipélago atlântico, ilha oceânica

The Scombridae family is composed by 15 genus and 49 epipelagic marine fish species represented mainly by mackerels, tunas and bonitos. Among the seven species of the genus *Thunnus*, five are found in Brazilian waters (*T. alalunga*, *T. obesus*, *T. albacares*, *T. atlanticus* and *T. thynnus*), with rare occurrences of the last one (Figueiredo & Meneses 2000). The maximum fork length (FL) of blackfin tuna is up to 100 cm and the mean size of the specimens caught is 72 cm, weighting 6 to 7 kg (Collette & Nauen 1983). Morphologically, *T. atlanticus* is the smaller tuna of the genus, presenting a golden shade in the flanks and pectoral fins ranging in size between 22 to 31% of the FL. The first dorsal fin have 13 spines, the soft rays of second dorsal and anal fins contain 14-15 and 13-14, respectively. Blackfin tuna have 39 vertebrae divided in 19 precaudal and 20 caudal (Collette & Nauen 1983, Figueiredo & Meneses 2000) and the number of

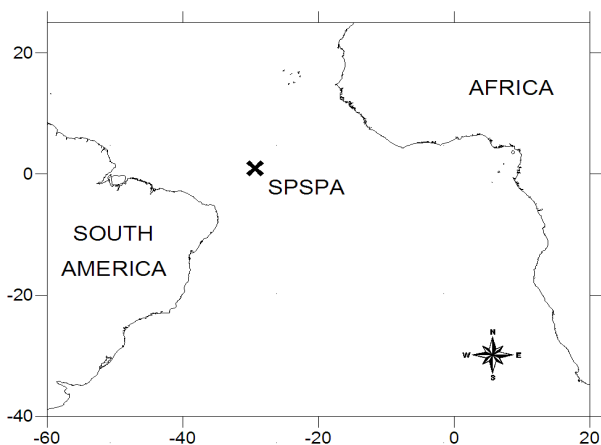
pinnules in superior and inferior parts of caudal peduncle is eight and seven, respectively. The species is distributed in the western Atlantic between 40°N and 25°S, being mainly found in neritic waters, but also observed in the oceanic province restricted to the west of 30°W (Collette & Nauen 1983, FAO 1994, Meneses & Figueiredo 2000). Due to its coastal distribution, the blackfin tuna is often caught by artisanal fisheries in Northeastern Brazil together with other tuna species (Lessa *et al.* 2004, Nóbrega & Lessa 2007). A targeted fishery for *T. atlanticus* in Baía Formosa, Rio Grande do Norte state, represents an important resource to the local community (Vieira *et al.* 2005).

The occurrence of the species is presently recorded in the oceanic province, in the central Atlantic, near Saint Peter and Saint Paul Archipelago (SPSPA), located at 0°55'02"N/ 029°20'42"W (Fig.1). The SPSPA is a small group of rocky islands

of the mid-Atlantic Ridge, 1,000 km from the Brazilian coast, and 1,890 km from Senegal, Africa. The fishing gears used by the Brazilian fleet in SPSPA are handline, trolling, and pelagic longline, targeting mainly the yellowfin tuna (*T. albacares*), although other species of commercial value are also caught, such as wahoo (*Acanthocybium solandri*), dolphinfish (*Coryphaena hippurus*), rainbow runner (*Elagatis bipinnulata*), flying fish (*Cypselurus cyanopterus*), and sharks (*Prionace glauca*, *Carcharhinus falciformis*) (Travassos 1999, Viana *et al.* 2008).

The blackfin tuna was never mentioned in checklists of fishes from the SPSPA area (Lubbock & Edwards 1981, Oliveira *et al.* 1997, Feitoza *et al.* 2003, Vaske Jr. *et al.* 2005, Vaske Jr. *et al.* 2006, Vaske Jr. *et al.* 2008). The first specimen recorded in the SPSPA was caught by handline, in December 2008. According to the fishermen, the species is sporadically caught in the region, being called as “small tuna”, but it is not reported in fishing logbooks. In 2009, however, there was a significant increase in catches of blackfin tuna in that area, enabling biological studies on its reproductive biology and feeding habits. Until February, 2010, 299 biological samples had already been collected, including 200 males and 99 females, ranging from 38 to 95 cm FL.

The specimen used for identification was 76 cm in total length and 71 cm FL (Fig. 2). Pectoral fin was 26% of FL (18 cm), being one of the main morphometric characteristics of the species. The first dorsal fin had 13 spines, while the second dorsal and anal fins had 14 and 13 soft rays, respectively. The caudal peduncle had eight and seven pinnules on superior and inferior region, respectively. The specimen is available at the Laboratório de Ecologia Marinha (LEMAR), at Departamento de Pesca e Aquicultura (DEPAq) of Universidade Federal Rural de Pernambuco (UFRPE).



**Figure 1.** Location of Saint Peter and Saint Paul Archipelago, Brazil.



**Figure 2.** Blackfin tuna *Thunnus atlanticus*, caught in Saint Peter and Saint Paul Archipelago, Brazil. (Photo: Natalia Bezerra).

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