

Some information regarding narrow barred spanish mackerel caught in Mozambique

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ABSTRACT

Narrow barred Spanish mackerel or kingfish is mainly caught in line and game fishing. Some information regarding catch and size composition obtained during competitions in some fishing grounds are presented. Until 2009, the gamefish coverage was only in the southern part of the country. This is one of the prioritized species in the SWIOFP project component 4, so it is expected to have some studies carried out on the end of the project in 2012.

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1. INTRODUCTION

Kingfish is a member of the Scombridae family which includes tunas, mackerel and bonitos. They are widely distributed across subtropical waters of Indo Pacific .(Colette and Nauen, 1983)but are generally caught along the Mozambique coastline. Mozambique stocks are shared with South Africa so in the SWIOFP project some studies will be undertaken to know the state of the stocks. Kingfish are a large epipelagic schooling species which is known to spawn in Kenya and Mozambique from October to July and migrate to South Africa during summer. They are a fast-growing species and reach sexual maturity at approximately 2 years but stocks appear to be overexploited.

Kingfish are mainly caught in South Africa by the traditional linefishery, particularly in KwaZulu-Natal. This fishery operates from small ski- and deckboats within the inshore zone along most of the South African coastline, they are also a popular target for recreational line and spearfishers in KwaZulu Natal, juveniles of this species are also caught as bycatch in the shallow water prawn trawl in KwaZulu-Natal (Govender 1994).There is no minimum size limit for this species.

In Mozambique, this species is mainly caught by line semi industrial and recreational fishing. This species occurs along the coast from 15 to 200 m depth, along the year and is also caught by artisanal fishery (Figure 1).

Recreational and sport fishing is undertaken along the Mozambican coast with and without vessel. This kind of activity take place mainly in public holidays, week ends or during school holidays .

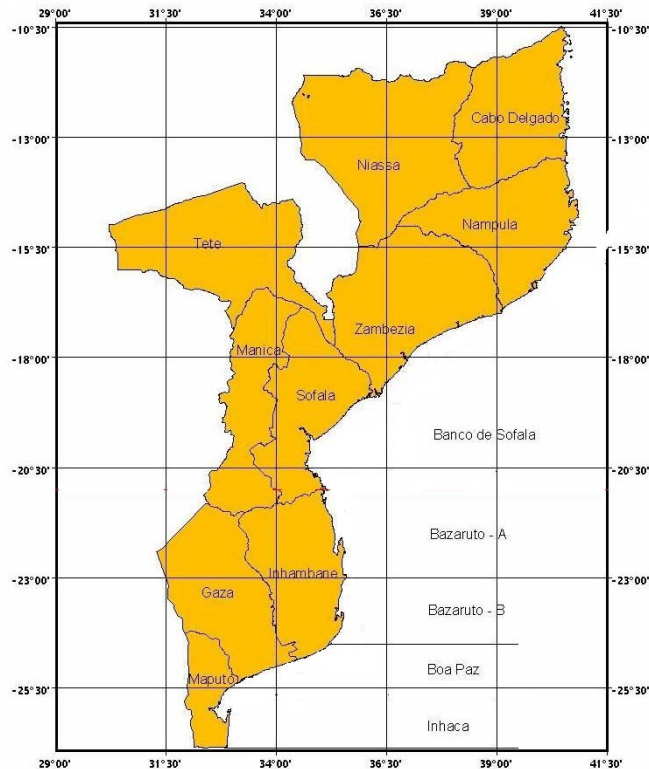


Fig. 1 Mozambique map with main fishing grounds.

2. Material and methods

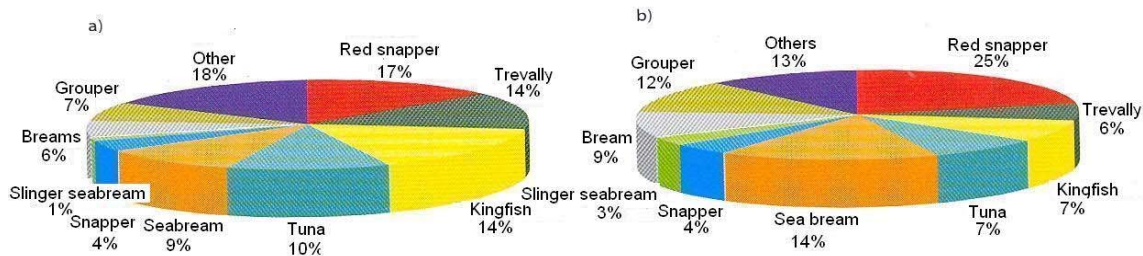
Data from recreational fishing from 2009 was obtained in Maritimo Club in Maputo from the fishing grounds between Ponta Dabela (26° 30') and Ponta do Ouro (26° 52') in southern part of the country through Lubombo Transfrontier Conservation Area and in Inhassoro (Inhambane province) collected by Fisheries Research Institute delegation in Inhambane. Regarding line fishing data was collected from Závora (24° 30'S) to Ponta do Ouro (26° 52'S).

3. Results and Discussion

During 2009, the Fisheries Research Institute collected data on 17 gamefish competitions (11 in Maputo city, 3 in Maputo Province, one in Gaza, one in Inhambane and another in Sofala Provinces). In Maputo city data was collected in Maritimo and Naval clubs while in Maputo Province it was collected from Ponta Dabela to Ponta do Ouro. During 2009, 19 vessels carrying between 1 to 5 persons participated in recreational fishing from Maritimo Club.

3.1. Species composition from recreational fishing

Species composition in weight was dominated by red snapper with 17%, (1207.5 kg) followed by trevally and kingfish with 14%(998.5 kg and 975.7 kg, respectively). Species composition by number was also dominated by red snapper followed by sea bream. Kingfish accounted to 7% (Figure 2).



Source:(Anon, 2009)

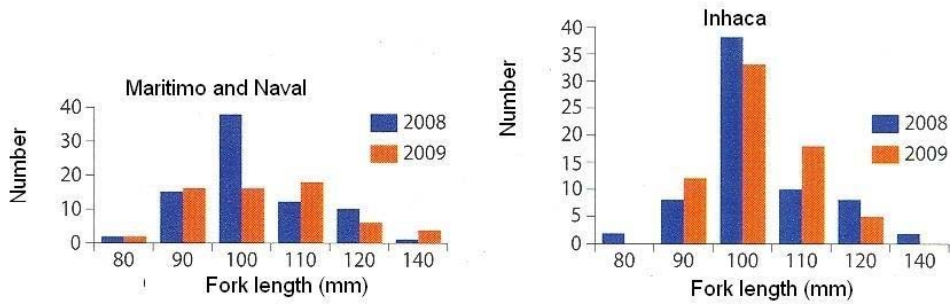
Figure 2. Species composition in weight (a) and in number (b) of the catches recorded in Maritimo Club (Maputo city) in 2009.

During 2009, 15 vessels participated in recreational fishing from Ponta Dobela, Milibangalala and Ponta do Ouro. Each vessel carried 1 to 4 persons and fishing period varied between 1 to 9 hours with and without vessel. The species composition by number was dominated by barracuda, (27%) followed by dolphinfish (20%), tuna (15%) and kingfish(10%). Species composition by weight was dominated by tuna (22%), followed by barracuda.

3.1.1. Size composition

Biological data collected for kingfish in the gamefish competitions in Maritimo and Naval clubs showed that mean fork length was 91 cm and mean weight was 6.5 kg. In the gamefish competition in Inhaca Island the mean fork length was 100.5 cm and the mean weight was 7 kg.

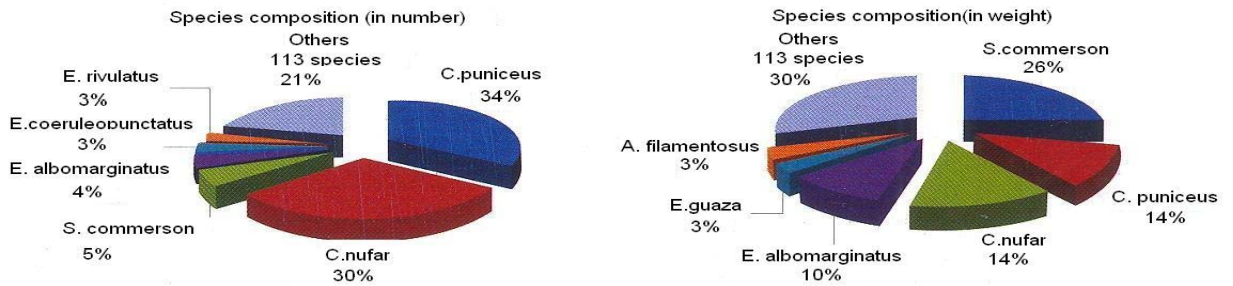
Figure 5 shows the mean fork length of kingfish during 2008 and 2009 obtained from gamefish competitions in Maputo city (Maritimo and Naval clubs) and Inhaca Island. The size ranged from 80 to 140 cm in both places and the majority of the specimens had 100 cm.



Source: (Anon, 2009)

Figure 3 Mean fork length of Kingfish during 2008 and 2009 in Maritimo and Naval Clubs and Inhaca Island.

3.2. Species composition from line fishing



Source: (Anon, 2009)

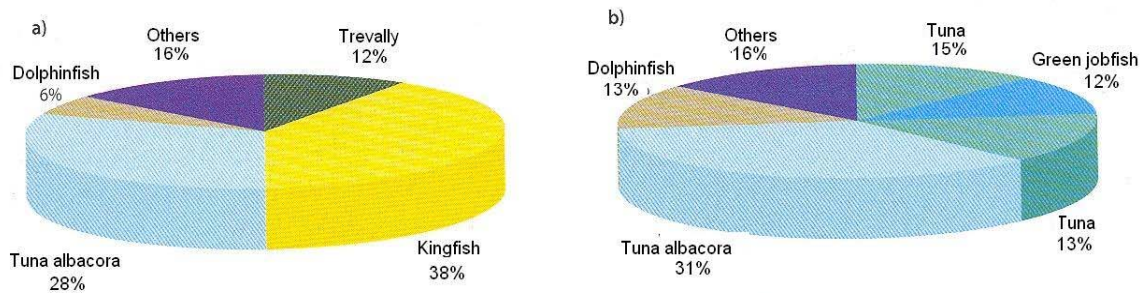
Figure4. Species composition of line semi-industrial fishing in 2009.

Species composition in weight was dominated by kingfish, followed by slinger seabream and grouper, because in 2009, the semi industrial vessels fished mainly in low depth fishing grounds.

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3.3. Sport fishing

Fisheries Research Institute only collected data in Maputo city and Maputo Province during 2009. Figure 5 shows the species composition by weight which was dominated by kingfish in Maputo city with 38%, followed by yellowfin tuna with 28%. In the gamefish competitions in Maputo Province yellowfin tuna dominated the catches by weight with 31% followed by skipjack with 15%.



Source: (Anon, 2009)

Figure 5. Species composition in weight (a) of recorded catches in Maputo city (a) and Maputo province (b) in 2009.

Regarding small scale fishing during 2009, data from three gamefish competitions in Ponta do Ouro (Maputo province, south Mozambique) were recorded. On board species composition showed that 3% of the catch was Kingfish, kawakawa, 16%, skipjack, 19% and Yellowfin tuna, 33%.

During the same year, in Inhambane province, 17% of line fishing catches were kingfish, tuna and wahoo.

4. Recommendations

- Data collection on this species should continue and expanded along the coast to give an overview of the country.
- As it was mentioned in the abstract more information is expected on the end of 2012 from SWIOFP project component 4.

5. References

Collette, B.B. and Nauen, C.E., 1983.FAO Species Catalogue. Vol 2.Scombrids of the world and annotated and illustrated catalogue of tunas,Mackerels, Bonitos and related species known to date. FAO Fisheries Synopsis 125(2), 137.

Govender, A.,1994. Growth of the king mackerel (*Scomberomorus commerson*) off the coast of Natal, South Africa from length and age data. Fisheries Research **20** (1994).63-79.

