

# LENGTH-WEIGHT RELATIONSHIP OF THE BIGEYE GRUNT - BRACHYDEUTERUS AURITUS (VALENCIENNES, 1831) OFF WEST COAST, NIGERIA

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## ABSTRACT

*Twenty (20) ornamental fish species belonging to thirteen (13) families were identified. Composition of the majority of the families is a specie each, while Scorpaenidae had four(4) species, Tetraodontidae had three (3) species, and Batrachoididae and Fistularidae had two (2) species each. Distribution of these fish species is fairly abundant with the Hippocampus sp being the least available as only two individuals were caught during the survey.*

## INTRODUCTION

There are several indigenous ornamental fish species in Nigeria. Most of them are freshwater species which are exported to different countries of the world in the global ornamental fish trade. Nigerian ornamental fish species are in great demand in various countries such as the United States of America, Germany Belgium, France, Indonesia, Philippines, Sri Lanka and China. Presently, exported fishes do not include marine species. Exporters have however indicated their interest in having marine species included in the trade. This forms the backdrop for a survey of the coast of Nigeria from Lagos to identify likely marine ornamentals.

Marine ornamental fish species are very attractive, having fantastic colours and unusual shapes (Mills 2003). Though they do not adjust well to differences in water quality or temperature fluctuations, which make hobbyists, face tougher challenges keeping them, they are highly valued (DeVito and Skomal 2000). Nigerian freshwater ornamental fishes are generally not brightly coloured, but because they are hardy they are in high demand (Areola, 2004). The availability of their colourful marine counterparts and their introduction into the export trade would boost the trade and increase Nigeria's participation in the global trade.

This is a preliminary survey aimed at identifying the marine species that would be introduced and added to the exporters list to boost the trade in Ornamental fish in Nigeria. This will eventually increase the country's foreign exchange earnings in non oil exports.

## METHODOLOGY

A survey was undertaken on board a fishing trawler MV Susainah . Sampling was done at stations up to 100m depth between the Nigeria/Benin Republic border and Lekki axis of Lagos State, Nigeria. Fish were caught at different locations with a trawling net. Fish were bagged and stored in the cold room of the vessel. On arrival at base, (Nigerian Institute for Oceanography and Marine Research) fish bags were transferred to deep freezers in the laboratory. Individual bags were later defrosted and fish identified into different families and species with the aid of Schneider (1990). Considering ornamental qualities such as bright colouration, shape unique features, ornamental fish species were then sorted out with the aid of Mills (2003) and Schneider (1990).

## RESULT

Twenty marine ornamental fish species belonging to thirteen families which include Syngnathidae, Scorpaenidae, Myliobatidae, Tetraodontidae, Batrachoididae, Ariidae, Fistularida, Chaetodontidae, Platycephalidae, Priacantidae, Mullidae, Lophiidae and Zeidae were identified. They exhibited a combination of varied Colours and shapes. In the different locations where fish was hauled, considerable numbers of these species were found. Though only two specimens of *Hippocampus sp* was caught

It is likely that a more intensive survey at greater depths in a more widespread area would yield better results with regards to the species diversity available. This will invariably enhance the export trade once introduced to exporters and also boost foreign exchange earnings.

## CONCLUSION

A greater participation of Nigeria in the global ornamental fish trade will only be actualized when both freshwater and marine species are exported. The desire to have marine species for export by exporters in recent times, has brought to the fore this survey which needs to be intensified to achieve better results that exporters can key into to boost the trade. This being a preliminary survey, is a tip of the iceberg as the Nigerian marine environment is teeming fishes is of utmost importance if Nigeria's export trade is to attain a higher level. Subsequently, more surveys should be carried out and the number of available marine ornamental species be improved upon. Thereafter, the inclusion of marine ornamental fishes in the export trade would uplift businesses and the Nigerian economy.

## REFERENCES

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2. DeVito C. and Skomal G.(2000): The Everything Tropical Fish Book-Setting up and maintaining freshwater and saltwater aquariums. 307pp
3. Mills D. (2003): Aquarium Fish. The clearest recognition guides available. Published by
4. DK Publishing. Inc. 375 Hudson Street, New York. 304pp

5. Schneider W. (1990): FAO Species Identification sheets for fishery purposes-Field Guide to the Commercial Marine Resources of the Gulf of Guinea. Published by FAO Of the United Nation 1990. 268pp

**Table 1.** Identified Marine Ornamental Fishes

<b>FAMILY</b>	<b>SCIENTIFIC NAME</b>	<b>COMMON NAME</b>
Syngnathidae	<i>Hippocampus sp</i>	Sea horse
Scorpaenidae	<i>Scorpaena angolensis</i>	Angola rockfish
	<i>Scorpaena laevis</i>	Senegalese rockfish
	<i>Setarches guentheri</i>	Deepwater scorpionfish
	<i>Pontinus accraensis</i>	Rockfish
Myliobatidae	<i>Trachinocephalus myops</i>	Bluntnose lizardfish
Tetraodontidae	<i>Sphoroides mamoratus</i>	Guinean puffer
	<i>Lagocephalus laevigatus</i>	Smooth puffer
	<i>Ehipion guttifer</i>	Prickly puffer
Batrachoididae	<i>Perulibatrachus rossignoli</i>	Rossignoli toadfish
	<i>Batrachoides liberensis</i>	Hairy toadfish
Ariidae	<i>Arius heuddotti</i>	Smooth mouth sea catfish
Fistularidae	<i>Fistularia pectimba</i>	Red cornet fish
	<i>Fistularia tabacana</i>	Blue spotted cornet fish
Chaetodontidae	<i>Chaetodon marcellae</i>	Butterfly fish
Platycephalidae	<i>Grammoplites gruveli</i>	Guinea flat head
Priacanthidae	<i>Priacanthus arenatus</i>	Atlantic big eye
Mullidae	<i>Pseudopeneus prayensis</i>	West African goatfish
Lophiidae	<i>Lophiodes kempi</i>	Longspine Africa angler
Zeidae	<i>Zeus faber</i>	John dory