

G3 MICROORGANISMS ASSOCIATED WITH FRESH FISH OBTAINED FROM RIVER BENUE

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INTRODUCTION

Many species of fish (Approx 6850) normally live in fresh water lakes and River. The Term "Fish" Encompasses All Sea Foods Including Crustaceans With A Chitinous Exoskeleton Such As Lobsters, Crabs, Shrimps And Molluscs Such As Mussels, Cockles, Clams And Oysters [1, 2]

MATERIALS AND METHODS

Fresh fish samples (of 3 species) i.e. carp fish, sucker fish, cat fish, polyethylene bags, sterile water (100ml), phosphate buffered saline, nutrient agar, macconkey agar, potato dextrose agar.

The bacteriological media and reagents used were prepared and sterilized by autoclaving at 121.1c for 15mins. Sterile water (100ml) was poured into each polythene bags containing one fish of each species and was used to thoroughly wash the skin of the fish. 1.0ml of the wash water was diluted 10 folds in phosphate buffered saline, various culture media namely nutrient agar, macconkey agar potato dextrose agar were used. The gills were aseptically removed and weighted (about 1.2g) and were similarly treated like the skin. The plates were incubated for 24-48 hours at 37°C, the potato dextrose agar plates were incubated for 72 hours at 37°C. Colonies obtained were counted and reported as colony forming.

RESULT AND DISCUSSION

Microorganisms associated with fresh fish from river Benue were determined. Fish studied were catfish (*auchenogianis occidentalis*), carp fish (*labeo coubie*), and sucker fish (*echeneis, naurates*) the viable counts of the isolates on the gills and skin both ranged from 10²cfu/g to 10⁶cfu/g.

The total coliform counts varied between 10²cfu/g to 10⁶ for the two specimens. bacteria isolated from the 27 fish samples collected were *Eschericia coli*, *Shigella spp*, *Staphylococcus*

aureus, *Vibrio spp*, and *Klebsiella spp*. the surgal species identified were *Aspergillus niger* and *Rhizopus spp*.

Table 1: Microbial Load Of The Various Fish Samples obtained from River Benue

Locations	Sample	Parts Isolated From	Tpc CfU/G	Tcc CfU/G
North Bank Market	Carpfish	Skin	9.0×10^5	6.9×10^4
		Gills	2.6×10^5	6.9×10^4
	Suckerfish	Skin	7.5×10^5	5.8×10^4
		Gills	8.3×10^5	5.8×10^4
	Catfish	Skin	3.4×10^5	5.8×10^4
		Gills	1.6×10^5	6.0×10^3
Wurukum Market	Carpfish	Skin	7.5×10^5	2.7×10^4
		Gills	3.0×10^4	3.0×10^5
	Suckerfish	Skin	3.3×10^4	1.0×10^5
		Gills	5.4×10^5	2.0×10^5
	Catfish	Skin	2.1×10^3	2.0×10^4
		Gills	5.6×10^4	7.0×10^5
Wadata Market	Carpfish	Skin	2.9×10^3	1.0×10^3
		Gills	2.0×10^2	1.2×10^2
	Suckerfish	Skin	2.2×10^2	2.4×10^2
		Gills	3.2×10^3	3.9×10^2
	Catfish	Skin	1.4×10^2	3.5×10^2
		Gills	2.3×10^2	4.4×10^2

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