

NUTRITION FACTS

Cirrhinus mrigala (Mrigal)



Outreach Activity on

"NUTRIENT PROFILING OF FISH"

ICAR - Central Institute of Freshwater Aquaculture

(ISO 9001 : 2008 Certified Institute)

Kausalyaganga, Bhubaneswar-751002

Odisha



Kingdom	Animalia
Phylum	Chordata
Class	Teleostomi
Order	Cypriniformes
Family	Cyprinidae
Genus	<i>Cirrhinus</i>
Species	<i>mrigala</i>
Binomial Name	<i>Cirrhinus mrigala</i> , Bloch 1795

Identifying Characters

1. Body elongated with depressed and obtusely rounded snout.
2. Scales are large and cycloid.
3. Mouth is terminal and wide, lips without fringe, upper lip not continuous with lower lip. One pair of short rostral barbels present in mouth.
4. Caudal fin homocercal with deeply forked. Body colour is usually dark grey on the back and silvery on the sides and belly.

Information on the species:

Mrigal is mainly oligophagous, feeding on the bottom on decayed vegetation, although it can also switch to a filter feeding mode. The thin terminal lips are adapted for picking up food materials from the substratum. Juvenile fish feed intensively throughout the year except between January and March, while adults feed most intensively during post-spawning period (October to December). The weight range of pooled analyzed mrigal sample was 1.5 kg to 2.5 kg and collected from West Bengal, Odisha, Tripura, Karnataka and Chhattisgarh. The nutrient profile of this fish would provide a guideline for dieticians, medical practitioners and nutritionist in prescribing diet chart for the human population. The nutrient profiling of the species is conducted under the Outreach Activity project of Indian Council of Agricultural Research (ICAR) on 'Nutrient Profiling and evaluation of fish as a dietary component'.

NUTRITION INFORMATION

Amounts per 100g

CALORIE INFORMATION

Calories	96.35 kcal (403.40 kJ)
From Carbohydrate	0.0 kcal
From Fat	31.59 kcal (132.26 kJ)
From Protein	64.76 kcal (271.14 kJ)

FATS & FATTY ACIDS

Total Fat	3.51 g
Saturated Fat	2.32 g
C6:0	0.0017 mg
C10:0	0.0021 mg
C11:0	0.04 mg
C12:0	0.04 mg
C13:0	0.06 mg
C14:0	0.23 mg
C15:0	0.16 mg
C16:0	1.51 mg
C20:0	0.01 mg
C21:0	0.26 mg
C23:0	0.01 mg
Monounsaturated Fat	0.61 g
C14:1	0.01 mg
C15:1	0.01 mg
C16:1	0.02 mg
C17:1	0.05 mg
C18:1n9t	0.41 mg
C20:1	0.10 mg
C22:1n9	0.01 mg
Polyunsaturated Fat	0.57 g
C18:2n6t	0.003 mg
C18:2n6c	0.009 mg
C18:3n3	0.20 mg
C20:3n6	0.06 mg
C20:3n3	0.002 mg
C20:4n6	0.02 mg
C20:5n3 (EPA)	0.24 mg
C22:6n3 (DHA)	0.04 mg
ω 3	0.48 mg
ω 6	0.09 mg

PROTEIN & AMINO ACIDS

Protein	16.19
Arginine	0.20
Histidine	0.71
Isoleucine	1.01
Leucine	1.37
Lysine	0.69
Methionine	0.27
Phenylalanine	1.04
Threonine	0.96
Tryptophan	0.10
Valine	1.14
Aspartic acid	1.83
Serine	1.00
Glutamic acid	2.45
Proline	0.07
Glycine	2.12
Alanine	1.01
Cysteine	0.02
Tyrosene	0.20

NUTRITION INFORMATION

Amounts per 100g

VITAMINS

Vitamin A	42.43 IU
Vitamin D	203.20 IU
Vitamin E	0.78 IU
Vitamin K	0.15 mcg

OTHERS

Water	75.44 g
Ash	2.30 g

MINERALS

Calcium	174.82 mg
Phosphorus	275.71 mg
Sodium	184.78 mg
Potassium	142.59 mg
Iron	1.48 mg
Manganese	0.26 mg
Zinc	0.89 mg
Selenium	0.17 mg



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