

NUTRITION FACTS

Silver barb (*Barbonymus gonionotus*)



ICAR Outreach Project “NUTRIENT PROFILING OF FISH”



ICAR – Central Institute of Freshwater Aquaculture
(ISO 9001:2015 Certified Institute)
Kausalyaganga, Bhubaneswar – 751 002
Odisha, India



Information on the species

Barbonymus gonionotus is a freshwater riverine fish. The species is native to Indonesia and introduced in India in 1972. The species occurs at mid-water to bottom depths in rivers, streams, lakes, ponds, floodplains and occasionally in reservoirs. It prefers living in standing water habitats instead of flowing water. These fishes are omnivorous and their diet includes small invertebrates and plant matter. The species is highly acceptable by consumers because of its good taste and nutritional values. The species is also compatible to carp polyculture. The nutrient profiling of the species was conducted under the Outreach Activity on “Nutrient profiling of fish” of Indian Council of Agricultural Research (ICAR).

Taxonomical Classification

Kingdom	: Animalia
Phylum	: Chordata
Class	: Actinopterygii
Order	: Cypriniformes
Family	: Cyprinidae
Genus	: <i>Barbonymus</i>
Species	: <i>gonionotus</i>
Binomial Name	: <i>Barbonymus gonionotus</i> (Bleeker, 1850)

Morphological Characters: Body is strongly compressed and deeply elevated dorsal profile from the concave occiput raised maximum at the dorsal fin origin. Head is small, snout is pointed. Eyes are somewhat shorter than snout and twice in inter-orbital space. Mouth is terminal, small; lips are thin and not fringed. Skin of lower lip separated from lower jaw by a shallow groove. 2 pairs of maxillary barbells present. Scales are cycloid, moderately large, with numerous undulated longitudinal lines. Dorsal fin spine is serrated. Eight branched pelvic fin rays. Anal fin base is long and about 90% of the head length.

Feeding habits: *B.gonionotus* is an omnivore prefers submerged vegetation. Principally they are herbivore bottom and marginal feeder, but occasionally they take animal organism too in adult stages.

NUTRITION INFORMATION

Amount per 100g fresh fish

CALORIE INFORMATION	
Calories	105.89 Kcal (442.62KJ)
From Carbohydrate	0.0 KJ
From Fat	42.48 Kcal (177.57 KJ)
From Protein	63.41 Kcal (265.05 KJ)

AMINO ACID	
Arginine	7.425 mg
Histidine	231.66 mg
Isoleucine	49.0 mg
Leucine	7.425 mg
Lysine	7.425 mg
Methionine	494.51 mg
Phenylalanine	19.31 mg
Threonine	7.425 mg
Tryptophan	7.425 mg
Valine	7.425 mg
Aspartic acid	87.62 mg
Serine	32.67 mg
Glutamic acid	14.425 mg
Proline	7.425 mg
Glycine	7.425 mg
Alanine	20.79 mg
Cysteine	16.34 mg
Tyrosene	28.22 mg
Glutamine	8.91 mg
Asparagine	35.64 mg

FATS AND FATTY ACIDS	
Total Fat	4.71 g
Saturated Fat	2.48 g
C4:0	8.007 mg
C8:0	1.413 mg
C12:0	4.239 mg
C14:0	123.40 mg
C15:0	47.10 mg
C16:0	1559.95 mg
C17:0	63.59 mg
C18:0	503.97 mg
C20:0	10.36 mg
C23:0	40.04 mg
Monounsaturated Fat	1.70 g
C14:1	1.884 mg
C15:1	22.61 mg
C16:1	35.33 mg
C17:1	2.826 mg
C18:1n9c	1597.16 mg
C20:1n9c	33.44 mg
Polyunsaturated Fat	0.65 g
C18:2n6t	3.786 mg
C18:2n6c	303.80 mg
C18:3n6	8.949 mg
C18:3n3	4.239 mg
C20:2	33.44 mg
C20:3n6	114.92 mg
C20:5n3	49.93 mg
C22:6n3	133.29 mg
ω 3	186.52 mg
ω 6	464.41 mg
EPA+DHA	183.22 mg

NUTRITION INFORMATION

Amount per 100g fresh fish

VITAMINS	
Vitamin A	46.5 IU
Vitamin D	5.0 IU

Proximate Compositions	
Moisture	73.61 g
Protein	14.85 g
Fat	4.71 g
Ash	2.41 g

MINERALS	
Calcium	208.50 mg
Sodium	5.647 mg
Potassium	12.83 mg
Iron	0.049 mg
Manganese	0.011 mg
Zinc	0.070 mg
Copper	0.041 mg



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