



Chheng P., Baran E., Touch B.T. 2004 Synthesis of all published information on ted tail tinfoil *Barbonymus altus* ("trey kahe"), based on FishBase 2004. WorldFish Center and Inland Fisheries Research and Development Institute, Phnom Penh, Cambodia. 16 pp.

#### Introduction

This document results from the extraction and the editing by the authors of the information available in FishBase 2004.

FishBase is a biological database on fishes developed by the WorldFish Center (formerly ICLARM, the International Center for Living Aquatic Resources Management) in collaboration with the Food and Agriculture Organization of the United Nations (FAO) and with the support of the European Commission (EC).

These synopses present a standardized printout of the information on the above-mentioned species incorporated in FishBase as of 11 May 2004, is inspired from the format suggested for such documents by H. Rosa Jr. (1965, FAO Fish. Syn. (1) Rev 1, 84 p.).

We cannot guarantee the total accuracy of the information herein; also we are aware that it is incomplete and readers are invited to send complementary information and/or corrections, preferably in form of reprints or reports to the FishBase Project, WorldFish Center, MC P.O. Box 2631, Makati, Metro Manila 0718, Philippines.

#### Some hints on how to use the synopses

The following definitions are meant to help you better understand the way this synopsis presents information and document its sources.

Please refer to the FishBase book for more details; and do not hesitate to contact FishBase staff if you have suggestions or information that would improve the format or the contents of this synopsis.

SpecCode : Numeric FishBase code, assigned to a species and used for internal purposes only.

StockCode : Numeric FishBase code, assigned to the species in general, a wild population, or a cultured strain.

Since, to date, only a few species have been separated into stocks, the StockCode usually refers to

the species in general.

MainRef. : Numeric FishBase code corresponding to the reference used as a source for most of the information

within a table.

Ref. : Numeric FishBase code corresponding to the reference associated with a specific entry or set of

entries; when left empty, the source of information is the MainRef. Note that the references listed at

the end of this synopsis are arranged according to their numeric codes, and not alphabetically.

Empty fields : Imply information that is currently not available to the FishBase project and/or information which is

available but which has not been entered as of 31-Mar-04 . Note that the character 0 (zero) is used as

a valid numerical value, and does not indicate that no information is available.

Choice fields: Much of the information in this synopsis was entered via multiple choice fields; the available

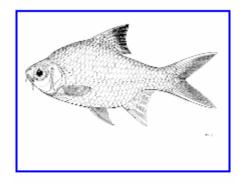
alternatives must be considered when evaluating the wisdom of a given choice.

Remarks or Comment fields: The free text included in such fields may have been taken verbatim from the source in

"Ref.", in which case this should be regarded as a direct citation (but lacking quotation marks); alternatively, the text may have been modified/adapted from one or several sources. In the latter

case, additional "Ref." numbers may be incorporated in the text.

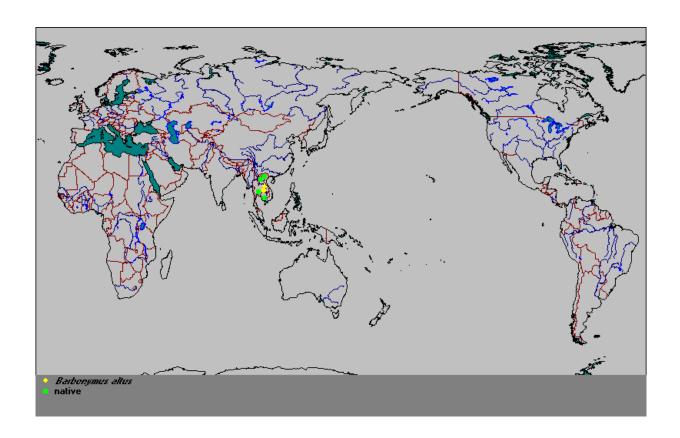
# Barbonymus altus (Günther, 1868) Red tailed tinfoil



picture (Baalt\_ul.gif) by FAO



picture (Baalt\_u0.jpg) by Warren, T.



# Summary information on the family Cyprinidae

Family : Cyprinidae (Minnows or carps)

Order : Cypriniformes MainRef. : 007463 Class : Actino:pterygii (ray-finned fishes) FamCode : 122

Number of genera: 210 Number of species: 2010

Occurs in : O Marine

BrackishFreshwater

Aquarium fishes : many

First fossil record : lower Tertiary

Eocene Ref.: 004879

Species currently in FishBase: Genera: 331 Species: 2408 (Including subspecies) complete: Yes

Remarks: Distribution: North America (northern Canada to southern Mexico), Africa, and Eurasia. Pharynx with 1-

3 rows of teeth, each row with a maximum of 8 teeth. Usually thin lips, plicae or papillae absent; mouth sometimes suckerlike (Garra and Labeo). With or without barbels. Premaxilla usually borders the upper jaw making the maxilla entirely or almost entirely excluded from the gape. Usually protrusible upper jaw. Dorsal fin with spinelike rays in some. Primitive number of chromosomes 2n=50, some with 48; polyploidy exists. Maximum length at least 2.5 m to probably 3 m in Catlocarpio siamensis; many species less than 5 cm. Mainly non-guarders, but in some species males build nests and/or protect the

eggs.

Etymology: Greek, kyprinos = goldfish. 1828 (Ref. 45335).

# Information on the genus Barbonymus

and its synonyms, after Eschmeyer March 2003 (Ref. 46206)

Barbonymus Status: no revision Gender: masculine

Kottelat, 1999, p. 595, CAS Ref: 24610

Type by original designation.

Type species: Barbus schwanenfeldii Bleeker, 1853

Current genus: Barbonymus

# General information on Barbonymus altus

Classification	on			
Class	: Actinopte	erygii (ray-finned fishes)	IainRef.	027732
Order	: Cyprinifo	ormes		
Family	: Cyprinida	ae (Minnows or carps)		
Species	: Barbony	mus altus		
Author	: (Günther,	, 1868) Auth	nor Ref.	
	Date Esc	hmeyer, pers. comm.		
Environme	nt			
Freshwater	: Yes	Habitat : benthopelagic		
Brackish	: No	Migrations :		
Saltwater	: No	Depth range :		
Importance	<b>:</b>			
Main catchin	ng method	:		
Other metho	ods: (•) Sei	ines (•) Gillnets O Castnets (•) Traps O Spea	ırs	
	O Tra	wls O Dredges O Liftnets O Hooks+Lines O Othe	r	
Used for aqu	ıaculture	: commercial	Ref.	012693
Used as bait		: never/rarely	Ref.	
Aquarium fi	sh	: commercial based mainly on capture	Ref.	006459
Game fish		: No	Ref.	
Dangerous f	ïsh	: harmless	Ref.	
Electrobiolo	gy	: no special ability	Ref.	
Size and ag	e		I	
Maximum le	ength (cn	n) (male/unsexed): 20 SL (female):	Ref.	030857
Common ler	ngth (cm	n) (male/unsexed): 15 SL (female):	Ref.	012693
Remarks				

Occurs at midwater depths in large and medium-sized rivers and floodplains. Feeds on various plant and animal matter. Commonly found near villages where it feeds on organic detritus disposed of by humans (Ref. 12693). Reported to be occasionally poisonous, causing vomiting, due the fruits it eats (Ref. 12369). Colonizes inundated forests and adults migrate back to the river in October. Young of the year follow thereafter when the water levels recede. Large-sized fish are marketed fresh while smaller ones are used to make prahoc and nuoc mam (Ref. 12693). Popular fish in the aquarium trade where it is sold under the name of "tinfoil barb" (Ref. 12693). Captured from the wild for the ornamental fish trade in Thailand (Ref. 6459). Cultured in floating cages in Viet Nam (Ref. 12693).

# Synonyms, misidentifications, etc. used for Barbonymus altus

Synonym	Author	Status	Ref.	
Puntius altus	(Günther, 1868)	new combination	26336	
Barbus altus	Günther, 1868	original combination	1632	
Barbonymus altus	(Günther, 1868)	new combination	43281	
Barbodes altus	(Günther, 1868)	new combination	26336	
Puntius bocourti	Bleeker, 1865	other	1632	
Barbodes foxi	Fowler, 1937	junior synonym	26580	

# Common names for Barbonymus altus

Name	Language	Country	Ref.	
Kahe	Khmer	Cambodia	036651	
Trey kahe	Khmer	Cambodia	012693	
Trey kahè	Khmer	Cambodia	036654	
Trey kahe khor horm	Khmer	Cambodia	012693	
Trey kaho	Khmer	Cambodia	036654	
Pa wien fai	Laotian	Lao People's Dem. Rep.	009497	
Pba wian fai	Laotian	Lao People's Dem. Rep.	012369	
Wien fai	Laotian	Lao People's Dem. Rep.	040382	
Red tailed tinfoil	English	Thailand	006459	
Pla kra hea tong	Thai	Thailand	042982	
Pla mong ka	Thai	Thailand	042982	
Pla pak	Thai	Thailand	042982	
Pla ta pien tong	Thai	Thailand	009648	
Cá he vàng	Vietnamese	Viet Nam	036625	

## Distribution of Barbonymus altus

Asia: Mekong and Chao Phraya basins (Ref. 27732). Recorded from the Maeklong, MainRef.: 027732

Peninsular and Southeast Thailand river systems (Ref. 26336).

Latitudinal range: ° - ° Temperature range: 22 - 27 °C Ref.: 2059

Status of threat: NL.

CountryStatusRef.Cambodianative012693

Occurs in the Mekong basin (Ref. 12693,27732,26580), around the Tonle Sap river, Great Lake (Ref. 36651), Stung Sang and Sékong at Stung Treng (Ref. 36654).

Lao People's Dem. Rep. native 027732

Occurs in the Mekong and the lower Xe Bangfai (Ref. 27732). Found below the Mun-Chin River to the Knone Falls (Ref. 37772) and at Hat Village in Muang Khong District (Ref. 37769). Reported to migrate upstream during the dry season in December/January in Southern Laos (Ref. 37769). Recent decline in fisheries attributed to "lee" (large immobile wing traps used in rapids below Lee Pee). Upstream non-reproductive migration occurs in Jan-Feb lasting 1 wk - 10 days and downstream migrations in May-July at night in Ban Hang Khone, just

below the great waterfalls of the Mekong River (Ref. 9497). Observed to undergo migration at the fishing village of Ban Wernsonkhram on Don Hat (Hat Island) above the Lee Pee Waterfalls (Ref. 10431). This species is occasionally poisonous, causing vomiting, due to the fruits it has eaten (Ref. 12369). Museum: Mekong, CAS 96270 (near Ban Hang Khone), CAS 93464 (just below Khone falls) (Ref. 5515). Also Ref. 4792, 9497, 30857, 36654, 37767,44002.

Thailand native 026336

Occurs in the Mekong, Chao Phraya (Ref. 27732), Maeklong, Peninsular and Southeast Thailand river systems (Ref. 26336). Found in Bangkok, Paknam and Kemarat. Captured from the wild for the ornamental fish trade (Ref. 6459). Museum: Mekong mainstream near Chiang Sen, CAS 96265 (Ref. 5515). Also Ref. 1632, 9648, 36654

Viet Nam native 036625

Found in Mekong delta (Ref. 36625). Cultured in floating cages (Ref. 12693).

# Summary information (no. of records) available for Barbonymus altus

Level: species in general StockCode: 027732 MainRef.: 027732

Asia: Mekong and Chao Phraya basins Ref. 27732). Recorded from the Maeklong, Peninsular and Southeast Thailand river systems (Ref. 26336)

#### Level: species in general

Ecology	1	Max. sizes	0	Strains	0
Food Items	4	FAO catches	15502	Diseases	0
Food consumption	0	Genetics	1	Ciguatera	0
Diet composition	0	Allele frequency	20	Ecotoxicology	0
Ration	0	Heritability	0	Metabolism	0
Predators	0	Reproduction	0	Gill area	0
Morphology	1	Spawning	1	Swimming Type	0
Processing	0	Eggs	0	Swimming speed	0
Growth/mortality	0	Egg dev't.	0	Vision	0
Maturity	0	Larvae	0	Brains	0
Recruitment	0	Larval dynamics	0	Introductions	0
L/Wrelat.	0	Aquaculture	0	Occurrence	20

### Morphology of Barbonymus altus

Level: species in general StockCode: 008482 MainRef.: 027732

Appearance refers to: O females O males

#### DIAGNOSTIC CHARACTERS

Broad red distal margin with no black submarginal stripe along each lobe of the caudal fin; red pelvic and anal fins; a black distal blotch on the dorsal fin; the body depth 1.8-2.2 times in standard length (Ref. 27732).

#### **DESCRIPTIVE CHARACTERS**

Operculum present : No

#### MERISTIC CHARACTERS

Scales on lateral line

**Dorsal fins** 

Number of fins: 1 - spines total

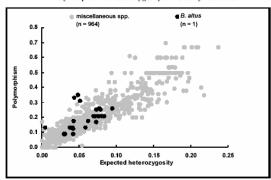
# Genetic information for Barbonymus altus

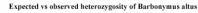
Level : species in generalMainRef.: 030184Locality : Central Thailand, ThailandRef: 030184

Chromosome number (haploid): 25 Chromosome number (diploid): 50 Genetic marker(s) present: No DNA content (picogram, haploid): Chromosome arm no: 84

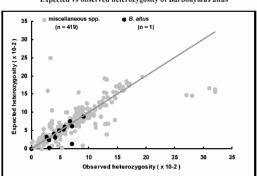
Sex-determining mechanism

#### Polymorphism vs heterozygosity of Barbonymus altus

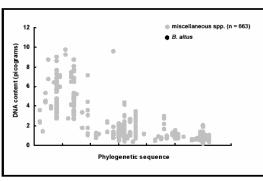




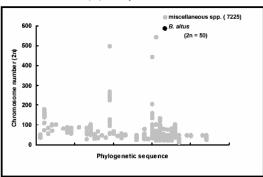
Ref: 030184



DNA content vs. phylogenetic sequence of Barbonymus altus



Chromosome number of (2n) Barbonymus altus



### Electrophoretic data for Barbonymus altus

Ref.: 005950 Refers to species in general

Locality : Thailand Macklong River, Bachiralongorn Dam Reservoir

Method : Starch gel electrophoresis

# Spawning Information for Barbonymus altus

**Locality**: Laos, Mekong basin at Hat Village, Muang Khong District

Season (% of mature females; 111= presence of mature females):

Stockcode: 008482

Main Ref.: 037769

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov 111 Dec Data Ref.: 037769

111

# **Ecology of Barbonymus altus**

Level : species in general StockCode : 008482 008171 : 009497

Habitats Ref.: 009497

Streams: Yes Lakes: No Caves: No (exclusively: No

Estuaries/lagoons/brackish seas : No

Intertidal: No soft: No rocky: No mangroves/marshes/swamps No

Marine : No oceanic : No neritic : No coral reefs : No

tropical soft bottom: No hard bottom: No seagrassbeds: No macrophyte: No

Feeding

Feeding Type : mainly plants/detritus (troph. 2-2.19)

Ref: 009497

Feeding Habit : grazing on aquatic plants

Ref: 009497

From indiv. food items : 2.4 0.18 Trophic level estimate

#### **Additional remarks**

Effects annual upstream and downstream non-reproductive and reproductive migrations.

### Food items for Barbonymus altus

Level: species	general	•	StockCode:	008482
in				
Food item				Ref.
detritus				
detritus	debris	unidentified	unidentified	012693
plants				
other plants	benthic algae/weeds	unidentified	unidentified	009497
	terrestrial plants	unidentified	unidentified	012369
zoobenthos				
other benth.	n.a./other benth.	unidentified	unidentified	012693
invertebrates	Invertebrates			

9

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