



Chheng P., Baran E., Touch B.T. 2004 Synthesis of all published information on the Siamese mud carp *Henicorhynchus siamensis* ("trey riel") based on FishBase 2004. WorldFish Center and Inland Fisheries Research and Development Institute, Phnom Penh, Cambodia. 11 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

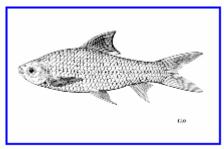
alternatives must be considered when evaluating the wisdom of a given choice.

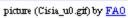
Remarks or Comment fields: The free text included in such fields may have been taken verbatim from the source in

"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.

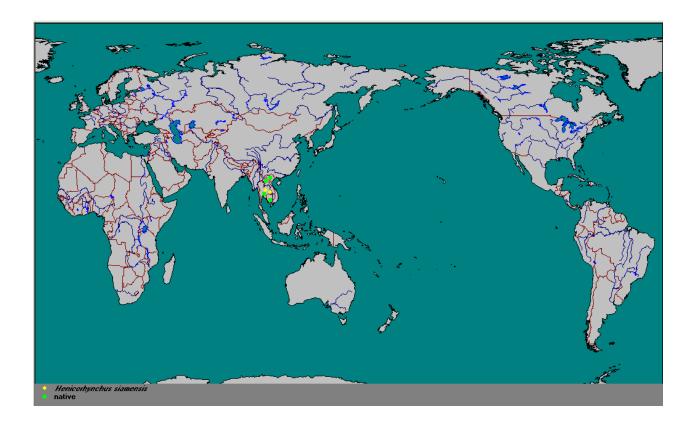
Siamese mud carp Henicorhynchus siamensis (Sauvage, 1881)







picture (Cisia_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

• Brackish
• Freshwater

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 sucker like (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 spine like 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 Henicorhynchus

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

Henicorhynchus Status : synonym Gender : masculine

Smith, 1945, p. 256, CAS Ref: 4056

Type by original designation (also monotypic).

Type species: Henicorhynchus lobatus Smith, 1945

Current genus: Cirrhinus

General information on Henicorhynchus siamensis

Classification

Class : Actinopterygii (ray-finned fishes) MainRef.: 033488

Order : Cypriniformes

Family : Cyprinidae (Minnows or carps)
Species : Henicorhynchus siamensis

Author : (Sauvage, 1881)

Environment

Freshwater : Yes Habitat : benthopelagic

Brackish : No Saltwater : No

Importance Ref.:012693

Importance to fisheries commercial

Main catching method

Other methods: O Seines O Gillnets O Castnets O Traps O Spears

O Trawls O Dredges O Liftnets O Hooks+Lines O Other

Used for aquaculture never/rarely
Used as bait never/rarely
Aquarium fish commercial

Game fish No Ref.:012693

Dangerous fish harmless

Electrobiology no special ability

Size and age

Maximum length (cm) (male/unsexed): 20 SL (female):

Remarks

Often found in great abundance at midwater to bottoms depths in large and small rivers. Feeds on algae, periphyton and phytoplankton. Not known to prosper in impoundments. Well known for its annual trophic migrations out to the floodplains in wet season. Returns to rivers as water levels begin to fall in October with numbers increasing through December and then slowly declining (Ref. 12693). From just upstream Phnom Penh in Cambodia to the Khone Falls this species is reported to migrate upstream during the period October-February. At Muk Kompul in Kandal Province, it migrates upstream just before the full moon. Further upstream near Kratie, migration occurs during full moon and at Sambor, migration takes place immediately after full moon. Near the Khone Falls, upstream movements continue through March but in April fish are moving in both direction. From May to July, at the start of the rainy season, it migrates downstream from the Khone Falls to the Mekong Delta. Here, the fish is reported to move out of the Mekong into canals and flooded areas in August-September. When water recedes in November-December, fish migrates to the Mekong again. Upstream the Khone Falls near Ubolratchatani in Thailand, this species moves upstream between February and June, consisting mainly of juveniles in February-March and of adults (15-20 cm) in April-June. Further upstream from Xayabouri in Laos to Chiang Khong in Thailand, upstream migrations takes place between March to July, first by juveniles, later by adults (Ref. 37770). Used to make prahoc along the Tonlé Sap, Cambodia. Often seen in the aquarium trade (Ref. 12693).

Synonyms, misidentifications, etc. used for Henicorhynchus siamensis

Synonym	Author	Status	Ref.
Tylognathus brunneus	Fowler, 1934	junior synonym	033488
Tylognathus entmema	Fowler, 1934	questionable	033488
Cirrhinus jullieni	(nonSauvage, 1878)	misidentification	033488
Henicorhynchus lobatus	(non Smith, 1945)	misidentification	033488
Cirrhinus marginipinnis	Fowler, 1937	junior synonym	033488
Crossocheilus reba	Smith, 1945	other	033488
Cirrhina sauvagei	Fang, 1942	junior synonym	043281
Tylognathus siamensis	de Beaufort, 1927	junior synonym	043281
Morara siamensis	Sauvage, 1881	original combination	043281
Henicorhynchus siamensis	(Sauvage, 1881)	new combination	043281
Henicorhynchus siamensis	(de Beaufort, 1927)	junior synonym	033488
Cirrhinus siamensis	(Sauvage, 1881)	new combination	043281
Aspidoparia siamensis	(Sauvage, 1881)	new combination	033488
Crossocheilus thai	Fowler, 1944	junior synonym	043281
Total = 14			

Common names for Henicorhynchus siamensis

Name	Language	Country	Ref.
Trey real	Khmer	Cambodia	010431
Trey riel	Khmer	Cambodia	012693
Trey riel tob	Khmer	Cambodia	012693
Pa mohk	Laotian	Lao People's Dem. Rep.	009497
Pa soi	Laotian	Lao People's Dem. Rep.	009497
Pa soi houa po	Laotian	Lao People's Dem. Rep.	037767
Siamese mud carp	English	USA (contiguous states)	004537
Total = 7			

Distribution of Henicorhynchus siamensis

Asia: Mekong and Chao Phraya basins.

Status of threat: NL.

CountryStatusRef.Cambodianative012693

Found in the Mekong River (Ref. 43281). Known fromPhnomPenh (Ref. 36654) and Great Lake (Ref. 33813). Just upstream Phnom Penh to the Khone Falls, this migrates upstream during the period October to February. At Muk Kompul in Kandal Province, it moves upstream just before the full moon. Further upstream near Kratie, this fish undertakes migration during full moon and at Sambor, it migrates immediately after full moon (Ref. 37770). This is the most important fish in the annual dai (set-net) fishery in the Tonlé Sap. Used to make prahoc (Ref. 12693). Also Ref. 1632, 10431,27732, 33488, 36662, 36686,45353.

MainRef .: 033488

Lao People's Dem. Rep.

native

027732

MainDaft 022400

Occurs in the Mekong and the lower and middle Xe Bangfai (Ref. 27732). Found in Ban Hang Khone, a village on an island in the middle of the mainstream Mekong River just below the Great Khone Waterfalls in Khong District, Champasak Province (Ref. 37767). Undertakes upstream and dowstream migrations during the wet season in June-July through Hoo Som Yai at the Great Fault Line on the Mekong River, Champassack Province (Ref. 37771). Reported to migrate upstream during the dry season in December/March in Southern Laos (Ref. 37769). From Xayabouri in Laos to Chiang Khong in Thailand, this species is reported to migrate upstream from March to July, first by juveniles, later by adults (Ref. 37770). Museum: Mekong river, CAS 93270 (Ban Hang Khone, below Lee Pee waterfalls); CAS 94931 (Ban Hang Khone); CAS 96204, 94279 (Ban Hang Khone just below Khone falls) (Ref. 5515). Also Ref. 4792, 10431, 30857, 33488, 36654, 37770, 43281,44002.

Thailand native 033488

Known from the Chao Phraya and the Mekong basins (Ref. 10431, 33488,43281). From Xayabouri in Laos to Chiang Khong in Thailand, this species is reported to migrate upstream from March to July, first by juveniles, later by adults (Ref. 37770). Museum: Mekong, CAS 79183 (ca. 4 km downriver from Pak Ing, ca 25 km downriver from Chiang Khong); CAS 96188 (near Chiang Saen) (Ref. 5515). Also Ref. 1632, 12693,27732, 36654.

Viet Nam native 027732

Known from the Mekong basin (Ref. 43281). From May to July, at the start of the rainy season, it migrates downstream from the Khone Falls to the Mekong Delta. Here, the fish moves out of the Mekong into canals and flooded areas in August-September. When water recedes during November-December, fish migrate to the Mekong again (Ref. 37770). Also Ref. 36654.

Total native = 4 Total introduced = 0

Summary information (no. of records) available for Henicorhynchus siamensis

Level: species in general		StockCode: 033488		MainRef.:	033488
Asia: Mekong and Ch	ao Phraya basins.				
Ecology	1	Max. sizes	0	Strains	0
Food Items	4	FAO catches	15502	Diseases	0
Food consumption	0	Genetics	0	Ciguatera	0
Diet composition	0	Allele frequency	0	Ecotoxicology	0
Ration	0	Heritability	0	Metabolism	0
Predators	0	Reproduction	0	Gill area	0
Morphology	1	Spawning	7	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	67
Total = 1					

Morphology of Henicorhynchus siamensis

Level: species in general StockCode: 045787 Main Ref.: 027732

Appearance refers to: O females O males

DIAGNOSTIC CHARACTERS

Lavale anasisa in asmanal

Head large and broad, width 5.5-6.7 times in SL; relatively deep body, 3.2-3.4 times in SL; snout not or weakly projecting; plain silvery body (Ref. 43281)

DESCRIPTIVE CHARACTERS

Operculum present : No

MERISTIC CHARACTERS

Lateral Lines interrupted : No

Scales on lateral line 5-5

Vertebrae preanal total : 33-34

Dorsal fins

Adipose fin : absent finlets dorsal : 0-0 finlets ventral

Caudal fin

Shape of fin : forked

Attributes : more or less normal

Paired fins

Pectoral attributes : more or less normal Pelvics attributes : more or less normal

position: abdominal behind origin of D1

Spawning Information for Henicorhynchus siamensis

Locality: Mekong mainstream Stockcode: 045787

Season (%f mature females; 111= presence of mature females) : Main Ref.: 037770

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

111 111 111 Temp.: - °C

Comment: Based on mature eggs, spawning occurs from April to July with a main peak in May-June.

Locality: Laos, Mekong basin at Hatsakhoun Village near Khong Island Stockcode: 045787

Season (% of mature females; 111= presence of mature females): Main Ref.: 037770

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

111 Temp.: - °C

Comment: Based on 11 female specimens with fully developed ovaries.

Locality: Laos, Mekong basin at Savannakhet-Mukdahan Stockcode: 045787

Season (% of mature females; 111= presence of mature females): Main Ref.: 037770

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

111 111

Locality: Laos, Mekong basin at Sambor Stockcode: 045787

Season (% of mature females; 111= presence of mature females): Main Ref.: 037770

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

111 : Temp.: - °C

Comment: Mature females release eggs which then flow downstream.

Locality : Thailand, Mekong basin at Savannkhet-Mukdahan Stockcode: 045787 Season (% of mature females; 111= presence of mature females) :

Main Ref.: 037770

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec

111 111 111

Locality: Thailand, Mekong basin at Loei

Season (% of mature females; 111= presence of mature females): Main Ref.: 037770

Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec 111 111

Comment: Spawns in a tributary (Loei River) in a small pool with slow current. Spawning seems to occur over a longer period and extend into August-September from Loei and upstream

Locality: Thailand, Mekong basin at Chiang Khong

Stockcode: 045787 Main Ref.: 037770

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

Stockcode: 045787

Aug Sep Dec Mar Apr May Jun Jan Feb Jul Nov 111 111 111

Comment: Fish migrate up in tributaries to spawn from May to July.

Ecology of Henicorhynchus siamensis

: species in general StockCode 045787, 055277 Main Ref.: 012693 Level :

Habitats

Lakes: Yes Streams: Yes Caves : No (eclusively): No

Estuaries/lagoons/brackish seas :No

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

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

hard bottom tropical soft bottom: No seagrass beds: No macrophyte: No

Feeding

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

Feeding Habit : grazing on aquatic plants

Food items for Henicorhynchus siamensis

Level: species in	general		StockCode:	045787
plants	_			
other plants	benthic algae/weeds	Chlorophytes	unidentified filamentous chlorophytes	037771
		unidentified	unidentified	033813
	periphyton	unidentified	unidentified	033813
phytoplankton	n.a./other phytoplankton	unidentified	unidentified	033813

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