



Chheng P., Baran E., Touch B.T. 2004 Synthesis of all published information on striped snakehead *Channa striata* ("trey ros"), based on FishBase 2004. WorldFish Center and Inland Fisheries Research and Development Institute, Phnom Penh, Cambodia. 30 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.

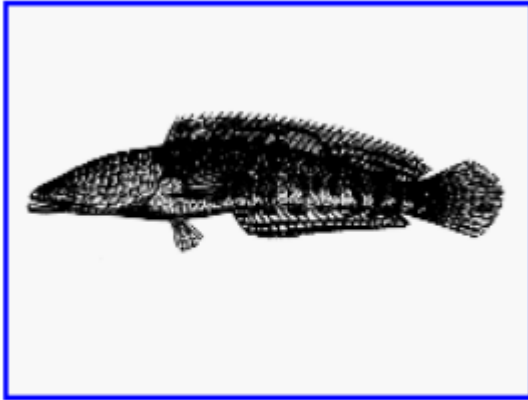
Some hints on how to use the synopses

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.

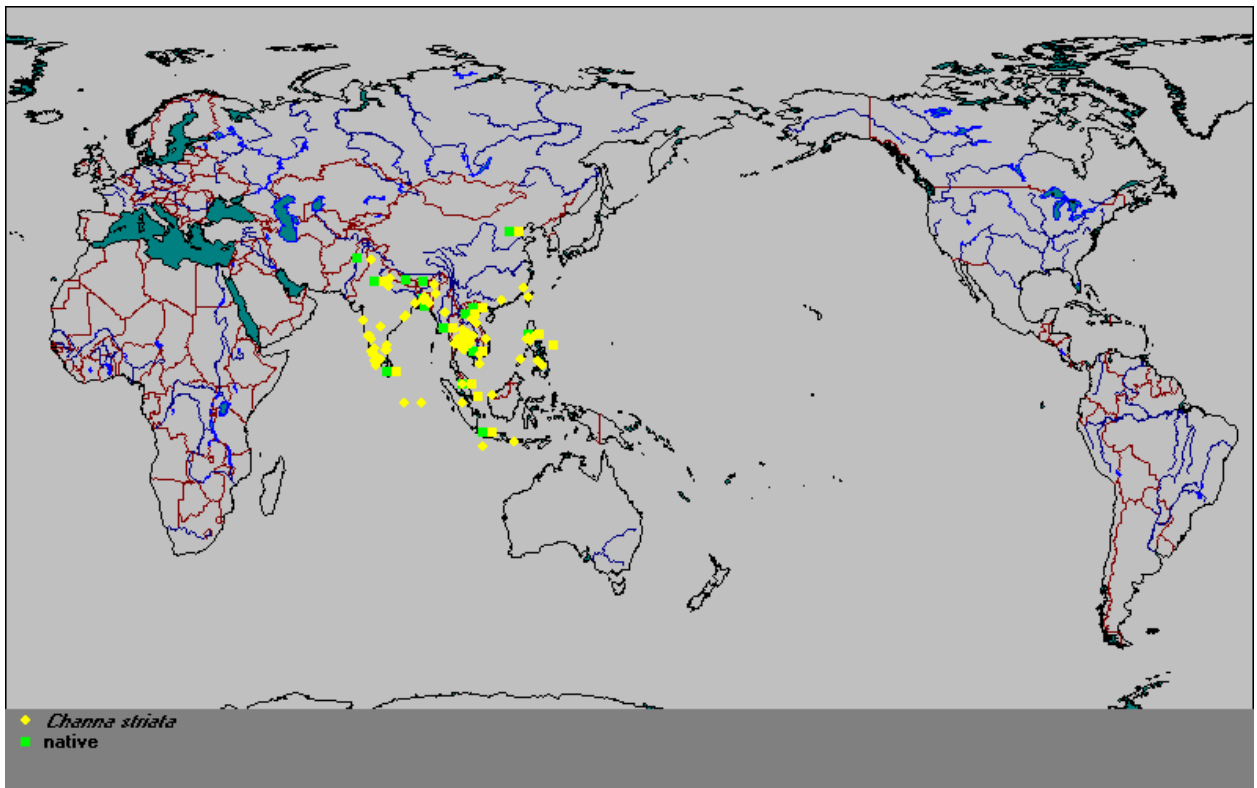
***Channa striata* (Bloch, 1793)**
Snakehead murrel or striped snakehead



picture (Chstr_u0.gif) by [Günther, A.C.L.G.](#)



picture (Chstr_u3.jpg) by [Baird, I.G.](#)



Philypnoides Status : synonym Gender : masculine
 Bleeker, 1849, p. 19, CAS Ref: 319
 Type by monotypy.
 Type species : *Philypnoides surakartensis* Bleeker, 1849
 Current genus: *Channa*

Psiloides Status : other Gender : masculine
 Fischer, 1813,p. 74, 111, CAS Ref: 1331
 Type by being a replacement name.
 Type species : *Bostrychoides oculatus* Lacepède, 1801
 Current genus: *Channa*

Pterops Status : synonym Gender : masculine
 Rafinesque, 1815, p. 84, 91, CAS Ref: 3584
 Type by being a replacement name.
 Type species : *Bostrychoides oculatus* Lacepède, 1801
 Current genus: *Channa*

General information on <i>Channa striata</i>

Classification

Class : Actinopterygii (ray-finned fishes)	MainRef.	006028
Order : Perciformes		
Family : Channidae (Snakeheads)		
Subfamily :		
Species : <i>Channa striata</i>		
Author : (Bloch, 1793)	Author Ref.	001571

Environment

Freshwater : Yes	Habitat : benthopelagic
Brackish : Yes	Migrations :
Saltwater : No	Depth range : 1to10m

Importance

Landing statistics : from 10,000 to 50,000 tonnes	Ref.	004931
Main source of landing :		
Importance to fisheries : highly commercial		
Main catching method :		
Other methods : (•) Seines (•) Gillnets O Castnets (•) Traps O Spears O Trawls O Dredges O Liftnets (•) Hooks+Lines O Other		
Used for aquaculture : commercial	Ref.	012108
Used as bait : never/rarely	Ref.	
Aquarium fish : public aquariums	Ref.	004537
Game fish : No	Ref.	
Dangerous fish : potential pest	Ref.	
Electrobiolgy : no special ability	Ref.	

Size and age

Maximum length (cm) (male/unsexed) :	100 SL	(female) :		Ref.	002686
Common length (cm) (male/unsexed) :	61 TL	(female) :		Ref.	044091
Maximum weight (g) (male/unsexed) :	3,000.00	(female) :		Ref.	040637

Remarks

Inhabits ponds, streams and rivers, preferring stagnant and muddy water of plains (Ref. 41236). Found mainly in swamps, but also occurs in the lowland rivers. More common in relatively deep (1-2 m), still water. Very common in freshwater plains (Ref. 4515). Occurs in medium to large rivers, brooks, flooded fields and stagnant waters including sluggish flowing canals (Ref. 12975). Survives dry season by burrowing in bottom mud of lakes, canals and swamps as long as skin and air-breathing apparatus remain moist (Ref. 2686) and subsists on the stored fat (Ref. 1479). Feeds on fish, frogs, snakes, insects, earthworms, tadpoles (Ref. 1479) and crustaceans (Ref. 2847). Undertakes lateral migration from the Mekong mainstream, or other permanent water bodies, to flooded areas during the flood season and returns to the permanent water bodies at the onset of the dry season (Ref.37770). During winter and dry season, its flesh around coelomic cavity is heavily infested by a larval trematode *Isoparorchis hypselobargi*. Other parasites infecting this fish include *Pallisentis ophicephali* in the intestine and *Neocamallanus ophicepahli* in the pyloric caecae (Ref. 1479). Processed into pra-hoc, mam-ruot, and mam-ca-loc (varieties of fish paste) in Kampuchea (Ref.4929). Perhaps the main food fish in Thailand, Indochina and Malaysia (Ref. 2686). Firm white flesh almost bone-free, heavy dark skin good for soup and usually sold separately (Ref. 2686). In Hawaiian waters the largest specimen taken reportedly exceeded 150 cm (Ref. 44091).

Synonyms, misidentifications, etc. used for *Channa striata*

Synonym	Author	Status	Ref.
<i>Ophiocephalus philippinus</i>	Peters, 1869	junior synonym	033021
<i>Ophiocephalus planiceps</i>	Cuvier, 1831	junior synonym	041236
<i>Channa striata</i>	Bloch, 1793	new combination	027732
<i>Ophiocephalus striatus</i>	Bloch, 1793	original combination	006028
<i>Ophiocephalus striatus</i>	Bloch, 1793	original combination	001479
<i>Channa striatus</i>	Bloch, 1793	misspelling	027732
<i>Ophiocephalus vagus</i>	Peters, 1869	junior synonym	002854

Common names for *Channa striata*

Striped snakehead	English	Australia	002847
Stripped snakehead	English	Bangladesh	047891
Ptuok	Khmer	Cambodia	036651
Ros	Khmer	Cambodia	036651
Trey phtuok	Khmer	Cambodia	012693
Trey ras	Khmer	Cambodia	036654
Trey raws	Khmer	Cambodia	012693
Trey ros (or ras)	Khmer	Cambodia	002686
Chevron snakehead	English	Hawaii (USA)	044091
Pongee	English	Hawaii (USA)	044091
Pa kaw	Laotian	Lao People's Dem. Rep.	009497
Pakho	Laotian	Lao People's Dem. Rep.	002686
Nga-yan	Burmese	Myanmar	002686
Nga-yau-auk	Burmese	Myanmar	007100
Striped snake head murrel	English	Myanmar	005736
Snakehead	English	Thailand	006459
Pla chon	Thai	Thailand	006459
Chevron snakehead	English	United Kingdom	012693
Snakehead murrel	English	United Kingdom	001739
Chevron snakehead	English	USA (contiguous states)	004537
Striped snakehead	English	USA (contiguous states)	004537
Cá lóc	Vietnamese	Viet Nam	036625
Cá lóc (lóc)	Vietnamese	Viet Nam	
Cá trầu	Vietnamese	Viet Nam	

Distribution of *Channa striata*

Asia: Pakistan to Thailand and south China. Several countries report adverse ecological impact after introduction. MainRef.: 004833

Latitudinal range: 35° N - 18° S Temperature range: 23 - 27 °C Ref.: 1672

Status of threat: NL.

Country	Status	Ref.
Bangladesh	native	001479
Very abundant in beels, haors, ponds, ditches and swamps throughout the country. Also Ref. 4854,4833, 27732, 39989,41236,43640.		
Bhutan	native	009418
Occurs in natural waters (Ref. 9418). Found in Gaylegphug river (Ref. 40882).		
Cambodia	native	012693
Occurs in the Mekong basin (Ref. 27732). Found around the Tonle Sap river, Great Lake = Lake Tonle Sap (Ref. 36651, 36686), Ratanakiri, Boum Long, Kompong Chnang, Réam, Beng Keal Damrey, Sianoukville and Angkor (Ref. 36654). Much more common in flood-plain lakes and smaller streams than in the Mekong mainstream (Ref. 37770). Also Ref. 3902, 27732,33813,36662,37772,45353.		
China	native	027732
Occurs in the Mekong basin in Yunnan (Ref. 27732). Also Ref. 4833, 35840, 36654,43640.		
Hawaii (USA)	introduced	005360
Brought to Hawaii by Asian immigrants in the 1800s; found only on the island of O'ahu, where it is abundant in the Wahiawa Reservoir and several smaller reservoirs on the north side of the island; considered to be one of the best eating fish among freshwater fishermen (Ref. 44091)		
India	native	004833
Occurs throughout India (Ref. 45255). Also Ref. 27732,29108, 36654,41236,43634,43640,44148,44149.		
Indonesia	native	007050
Known from Sulawesi, Lesser Sundas, Moluccas (Refs. 7050; 27732). Previously unknown from Irian Jaya, New Guinea, but was collected in streams near Bintuni on the Vogelkop Peninsula 1989 (Ref. 2847). An introduced species (Ref. 1739). Also Ref. 4537,43640.		
Korea, Republic of	introduced	001739
Lao People's Dem. Rep.	native	027732
Known from the Mekong basin. Found in the middle Xe Bangfai and the middle Nam Theun rivers (Ref.27732) and Ban Hang Khone, about 3 km below the fall line of the great waterfalls of the Mekong river system at Lee Pee (Ref. 9497). Recorded from the Khone Falls (Ref. 37772). Migrates into the flooded forest on Don Khone and Don Saddam to forage (Ref. 37772). Also Ref. 4792,2686, 30857, 37767, 37772,43281.		
Madagascar	introduced	013686
Also Ref. 13333.		
Malaysia	native	004835
Mauritius	introduced	001739
Myanmar	native	005736
Also Ref. 4833,41236,43640.		
Nepal	native	009496
Occurs in Koshi, Gandaki and Karnali rivers (Ref. 6351). Recorded from Kosi and Narayani zones at 76-120m altitude. Also Ref. 4833,41236,43640.		
New Caledonia	introduced	001739
Pakistan	native	012076
Occurs throughout the plains of Pakistan. Recorded from the river Nulli-ni, near Kota Meer Muhammad. Also Ref. 4854,4833,41236,43640.		

Summary information (n° of records) available for *Channa striata*

Level: species in general

StockCode: 004833

MainRef.: 004833

Asia: Pakistan to Thailand and south China. Several countries report adverse ecological impact after introduction

Ecology	1	Max. sizes	5	Strains	0
Food Items	4	FAO catches	15502	Diseases	54
Food consumption	0	Genetics	6	Ciguatera	0
Diet composition	1	Allele frequency	0	Ecotoxicology	0
Ration	0	Heritability	0	Metabolism	11
Predators	0	Reproduction	1	Gill area	1
Morphology	1	Spawning	9	Swimming Type	1
Processing	1	Eggs	0	Swimming speed	0
Growth/mortality	3	Egg dev't.	0	Vision	0
Maturity	1	Larvae	0	Brains	0
Recruitment	0	Larval dynamics	0	Introductions	11
L/Wrelat.	2	Aquaculture	0	Occurrence	424

Total = 1

Morphology of *Channa striata*

Level : species in general

StockCode : 000357

Main Ref.: 002847

Appearance refers to : (•) females (•) males

DIAGNOSTIC CHARACTERS

Body sub-cylindrical; head depressed; caudal fin rounded (Ref. 2847). The dorsal surface and sides is dark and mottled with a combination of black and ochre, and white on the belly; a large head reminiscent of a snake's head; deeply-gaping, fully toothed mouth; very large scales (Ref. 44091).

DESCRIPTIVE CHARACTERS

Striking features	: none	Cross section	: other (see Diagnosi)
Body shape lateral	: elongated	Dorsal head profile:	more or less straight
Operculum present	: Yes		
Type of eyes	: more or less normal		
Position/type of mouth	: more or less normal		

Teeth: Presence

lower jaw : present

upper jaw : present

Pigmentation on trunk and tail

Horizontal stripes	: absent		
Vertical stripes	: absent		
Diagonal stripes	: present	dorsal and ventral	reaching ventral contour
Curved stripes	: absent		
Spots	: no spot		
Dorsal fin (D1)	: no spot on stripes		
Caudal fin Anal	: no spot on stripes		
Anal fin (A1)	: no spot on stripes		

MERISTIC CHARACTERS

Lateral Lines : interrupted: Yes
Scales on lateral line : 53 -55
Barbels : 0

Dorsal fins

Dorsal attributes : no striking attributes
Number of fins :1 spines total : 0-0 soft-rays total: 38 -43
Adipose fin : absent finlets dorsa : 0-0 finlets ventral: 0 -0

Anal fin

Number of fins : 1 spines total : 0-0 soft-rays total: 23 -27

Paired fins

Pectoral attributes : more or less normal
spines : soft-rays : 15- 17
Pelvics attributes : more or less normal
position : abdominal
spines : soft-rays: 6 -6

Genetic information for *Channa striata*

Level : species in general

Main Ref.: 004854

Locality : Unspecified

Chromosome number (haploid) : 20

Main Ref.: 004854

Chromosome number (diploid) : 40

Ref: 008982

Genetic marker(s) present : No

DNA content (picogram, haploid) : 0.75

Ref.: 004854

Chromosome arm no : 54

Ref: 008982

Remarks:

M=8,ST = 6andT = 26

Level : species in general

Main Ref.: 028174

Locality : Kalyani, Western Bengal, india

Chromosome number (haploid) : 20

Main Ref.: 008945

Chromosome number (diploid) : 40

Ref: 008945

Genetic marker(s) present : No

Chromosome arm no : 50

Ref: 008945

Remarks:

Sex chromosomes not distinguishable. No banding technique used. Also in ref. 030184.

Level : species in general

Main Ref.: 0030184

Locality : Delhi, India

Chromosome number (haploid) : 20

Ref: 029199

Chromosome number (diploid) : 40

Ref: 029199

Genetic marker(s) present : No

Chromosome arm no : 50

Ref: 029199

Remarks:

Also in Ref. 034370.

Level : species in general

Main Ref.: 0030184

Locality : Assam, Meghalaya, India

Chromosome number (haploid) : 20
 Chromosome number (diploid) : 40
 Genetic marker(s) present : No
 Chromosome arm no : 54

Ref: 029199
 Ref: 029199
 Ref: 029199

Level : species in general

Main Ref.: 034370

Locality : Kalyani, Western Bengal, India

Chromosome number (haploid) : 20
 Chromosome number (diploid) : 40
 Genetic marker(s) present : No
 Chromosome arm no : 50

Main Ref.: 004845
 Ref: 004845
 Ref: 004845

Remarks:

DNA/2n: 0.73 pg(Ref. 034370).

Level : species in general

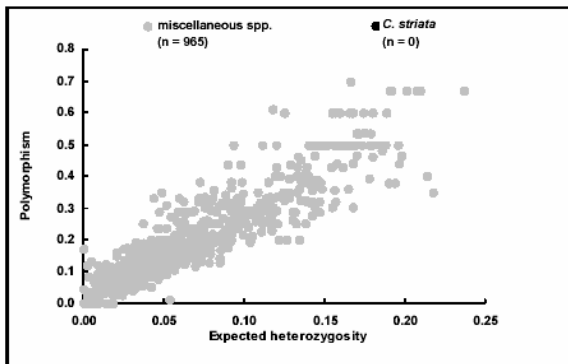
Main Ref.: 034370

Locality : Kalyani, Western Bengal, india

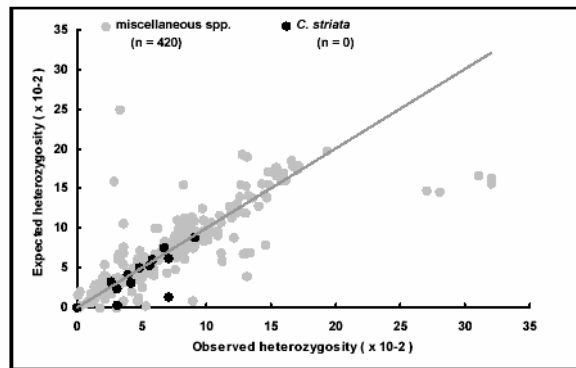
Chromosome number (haploid) : 20
 Chromosome number (diploid) : 40
 Genetic marker(s) present : No
 Chromosome arm no : 50

Main Ref.: 029199
 Ref: 029199
 Ref: 029199

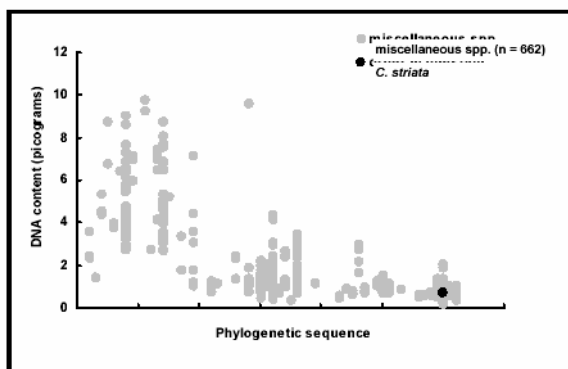
Polymorphism vs heterozygosity of *Channa striata*



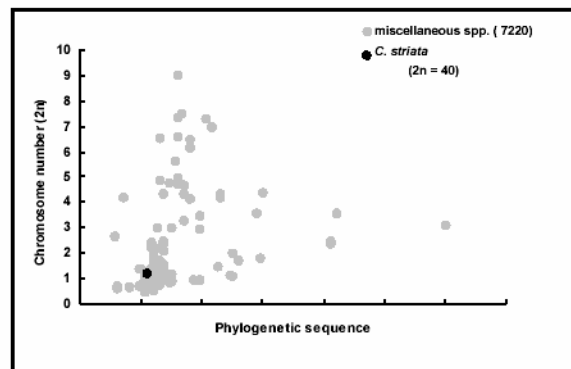
Expected vs observed heterozygosity of *Channa striata*



DNA content vs. phylogenetic sequence of *Channa striata*



Chromosome number of (2n) *Channa striata*



FAO Aquaculture Production Data for *Channa striata*

Country (Area)		1984	1985	1986	1987	1988	1989	1990
		1991	1992	1993	1994	1992	1992	1992
		1998	1999	2000	2001			
Philippines (4)	(t)	226	253	191	133	134	132	5
	(US\$'000)	257	288	219	131	142	147	9
	(t)	0	0	378	707	2,427	2,076	2,144
	(US\$'000)	0	0	688	1,456	3,598	2,856	3,158
	(t)	1,343	1,352	1,290	1,439			
	(US\$'000)	3,398	3,218	3,496	4,475			
Thailand (4)	(t)	4,863	7,364	5,986	3,294	4,040	3,732	3,800
	(US\$'000)	6,877	8,490	7,792	4,380	5,634	5,398	5,946
	(t)	5,560	4,714	5,909	6,500	5,790	7,750	6,921
	(US\$'000)	8,934	6,492	11,216	12,422	12,304	16,104	14,640
	(t)	5,336	4,005	4,447	5,300			
	(US\$'000)	7,442	6,585	7,214	8,480			
Total: 2	(mt)	5,089	7,617	6,177	3,427	4,174	3,864	3,805
	(US\$'000)	7,135	8,778	8,010	4,511	5,5445	5,544	5,954
	(mt)	5,560	4,714	6,287	7,207	8,217	9,826	9,065
	(US\$'000)	8,934	6,492	11,904	13,877	15,901	18,961	17,798
	(mt)	6,679	5,357	5,737	6,739			
	(US\$'000)	10,839	9,803	10,710	12,955			

Weight proportions and chemical composition of *Channa striata*

Level : species in general
 Locality : Not stated.

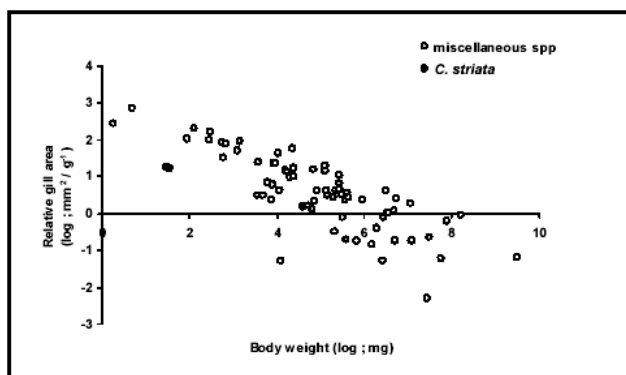
Stockcode: 000357
 MainRef.: 027117

Gill area of *Channa striata*

Gill area : 163 (cm²)
 Blood/water distance :
 Body weight : 59.9 (g)
 Gill area / weight : 2.72 (cm²/g)

MainRef. 002302
 DataRef. 002321

Relative gill area of *Channa striata*



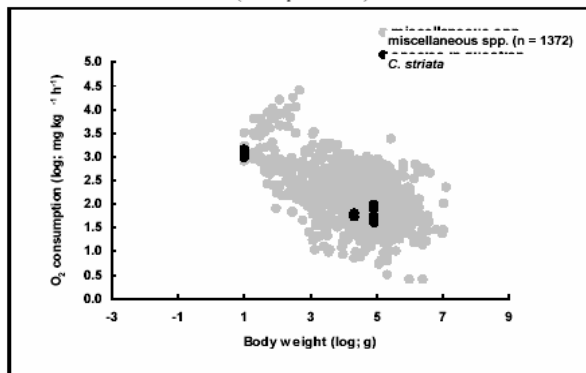
Oxygen consumption of *Channa striata*

(mg/kg/h)	at 20°C	Weight(g)	Temp. °C	Activity level	Applied stress	MainRef.
1493	777.3	0.01	28	routine	none specified	002120
1310	682.1	0.01	28	routine	none specified	002120
981	510.8	0.01	28	routine	none specified	002120
68.1	30.2	20	30	routine	other stress	002120
55.6	24.6	20	30	routine	none specified	002120
101	44.8	82	30	routine	none specified	002120
92.3	40.9	82	30	routine	none specified	002120
85.7	38.0	82	30	routine	none specified	002120
57	25.3	82	30	routine	none specified	002120
44.3	19.6	82	30	routine	none specified	002120
42.3	18.8	82	30	routine	none specified	002120

Total = 11

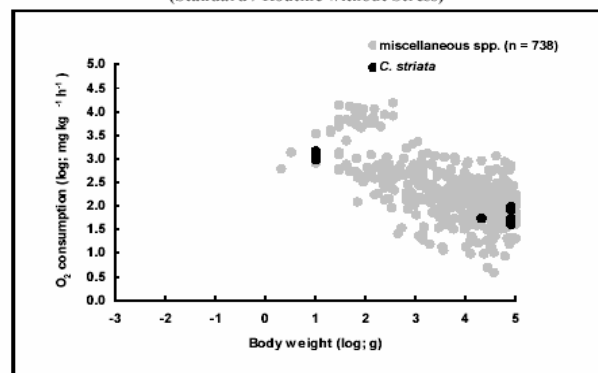
Relative oxygen consumption of *Channa striata*

(All experiments)



Relative oxygen consumption of *Channa striata*

(Standard / Routine without Stress)



General information on the reproduction of *Channa striata*

Level : species in general,

StockCode : 000357

MainRef : 001479

Mode and Type of Reproduction

Mode : dioecism

Fertilisation : external

Reproductivity : guarders clutch tenders

Breeds in ditches, ponds and flooded paddy fields. Young shoal at the surface and are guarded by parents, hiding below the surface water. In captivity, as soon as the male bends its body close to the female during mating, milt is released following the release of the eggs (Ref. 45162).

Spawning Information for *Channa striata*

Locality : Mekong mainstream

Stockcode: 000357

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

MainRef.: 037770

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

Comment: Eggs were observed from January-December, except in August. In Cambodia, eggs were encountered in May-June and November-December. In Sambor Cambodia, fish guards its fry during June-July

Locality : India, Karnataka State **Stockcode: 000357**
Season (% of mature females; 111= presence of mature females) : **MainRef.: 032692**
 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec DataRef.:039630
 111 111 111 111 111 111 111 111 111 111 111

Locality : Nepal, Nepal **Stockcode: 000357**
Season (% of mature females; 111= presence of mature females) : **MainRef.: 006351**
 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 111 111

Locality : Viet nam, Mekong basin in Dong Thap Province **Stockcode: 000357**
Season (% of mature females; 111= presence of mature females) : **MainRef.: 037770**
 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 111 111
 Comment: Spawns in an irrigated paddy field.

Locality : Thailand, Mekong mainstream at Khammaratch **Stockcode: 000357**
Season (% of mature females; 111= presence of mature females) : **MainRef.: 037770**
 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 111
 Comment: Spawns in an area with sluggish water. Observed to guard its young for about a month

Locality : Thailand, Mekong mainstream at Chiang Rai Province **Stockcode: 000357**
Season (% of mature females; 111= presence of mature females) : **MainRef.: 037770**
 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 111 111
 Comment: Spawns in rice fields and a natural swamp. Guards the newly hatched fry.

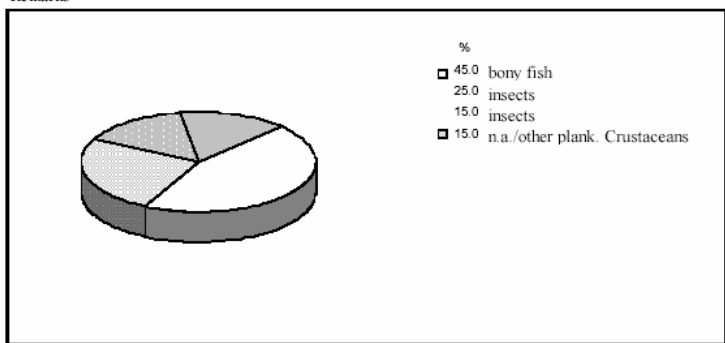
Locality : Thailand, Thailand **Stockcode: 000357**
Season (% of mature females; 111= presence of mature females) : **MainRef.: 044091**
 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 111 111 111 111 111
 Fecundity: min 40,000 (n) Female size: 1200 (g) 43.60 (cm) Ref: 006459

Locality : Hawaii, Not specified **Stockcode: 000357**
Season (% of mature females; 111= presence of mature females) : **MainRef.: 044091**
 Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec
 111 111
 Comment: Spawning occurs during the spring; the female deposits her eggs in a nest constructed by the male in shoreline vegetation; eggs hatch in about 3 days, with both parents guarding the young for several weeks (Ref. 44091).

Maturity data for *Channa striata*

Locality : Philippines, Philippines **StockCode : 000357**
 Sex : unsexed **Main Ref.: 002854**
 Length at first maturity (cm) : Lm : 25
 Age at first maturity (years) : tm: 1.5
 Comment : cultured in an aquarium

Remarks



Total = 1

Maximum weight/length/age of *Channa striata*

Locality	• India, Krishna and Godavari Rivers, Karnataka		StockCode : 000357
Max weight (g):	2500 total weight		Ref. : 043636
Max length (cm) :	Same specimen for WL :	No	Sex : unsexed
Max age (yrs)No:	Same specimen for LT :	No	
Locality	• India, Maharashtra		StockCode : 000357
Max weight (g):	1000 total weight		Ref. : 043634
Max length (cm) :	Same specimen for WL :	No	Sex : unsexed
Max age (yrs)No:	Same specimen for LT :	No	
Locality	• India, Tamil Nadu		StockCode : 000357
Max length (cm) :	19.5 Same specimen for WL :	No	Sex : unsexed
Max age (yrs)No:	Same specimen for LT :	No	
Locality	• India, Western Ghats Rivers, Karnataka		StockCode : 000357
Max length (cm) :	45 Same specimen for WL :	No	Sex : unsexed
Max age (yrs) :	Same specimen for LT :	No	
Locality	• Nepal, Rivers of terai and mid hills.		StockCode : 000357
Max length (cm) :	91.5 Same specimen for WL :	No	Sex : unsexed
Max age (yrs) :	Same specimen for LT :	No	
Comment:			
Total = 5			

Length-Weight relationships of *Channa striata*

($W = a * L^b$ with Length in cm and Weight in g)

Locality				StockCode : 000357
Length range	: 57 - 57 TL	Sample size :	1	Main Ref. : 040637
a	0.0162	Correlation coefficient :		Ref. :
b	3			Sex : unsexed
Comment	L-W relationship calculated from data in Ref. 40637.			
Locality	: China Main,			StockCode : 000357
Length range	: - SL	Sample size :		Main Ref. : 041847
a	0.0279	Correlation coefficient :	0.985	Ref. : 041847
b	2.811			Sex : unsexed
Total =2				

Growth and mortality of *Channa striata*

Country	L (cm)	∞ W (g)	Kt (/year)	t ₀ (y)	Sex	Ref.
Sri Lanka	52 TL		0.21		unsexed	032692
China Main	36.8SL-	736	0.441	0.11	unsexed	041847
India	56.5 TL		0.42		unsexed	032692
Total =	3					

Diseases reported for *Channa striata*

StockCode: 000357 MainRef. : 042533
 Parasitic infestations (protozoa, worms, etc.) , Acanthogyrus Infestation Ref. : 005435
 Causative agent : *Acanthogyrus tilapiae*
 Occurrence : Barisal, Bangladesh, 1981
 Remarks : Infestation commonly occurs; in the intestine. Besides 1981 (Ahmed and Rouf;Ahmed), the infestation was also recorded in 1997 (Ahmed and Ezaz) but with no specific locality cited.

StockCode: 000357 MainRef. : 042533
 Parasitic infestations (protozoa, worms, etc.) , Pallisentis Disease Ref. : 042533
 Causative agent : *Pallisentis sp.*
 Occurrence : Chittagong, Bangladesh, 1974
 Remarks: Infestation commonly occurs in the body cavity, viscera, and intestine. Besides 1974 (Anonymous) the infestation was also recorded in and 1978 (Ahmed and Begum) in the localities of Dhaka and Barisal, and 1968 (Ali) with no specific locality cited.

StockCode: 000357 MainRef. : 042533
 Parasitic infestations (protozoa, worms, etc.) , Fish louse Infestation 1 Ref. : 000060
 Causative agent : *Argulus sp.*
 Occurrence : Chittagong, Bangladesh, 1968
 Remarks : Infestation commonly occurs in the fins, skirl gills and eyes. Besi infestation was also recorded in 1974 (Anonymous) in the localities of Barisal and Chittagong.

StockCode: 000357
 Parasitic infestations (protozoa, worms, etc.) , Contracaecum Disease
 Causative agent : *Contracaecum sp.*
 Occurrence : Chittagong,, Bangladesh, 1974
 Remarks : Infestation commonly occurs in the body cavity, stomach, intestine, viscera and pyloric caeca.
 Beside 1974 (Anonymous), the infestation was also recorded in 1968 (Ali) but no specific locality cited.

StockCode: 000357 MainRef. : 042533
 Parasitic infestations (protozoa, worms, etc.) , Neocamallanus Disease Ref. : 042533
 Causative agent : *Neocamallanus sp.*
 Occurrence : Chittagong, Bangladesh, 1974
 Remarks : Infestation commonly occurs in the pyloric caeca. Besides 1974 (Anomymous), the infestation was also recorded in 1968 (Ali) but with no specific locality cited.

StockCode: 000357 MainRef. : 042533
 Parasitic infestations (protozoa, worms, etc.) , Anchistrocephalus Disease Ref. : 042533
Neocamallanus sp. Chittagong, Bangladesh, 1974
 Causative agent: *Anchistrocephalus sp.*
 Occurrence: Chittagong, Bangladesh, 1974
 Remarks: Infestation commonly occurs in liver and intestine. Besides 1974 (Anonymous), the infestation was also recorded in 1968 (Ali) with no specific locality cited. The recorded from fresh water fishes of Bangladesh may involve a misidentification, the parasite *Anchistrocephalus* is the only member of its genus (Rudolphi, 1819) and the parasite of the ocean sunfish (*Mola mola*) (see Wardle and McLeod 1952).

StockCode: 000357 Main Ref.: 042533
Parasitic infestations (protozoa, worms, etc.) , Phyllodistomum Disease Ref.: 000235
Causative agent : *Phyllodistomum lancea*
Occurrence : Dhaka, Bangladesh, 1978
Remarks: Infestation commonly occurs in the urinary bladder. Besides 1978 (Ahmed and Begum),the infestation was also recorded in 1981 (Ahmed) but with no specific locality cited.

StockCode: 000357 Main Ref. : 042533
Parasitic infestations (protozoa, worms, etc.) , Gnathostoma Infestation Ref. : 026129
Causative agent : *Gnathostoma spinigerum*
Occurrence : Dhaka, Bangladesh, 1972
Remarks : Infestation commonly occurs in the body cavity, stomach, intestine, viscera and muscles. Besides 1972 (Bashirullah), the infestation was also recorded in 1973 (Bashirullah) in Dhaka and/or Sylhet and 1981 (Ahmed) with no specific locality cited. This nematode is the cause of gnathostomosis, which is a serious disease in man.

StockCode: 000357 Main Ref. : 042533
Parasitic infestations (protozoa, worms, etc.) , Euclinostomum Infestation Ref. : 026129
Causative agent : *Euclinostomum multicaecum*
Occurrence : Dhaka, Bangladesh, 1982
Remarks : Infestation commonly occurs in the stomach and muscles, kidney, liver, pharyngeal wall, and the external surface of the alimentary canal.

StockCode: 000357 MainRef. : 042533
Parasitic infestations (protozoa, worms, etc.) , Isoparorchis Infestation Ref. : 042533
Causative agent : *Isoparorchis hypselobagri*
Occurrence : Dhaka, Bangladesh, 1972
Remarks : Infestation commonly occurs in the swimbladder, body cavity, muscle, liver stomach, visceral surfaces and intestine. Besides 1972 (Bashirullah), the infestation was also recorded in 1973 (Bashirullah) in Dhaka and/or Sylhet, 1974 (Anonymous) in Chittagong, and 1981 (Ahmed) and 1989 (Rahman) but with no specific locality cited.

StockCode: 000357 MainRef. : 042533
Parasitic infestations (protozoa, worms, etc.) , Pallisentis Infestation 3 Ref. : 042533
Causative agent : *Pallisentis gaboos*
Occurrence : Dhaka, Bangladesh, 1978
Remarks : Infestation commonly occurs in the testine, body cavity and mesenteries. Besides 1978 (Ahmed and Begum), the infestation was also recorded in 1981 (Ahmed and Rouf; Ahmed) in the localities Barisal and Dhaka.

StockCode: 000357 MainRef. : 042533
Parasitic infestations (protozoa, worms, etc.) , Euclinostomum Infestation 2 Ref. : 042533
Causative agent : *Euclinostomum heterostomum*
Occurrence : Dhaka, Bangladesh, 1993
Remarks : Infestation commonly occurs ; in the liver.

StockCode: 000357 MainRef. : 042533
Parasitic infestations (protozoa, worms, etc.) , Camallanus Infestation 11 Ref. : 042533
Causative agent : *Camallanus intestinalis*
Occurrence : Dhaka, Bangladesh, 1974
Remarks : Infestation commonly occurs intestine.

StockCode: 000357 MainRef. : 042533
Parasitic infestations (protozoa, worms, etc.) , Pallisentis Infestation 5 Ref. : 042533
Causative agent : *Pallisentis nagpurensis*
Occurrence : Dhaka and Barisal, Bangladesh, 1973
Remarks : Infestation commonly occurs in the intestine. Besides 1973 (Ahmed and Rouf; Ahmed), the infestation was also recorded in 1973 (Bashirullah) in the locality of Dhaka and/or Sylhet and 1993 (Khanum et al.) with no specific locality cited.

StockCode: 000357 Main Ref. : 042533
 Parasitic infestations (protozoa, worms, etc.) , Procamlanus Infestation 5 Ref. : 042533
 Causative agen: *Spirocamallanus mysti*
 Occurrence : Dhaka and/or Sylhet, Bangladesh, 1973
 Remarks : Infestation commonly occurs in the stomach, intestine and liver. Besides 1973 (Bashirullah), the infestation was also recorded in 1981 (Ahmed) but with no specific locality cited.

StockCode: 000357 Main Ref. : 042533
 Parasitic infestations (protozoa, worms, etc.) , Procamlanus Infestation 6 Ref. : 042533
 Procamlanus (*Procamlanus*) *spiculogubernaculus*
 Causative agent: *Procamlanus spiculogubernaculus*
 Occurrence: Dhaka and/or Sylhet, Bangladesh, 1973
 Remarks : Infestation commonly occurs in the stomach and intestine. Besides 1973 (Bashirullah), the infestation was also recorded in 1981 (Ahmed) but with no specific locality cited.

StockCode: 000357 Main Ref. : 044274
 Viral diseases , Epizootic Ulcerative Syndrome Ref. : 044274
 Causative agent : *N.A.*
 Occurrence : Laguna de Bay, Philippines, 1991

StockCode: 000357 Main Ref. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Fish louse Infestation 1 Ref. : 000060
 Causative agent : *Argulus sp.*
 Occurrence: Luzon, Philippines, 1983
 Remarks: Infestation occurs commonly in the skin. Besides 1983 (Quines and Paycana), the infestation also occurred in 1988 (Natividad).

StockCode: 000357 Main Ref. : 026129
 Parasitic infestations (protozoa, worms, etc.) , *Clinostomoides* Infestation Ref. : 026129
 Causative agent : *Clinostomoides brieni*
 Occurrence : Luzon, Philippines, 1944
 Remarks : Infestation occurs most commonly in the gills, gill cavity, gall bladder, periocular tissue, brachioistegal musculature and pericardium. Besides 1944 (Tubangui and Masiluñgan), the infestation also occurred in 1988 (Velasquez).

StockCode: 000357 Main Ref. : 026129
 Parasitic infestations (protozoa, worms, etc.) , *Haplorchis* Infestation 3 Ref. : 026129
 Causative agent : *Haplorchis taichui*
 Occurrence : Luzon, Philippines, 1939
 Remarks : Infestation commonly occurs in the musculature. Besides 1939 (Vazquez-Colet and Africa), the infestation was also recorded in 1973 (Velasquez) in Luzon and Mindanao.

StockCode: 000357 Main Ref. : 026129
 Parasitic infestations (protozoa, worms, etc.) , *Haplorchis* Infestation 2 Ref. : 026129
 Causative agent : *Haplorchis pumilio*
 Occurrence : Luzon, Philippines, 1939
 Remarks : Infestation commonly occurs in the musculature.

StockCode: 000357 MainRef.:026129
 Parasitic infestations (protozoa, worms, etc.) , AnchorwormDisease(Lernaeasp.) Ref.: 041805
 Causative agent : *Lernaea sp.*
 Occurrence : Luzon, Philippines, 1988
 Remarks : The head of the parasite is embedded in the musculature with the body protruding externally.

StockCode: 000357 MainRef. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Turbidity of the Skin (Freshwater fish) Ref. : 041805
 Causative agent : *Chilodonella sp.*
 Occurrence : Luzon, Philippines, 1990
 Remarks : Infestation commonly occurs in the skin.

StockCode: 000357 MainRef. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Procerovum Infestation 1 Ref. : 026129
 Causative agent : *Procerovum calderoni*
 Occurrence : Luzon, Philippines, 1939
 Remarks : Infestation commonly occurs in the musculature and base of fins. Besides 1939 (Vazquez-Colet and Africa), the infestation also occurred in 1966 (Velasquez).

StockCode: 000357 MainRef. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Camallanus Disease Ref. : 026129
 Causative agent : *Camallanus sp.*
 Occurrence : Luzon, Philippines, 1982
 Remarks : Infestation occurs commonly in the intestine. Besides 1982 (HopkinsandCruz),the infestation also occurred in 1983 (Quines and Paycana) and again in 1982 (Quinesand Paycana).

StockCode: 000357 Main Ref. : 026129
 Parasitic infestations (protozoa, worms, etc.) , False Fungal Infection (Epistylis sp.) Ref. : 041805
 Causative agent : *Epistylis sp.*
 Occurrence : Luzon, Philippines, 1990
 Remarks : Infestation occurs most commonly in the skin.

StockCode: 000357 Main Ref. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Yellow Grub Ref. : 000195
 Causative agent : *Clinostomum complanatum*
 Occurrence : Luzon, Philippines, 1933
 Remarks : Infestation commonly occurs i n the perioculartiar tissues, gill cavity, bra chiostegral musculature, and the pericardium. Besides 1933 (Tubanguí), the infestation also occurred in 1988 (Velasquez).

StockCode: 000357 Main Ref. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Piscicola Infestation Ref. : 005435
 Fish leech Infestation
 Causative agent : *Piscicola sp.*
 Occurrence :Luzon, Philippines, 1986
 Remarks: Infestation commonly occurs in the skin. Besides 1986 (Velasquez), the infestation also occurred in 1988 by the same author.

StockCode: 000357 Main Ref. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Clinostomum Infestation Ref. : 005435
 (metacercaria) : *Clinostomum sp.*
 Causative agent:
 Occurrence: Luzon, Philippines, 1983
 Remarks: Infestation occurs most commonly in the periocular tissues

StockCode: 000357 Main Ref.026129
 Parasitic infestations (protozoa, worms, etc.) , Cercaria Disease (e.) Ref.:000193
 Cercariosis
 Causative agent : *Diplostomum sp.*
 Occurrence : Luzon, Philippines, 1986
 Remarks : Infestation commonly occurs in the brain, intestine and musculature. Besides 1986 (Lopez), the infestation also occurred in 1988 by the same author.

StockCode: 000357 MainRef. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Trichodinosis Ref. : 000193
 Trichodinella sp.; Trichodina infestation
 Causative agent : *Trichodina* sp.
 Occurrence : Luzon, Philippines, 1990
 Remarks : Infestation occurs most commonly in the gills and skin.

StockCode: 000357 MainRef. : 026129
 Parasitic infestations (protozoa, worms, etc.) , False Fungal Infection (*Apiosoma* sp.) Ref. : 041805
 Causative agent : *Apiosoma* sp.
 Occurrence : Luzon, Philippines, 1975
 Remarks: Infestation occurs most commonly in the gills and skin.

StockCode: 000357 MainRef. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Skin Flukes Ref. : 000060
 Helminthose (skin and eventually gills afflicted)
 Causative agent : *Gyrodactylus* sp.
 Occurrence : Luzon, Philippines, 1975
 Remarks : Infestation commonly occurs in the gills and skin.

StockCode: 000357 MainRef. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Neodiplostomum Disease Ref. : 026129
 Causative agent : *Neodiplostomum* sp.
 Occurrence : Luzon, Philippines, 1939
 Remarks : Infestation commonly occurs in the scales and skin. Besides 1939 (Vazquez-Colet and Africa), the infestation was also recorded in 1986 and 1988 (Velasquez).

StockCode: 000357 MainRef. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Haplorchis Infestation 1 Ref. : 026129
 Causative agent : *Haplorchis yokogawai*
 Occurrence : Luzon, Philippines, 1936
 Remarks: Infestation commonly occurs in the musculature. Besides 1936 (Garci cia), the infestation also occurred in 1939 (Vazquez-Colet and Africa). This parasite has been associated with human myocardial complications and heart failure due to the blockage of coronary vessels caused by the parasites eggs entering the circulatory system by the intestinal mucosa. Ingestion of metacercaria in raw or inadequately cooked fish is the caused of human infections.

StockCode: 000357 MainRef. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Euclinostomum Infestation Ref. : 026129
 Causative agent : *Euclinostomum multicaecum*
 Occurrence : Luzon, Philippines, 1935
 Remarks : Infestation commonly occurs ; in the musculature. Besides 1935 (Tubangui and Masiluñgan), the infestation also occurred in 1960 (Velasquez).

StockCode: 000357 MainRef. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Gnathostoma Infestation Ref. : 026129
 Causative agent : *Gnathostoma spinigerum*
 Occurrence : Luzon, Philippines, 1936
 Remarks : Infestation commonly occurs in the musculature and visceral linings.

StockCode: 000357 MainRef. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Neocamallanus Infestation Ref. : 026129
 Causative agent : *Neocamallanus ophicephali*
 Occurrence : Luzon, Philippines, 1966
 Remarks : Infestation commonly occurs in the stomach, pyloric caeca and instine. Besides 1966 (Velasquez), the infestation also occurred in 1980 (Velasquez), 1981 (Calhoun), 1982 (Boromthanarat), 1986 (Lopez) and 1988 (Lopez).

StockCode: 000357 Main Ref. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Centrocestus Infestation 2 Ref. : 026129
 Causative agent : *Centrocestus caninus*
 Occurrence : Luzon, Philippines, 1939
 Remarks : Infestation occurs most commonly in the gills.

StockCode: 000357 Main Ref. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Fish Louse Infestation 3 Ref. : 026129
 Causative agent : *Argulus indicus*
 Occurrence : Luzon, Philippines, 1986
 Remarks : Infestation commonly occurs ; in the skin. Besides 1986 (Lopez), the infestation also occurred in 1988 by the same author. Velasquez also reported the parasite in 1986 and 1988.

StockCode: 000357 MainRef. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Clinostomum Infestation Ref. : 026129
 Causative agent : *Clinostomum philippinensis*
 Occurrence : Luzon, Philippines, 1960
 Remarks : Infestation commonly occurs in pericardium, gill cavity and tissues under pectoral fins. Besides 1960 (Velasquez), the infestation was also recorded in 1966 and 1988 in Luzon, and 1975 in Luzon and Mindanao by the same author.

StockCode: 000357 MainRef. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Anchor worm Disease Ref. : 000060
 Lernaosis
 Causative agent : *Lernaea cyprinacea*
 Occurrence : Luzon, Philippines, 1988
 Remarks : The parasites head is commoly embedded in the eye, nostril, an host. With the body protruding externally.

StockCode: 000357 MainRef. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Opegaster Infestation Ref. : 026129
 Causative agent : *Opegaster minima*
 Occurrence : Luzon, Philippines, 1944
 Remarks : Infestation commonly occurs in the intestine.

StockCode: 000357 Main Ref. : 042533
 Parasitic infestations (protozoa, worms, etc.) , Taphrobothrium Infestation Ref. : 042533
 Causative agent : *Taphrobothrium japonense*
 Occurrence : not specified, Bangladesh, 1993
 Remarks : (Location of infestation not specified)

StockCode: 000357 Main Ref. : 042533
 Parasitic infestations (protozoa, worms, etc.) , Polyonchobothrium Disease Ref. : 042533
 Causative agent : *Polyonchobothrium sp.*
 Occurrence : not specified, Bangladesh, 1993
 Remarks : (Location of infestation not specified.)

StockCode: 000357 Main Ref. : 042533
 Parasitic infestations (protozoa, worms, etc.) , Bothriocephalus Infestation 3 Ref. : 042533
 Causative agent : *Bothriocephalus cuspidatus*
 Occurrence : not specified, Bangladesh, 1993
 Remarks : Infestation commonly occurs in the intestine and pyloric caeca. The parasite is a North American species, so this report from Bangladesh is probably based on a misidentification.

StockCode: 000357 Main Ref. : 042533
 Parasitic infestations (protozoa, worms, etc.) , Paracmallanus Infestation Ref. : 042533
 Causative agent : *Paracmallanus sweeti*
 Occurrence : not specified, Bangladesh, 1993
 Remarks : Infestation commonly occurs in the liver, esophagus, stomach and intestine.

StockCode: 000357 Main Ref. : 042533
 Parasitic infestations (protozoa, worms, etc.) , Allogomtiorema Infestation Ref. : 042533
 Causative agent : *Allogomtiorema attu*
 Occurrence : not specified, Bangladesh, 1993
 Remarks : Infestation commonly occurs in the stomach and intestine.

StockCode: 000357 Main Ref. : 042533
 Parasitic infestations (protozoa, worms, etc.) , Pallisentis Infestation 4 Ref. : 042533
 Causative agent : *Pallisentis ophiocephali*
 Occurrence : not specified, Bangladesh, 1967
 Remarks : Infestation commonly occurs in the stomach, viscera, muscle and intestine. Besides 1967 (Rahman and Ali), the infestation was also recorded in 1974 (Anonymous) and 1989 (Rahman) both with no specific locality cited.

StockCode: 000357 Main Ref. : 042533
 Parasitic infestations (protozoa, worms, etc.) , Echinocephalus Disease Ref. : 042533
 Causative agent : *Echinocephalus sp.*
 Occurrence : not specified, Bangladesh, 1968
 Remarks : Infestation commonly occurs in the intestine. Besides 1968 (Ali), the infestation was also recorded in 1974 (Anonymous) but with no specific locality cited.

StockCode: 000357 Main Ref. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Posthodiplostomum Disease Ref. : 026129
 Causative agent : *Posthodiplostomum sp.*
 Occurrence : not specified, Philippines, 1976
 Remarks : Infestation commonly occurs in the scales. Beside 1976 (Velasquez) the infestation also occurred in 1977 by the same author.

StockCode: 000357 Main Ref. : 048848
 Parasitic infestations (protozoa, worms, etc.) , Posthodiplostomum Disease Ref. : 000060
 Infectious Ascites; Haeromorrhagic; Red Fin Disease
 Causative agent : *Aeromonas*
 Occurrence: Not specified 1971
 Remarks: The infection were recorded in 1971 (Bullock et al.) 1978 (Egusa) and later 1986 (Saitanu)

StockCode: 000357 Main Ref. : 0026129
 Parasitic infestations (protozoa, worms, etc.) , Posthodiplostomum Infestation Ref. : 026129
 Causative agent : *Posthodiplostomum grayi*
 Occurrence : not specified, Philippines, 1943
 Remarks : Infestation commonly occurs in the body cavity.

StockCode: 000357 Main Ref. : 042533 Ref. : 026129
 Parasitic infestations (protozoa, worms, etc.) , Neocmallanus Infestation
 Causative agent : *Neocmallanus ophicephali*
 Occurrence : Sylhet, Bangladesh, 1969
 Remarks : Infestation commonly occurs in the intestine and pyloric caeca. Besides 1969 (Khan and Yaseen), the infestation was also recorded in 1973 (Bashirullah) in Dhaka and/or Sylhet, 1974 (Bashirullah) and 1976 (Ahmed) in Dhaka, and records in 1974 (Anonymous), 1981 (Ahmed) and 1989 (Rahman) \with no specific locality cited.

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