上海科学技术出版社

中国淡水鱼类源含图绘

THE FRESHWATER IN COLOURED ILLUSTRATIONS



中国淡水鱼类原色图集

农牧渔业部水产局 上海自然博物馆 中国科学院水生生物研究所

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THE FRESHWATER FISHES
OF CHINA

IN COLOURED ILLUSTRATION



上海科学技术出版社

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淡水鱼类原色照片图集, 其所收集内容之广泛, 色彩之真实, 都达到了一定的水平。 生物研究所和上海自然博物馆共同协作拍摄的《中国淡水鱼类原色图集》是我国出版的第一部 在农牧渔业部水产局的主持下,由中国科学院水生生物研究所编写并由中国科学院水生

组成的复杂,形态的千变万化,色彩的绚丽多彩,早已为人们所熟知。但由于鱼类栖息于江河濒 在鱼类科学的研究和教学上也有一定的价值。 丽的直观图片,这对开发利用我国的淡水鱼类资源,普及鱼类科学知识,有着较大的实际意义, 水鱼类原色图集》采用新的摄影技术,直接拍摄活体标本和模拟的生态环境,为人们提供了美 泊之中,其自然环境和天然色彩难以被直接观察和记录,以往的科学描述也难免失真。《中国淡 中国是世界淡水鱼种类最多的国家之一,其总数不下八百种。它们适应范围的广泛,区系

色动物图集的出版,用色彩鲜艳的彩色照片,去反映我们祖国的壮丽河山和富饶的动物资源。 采用新的技术,发展我国的科学事业,是实现四个现代化的重要内容。我们期待着更多原

传染文

弯响

得丰富多彩,此外,本集还收入了部分滇西北和川西横断山区的鱼类。这一地区为青藏高原之 部,气候温暖湿润,大部分区域全年无霜。除云南高原外,较少天然湖泊。多数河流穿行于丘陵 貌发育,存在大量的峰林、溶洞和暗河,生境复杂多样,产生了许多特殊的种类,鱼类资源更显 科、蚒亚科,以及平鳍鳅科和鲱科的种类,在区系组成中占了很大的比重。加之这一带喀斯特地 地带,河道弯曲,河水清澈湍急。适应于山溪急流环境的暖水性鱼类,如鲤科的鲃亚科、野鲮亚 上反映了青藏高原鱼类区系的轮廓。 东部,地势高亢,气候寒冷,鱼类区系主要为裂腹鱼类和条鳅类所组成。因此本集也在一定程度 了南岭以南的华南区淡水鱼类区系的特色。这一地区, 属热带——亚热带, 北回归线横贯其中 本集的内容主要为珠江水系的鱼类,也包括福建、云南和海南岛的部分特有种,大体反映

学提供了一些珍贵的资料。 形态特征、生活习性、地理分布和经济意义。为利用和保护这一地区的鱼类资源以及科研和教 生境拍摄而成,形态生动,体色真实。每种鱼还附有简要的文字说明和英文择要,介绍其主要的 本集共收入了上述地区的鱼类 179 种, 分隶于 28 科。图片均为野外采集活体,模拟其栖息

宣教授审阅, 谨此表示衷心的感谢。并希望广大读者对本书提出宝贵意见。 水产科、福建省龙岩地区科委、崇安县科委、中国科学院昆明动物研究所和中国科学院青藏高 星湖渔场、海南岛松涛水库管理处、海南岛琼中县农办、云南省农业厅水产处、西双版纳自治州 产局、金秀县农业局、桂林市畜牧水产局、阳朔县鱼种场、广东省水产厅、肇庆地区水产局、肇庆 原综合考查队等单位及有关同志的大力支持与帮助; 文稿由中国科学院水生生物研究所曹文 区畜牧水产局、龙州县畜牧水产局、横县畜牧水产局、浦北县水产局、钦州县水产局、象州县水 《图集》在野外实地拍摄过程中,曾得到广西水产局淡水处、广西水产研究所、广西南宁地

编者

PREFACE

the Qinghai-Xizang Plateau. harsh climate. Schizothoracine and neomachiline fishes constitute the main component of the fishfauna in this region. These species are included in this volume as an epitome of the fish-fauna of Qinghai-Xizang (Chinghai-Tibetan) Plateau and its environmental conditions are rigorous, with in northwest of Yunnan and west Sichuan. This mountain range is the eastern border of the this region. In addition, we also select some endemic fishes from the Hengduan Mountain Range ridges, peaks, caverns and subterranean streams are developed. Its complex environment resulted rivers run through the hilly land and take meandering course, with limpid and rapid current. the year. There is a scarcity of natural lakes in this region except the Yunnan Plateau. Most section. The weather is warm and humid, and in most part of this area there is no frost throughout situated in the tropical-subtropical region and the Tropic of Cancer runs across its central in the rise of many endemic species. Consequently the fish-fauna is more diverse and plentiful in features of the freshwater fish-fauna of the South China Subregion on the whole. This region is endemic species from Fujian Province, Yunnan Province and Hainan Island. They mirror the fish-fauna. Moreover, the river system is distributed over tropical karst region, where numerous Labioninae of Cyprinidae, Homalopteridae, and Sisoridae is quite large in the composition of the Therefore, the proportion of the warm-water fishes adapted to rapid stream such as Barbinae, Illustrations" are the fishes from the Zhujiang River (Pearl River) system, including some The main contents of the second volume of "The Freshwater Fishes of China in Coloured

from living specimens on simulated natural ecological backgrounds so that their body colouration 179 species belonging to 28 families are compiled in this volume. All photographs were taken

main morphological characteristics, life habit, geographical distribution and economic imporresources of the specified region. tance. The book will provide valuable scientific information for exploring and utilizing the fish and behavior are fairly close to realness. A brief description is given to each species, depicting the

The Editors

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英 文 邁 蝦

1. Dasyatis akajei (Müller et Henle)

The stingrays are inshore marine fishes. This species, the red stingray, is also found in the West River. Body generally depressed and forms a flat disc with a long and thin tail.

2. Clupanodon thrissa (Linnaeus)

This fish is commonly found in the Donghai Sea and the Nanhai Sea. It is anadromous and enters rivers in the spring. The last ray of dorsal fin greatly elongated. A food fish, with a body length of about 120 mm.

3. Coilia grayi Richardson

This is a species of anchovies. Body compressed, with seven rays of pectoral fin elongated to form free filaments; anal fin confluents with caudal fin. It is commonly found in the Nanhai Sea. The adults are anadromous and enter rivers in the spring; the body length is about 100-200 mm.

4. Plecoglossus altivelis Temminck et Schlegel

This salmonoid fish, the ayu fish, inhabits the Donghai Sea and the Nanhai Sea. It is anadromous and enters streams in the spring, and spawns in autumn. A famous food fish; the body length is about 150-200 mm.

5. Leucosoma chinensis (Osbeck)

The icefish inhabits the Donghai Sea and the Nanhai Sea, and is a inshore fish. It is anadromous and enters brackish or freshwater to spawn. Body transparent, head strongly depressed, skeleton poorly ossified.

6. Anguilla marmorata Quoy et Gaimard

This species is the largest freshwater eel, with a weight of about 15-20 kg. Body elongate and cylindrical with grey or black spots; minute scales are present. It inhabits the mountain streams in South China and is catadromous.

7. Micronoemacheilus pulcher (Nichols et Pope)

A noemacheiline loach. This species is found in the Zhujiang River system and the Hainan Island, on sand and gravel bottom of streams. The body length is about 60-120 mm.

8. Oreonectes platycephalus Günther

This species is known as planehead loach, found only in the Zhujiang River system. It inhabits the gravel bottom of streams. The body length is about 100 mm.

9. Oreonectes anophthalmus Zheng

The blind planehead loach is found in Wuming County,

Guangxi Autonomous Region. It inhabits a cavern at the Qifeng Mountain. Body translucent, eyes absent, ventral fin rays only 4; the body length is about 25-40 mm.

10. Noemacheilus meridionalis Zhu

This small fish is found in Xishuangbanna, Yunnan Province. It inhabits the slow current in the Lancangjiang River and lives in the crevice of gravel or among waterweeds. The color pattern in male is different from the female by having a dark brown longitudinal stripe along its body.

11. Noemacheilus fasciolatus (Nichols et Pope)

This noemacheiline loach is commonly found in South China. It inhabits the rapid current of the mountain streams. Body usually with 10-16 dark cross bands; the body length is about 50-120 mm.

12. Noemacheilus incertus (Nichols)

This species is similar to *Noemacheilus fasciolatus*, but without any dark cross bands on the body, which is dark green in colour. Body length 50-100 mm. It inhabits the bottom of streams, and is found in the Zhujiang River system.

13. Noemacheilus thai Fowler

This species is native to Thailand. In China, it distributes only in the Lancangjiang River, Yunnan Province. Body with eight dark cross bands; the body length is about 50-100 mm.

14. Noemacheilus gejiuensis Chu et Chen

A blind noemacheiline loach. The pigmentation of body lack or absent; the body length is about 40-50mm. This species is found in Gujiu, Yunnan Province, and livers in a

subterranean stream.

15. Triplophysa bleekeri (Sauvage et Dabry)

This plateau noemacheiline loach is found in the upper reaches of the Changjiang River. It inhabits the rapid current of the mountain streams.

16. Triplophysa brevicauda (Herzenstein)

This species is commonly found in the Qinghai-Xizang Plateau and adjacent regions. It lives in the rapid current of the mountain streams.

17. Botia robusta Wu

A small botine loach. Body compressed with rather variable dark cross bands. It is found in the Zhujiang River and the Jiulongjiang River systems, and lives in sand bottom of the streams.

18. Botia pulchra Wu

This species is also found in the Zhujiang River and the Jiulongjiang River systems, and looks like *Botia robusta* Wu, but its eye is smaller than in the latter. It inhabits sand bottom of streams.

19. Parabotia maculosa (Wu)

Head with dark spots, body slender and compressed, with 13-15 dark cross bands. It inhabits the sand and gravel bottom of the streams in the Changjiang River, the Zhujiang River and the Minjiang River system. The body length is about 100-200 mm.

20. Leptobotia pellegrini Fang

This botine loach is commonly found in the rivers to the south of the Changjiang River. Cheek with scales, body elongate, the body length is about 120-220 mm.

21. Leptobotia guilinensis Chen

This small botine fish is only found in the Lijiang River, Guangxi Autonomous Region. It inhabits the sand bottom of the streams. The body length is about 100 mm.

22. Leptobotia tientaiensis (Wu)

This species is found in the mountain streams in Zhejiang and Fujian Provinces. It is a bottom dweller; the body length is about 60-130 mm.

23. Cobitis arenae (Lin)

Body slender and compressed, head and back with dark spots, 18-24 dark blotches along lateral line. This cobitine loach is found in the Zhujiang River system and inhabits the sand and gravel bottom of the streams.

24. Danio chrysotaeniatus Chu

This small cyprinid fish is found in Xishuangbanna, Yunnan Province, and inhabits the mountain streams of the Lancangjiang River. This species is an ornamental fish; the body length is about 70 mm.

25. Barilius pulchellus Smith

This species is found in the Lancangiang River and the Red River, and inhabits the mountain streams. It is also an ornamental fish; the body length is about 100 mm.

26. Raiamas guttatus (Day)

Body compressed, head and mouth large. This species is a predatory fish and inhabits the mountain streams. It is distributed in the Lancangjiang River, and the Irrawaddy River.

27. Parazacco spilurus (Günther)

This small fish is only found in the streams in the south of Guangdong Province and the Hainan Island. It resembles *Zacco* and *Opsariichthys*, but differs in having a postventral keel, a superior mouth and anal rays iii, 11–12.

28. Nicholsicypris normalis (Nichols et Pope)

The small cyprinid fish is commonly found in the Hainan Island and the south of Guangdong and Guangxi. It inhabits the mountain streams and canals. The pharyngeal teeth are in 2 rows; the body length is not longer than 100 mm.

29. Yaoshanicus arcus Lin

This species is similar in appearance to *Nicholsicypris* normalis, but the pharyngeal teeth are in 3 rows. It is only found in the mountain streams in the Dayao Shan Mountain, Guangxi Autonomous Region.

30. Rasbora steineri Nichols et Pope

Body compressed. The species is commonly found in Guangdong, Guangxi, and the Hainan Island. An ornamental fish, the body length is about 100 mm.

31. Xenocyprioides carinatus Chen et Huang

This species resembles Xenocypris in pharyngeal teeth

pattern, with 6 teeth in the main row, but differs in the subsuperior mouth and the absence of lateral line. It is only found in Longzhou County, Guangxi Autonomous Region; the body length is about 20-40 mm.

32. Paralaubuca barroni (Fowler)

Body compressed and thin, with a scaleless keel from the branchial isthmus to the anus. This small cyprinid fish is only found in Xishuangbanna, Yunnan Province.

33. Rasborinus lineatus (Pellegrin)

This species inhabits the slow current in the Minjiang River and the Zhujiang River systems. Body deep and compressed, with a keel from the ventral to the anus. The body length is about 60-100 mm.

34. Rasborinus formosae Oshima

This small fish resembles *Rasborinus lineatus* in appearance, and is found in the Taiwan Island, the Hainan Island and the south of Guangxi Autonomous Region.

35. Sinibrama melrosei (Nichols et Pope)

Body deep and compressed, with a keel from the ventral to the anus, the anal fin iii, 21-25. This species is found in the Zhujiang River and the Hainan Island; the body length is about 100 mm.

36. Sinibrama macrops (Günther)

This species resembles Sinibrama melrosei in appearance, but differs in the number of lateral line scales. It is distributed in Taiwan Province, Guangxi Autonomous Region and the Fujian province.

37. Sinibrama barbatula Lo et Huang

This specialized species of Genus *Sinibrama* is found in Qinzhou County, Guangxi Autonomous Region. Body compressed, the anal fin iii, 14-16. There is a short barble at the each corner of the mouth. It inhabits the mountain streams, and the body length is about 100-200 mm.

38. Anabarilius liui (Chang)

Body elongate and compressed, with a keel from the ventral to the anus. It is found in the northeast of Yunnan Province and the southwest of Sichuan Province, and lives in the slow current of the rivers or in the still water of lakes.

39. Anabarilius grahami (Regan)

This species is like *Anabarilius liui*, but differs in the number of the gillrakers. It inhabits the upper or mid-water in the Fuxian Lake, Yunnan Province.

40. Hemiculterella wui (Wang)

Body compressed and thin, with a keel from the ventral to the anus. This species is found in Zhejiang and Guangxi. The body length is about 80-140 mm.

41. Pseudohemiculter dispar (Peters)

This fish is commonly found in the area to the south of the Changjiang River, and lives in the upper or mid-water of rivers and lakes. Body elongate and compressed, with a keel from the ventral to the anus. The body length is about 80 —140mm.

42. Toxabramis houdemeri Pellegrin

Body very compressed and thin, with a keel from the breast to the anus. This species is found in the Zhujiang River, the Red River and the Hainan Island. The body length is about 50-100 mm.

43. Erythroculter hypselonotus (Lin)

Body compressed, with a keel from the ventral to the anus. Mouth large and vertical, eyes large, This predatory fish inhabits the slow current in the Zhujiang River.

44. Erythroculter pseudobrevicauda Nichols et Pope

This species is similar in appearance to *Erythroculter hypselonotus*, but the scales are smaller than in the latter. It is found in the Zhujiang River and the Hainan Island.

45. Megalobrama hoffmanni Herre et Myers

Body deep and compressed, a strong and smooth spine in the dorsal fin, and with a keel from the ventral to the anus. This black bream inhabits the slow current of rivers. It is found in the Zhujiang River and the Hainan Island. A delicious food fish; the weight is about 1 kg.

46. Rhodeus spinalis Oshima

This bitterling is only found in the Hainan Island. Body compressed and rhomboid, lateral line incomplete, anal fin iii, 14-15. An ornamental fish, the body length is about 100 mm.

47. Paracheilognathus meridianus Wu

Body compressed and elongate, lateral line complete,

anal fin iii, 8-9, a short barbel at each corner of the mouth. The bitterling is found in Guangxi Autonomous Region; the body length is about 50-100 mm.

48. Hemibarbus macracanthus Lo, Yao et Chen

Body elongate and fusiform. A strong and smooth spine in the dorsal fin, the spine being longer than the head. It is found in the West River. A food fish, the body length is about 200-300 mm.

49. Gnathopogon taeniellus (Nichols)

This is a species of gudgeons. It is found in the mountain streams in Zhejiang and Fujian Provinces. A small fish, the body length is not longer than 100 mm.

50. Squalidus wolterstorffi (Regan)

This small gudgeon is commonly found in the east of China. It inhabits the rivers or streams south of the Luanhe River. The body length is not longer than 100 mm.

51. Squalidus atromaculatus Nichols

This gudgeon inhabits the sand and gravel bottom of the streams in the Hainan Island and the Zhujiang River. The body length is about 80-110 mm.

52. Pseudogobio guilinensis Yao et Yang

Body elongate and cylindric, mouth inferior, lips fleshy, the lower lip free behind across the chin. This species inhabits the sand and gravel bottom of streams in the West River. A food fish, the body length is about 200 mm.

53. Microphysogobio labeoides (Nichols et Pope)

This gudgeon is found in the Zhujiang River, and the Hainan Island. Body elongate, lips fleshy, anal fin iii, 6.

54. Microphysogobio fukiensis (Nichols)

This gudgeon is commonly found in the rivers south of the Changjiang River. The anal fin is iii, 5.

55. Microphysogobio kiatingensis (Wu)

This species is also commonly found in the rivers south of the Changjiang River, and resembles *Microphysogobio fukiensis* in appearance, but differs in having 6 branched rays in the anal fin.

56. Microphysogobio elongata (Yao et Yang)

Body slender, anal fin iii, 6. This species is only found in the West River.

57. Platysmacheilus exiguus (Lin)

A small fish, body elongate and cylindric, mouth inferior, lips fleshy with papillae, the lower lip free behind across the chin. This species inhabits the sand and gravel bottom of streams in the Zhujiang River system.

58. Gobiobotia guilinensis Chen

The Genus *Gobiobotia* is a specialized gudgeons. Body elongate and cylindric, barbels 8, the first pair in mouth corner, others on the chin. This eightwhisker gudgeon is found in the Zhujiang River and inhabits the gravel bottom.

59. Gobiobotia longibarba meridionalis Chen et Tsao

The barbels longer than those in other species of this genus. This subspecies is found in the Zhujiang River and the Changjiang River.

60. Barbodes daruphani luosuoensis Wu et Lin

Body deep and compressed, a strong and barbed spine in the dorsal fin, barbels 4. This fish is found in Xishuangbanna, Yunnan Province and inhabits the slow current in the Lancangjiang River. A food fish, the weight is about 250 g.

61. Barbodes huangchuchieni (Tchang)

Body elongate and compressed. This species is found in the Lancangjiang River and the Red River.

62. Spinibarbus denticulatus (Oshima)

Body elongate, a precumbent and forwardly directed spine before the dorsal fin. This barbine fish is a vegetarian and inhabits the deep pool of the streams. It is found in the Zhujiang River, the Red River and the Hainan Island. A food fish, the weight is about 1 kg.

63. Capoeta semifasciolata (Günther)

A small barbine fish, body deep and compressed, barbels 2. This species is commonly found in the south of China and inhabits the pools or canals. It is an ornamental fish; the body length is about 40-70 mm.

64. Sinocyclocheilus grahami tingi Fang

Body elongate and compressed, scales minute, the scales along the lateral line are about 70 in number and slightly

larger than those in other parts of the body. This species is only found in the Fuxian Lake, Yunnan Province. A famous food fish, the weight is about 100 g.

65. Percocypris pingi regani (Tchang)

This species is only found in the Lancangjiang River and the Fuxian Lake. Body elongate and compressed, mouth slightly large and the lower jaw projecting. A predatory fish, the weight is about 0.5-1 kg.

66. Luciocyprinus langsoni Vaillant

Body elongate and cylindric, mouth large, scales minute. This barbine fish resembles *Elopichthys bambusa* in appearance. It is found in the West River and the Lakes in the east of Yunnan Province. A predatory fish, the largest weight is about 15 kg.

67. Mystacoleucus marginatus (Cuvier et Valenciennes)

A specialized barbine fish, with 2 pairs of barbels, the anal fin iii, 8-9. Body deep and compressed, with a precumbent and forwardly directed spine before the dorsal fin. This species is only found in Xishuangbanna, Yunnan Province.

68. Mystacoleucus lepturus Hwang

This species is also found in Xishuangbanna, and looks similar to *Mystacoleucus marginatus*, but with only 1 pair of barbels.

69. Acrossocheilus labiatus (Regan)

Body elongate and compressed, mouth inferior, lips fleshy, the spine of the dorsal fin slender. This species is commonly found in Taiwan, Fujian, Zhejiang and Guangxi, and

inhabits the gravel bottom of the mountain streams.

70 Acrossocheilus hemispinus (Nichols)

This species is found in the Zhujiang River and the Minjiang River; the body length is about 100-200 mm. Its spine of the dorsal fin is stronger than that of *Acrossocheilus* labiatus, but the end of the spine is soft.

71. Acrossocheilus wenchowensis Wang

The spine of the dorsal fin is moderately strong and serrated. This species is found in Fujian Province and the south of Zhejiang Province.

72. Acrossocheilus yunnanensis (Regan)

This species is commonly found in the upper reaches of the Changjiang River and the West River, and in the lakes in the eastern part of Yunnan province. Body elongate and compressed, lips fleshy, no noticeable horny edge to the lower jaw. A food fish, the body length is about 150-200 mm.

73. Acrossocheilus longipinnis (Wu)

The lower jaw with a well-developed horny edge, and the first branched ray of the dorsal fin in males is elongated. This species is found in the Zhujiang River. A food fish, the body length is about 100 mm.

74. Acrossocheilus iridescens (Nichols et Pope)

This fish looks similar to *Acrossocheilus longipinnis*, but it is only found in the Hainan Island.

75. Varicorhinus (Scaphesthes) barbatus (Lin)

Body elongate and compressed, mouth inferior, lower

jaw with a well-developed horny edge, last simple dorsal ray not spinous. This species is found in the Zhujiang River and the Xiangjiang River, and inhabits the gravel bottom of streams.

76. Varicorhinus (Scaphesthes) barbatulus (Pellegrin)

This fish is found in the Zhujiang River and the streams in Fujian, Zhejiang and Taiwan Provinces. The species recembles *Varicorhinus barbatus* in appearance, but its mouth is wider than in the latter.

77. Varicorhinus (Scaphesthes) lepturus (Boulenger)

This species looks similar to *Varicorhinus barbatulus*, but its caudal peduncle is slightly slender. It is found in the Minjiang River and the Hainan Island.

78. Varicorhinus (Onychostoma) gerlachi (Peters)

Body elongate and compressed, mouth inferior, lower jaw with a well-developed horny edge, the spine of the dorsal fin serrated. This species is commonly found in the Zhujiang River, the Red River, the Lancangjiang River and the Hainan Island, and inhabits the rapid current of the mountain streams. A food fish, the weight is about 250-1000 g.

79. Varicorhinus (Onychostoma) ovalis rhomboides Tang

Body deep and compressed. This subspecies is found in the Zhujiang River and the Wujiang River; the weight is about 0.5-1 kg.

80. Varicorhinus (Onychostoma) acanthopterus (Fowler)

Body elongated and compressed, barbel absent, branched rays of the dorsal fin 11-12. This species is only found in the

Lancangjiang River.

81. Tor (Tor) tor sinensis Wu

Lips thick, completely covering the edge of jaws, with a median labial lobe, the dorsal fin with a strong smooth spine. This species is only found in the Lancangjiang River.

82. Tor (Parator) zonatus Lin

Body elongate, a precumbent and forwardly directed spine before the dorsal fin, the dorsal fin with a strong serrate spine. Lips thick, completely covering the edge of jaws, lower lip with a median labial lobe. This fish is only found in the Zhujiang River. A food fish, the weight is about 0.5-1 kg.

83. Sinilabeo decorus (Peters)

Body oblong, snout with tubercles, rostral fold with a notched margin and covering the base of upper lip, lower lip separated from lower jaw and papillose. This species is only found in the West River and inhabits the gravel bottom of the mountain streams. A food fish, with maximum weight of about 4 kg.

84. Sinilabeo discognathoides wui Zheng et Chen

This subspecies looks similar to *Sinilabeo decorus*, but has a postlabial groove continuous across the chin. It is found in the Zhujiang River and its usual weight is about 2-3 kg.

85. Lobocheilus melanotaenia (Fowler)

Body slender and compressed, lower lip separated from lower jaw and forms a free and rounded fleshy pad, barbels 2. This species is found in Xishuangbanna, Yunnan Province

and inhabits the swift waters in the Lancangjiang River.

86. Osteochilus vittatus (Cuvier et Valenciennes)

This fish is commonly found in the Zhujiang River, the Minjiang River, the Jiulongjiang River, the Red River, and the Hainan Island. Lips fleshy, the upper lip turned over and fringed, lower lip with papillae. A food fish, the body length is about 80–160 mm.

87. Cirrhinus molitorella (Cuvier et Valenciennes)

Body oblong, jaws with a horny edge and separated from lips, upper lip with a notched margin and lower lip with papillae. This species is an important culture fish in South China; the weight is about 0.5 kg.

88. Labiobarbus lineatus (Sauvage)

Body elongate and compressed, the extremely long dorsal fin with 21-23 branched rays, lips fleshy and fringed. This species is only found in the Lancangjiang River.

89. Epalzeorhynchus bicornis Wu

This specialized fish is only found in the Nujiang River and inhabits the swift waters. Body elongate and cylindric, snout with a small movable lateral lobe, skin of rostrum is fringed and covers the mouth.

90. Ptychidio jordani Myers

Body elongate and cylindric, skin of rostrum is fringed and covers the mouth; jaws with a horny edge and separated from the skin of rostrum and lower lip. This species is found in the Zhujiang River and Taiwan Province. It inhabits the gravel bottom of the streams. A food fish, the weight is about

150-500 g.

91. Ptychidio macrops Fang

This species is only found in the West River. It resembles *Ptychidio jordani* in apearance, but its eyes are larger than in the latter.

92. Rectoris posehensis Lin

Body elongate and cylindric, the skin of rostrum with a fringed margin covering the upper jaw and connected with the lower lip. This species inhabits the rapid current in the West River. A food fish, the body length is about 80-140 mm.

93. Parasinilabeo assimilis Wu et Yao

This species resembles *Rectoris posehensis* in appearance, but its upper jaw is not connected with the lower lip. It is found in the Zhujiang River and the Xiangjiang, Lishui of the Changjiang River. This fish inhabits the swift waters of the mountain streams; the body length is about 80–100 mm.

94. Semilabeo notabilis Peters

Body elongate and cylindric, the skin of rostrum with many horny papillae before the mouth, lower lip fleshy and with a triangular strongly papillated area in the chin. This species is found in the Zhujiang River and the Yuanjiang River. It inhabits the gravel bottom of the mountain streams. A famous food fish, the usual weight is about 1-2 kg.

95. Garra orientalis Nichols

This specialized fish is found in the Minjiang River, the Zhujiang River, the Red River, the Lancangjiang River and the Irrawaddy River, and in the Hainan Island. Body elongat-