

New Species of the Genus *Scaphognathops*, Cyprinidae, from the Lao Mekong River System

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(Received July 4, 1974)

Abstract A new cyprinid species, *Scaphognathops mekongensis*, is described from the Lao Mekong and its tributaries. The new species is distinguished from its only congener, *S. stejnegeri*, primarily by its much wider lower jaw, less developed lower lip, broader interorbital space, fewer numbers of branched rays in the dorsal and anal fins, and more numerous gill-rakers. On the other hand, *S. mekongensis* agrees with *S. stejnegeri* in the basic formation of the snout and mouth, structures of the principal simple dorsal and anal rays, squamation, shape and arrangement of the pharyngeal teeth, number of the vertebrae, and principal body proportions. These similarities clearly indicate their close relationship, and seem sufficient to recognize the new species as congeneric with *S. stejnegeri*. Status of the genus *Scaphognathops* still remains obscure. On the basis of similarities in the features of the mouth region and simple dorsal rays, the genus appears related to the Southeast Asian genus *Scaphiodonichthys*. *Scaphiodonichthys acanthopterus* is also recorded from Laos.

Introduction

Described herein is a new cyprinid species referred to the genus *Scaphognathops* collected in the Mekong River and its tributaries in central and southern Laos.

The genus *Scaphognathus* was proposed by Smith (1931: 21-22) for *Scaphognathus stejnegeri*, which was described from a single specimen taken from the Mekong in northeastern Thailand. Smith characterized the genus by the combination of deep body, absence of barbels, highly modified lower jaw formed into a sharp-edged, slender, bony scoop with lower lips restricted to sides and deficient medially, an osseous and denticulated principal simple dorsal ray followed by numerous branched rays, and an osseous and entire principal simple anal ray followed by six branched rays. The generic name was later replaced with *Scaphognathops* (Smith, 1945: 208) because of the preoccupation of *Scaphognathus* in reptiles. Since the original description, there had been no record of the genus until Taki (1968: 4, 12) reported its occurrence in Laos.

In the course of my 1970~1971 collection of fish in Laos, I came across a number of specimens which are referable to the genus *Scaphognathops* but apparently differ from *S. stejnegeri* in their overall appearances of the

mouth region and some meristic characters. These specimens were tentatively identified as *Scaphognathops* sp. in Taki (1974: 146). Subsequent study of this species has confirmed the adequacy of its assignment to *Scaphognathops*, and revealed many unique characters that warrant its recognition as a new species. The description of *Scaphognathops mekongensis* is based on a total of 33 type specimens and 29 other samples collected from the Mekong system in Laos. A descriptive note, based on six specimens from the same area, is also made of *S. stejnegeri* in order to supplement its original description and compare it with the present new species.

Material and methods

Type specimens and other samples of *S. mekongensis* were deposited at the National Science Museum, Tokyo (NSMT-P) and the Institute for Breeding Research, Tokyo University of Agriculture (IBRP). Collecting data for *S. mekongensis* and *S. stejnegeri* are shown preceding the description of each species.

Measurements which require explanation are as follows: Head length includes opercular flap; length of caudal fin is expressed as the distance from the base of middle caudal ray to the tip of the upper lobe of the fin. All measurements were made with dial calipers,

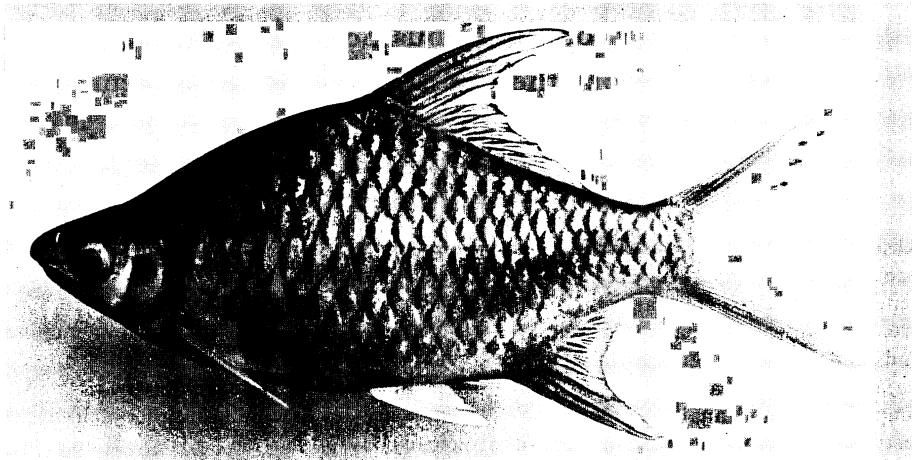


Fig. 1. *Scaphognathops mekongensis* sp. nov., holotype, 140.0 mm SL, NSMP-P. 17881; collected in the Mekong River at Hatsalao, southern Laos, on Apr. 23, 1971.

read to the nearest 0.1 mm, and are expressed as percent of standard length (SL) or head length (HL). Some counts employed in this study require explanation as follows: Lateral line scale counts include all tube-bearing scales on the caudal fin; scale counts for transverse series above lateral line are made for the left side series containing the posteriormost free-margined predorsal scale and those below lateral line are for the series including the posteriormost free-margined preanal scale, and the predorsal or preanal scale is counted as 0.5; predorsal scale counts are expressed as a number of free-margined scale mounting on the median dorsal line. Counts for vertebrae and vertical fin rays and observation of skeletons were made on radiographs.

Scaphognathops mekongensis. sp. nov.
(Figs. 1, 2A, 3A)

Scaphognathops sp. Taki, 1974: 146, fig. 141, Mekong River at Sithan Tay, Hatsalao, Bang Lieng and the Khong Falls, Laos, Nam Khon R. near Tha Ngon, Laos, Bang Lieng R. at Bang Lieng, Laos (description).

Holotype—140.0 mm SL, sex not determined, collected in the Mekong River at Hatsalao, near Pakse, southern Laos, on Apr. 23, 1971, by the author, by means of beach seine, Cat. No. NSMT-P. 17881. (Fig. 1)

Paratypes—A total of 32 specimens were

designated as paratypes: 1 specimen, 134.0 mm SL, collected with the holotype, NSMT-P. 17882; 1, 157.5 mm SL, from the type locality, Apr. 2, 1971, IBRP 5451; 27 (3 cleared; 1, 90.2 mm SL—Fig. 2A; 1, 105.2 mm SL—Fig. 3A), 76.9~154.5 mm SL, Mekong R. at mouth of Bang Lieng R. and Bang Lieng R. near its mouth, at Bang Lieng, about 50 km south of Pakse, southern Laos, May 26, 1970, IBRP 4028; 1, 80.0 mm SL, Mekong R. at the Khong Falls, southern Laos, Jun. 2, 1970, IBRP 4957; 1, 91.0 mm SL, Mekong R. at Sithan Tay, near Vientiane, central Laos, May 9, 1971, IBRP 5751; 1, 83.6 mm SL, Nam Khon R. about 1 km upstream from its mouth to Nam Ngum R., near Tha Ngon, central Laos, Jun. 17, 1970, IBRP 4830.

Other material—Twenty-nine juvenile specimens were collected: 20, 49.2~61.0 mm SL, Mekong R. at Sithan Tay, near Vientiane, central Laos, Apr. 9, 1971, IBRP 5519; 9, 50.0~62.2 mm SL, locality as IBRP 5519 above, Apr. 10, 1971, IBRP 5571.

Diagnosis

A species of the genus *Scaphognathops* with terminal or subinferior mouth, wide lower jaw, and minute, rudimentary lower lip confined to each side of lower jaw near corner of mouth; branched dorsal soft rays 9, branched anal soft rays 5, gill-rakers 3~5+12~13=16~18.

Description

Except where otherwise noted, the description is based on the holotype and 32 paratypes. Counts for fin rays, scales, gill-rakers and vertebrae are given in Table 1; proportional measurements are in Table 2.

Body deep, compressed; greatest depth at origin of dorsal fin; caudal peduncle strongly compressed. Head small, short; interorbital space moderately wide. Tip of snout bluntly pointed, prominent, forming a pendulous rostral fold (terminology following Weber and de Beaufort, 1916) covering upper lip medially; a lateral fold (new term) on each side of snout, covering upper lip laterally (Fig. 2A). Mouth small, terminal to subinferior; upper lip thin, separated from rostral fold by a deep groove, connected with lower lip around mouth corners; lower lip rudimentary, restricted to each side of lower jaw near mouth corner and broadly deficient medially, separated from skin of chin by shallow postlabial grooves; front margin of lower jaw

forming a sharp, wide, horny edge; the edge consisting of a horny sheath V-shaped in vertical section, overhung by upper lip when mouth is closed, connected with thick layers of gnathic muscle covered by thick skin (Fig. 2A). No barbels. Nostrils nearer to eye than tip of snout. Eyes large, with a narrow but distinct eyelid-like margin. Preoperculum and operculum rather narrow; opercular flap broad.

Gill-rakers small, short; those on upper limb slender; those on lower limb coarsely set, conical to papillate. Pharyngeal teeth (from 3 specimens, IBRP 4028) biserial, 3.5-5.3; teeth in outer row small, slender, somewhat hooked; uppermost tooth in main row (5th tooth in main row, according to the definition by Chu, 1935) greatly recurved, distal portion swollen, edging in a spoon-like hook, grinding surface oblique, entire; lowermost tooth in main row (1st tooth in main row, according to Chu, 1935) small, with a rounded tip; remaining three teeth in main row well

Table 1. Counts for meristic characters and their frequencies and means for 62 specimens of *S. mekongensis* and 6 specimens of *S. stejneri*. Gill-raker counts are from IBRP 4028 (7 specimens), 5451 (1) and 5519 (7).

Character	<i>S. mekongensis</i>				<i>S. stejneri</i>		
	Holo-type	Specimens including holotype			N	Counts and frequencies (N)	\bar{x}
		N	Counts and frequencies (N)	\bar{x}			
Simple dorsal rays	4	62	4(62)	4.00	6	4(6)	4.00
Branched dorsal rays	9	62	9(62)	9.00	6	13(1), 14(4), 15(1)	14.00
Simple anal rays	3	62	3(62)	3.00	6	3(6)	3.00
Branched anal rays	5	62	5(62)	5.00	6	6(6)	6.00
Total pectoral rays	17	60	15(1), 16(9), 17(41), 18(9)	16.97	6	16(5), 17(1)	16.17
Total pelvic rays	9	62	9(62)	9.00	6	9(6)	9.00
Principal caudal rays	19	60	19(60)	19.00	6	19(6)	19.00
Lateral line scales	29	54	27(3), 28(26), 29(21), 30(4)	28.48	5	28(3), 30(2)	28.80
Scales in transverse series above lateral line	5.5	57	5.5(56), 6.5(1)	5.52	5	5.5(5)	5.50
Scales in transverse series below lateral line	4.5	60	4.5(36), 5.5(24)	4.90	5	4.5(4), 5.5(1)	4.60
Predorsal scales	9	49	8(3), 9(39), 10(7)	9.08	6	9(6)	9.00
Scales around caudal peduncle	16	53	16(53)	16.00	6	16(6)	16.00
Gill-rakers on upper limb		15	3(3), 4(9), 5(3)	4.00	5	3(4), 4(1)	3.20
Gill-rakers on lower limb		15	12(9), 13(6)	12.40	5	8(3), 9(2)	8.40
Total gill-rakers		15	16(11), 17(2), 18(2)	16.40	5	11(2), 12(3)	11.60
Vertebrae	36	62	36(61), 37(1)	36.02	6	36(6)	36.00

developed, not much compressed, little hooked, grinding surface broad, oblique, entire (Fig. 3A).

Lateral line complete, decurved downward running in lower side of trunk and in middle of caudal peduncle, extending posteriorly to two or three scales on caudal fin; sensory tubes simple. Scales large except those on thorax. Dorsal fin high, with a low scaly sheath along anterior portion of its base, free (=distal) margin concave; simple soft rays osseous; principal (=4th) simple ray elongate, distal 1/4 to 1/3 flexible, serrated with about 15 denticles along its hind margin; origin of dorsal fin about midway between tip of snout and base of caudal fin and opposite to or slightly in advance of insertion of pelvic fins; interneural spine of principal simple ray inserted between neural spines of 11th and 12th or rarely 12th and 13th vertebrae. Anal fin with a basal scaly sheath, free margin concave; simple soft rays osseous; principal (=3rd) simple ray prolonged, entire, distal 1/6 to 1/5

flexible; interhemal spine of principal simple ray inserted between hemal spines of 21st and 22nd or rarely 22nd and 23rd vertebrae. Caudal fin broad, deeply forked; each lobe pointed. Pelvic fins slightly shorter than pectoral fins, extending slightly beyond vent, with a free axillary scale.

Coloration of fresh-caught specimens. Body uniformly silvery, top of head and back of body dark with grayish to bluish tint, ventral surface of body whitish. Operculum silver to golden. Each scale on back and sides with a black, crescent base. Membranes of vertical fins blackish, paired fins pale yellow, sparsely covered with dark melanophores.

Distribution—*S. mekongensis* occurs in main-streams and affluents of the lower Mekong. In central Laos it was collected at Tha Ngon and Sithan Tay; in southern Laos it was

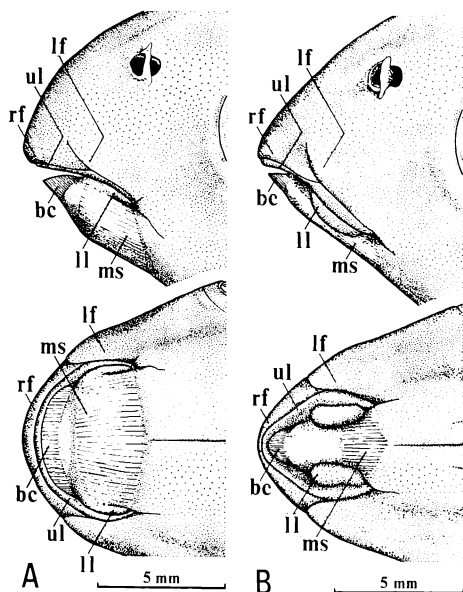


Fig. 2. Lateral and ventral aspects of snout and mouth: A) *Scaphognathops mekongensis* (90.2 mm SL) and B) *Scaphognathops stejneri* (88.5 mm SL). Abbreviations: bc, horny edge of lower jaw; lf, lateral fold; ll, lower lip; ms, gnathic muscle; rf, rostral fold; ul, upper lip.

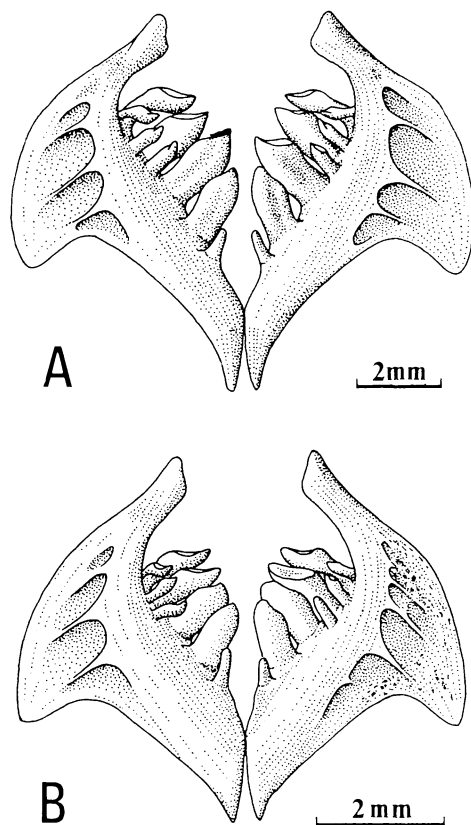


Fig. 3. Fronto-dorsal aspects of pharyngeals and their teeth: A) *Scaphognathops mekongensis* (105.2 mm SL) and B) *Scaphognathops stejneri* (64.0 mm SL).

found from Hatsalao, Bang Lieng, south to the Khong Falls near the Cambodian border. The species probably ranges further southward in the Cambodian Mekong, but the collection data indicate that the fish does not inhabit, or rarely inhabits, northern Laos. *S. mekongensis* is sympatric with *S. stejnegeri*.

Etymology—Distribution of the species is apparently restricted to mainstreams and branches of the Mekong River, from which it was named.

Scaphognathops stejnegeri (Smith)
(Figs. 2B, 3B)

Scaphognathus stejnegeri Smith, 1931: 22~23, figs. 10, 11, Mekong River near Ban deMekong, northeastern Thailand (original description): holotype, USNM 90303.

Scaphognathops stejnegeri; Smith, 1945: 208~209, fig. 36 (generic name to replace *Scaphognathus*, preoccupied in reptiles; reference to original description); Taki, 1968: 4, 12, fig. 13, Mekong R. at Vientiane, market at Pakse, Laos (in list, range), 1974: 145, fig. 140, Nam Khon R. at Tha Ngon, Mekong R. at the Khong Falls, Laos (description).

Material examined—1 specimen, 63.5 mm SL, collected in the Mekong R. at the Khong Falls, southern Laos, on Jun. 2, 1970, NSMT-P 17883; 2 (1, 64.0 mm SL—cleared, Fig. 3B), 46.0 and 64.0 mm SL, Nam Khon R. about 1 km upstream from its mouth to Nam Ngum R., near Tha Ngon, central Laos, Jun. 17, 1970, IBRP 4378; 1, 88.5 mm SL, locality as IBRP 4378 above, July. 18, 1970, IBRP 4410 (Fig. 2B).

Descriptive note—Body deep, compressed; greatest depth at origin of dorsal fin. Head small; interorbital space narrow. Snout pointed, forming a rostral fold covering upper lip medially and a lateral fold on each side covering upper lip laterally (Fig. 2B). Mouth small, terminal, oblique; upper lip thick, separated from rostral fold by a deep groove, connected with lower lip around mouth corners; lower lip thick, fleshy, restricted to each side of lower jaw and deficient medially, separated from skin of chin by postlabial grooves laterally; median portion of lower jaw forming a sharp, narrow, scoop-like, horny

edge; chin narrow, with thin layers of gnathic muscle covered by thick skin (Fig. 2B). No barbeles. Eyes large, with a narrow but distinct eyelid-like margin. Opercular flap broad.

Gill-rakers small, coarsely set; those on upper limb slender; those on lower limb conical to papillate. Pharyngeal teeth biserial, 3.5.5.3; teeth in outer row small, slender, somewhat hooked; those in main row large except lowermost (1st tooth in main row, according to Chu, 1935) round-tipped tooth, not much compressed, little hooked, grinding surface broad, oblique, entire (Fig. 3B).

Lateral line complete, sensory tubes simple. Dorsal fin with a basal scaly sheath; principal (=4th) simple soft ray prolonged, osseous, denticulated behind; origin of dorsal fin opposite to or slightly in advance of insertion of pelvic fins; interneural spine of principal simple ray inserted between neural spines of 11th and 12th or 12th and 13th vertebrae. Anal fin with a basal scaly sheath; principal (=3rd) simple soft ray long, osseous, entire; interhemal spine of principal simple ray inserted between hemal spines of 21st and 22nd vertebrae.

Coloration of fresh-caught specimens. Body silvery, back dark, ventral surface whitish. Each scale on back and sides with a dark crescent base. All fins with blackish membranes.

Distribution—*S. stejnegeri* has been recorded in the lower Mekong basin from Vientiane, Laos south to the Khong Falls near the boundary between Laos and Cambodia. This species is sympatric with *S. mekongensis*, and apparently does not occur, or rarely occurs, in the upper Mekong.

Remarks—The Laotian specimens examined in this study do not agree with the description of the holotype (Smith, 1931: 22~23) in the number of the predorsal scales. Whereas the scale count is 12 in the holotype, it is invariably 9 in the specimens at hand. The difference may have resulted from differences in counting methods.

Comparison of *S. mekongensis* and *S. stejnegeri*, and discussion on their status

Despite the divergent appearances of the mouth region, *S. mekongensis* and *S. stejnegeri*

Table 2. Measurements in percent of standard length or head length of the holotype and 32 paratypes of *S. mekongensis* and five specimens of *S. stejnegeri*. \bar{x} and N for *S. mekongensis* are calculated on both holo- and paratypes.

Character	<i>S. mekongensis</i>				<i>S. stejnegeri</i>		
	Holotype	Paratypes Range	\bar{x}	N	Range	\bar{x}	N
Standard length (mm)	140.0	76.5~157.5		33	55.2~88.5		5
In % of standard length:							
Head length	26.3	24.9~26.9	26.0	33	26.42~8.9	27.2	5
Head depth at occiput	22.5	21.2~24.9	22.7	33	22.6~23.4	23.0	5
Body depth	45.8	41.6~48.8	44.2	33	38.4~46.3	41.6	5
Body width	16.6	14.7~19.4	16.6	32	14.9~17.3	15.6	5
Caudal peduncle length	15.9	14.3~17.4	15.6	33	15.3~15.8	15.6	5
Caudal peduncle depth	14.6	13.7~14.8	14.2	33	13.1~14.1	13.6	5
Predorsal length	57.3	54.5~57.3	56.1	33	56.4~57.7	57.0	5
Preanal length	76.0	75.1~78.4	76.6	33	75.4~76.7	76.1	5
Prepelvic length	54.1	53.6~56.9	55.0	33	53.7~56.3	55.1	5
Dorsal fin base	25.0	23.3~26.8	24.8	33	29.0~34.1	31.1	5
Anal fin base	15.2	14.1~15.9	14.9	33	14.4~15.9	14.9	5
4th simple dorsal ray	31.6	27.4~33.0	30.2	29	30.4~36.2	32.6	3
3rd simple anal ray	25.0	22.9~25.7	24.0	23	24.1~25.0	24.7	3
Pectoral fin length	23.0	21.2~24.1	22.6	32	21.1~23.1	22.2	5
Pelvic fin length	22.1	19.3~22.7	20.9	32	20.8~22.6	21.9	5
Caudal fin length	40.0	35.0~40.5	38.1	30	36.3~38.9	37.5	5
Head length (mm)	36.8	21.3~38.5		33	15.2~22.5		5
In % of head length:							
Snout length	34.0	29.2~35.6	32.4	33	29.9~33.5	31.4	5
Orbit diameter	28.5	28.2~33.3	30.0	33	30.8~36.8	33.8	5
Postorbital length	41.3	39.4~44.2	42.0	33	35.5~38.6	37.1	5
Interorbital width	39.4	37.3~42.4	39.4	31	33.0~35.9	34.1	5
Width of lower jaw at mouth corners	25.0	22.1~25.8	24.1	31	8.6~10.3	9.3	5

share all fundamental structural characters of the snout and mouth. The snout has a rostral fold on front and lateral folds on sides; barbels are absent; the lower jaw forms a sharp horny edge; the lower lip is deficient medially and restricted to sides of the lower jaw (Figs. 2A, B). The two species are also similar in the structures of the principal simple dorsal and anal rays (osseous and denticulated in the dorsal and osseous and entire in the anal), arrangement and shape of the pharyngeal teeth (Figs. 3A, B), squamation (Table 1), number of the vertebrae (Table 1), and the body proportions (Table 2).

S. mekongensis and *S. stejnegeri* are different in the number of the branched dorsal and anal rays and gill-rakers (Table 1). The two species are also distinguishable by the shape and

degree of modification of the parts of the mouth region: *S. mekongensis* has a more rounded snout, a lower-positioned mouth, less developed lower lips (Figs. 2A, B), a much wider lower jaw (Figs. 2A, B; Table 2), and a wider interorbital space (Table 2).

The discovery of the second species of *Scaphognathops* requires the following emendation of the generic diagnosis by Smith (1931: 21~22): Mouth terminal to subinferior; lower jaw narrow or broad; lower lip rudimentary or large and thick; branched dorsal rays more than 9; branched anal rays 5 or 6; pharyngeal teeth biserial, 3·5-5·3. The two species of the genus can be distinguished by the following key:

1. Branched dorsal rays 9; branched anal rays 5; total gill-rakers 16~18; interorbital

width more than 37% of head length; width of lower jaw at mouth corners more than 22% of head length; lower lip rudimentary *S. mekongensis*, sp. nov.

2. Branched dorsal rays 13~15; branched anal rays 6; total gill-rakers 11~12; inter-orbital width less than 36% of head length; width of lower jaw at mouth corners less than 11% of head length; lower lip thick, fleshy *S. stejnegeri*

Relationship of *Scaphognathops* with other cyprinid genera are difficult to interpret. Smith (1931: 21~22), who compared the genus with the East Asian genus *Sarcocheilichthys*, stated that in some members of *Sarcocheilichthys* the lower jaw is somewhat similar to that of *Scaphognathops*, but the mouth is inferior and the principal simple dorsal ray is neither strongly ossified nor denticulated. The South and Southeast Asian genus *Aspidoparia* also has a bony-edged lower jaw without lip, however, according to Smith (1945: 123), the principal simple dorsal ray is not osseous and entire.

The Southeast Asian genus *Scaphiodonichthys* shows a close affinity to *Scaphognathops* in many respects. I have examined five specimens of *Scaphiodonichthys acanthopterus* (originally described under the generic name *Scaphiodonichthopsis* by Fowler, 1934: 119). In this species the formation of the mouth region is similar to that of *Scaphognathops* except that the lateral folds are inconspicuous or absent and the lower lip is vestigial. The principal simple dorsal ray is also osseous and serrated. According to Fowler (1934: 119), however, the pharyngeal teeth are triserial, with a dental formula 2.3.5~4.3.1.

Sorescu (1968), on the basis of their pectoral girdles, assigned *Sarcocheilichthys* and *Aspidoparia* to the subfamilies Gobiinae and Cultrinae respectively. For *Scaphognathops* and *Scaphiodonichthys*, however, no attempt has been made by recent authors to clarify their status of subfamily level. I have placed both *Scaphiodonichthys* and *Scaphognathops* in the subfamily Barbinae (Taki, 1974: 144~146), but, as noted in that article, the assignment is provisional. Based on my observation of pharyngeal teeth in Southeast Asian cyprinids (unpublished) and the comprehensive work by

Chu (1935) on pharyngeals and their teeth in Chinese cyprinids, the two-rowed pharyngeal teeth in *Scaphognathops* may be an exceptional case in the subfamily Barbinae, in which the teeth are arranged mostly in three rows or the genus may be included in a subfamily other than the Barbinae.

In a sense of postscript the record of the species below is appended.

Scaphiodonichthys acanthopterus (Fowler)—1 specimen (cleared), 59.4 mm SL, collected in the Nam Done River near Luang Prabang, northern Laos, on Jun. 15, 1970, Cat. No. IBRP 4152; 4. 48.6~51.0 mm SL, Nam Mo R. at Nam Mo, central Laos, Apr. 22, 1974, IBRP 6076.

Acknowledgements

Dr. Fujio Yasuda and Kiyoshi Fujita, Tokyo University of Fisheries, and Tousei Urushido, the Institute for Breeding Research, Tokyo University of Agriculture, have been of great help in the preparation of the manuscript. Sincere appreciation is also extended to Dr. Norio Kondo, the Institute for Breeding Research, Tokyo University of Agriculture, and Dr. Katsuzo Kuronuma, for their invaluable suggestions given to my work on Southeast Asian fishes.

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ラオス域メコン河系から得られたコイ科

Scaphognathops 属の1新種

ラオス域内のメコン河とその支流から得られたコイ科の1新種 *Scaphognathops mekongensis* を記載した。*Scaphognathops* 属は、やや鋭利な角質縁を形成し中央部に下唇を欠く下顎、棘状で鋸歯を有する背鰭の主不分枝軟条、棘状で平滑な臀鰭の主不分枝軟条などにより特徴づけられ、従来同属には、同じくメコン水系から報告されている *S. stejnegeri* 1種のみが知

られていた。

本新種は、下顎とその角質縁が幅広く、下唇の発達 がきわめて悪く、背鰭分枝軟条数 9、臀鰭分枝軟条数 5. 鰓耙数 $3\sim5+12\sim13=16\sim18$ を有する点で、下顎 と角質縁の幅が狭く、下唇が比較的大きく、背臀分枝 軟条数 13~15. 臀鰭分枝軟条数 6. 鰓耙数 $3\sim4+8\sim 9=11\sim12$ を示す *S. stejnegeri* と明らかに区別され る。他方両種は、吻・口部の基本的構成、背・臀鰭の 不分枝軟条の性状、各列の鱗数、咽頭歯の形状と配 列、脊椎骨数、体各部の主要計測形質においてほとん ど完全に一致している。この類似性は、両種が密接な 類縁関係にあることを明白に示しており、また、本新 種が *Scaphognathops* 属に帰属すると判定するに十分 であると考えられる。

Scaphognathops 属のコイ科内における系統・分類 学的位置についてはいまだ不明な点が多いが、吻・口 部および背鰭不分枝軟条の性状における類似性からみ て、東南アジア産の *Scaphiodonichthys* 属と類縁性 をもつものと考えられる

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