

A New Sparoid Fish, *Gymnocranius elongatus*, from the Southern South China Sea

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Abstract A new sparoid fish, *Gymnocranius elongatus* is reported from the southern South China Sea and the sea off the coast of the northwestern Australia. The fish described by Bleeker (1877) under the name of *G. griseus* is considered to belong to the present species. A detailed comparison of the species with another *Gymnocranius* species, which is the commonest fish among the genus in the South China Sea and has been usually identified as *G. griseus* (Temminck and Schlegel), is given. Need for a future study on the specific name of the latter is suggested.

The research vessel Changi of the Research Department, Southeast Asian Fisheries Development Center, has carried out exploratory trawl fishing on the continental slope of the southwestern part of the South China Sea since January, 1970. Naked-headed sea bream, *Gymnocranius*, occupies 2.5~4% in weight of trawl catch by R/V Changi, and is usually composed of a single species identified as *Gymnocranius griseus* (Temminck and Schlegel). In October 1971, R/V Changi visited the sea off the coast of Sarawak of Borneo Island, where some 45 individuals of another type of *Gymnocranius* were caught together with more than one thousand individuals of *G. griseus*. Thereafter, it was found that the new type of the fish also occurred in the sea east to southern Malay Peninsula. A detailed examination of the specimens of the new type and comparison with the specimens of *G. griseus* led the author to the establishment of a new species which is reported here under the name of *Gymnocranius elongatus*.

Gymnocranius elongatus, sp. nov.

Onaga-meichidai (new Japanese name)
(Figs. 1-5)

Gymnocranius griseus (non Temminck
and Schlegel); Bleeker, 1877:

Holotype. RD (Research Department, Southeast Asian Fisheries Development Center) No. 7110001, an immature male specimen, 181 mm in standard length; caught by trawl off Sarawak, lat. 3°31'~3°37' N., long. 110°15'~110°23' E., depth of the sea 67~74 m. on Octo-

ber 21st, 1971.

Paratypes. RD No. 7110002, an immature female specimen, 163 mm in standard length; NMS (National Museum of Singapore) No. 2355, an immature male specimen, 196 mm in standard length; USBS (School of Biological Sciences, University of Science, Malaysia) No. 720002, a young male specimen, 122 mm in standard length; other data as for holotype. RD·d·7101~7106*, 6 individuals, 120~181 mm in standard length; RD·s·7101~7113*, 13 individuals, 162~181 mm; RD·t·7101 and 7102, 2 individuals, 179 and 207 mm; caught by trawl off Sarawak, lat. 3°31'~4°32' N., long. 109°42'~110°23' E., depth of the sea 67~114 m, on October 21st and 22nd, 1971. RD·s·7201~7203, 3 individuals, 161~184 mm in standard length, caught by trawl off the eastern coast of Malay Peninsula, lat. 2°29'~2°40' N., long. 104°48'~104°51' E., depth of the sea 58~61 m, on January 19th and 20th, 1972.

Among the above specimens, locating of the 1st hemal arch and examination of stomach contents were made on specimens with **d**, **s** and **t** in their catalogue numbers after measuring proportional length of body parts. Thereafter, skeletons were examined from specimens which have either **s** or **t** in their catalogue numbers.

* RD·d·7101, 7104 and 7105 and RD·s·7107 and 7111, are now ZIUT52946, 52947, NSMT-P. 17800, ZIUT52948 and 52949. ZIUT: Zoological Institute, Faculty of Science, the University of Tokyo. NSMT: Department of Zoology, National Science Museum, Tokyo.

Specimens of *G. griseus* used for comparative study. RD No. 7110003~7110005, 3 individuals, 116~191 mm in standard length; USBS No. 720003, 164 mm; other data as for holotype. RD·d·7107~7127*, 21 individuals, 107~200 mm in standard length; RD·s·7114~7120*, 7 individuals, 150~187 mm, RD·t·7103, 200 mm; other data as for RD·d·7101 et al. RD·s·7204~7208, 5 individuals, 158~211 mm in standard length. other data as for RD·s·7201 et al.

Diagnosis

A species of *Gymnocranius* once described by Bleeker (1877) under the name of *G. griseus* Bleeker, but quite different from *G. griseus* (Temminck and Schlegel). The species differs from all the other species of the genus in having a deeply forked caudal fin with its median rays shorter than eye and the ratio of its longest ray length over the median ray length being about 3.6; narrow suborbital bones with suborbital width of about 5 in head length; and caudal fin with red margins.

Description

The morphometric and meristic data of the holotype and three of the paratypes are given in Table 1. The data which show the degree of variation in proportional measurements of body parts and of some bones are given in Tables 2 and 3 and in Fig. 5. In the following

description the external characters are described mainly from the type specimens shown in Table 1, while the variations in proportional measurements are based upon the measurement on all the specimens. The internal characters, especially the skeletal structures, are described from the specimen RD·s·7101, 178 mm in standard length with supplementary observation on the other specimens, 120~207 mm in standard length. Live color of the fish was observed on live individuals among catches, and color pictures were also taken to ascertain the field observations.

Body ovate, compressed, its width about 2.7 in depth. Dorsal and ventral profiles almost similarly convexed, tip of snout only slightly below axis of body. Dorsal outline of head gently arched. Prefrontals prominent, forming a shallow hollow between them in dorso-posterior region of snout. Eyes big, pear-like, their fleshy margins indent upward, interorbital space narrowest above pupils. Two nostrils on each side, close to eye, the anterior one with a fleshy flap, the posterior nostril much bigger than the anterior one, longer vertically than horizontally. Preorbitals rather narrow, sheathing maxillary almost entirely. Jaws equal, mouth moderate and slightly oblique, maxillary scarcely reaching below anterior margin of eyes, lips papillose. Preopercle

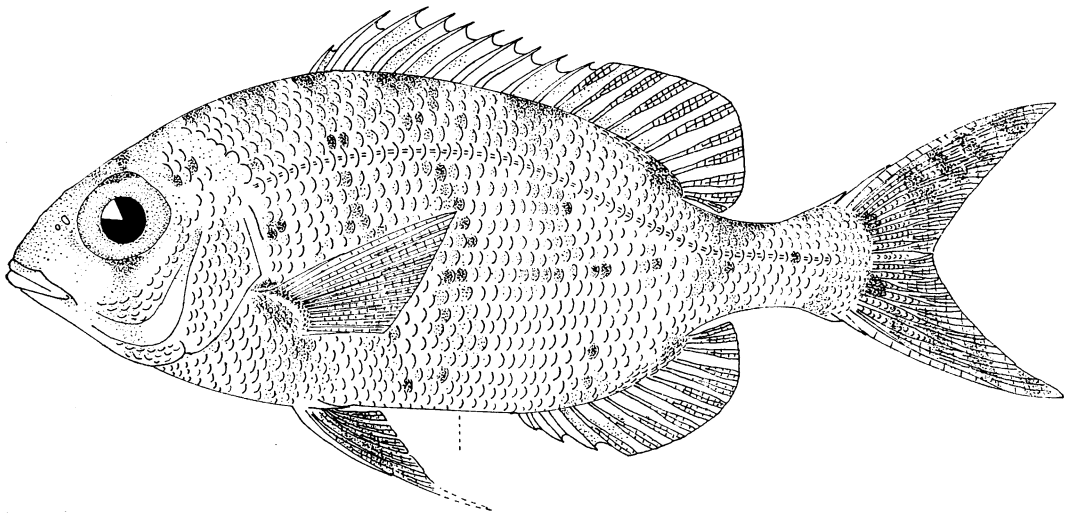


Fig. 1. *Gymnocranius elongatus* sp. nov., 181.0 mm in standard length.

* RD·d·7110, 7117 and 7124, and RD·s·7116 and 7119 are now ZIUT52951, 52952, NSMT-P. 17801, ZIUT52953 and 52954.

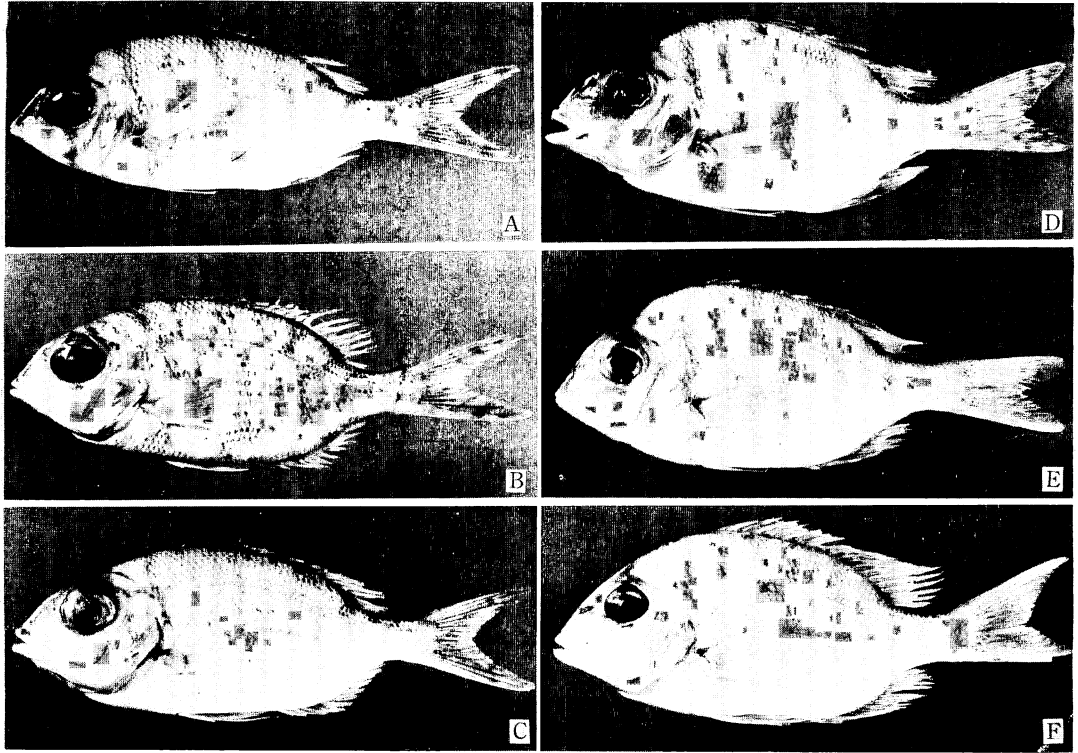


Fig. 2. Photographs of *Gymnocranius elongatus* (A-C) and *G. griseus* (D-F).
A, 122 mm; B, 163 mm; C, 196 mm; D, 116 mm; E, 164 mm;
F, 195 mm; in standard length.

smooth on both posterior and inferior margins. Opercle without spine, save for a rudimentary one on posterior edge.

On each side of upper jaw, 2~3 stout, curved canines of moderate size arranged anteriorly in an outer row. Posterior outer teeth in single row consisting 3~7, mostly 5, stout conical teeth. A band of villiform teeth on inner side. Each side of lower jaw with 2~4 anterior canines, usually the last one well developed and stout; the posterior part of the lower jaw with 7~13, mostly 9 or 10, stout conical teeth in an outer row, well separated from canines. Inner side of the lower jaw with a band of villiform teeth anteriorly, slightly reaching 2nd conical tooth (Fig. 4). A row of several recruiting conical teeth is often seen in dentary, embedded just below the row of existing conical teeth.

Dorsal spines rather flexible. First dorsal spine originates above latter half of base of pectoral fin. Third or 4th spine longest, decreasing in height posteriorly; 9th or 10th spine,

aside from 1st spine, shortest, about 1.4 times shorter than longest spine. Longest dorsal ray, 5th or 6th, as long as or slightly shorter than longest spine. Anal spines strong, 3rd longest. First anal ray longest, shorter than dorsal. Pectoral fin moderate, far from reaching 1st anal spine. Ventral fins originate below posterior end of pectoral base, 1st ray elongated, reaching 1st anal spine. Caudal fin deeply forked, median ray about 1.6 times shorter than eye; 1st branched ray of each lobe longest, about 3.6 times as long as median one. For both rays, measurements were made on the part uncovered by scales. When measured from hypural, median ray about 1.2 and about 2.9 times as short as eye and longest ray, respectively. Scales moderate, finely ctenoid; absent on dorsal surface of head, preorbitals, lower jaw, maxillary and limbs of preopercle. An isolated short band of scales present on supra-temporal region. Most part of membranes of caudal fin finely scaled.

Table 1. Counts and proportional measurements of the types of *Gymnocranius elongatus*.

Items	Holotype		Paratypes	
Specimen number	RD7110001	NMS2355	RD7110002	USBS720002
Sex	♂	♂	♀	♂
Standard length in mm	181.0	196.0	163.0	122.0
Total length in mm	239.0	256.0	214.0	162.0
Body weight in g	204.5	234.0	148.2	57.4
Dorsal fin ray	X, 10	X, 10	X, 10	X, 10
Anal fin ray	III, 10	III, 10	III, 10	III, 10
Pectoral fin ray	14	14	14	14
Pored scales on lateral line	48	48+ (1)	47+ (1)	47+ (1)
Scales above lateral line to dorsal origin	1/2 6	1/2 6	1/2 6	1/2 6
Scales below lateral line to anal origin	14 1/2	14 1/2	14 1/2	14 1/2
Gill rakers on first arch	3+5	3+5	3+5	2+5
Pyloric caeca	3	3	3	3
In standard length				
Head length	2.97	2.87	2.81	2.91
Depth of body	2.40	2.37	2.37	2.44
Length of pectoral fin	4.03	4.09	3.98	4.02
Length of ventral fin	3.86	4.03	broken distally	3.94
In head length				
Snout length	2.69	2.74	2.64	2.69
Interorbital width	2.96	3.14	2.98	2.84
Diameter of eye	2.75	2.63	2.59	2.75
Suborbital width	4.73	4.82	4.83	5.00

Ground color of body of live specimens silver with golden gleam. Dorsal part of snout to occipital dark brown. Margin of dorsal fin orange. Margins of caudal fin, especially posterior margin, red. Lips reddish. About eight transverse dark bars on body, clearer in younger specimens (Figs. 1 and 2); 1st most prominent, from interorbital through eye up to interopercle, perpendicular to body axis; 2nd~6th often distinct only on back, running backwards and downwards, some extending into membranes of dorsal and anal fins; 7th on peduncle, running forwards and downwards; 8th on posterior portion of peduncle, perpendicular to body axis. Proximal part of pectoral fin brown. Four to five transverse bars on each lobe of caudal fin. Ventral fin dark, forming 3 wide bands in young specimens. Black spots irregularly scattered on body, densest on flank. Scales grayly spotted basally, distinct only above lateral line in larger specimens.

In formalin, ground color of body olive for first few months, pale purple to pale orange later, ventral side more or less whitish. Red and orange on margins of dorsal and caudal fins

and on lips disappear soon without leaving any trace. Dark bars on body and fins, black spots

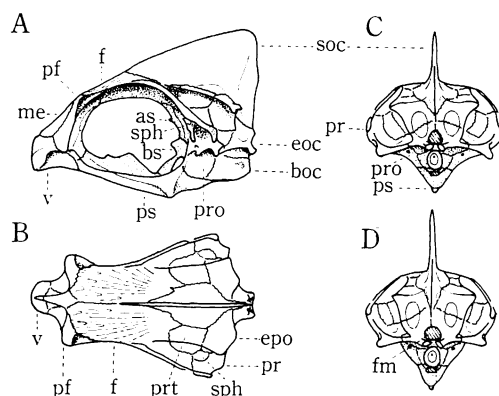


Fig. 3. Cranium of *G. elongatus* (A-C) from the specimen of 178 mm in standard length and of *G. griseus* (D) from the specimen of 172 mm in standard length. A, from side; B, from above; C and D, from behind. as, alisphenoid; boc, basioccipital; bs, basisphenoid; eoc, exoccipital; epo, epiotic; f, frontal; fm, foramen magnum; me, mesethmoid; pf, prefrontal; pr, pterotic; pro, prootic; prt, parietal; ps, parasphenoid; sph, sphenotic; soc, supraoccipital; v, vomere.

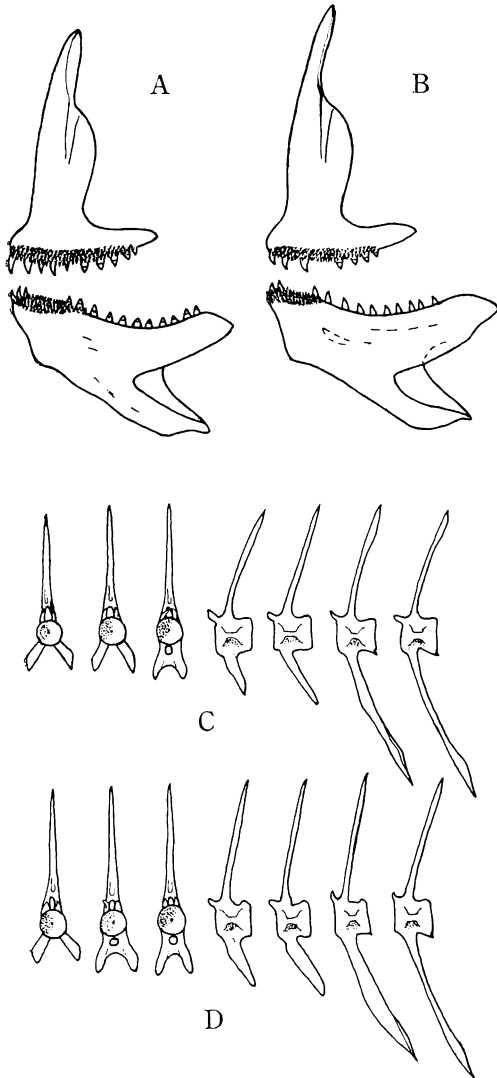


Fig. 4. Jaws (A and B) and 6th-12th vertebral columns (C and D) of *G. elongatus* (A and C) and *G. griseus* (B and D), from the same specimens as in Fig. 3.

A and B, premaxillary and dentary from inside; C and D, 6th-8th columns from front and 9th-12th columns from side.

on body, gray spots on scales last for a considerably long time, not less than one year (Fig. 2).

Gill rakers on first arch 8, short and knob-like, each with villiform spinules; 3 on upper limb, uppermost one often rudimentary obsolescent; 5 on lower limb.

Cranium rather high, height about 63% of its

length; prefrontals spread outward; viewed from behind foramen magnum like a regular triangle with rounded corners in shape (Fig. 3 A~C, Table 3). Premaxillary pedicel well developed, ramus about 64% of pedicel (Fig. 4A). Vertebrae 24, 10 on trunk; 1st hemal arch usually on 8th vertebra (in one specimen out of 21 specimens examined hemal arch first closed on 7th vertebra, but with quite thin layer of bone); 1st hemal spine slightly thicker than others (Fig. 4C).

Distribution

As mentioned before, *G. elongatus* was first found in the sea off the coast of Sarawak in October 1971. During this trip, October 15th ~22nd, R/V Changi made 37 trawl hauls in this area and caught a total of 435 kg of *Gymnocranius*, which consisted of about 45 individuals of *G. elongatus* and about 1420 individuals of *G. griseus*.

During the period from October 1971 through October 1972, R/V Changi made 8 cruises to off the eastern coast of Malay Peninsula, lat. $1^{\circ}35' \sim 4^{\circ}44' \text{ N.}$, long $104^{\circ}01' \sim 104^{\circ}55' \text{ E.}$, the depth of the sea 40~70 m, operating 154 trawl hauls with a total catch of 1664 kg of *Gymnocranius*. *G. elongatus* occurred in 5 cruises, the total number of individuals being 52. Some of them are kept as specimens (RD·s·7201~7203, RD No. 7206053, and ZIUT 52950). On the other hand, *G. griseus* was caught in every cruise, and the total number of individuals exceeded 4200.

R/V Changi has made 2 cruises, one in December 1971 and another in February 1972, to off Penang Island, lat. $4^{\circ}30' \sim 5^{\circ}51' \text{ N.}$, long. $99^{\circ}06' \sim 100^{\circ}07' \text{ E.}$ From a total of 40 trawl hauls, 219 kg of *Gymnocranius* were caught, which consisted exclusively of *G. griseus*.

Recently, some 40 fish specimens which were caught with trawl-net by the training vessel Nagasaki-maru of Nagasaki University, Japan, off the coast of north-western Austrialia (lat. $19^{\circ}41' \sim 19^{\circ}52' \text{ S.}$, long. $117^{\circ}13' \sim 117^{\circ}18' \text{ E.}$, depth 60~70 m) in September 1972, were sent to us for identification. They included 2 specimens of *Gymnocranius*, and both of them were *G. elongatus*, 207 mm and 211 mm in standard length, respectively (RD No. 7209099 and

7209099a).

The author visited Phuket Island of Thailand in November 1972, where he saw several *G. elongatus* in the fish market. Dr. Masato Akazaki of Miyazaki University of Japan (personal communication) has also collected specimens of *G. elongatus* in Okinawa Island. Bleeker (1877) collected his specimens from Java and Kyushu.

Summarizing, *G. elongatus* is distributed from Okinawa Island through the South China Sea to the eastern part of the Indian Ocean including the Andaman Sea. However, in the South China Sea it seems that this species is most abundant in the sea off Sarawak.

Food habit

The present species feeds mainly on crustaceans. Of 17 individuals caught in October 1971 and used for food study, the stomachs of 2 specimens were empty. All the other stomachs contained crustaceans such as small-sized shrimp, stomatopods and crabs. In addition, 3 stomachs contained scales and vertebrae of fish, 2 stomachs had bivalves and another 2 had polychaets.

Remarks

Aside from the present new species, *G. griseus* is the only species of *Gymnocranius* which has been reported to occur in trawl fishing grounds of the South China Sea and its adjacent waters such as Gulf of Thailand and Straits of Malacca (Scott, 1959; Tseng, 1962; Wongratana, 1968; Masuda, et al, 1970; catch record of R/V Changi, unpublished). In the general appearance the present new species resembles *G. griseus*. However, a comparative study on morphometric characters and skeletons revealed that *G. elongatus* is a distinct species from *G. griseus*.

The remarkable differences in external characters of *G. elongatus* from *G. griseus* are: body shallower; ventral fins shorter reaching the 1st anal spine, while in *G. griseus* they reach the 3rd anal spine; eyes bigger; suborbital width much narrower; caudal fin deeply forked; posterior dorsal spines more remarkably decrease in length (Table 2). Fig. 5 shows the constancy of the proportional measurements in both species over a range from 10 to 22 cm (the maximum size of *G. elongatus* obtained) in standard length. In this figure, those body

Table 2. Comparison of proportional measurements of body between *Gymnocranius elongatus* and *G. griseus*.

Species	<i>G. elongatus</i>			<i>G. griseus</i>		
	number measured	mean ± 99% confidence limits	coefficient of variation (%)	number measured	mean ± 99% confidence limits	coefficient of variation (%)
In standard length						
total length	25	0.76 ± 0.01	1.5	35	0.78 ± 0.01	1.7
head length	25	2.87 ± 0.05	3.2	35	2.83 ± 0.05	3.8
depth of body	25	2.40 ± 0.03	2.3	35	2.12 ± 0.04	4.4
length of pectoral fin	25	4.02 ± 0.09	4.0	35	3.82 ± 0.08	4.7
length of ventral fin	22	3.95 ± 0.10	4.2	34	3.50 ± 0.13	7.9
In head length						
snout length	25	2.71 ± 0.08	5.2	35	2.44 ± 0.07	6.3
interorbital width	25	3.00 ± 0.09	5.4	35	2.97 ± 0.06	4.0
diameter of eye	25	2.67 ± 0.09	6.0	35	2.93 ± 0.13	9.2
suborbital width	25	5.02 ± 0.19	6.6	35	3.70 ± 0.17	9.6
Ratio of						
3rd or 4th dorsal spine to 9th or 10th	13	1.44 ± 0.06	4.4	29	1.20 ± 0.03	5.7
longest caudal ray to median ray	25	3.59 ± 0.11	5.5	35	2.44 ± 0.11	9.7

parts which showed remarkable differences in the proportional values between both species are illustrated. Only the depth of body relative to standard length in *G. griseus* showed a tendency of decrease as fish becomes bigger.

As mentioned before, the posterior nostril of *G. elongatus* is a vertical slit, being longer vertically than horizontally. On the other hand, that of *G. griseus* is semi-circular in shape, with its chord upward.

There is almost no difference in the distribution of transverse bars on body for both species, well agreeing with the description given by Smith (1941). Still some considerable differences exist: marginal parts of unpaired fins of live specimens are darker and more reddish in *G. elongatus* than in *G. griseus*; no wavy blue

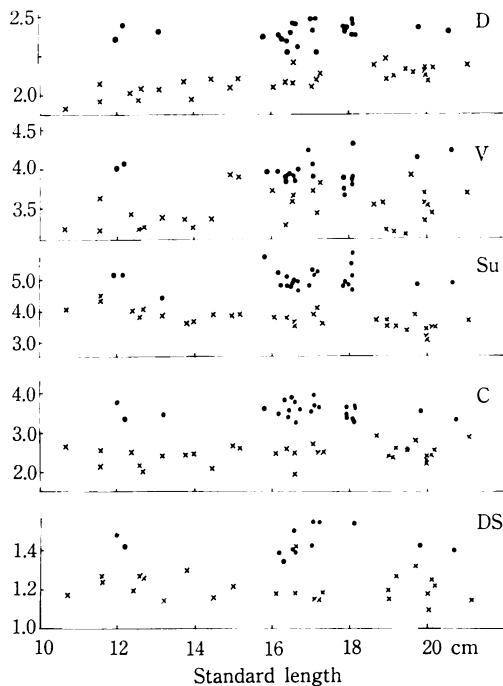


Fig. 5. Proportional measurements of bodily parts of *G. elongatus* (dots) and *G. griseus* (crosses) of various sizes.

D, depth of body; V, length of ventral fin; Su, suborbital width; C, ratio of the longest ray of upper lobe and the median ray of caudal fin; DS, ratio of the longest spine (3rd or 4th) and the shortest posterior spine (9th or 10th) of dorsal fin. Figures on ordinates show number in standard length for D and V, number in head length for Su, and the said ratios for C and DS.

lines appear on the snout and cheek of *G. elongatus*, while in *G. griseus* more or less clear wavy blue lines are often seen in specimens alive or shortly after death; black spots on body, especially of specimens in formalin, are clearer and more numerous in *G. elongatus*.

Differences between both species are recognized also internally. Relative height of cranium is bigger in *G. griseus*, while its width measured between prefrontals, parietals or pterotics is bigger in *G. elongatus* (Table 3). Foramen magnum of both the species is remarkably different in shape when viewed from behind: in *G. elongatus* nearly triangular, the vertical diameter being about 96% of the horizontal diameter; in *G. griseus* semi-circular, the vertical diameter being about 71% of the horizontal diameter (Fig. 3 C and D, Table 3). Premaxillary pedicel is comparatively less developed in *G. elongatus* (Fig. 4 A and B, Table 3). Parapophyses on 9th and 10th vertebrae and the first hemal spine are thickened in *G. griseus* (Fig. 4 C and D, Table 3). Hemal arch is first closed almost exclusively at 8th vertebra in *G. elongatus*, while of 32 specimens of *G. griseus* examined, 12 had the first hemal arch on 7th vertebra and 20 on the 8th.

According to the recent authors (Fowler, 1933; Akazaki, 1962; Marshall, 1964), the genus *Gymnocranius* includes *G. griseus* (Temminck and Schlegel), *G. robinsoni* (Gilchrist and Thompson), *G. bitorquatus* Cockerell, *G. japonicus* Akazaki, *G. audleyi* Ogilby, *G. marshalli* (Whitley), *G. microdon* (Bleeker), *G. lethrinoides* (Bleeker) and *G. frenatus* (Bleeker), although the last 3 species were often regarded as the synonyms of *G. griseus* (Jordan and Thompson, 1912; Weber and de Beaufort, 1936; Smith, 1941; Herre, 1953). *G. elongatus* can be easily distinguished from all the above mentioned species, because none of them has such a deeply forked caudal fin with median rays shorter than eye.

If there is any species reported earlier which is identical with *G. elongatus*, it is *G. griseus* of Bleeker's Atlas (1877). In fact, the external characters which he described for his *G. griseus* are almost completely in accord with those of *G. elongatus*, especially in having bigger eyes, narrower preorbitals and a deeply forked caudal fin. Together with *G. griseus*, Bleeker (1877)

Table 3. Comparison of proportional measurements of some skeletal parts between *Gymnocranius elongatus* and *G. griseus*.

Species	<i>G. elongatus</i>			<i>G. griseus</i>		
	number measured	mean($\times 100$) $\pm 99\%$ confidence limits	coefficient of variation (%)	number measured	mean($\times 100$) $\pm 99\%$ confidence limits	coefficient of variation (%)
Cranium						
length ¹⁾ /standard length	12	26.18 \pm 1.28	5.5	10	26.74 \pm 0.98	3.5
height ²⁾ /length	11	63.31 \pm 1.82	3.0	10	70.83 \pm 2.71	3.7
inter-parietal width ³⁾ /length	9	29.47 \pm 1.42	4.3	11	22.23 \pm 0.79	3.7
inter-prefrontal width ⁴⁾ /length	13	45.56 \pm 0.70	1.8	11	42.86 \pm 1.08	2.6
inter-pterotic width ⁵⁾ /length	9	62.44 \pm 1.18	1.6	9	58.47 \pm 2.09	3.1
Foramen magnum						
vertical diameter/horizontal d.	14	95.55 \pm 2.78	3.6	11	71.14 \pm 4.78	7.0
First hemal spine						
thickness ⁶⁾ /length ⁷⁾	11	6.39 \pm 0.30	5.0	8	8.25 \pm 1.24	12.1
Maxillary						
ramus/pedicel	13	63.91 \pm 1.62	2.9	7	58.85 \pm 1.92	2.3

1) distance between anterior margin of the vomer and posterior margin of the basioccipital, 2) distance between top of the supraoccipital and postero-inferior margin of the basioccipital, 3) distance between both parietals at boundary with the prefrontal along outer margin of shelf extending from the prefrontal to epiotic, 4) maximum distance between outer margins of both prefrontals, 5) ditto of both pterotics, 6) maximum antero-posterior thickness 7) distance from tip of the spine to intersecting point of extension of the spine and center of the centrum.

described *G. lethrinooides* and two more species of *Gymnocranius*. On separating *G. griseus* from *G. lethrinooides*, Bleeker mentioned that his previous description on *Dentex griseus*, having been made on specimens of two species, should be replaced with those he gave in the Atlas. His description on *G. lethrinooides* agrees better with the original description on *D. griseus* by Temminck and Schlegel (1843) than that on his *G. griseus*. Many authors (Fowler, 1933; Weber and de Beaufort, 1936; Herre, 1953; Akazaki, 1962) considered that *G. griseus* of Bleeker is identical with *Dentex griseus* of Temminck and Schlegel. However, Jordan and Thompson (1912), on describing *G. griseus* from several localities of Japan, wrote "This species is the *Gymnocranius lethrinooides* of Bleeker's Atlas and not his *Gymnocranius griseus*." However, they made no mention of the appropriate scientific name for Bleeker's *G. griseus*. Smith (1941) referred neither to *G. griseus* nor to *G. lethrinooides* of Bleeker in his revision on *Gymnocranius*.

A short explanation must be needed as to the identification of *G. griseus* treated in this report. As previously mentioned, the fish has 3 to 6

wavy blue lines on anterior part of head: 1 extending forward from nostrils on one side and reaching nostrils on the other side; others running from snout to cheeks either almost horizontally or undulatingly, far separated from those on the other side at dorso-anterior part of snout. This type of wavy blue lines has been considered as a specific character by some authors and the fish with such a character has been called by the scientific name of either *G. robinsoni* (Gilchrist and Thompson) (Fowler, 1933; Akazaki, 1962) or *G. ruppellii* Smith (Smith, 1941). However, distinctness of the wavy blue lines is subject to individual variety, being almost unrecognizable in some specimens even when they are alive. No matter how distinctive the wavy blue lines may be just after death, they often become faded in several days even if the fish has been kept frozen. It is almost impossible to find out any trace of the wavy blue lines on most specimens, about 65% of individuals examined, after preservation in formalin, and there is no difference between external characters of such specimens and the description on *G. griseus* given by Temminck and Schlegel (1843) or Jordan and Thompson

(1912). Still, it is also true that traces of the wavy blue lines are clearly seen as dark brownish lines in some of the preserved specimens, more often in bigger specimens, 20~25 cm or more in standard length.

Munro (1955) considered *D. rivulatus* and *G. robinsoni* synonymous with *G. griseus*, and the photograph of *G. griseus* in Scott's book (1959) shows, without doubt, the same fish as our *G. griseus*. The *G. griseus* in the trawl catch from the South China Sea reported by Tseng (1962), Wongratana (1968) and Masuda, et al. (1970) must also be the same fish as ours, because there is no other species which is so common in this region. An examination of the specimens of *G. griseus* in the National Museum of Singapore (Catalogue No. 2356) assured the author their identity with the specimens treated in this paper. These show that most of the fisheries scientists working on the fishes in the South China Sea and its adjacent seas has been identifying the fish as *G. griseus*.

From these circumstances, the author also identified, but temporarily, the fish as *G. griseus*. Notwithstanding, it is also most probable that this species is different from *G. griseus* reported originally by Temminck and Schlegel (1843) from Shimabara, Japan, because according to Dr. M. Akazaki (personal communication) the species from Japan seldom has the wavy blue lines on its cheeks. A future study is needed to decide the pertinent scientific name of the fish.

Acknowledgments

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南支那海南部より得た新種オナガメイチダイ

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メイチダイ属魚類は南支那海南部では重要なトロール対象魚種のひとつであり、専らメイチダイ *Gymnocranius griseus* (Temminck and Schlegel) より成る。

筆者は1971年10月にボルネオ島サラワク沖海域で別の型のメイチダイ属の魚約45個体を得た。その後、同じ魚をマレイ半島東岸沖でも再三見出し、またオーストラリア北西岸沖からの標本も入手した。メイチダイとの比較、文献の検討を通じ、この魚を新種とし、オナガメイチダイ *G. elongatus* と命名した。Bleeker (1877) の *G. griseus* は本種である。本種の最大の特徴は尾鰭中央の鰭条が眼径よりも短いことで、それだけで既知のすべての同属魚種と区別できる。体高が比較的低い、眼前骨幅が狭い、頭蓋骨幅が広い、大孔が正三角形に近いことなども特徴をなす。なお南支那海南部のメイチダイは生時頬に数条の青色波状線を有し、この点でサザナミダイ *G. robinsoni* (= *G. ruppelli*) と同定すべきかもしれない。しかし、固定後は通常その特徴が消える。さらに上述の両学名を *G. griseus* の異名とする研究者もあることなどから、本報告でも暫定的に後者を採用した。

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