A List of Some Sparid Fishes in the Catches of Oversea Trawlers, with the Proposal of New Japanese Names

Fujio Yasuda, Naoki Oda, Seiichi Watanabe and Kenya Mizuguchi (Received June 27, 1969)

With the recent transoceanic expansion of fishing activity with the progress in refrigeration techniques, a number of the sparid fishes have been caught in various waters of the world and brought back to Japan under frozen condition, and these fishes resulted a confusion as to their common names in the market. In the present paper we made a taxonomic study on the 17 species belonging to 8 genera referred to the family Sparidae which were caught in West Australia, New Zealand, west coast of North America, and northwest coast of Africa during the years 1964 to 1968 (Table 1). Out of 17 species, four species, referred to the genus Dentex, are briefly described herewith accompanied by their photographs (Fig. 1), and new Japanese name was proposed to each species.

The identification of the species was attempted based on the works by Fowler (1933 and 1936), Smith (1938 and 1953), Akazaki (1962) and Matsubara (1955).

1. Dentex argyrozona Valenciennes New Japanese name: Nagarenko (Fig. 1-1)

One specimen Cat. No. ZUMT 52387 (Section: Zoology. University Museum, University of Tokyo), 282 mm in body length: Head 2.88, height 2.79 in body; snout 3.06, eye diameter 4.08, upper jaw 2.88, interorbital 3.50 in head; eye diameter 1.33 in snout. Body elongate, compressed, interorbital space scaly and not gibbous; snout prolonged. Pored scales on lateral line 62; 7 scales above the lateral line, 16 below. Gill rakers 9+8. Both jaws with 4 canines. Premaxillary

ramus, longer than its pedicel. D. XII, 9; 2nd spine 4.08 and 3rd spine 3.16 in head. A. III, 7; 2nd spine 4.67 and 3rd spine 3.92 in head. P. 16; tips of pectoral and ventral fins not reaching the vent. Frontal bones fused, surface rather rough with a few paired small holes.

Color: Reddish pink, lower half pale. Three silvery white longitudinal narrow bands above lateral line and 5 below in defrosted sample.

2. Dentex macrophthalmus (Bloch)

New Japanese name: Ōmerenko (Fig. 1-2) One specimen (Cat. No. ZUMT 52388), 181 mm in body length: Head 2.78, height 2.59 in body; snout 3.67, eye diameter 3.25, upper jaw 2.56, interorbital 3.76 in head; eye diameter 0.90 in snout. Body ovoid. compressed, eye large, upper half of interorbital space scaly and slightly gibbous. Pored scales on lateral line 51: 6 scales above the lateral line, 13 below. Gill rakers 8+18. Upper jaw with 4 canines, lower with 6; those on lower jaw smaller. Premaxillary ramus, longer than its pedicel. D. XII, 9; 2nd and 3rd spines 2.78 in head. A. III. 8: 2nd spine 2.91 and 3rd spine 3.05 in head. P. 16; tip of pectoral fin reaching the spinous part of anal; ventral not reaching the vent. Frontal bones fused, surface rather rough with a few paired large depressions, of which a paired large triangular depression on anterior base of supraoccipital, and another large paired depression on anterior part of frontal, a part of frontals above these depressions

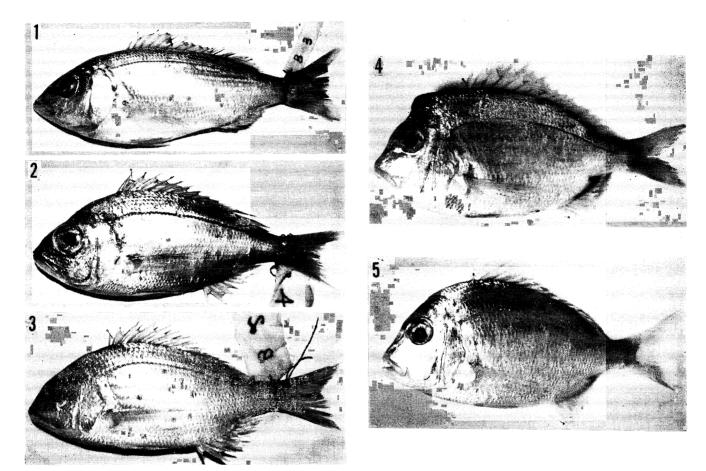


Fig. 1. The sparid fishes trawled in oversea fishing grounds and marketed in Japan (see Table 1). The size given in body length.

1, Dentex argyrozona, 282 mm (Cat. No. ZUMT 52387); 2, D. macrophthalmus, 181 mm (Cat. No. ZUMT 52388); 3, D. maroccanus, 175 mm (Cat. No. ZUMT 52389); 4. D. spariformis, 190 mm (Cat. No. ZUMT 52390); 5. D. spariformis, 159 mm (Cat. No. ZUMT 52391).

Table 1. A list of the sparid fishes caught by Japanese trawlers in oversea waters, 1964–1968, with common Japanese and market names, the latter adopted by the Nippon Suisan Co. Ltd. Names with one asterisk were given by Akazaki (1962) and these with two asteriskes newly proposed.

| | Species | Japanese name | Market name | Station |
|-----|--|---------------|---------------------|---|
| 1. | Chrysophrys auratus Bloch and Schneider | Gōshūmadai* | Tai | 25°30′-26°00′S. 112°30′-113°30′E. (West Australia) 38°50′-39°00′S. 174°30′-174°40′E. (New Zealand) |
| 2. | Pagrus pagrus (Linné) | Yōroppamadai* | Amerikamadai | 33°00′–33°30′N. 77°30′–78°00′W. (West America) |
| 3. | Pagrus africanus Akazaki | Afurikamadai* | Chidai | 10°00′-24°30′N. within 100 miles from the coast. (Northwest Africa) |
| 4. | Pagrus laniarius Cuvier | | Kirenko | 35°30′–36°00′S. 20°00′–20°30′E. (South Africa) |
| 5. | Argyrops bleekeri Ōshima | Taiwandai | Ōsutoraria chiko | 25°30'-26°00'S. 112°30'-113°00'E. (West Australia) |
| 6. | Argyrops auriga (Valenciennes) | Marudai* | Asahidai | 23°30′-24°00′N. 16°00′-16°30′W. (Northwest Africa) |
| 7. | Evynnis ehrenbergi (Valenciennes) | Kanarīchidai* | Bītai | 10°30′-11°00′N. 15°30′-16°00′W. (Northwest Africa) |
| 8. | Cheimerius filosus (Valenciennes) | Senagakidai* | Nishikidai | 23°00′-23°30′N. 16°30′-17°00′W. (Northwest Africa) |
| 9. | Cheimerius matsubarai Akazaki | Hoshirenko* | Chidai | 21°25'N. 17°15'W. (Northwest Africa) |
| 10. | Dentex canariensis Steindachner | Hanarenko* | Tai | 22°00'-22°30'N. 16°30'-17°00'W. (Northwest Africa) |
| 11. | Dentex argyrozona Valenciennes | Nagarenko** | Nagadai | 35°00′-35°30′N. 21°00,-21°30′W. (Northwest Africa) |
| 12. | Dentex macrophthalmus (Bloch) | Ōmerenko** | Benimedai | 15°30'-16°00'N. 16°30'-17°00'W. (Northwest Africa) |
| 13. | Dentex maroccanus Valenciennes | Namirenko** | Renko | 19°00'-19°30'N. 16°30'-17°00'W. (Northwest Africa) |
| 14. | Dentex spariformis Ogilby | Koburenko** | Ōsutoraria renko | 25°30′-26°00′S. 112°30′-113°00′E. (West Australia) |
| 15. | Diplodus vulgaris (Geoffroy St. Hilaire) | Afurikachinu* | Hedai | 22°03'N. 17°16'W. (Northwest Africa) |
| 16. | Pagellus bellottii Steindachner | Asahidai* | Sakuradai | 22°30′-23°00′N. 16°00′-16°30′W. (Northwest Africa) |
| 17. | Pagellus acarne (Risso) | Pesugo* | Sumiredai | 22°03'N. 17°16'W. (Northwest Africa) |

prolonged like a "visor".

Color: Reddish pink, lower half pale. A few indistinct yellowish longitudinal bands on sides of body in defrosted sample.

3. *Dentex maroccanus* Valenciennes New Japanese name: Namirenko (Fig. 1-3)

Five specimens (Cat. No. ZUMT 52389 and other four), counts and measurements of ZUMT 52389 are followed by the ranges of five specimens in parentheses, 175 (175-234) mm in body length: Head 2.82 (2.46-2.82), height 2.43 (2.17-2.43) in body; snout 2.95 (2.79-3.07), eye diameter 3.44 (3.44-4.56), upper jaw 2.95 (2.68-2.95), interorbital 3.90 (3.88-3.95) in head; eye diameter 1.19 (1.17-1.25) in snout. Body ovoid, compressed, interorbital space scaly and slightly gibbous. Pored scales on lateral line 47 (46–48); 4 scales above lateral line, 12 below. Gill rakers 7+10 (7+8-10). Jaws with 4 canines on upper, 6 on lower; a paired anterior canines on upper jaw large and concave. Premaxillary ramus, longer than its pedicel. D. XII, 10; 2nd spine 2.90 (2.88-2.95) and 3rd spine 2.30 (2.26-2.41) in head. A. III, 8: 2nd spine 2.48 (2.22-2.51) and 3rd spine 2.68 (2.65-2.70) in head. P. 16; tip of pectoral fin reaching the spinous part of anal; ventral reaching the vent. Frontal bones fused, surface rather rough with a few paired holes, a pair of them on the anterior part of frontals large.

Color: Reddish pink, lower half pale. Three yellowish longitudinal narrow bands above lateral line and 4 below in defrosted sample.

4. Dentex spariformis Ogilby New Japanese name: Koburenko (Figs. 1-4 and 5)

Two specimens (Cat. Nos. ZUMT 52391 and 52390), 159 and 190 mm in body length: Head 2.65 and 2.75, height 2.07 and 2.02 in body; snout 2.73 and 2.38, eye diameter 3.29 and 3.53, upper jaw 2.11 and 2.23, interorbital 3.10 and 3.14 in head; eye diameter

1.30 and 1.38 in snout. Body ovoid, deeply compressed, upper half of interorbital space scaly and slightly gibbous. Nape gibbous or not. Pored scales on lateral line 52 and 49; 6 scales above lateral line. 14 below. Gill rakers 7+11. Jaws with 4 canines on upper, 6 on lower; a paired canines in the middle of lower jaws small. Premaxillary ramus longer than its pedicel. D. XII, 10; 2nd spine 3.45 and 3.43 and 3rd spine 2.61 and 2.65 in head. A. III. 8: 2nd spine 3.59 and 3.63 and 3rd spine 4.00 and 4.06 in head. P. 15; tip of pectoral fin reaching the spinous part on anal; ventrals not reaching the vent. Frontal bones fused, surface rather rough with a few paired small holes, of which a paired hole on the anterior part of frontal was remarkable. Upper edge of supraoccipital expanded or

Color: Silvery pink, lower half pale. In adult male, snout yellowish brown in defrosted sample.

The authors wish to express their sincere gratitude to Prof. Yoshio Hiyama of the University of Tokyo, under whose guidance this work was conducted.

Literature cited

Akazaki, M. 1962. Studies on the spariform fishes.— Anatomy, phylogeny, ecology and taxonomy. (in Japanese with a partial English notes). Misaki Mar. Biol. Inst. Kyoto Univ. Spec. Rep., (1): 1–368, figs. 1–32.

Fowler, H. W. 1933. Fishes of the Philippine Sea and adjacent waters. Bull. U. S. Nat. Mus., 100 (12): 1-465, figs. 1-32.

Fowler, H. W. 1936. The marine fishes of West Africa. Amer. Mus. Nat. Hist., 12 (2): 607–1493, figs. 276–567.

Matsubara, K. 1955. Fish, Morphology and hierarchy. Pt. I. Ishizaki-Shoten, Tokyo. (in Japanese), XI and 789 pp.,, 289 figs.

Smith, J. L. B. 1938. The South African fishes of the families Sparidae and Denticidae. Trans. Roy. Soc. South Africa, 26 (3): 225-305.

Smith, J.L. B. 1953. The sea fishes of southern Africa. Central News Agency Ltd. South Africa, xvi and 564 pp., 1219 figs. (Fisheries Department, Faculty of Agriculture, The University of Tokyo Yayoi, Bunkyo-ku, Tokyo, Japan.)

遠洋トロール漁獲物中のタイ科魚類の目録及び新和名の提唱 安田富士郎・小田直樹・渡辺精一・水口憲哉 従来,遠洋トロール漁獲物には特定の和名のない種が 数多く、商業上の便宜的名称の乱用のため、多くの混乱をまねいていた。本報告は漁獲物中タイ科魚類 8 属 17 種を報告するとともに、このうちキダイ属 4 種についてナガレンコ、オオメレンコ、ナミレンコ、コブレンコの和名を与えた。

(東京大学農学部水産学科 東京都文京区)