

## THE NEWLY RECORDED SANDBORERS, *SILLAGO* *PARVISQUAMIS* GILL OF TAIWAN

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### ABSTRACT

K. H. Chang and C. P. Chen (1974). *The Newly Recorded Sandborers, Sillago parvisquamis Gill of Taiwan*. Bull. Inst. Zool., Academia Sinica, 13(1): 35-36. A sandborer fish, *Sillago parvisquamis* Gill (Family Sillaginidae.) was first recorded in Taiwan. Descriptions based on 4 specimens were provided.

Chen (1969)<sup>(1)</sup> previously listed only 3 species of sandborer fishes in Taiwan; they were *Sillago sihama* (Forskål), 1775, *S. japonica* Temminck et Schlegel, 1842, and *S. maculata* Quoy et Gaimard, 1824 respectively. The following paragraphs will describe the 4th species, *Sillago parvisquamis* Gill (Fig. 1). Four specimens were collected by the authors from the littoral zone in Hsinchu, Taiwan.

The meristic counting of the fin rays and vertebrae of *S. parvisquamis* were based on their radiographs (Fig. 2).

#### *Sillago parvisquamis* Gill 1861

*Sillago parvisquamis*; Gill<sup>(3)</sup>, 1861:505.—Fowler<sup>(2)</sup>, 1933:427.—Matsubara<sup>(5)</sup>, 1955:647.—Tomiyama<sup>(7)</sup>, 1958:1176.—Lindberg<sup>(4)</sup>, 1969:151.

*Sillago sihama*; Tanaka<sup>(6)</sup>, 1913:240.

**MATERIAL EXAMINED** 4 specimens, 123-168 mm (SL), Hsinchu, I 6 and II 9, 1974.

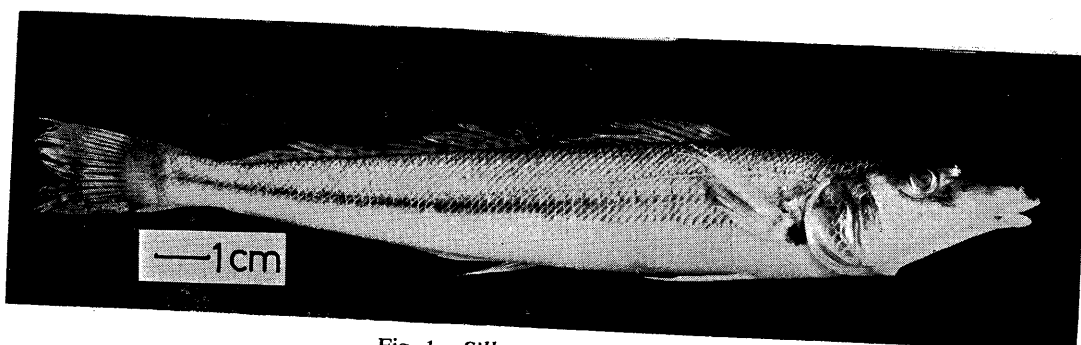
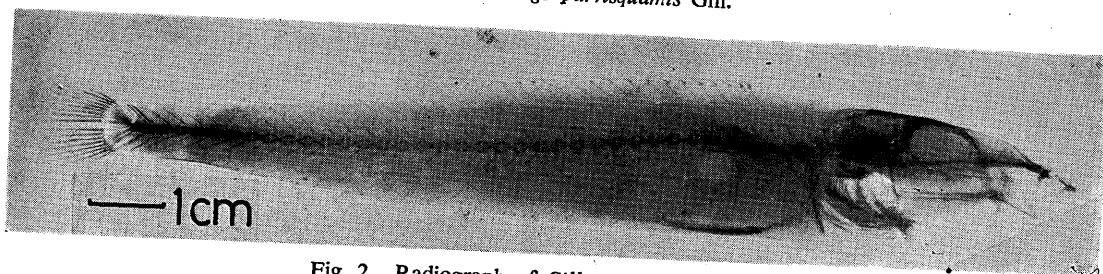
**DESCRIPTIONS** Body elongate. Head elongate, conical with flattened forehead. Teeth villiform. Edge of preopercule weakly serrated. Cheeks with ctenoid scales. Lateral line complete, almost straight, reaching base of caudal and continuing onto the fin. Tubular scales

80-81 in lateral line to caudal base and 15 more on latter; 7 scales above lateral line, 13 below; 4 rows on cheek below eye.

First dorsal fin XII-XIII; second dorsal fin I, 21-22. Anal II, 22-23, the base nearly equal to second dorsal fin. Pelvic fin I, 5. Vertebrae 16 + 23 = 39 (including urostyle).

**MEASUREMENTS** Length of head 3.48-3.61 (3.53), depth of body 6.08-6.22 (6.16), distance from the origin of first dorsal fin to snout tip 2.86-2.99 (2.91); to caudal base 1.47-1.52 (1.50); distance from the origin of anal fin to snout tip 1.77-1.84 (1.79); to caudal base 2.23-2.25 (2.24), all in standard length. Snout 2.17-2.37 (2.24), horizontal diameter of eye 5.83-6.48 (6.11), interorbital 3.89-4.51 (4.16), width of head 1.92-2.19 (2.06), width of body 2.00-2.19 (2.05), all in length of head. Eye 2.61-2.94 (2.73) in length of snout. Interorbital 1.42-1.50 (1.47) in eye.

**COLOR IN FORMALIN** Body dull yellow on back and above, lower surface paler. A blackish strip running from cheek to caudal base. Each scale of back with vertical streak made up of darker brown dots as seen under a magnifying lens. Iris slate-gray, narrow golden circle around

Fig. 1. *Sillago parvisquamis* Gill.Fig. 2. Radiograph of *Sillago parvisquamis* Gill.

pupil. Base of dorsal and pectoral fin with dark or bluish spots.

**DISTRIBUTION** On the Pacific coast of Japan, from Tokyo to the central part of Kyushu<sup>(7)</sup> and Taiwan.

**REMARKS** This species was found in shallow waters with sandy bottom, where *S. sihama* was more abundant.

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#### REFERENCES

1. Chen, J. T. F. (1969). A Synopsis of the Ver-

tebrates of Taiwan. Shangwu Book Co., Taipei, 2, 1-548 (Chinese).

2. Fowler, H. W. (1933). Fishes of the Philippine and adjacent seas. Bull. U. S. Nat. Mus., 100, Vol. 12, 465, pp. 32. figs.

3. Gill, T. (1861). Synopsis of the Sillaginoids. Proc Acad. Nat. Sci. Philadelphia. pp. 501-507.

4. Lindberg, G. U. and Z. V. Krasnyukova (1969). Fishes of the Sea of Japan and the adjacent Areas of the Seas of Okhotsk and the Yellow Sea. Part 3. Teleostomi XXIX Perciformes. Opred. Faune SSSR. No. 99: 1-479. (Israel program for scientific translations Jerusalem).

5. Matsubara, K. (1955). Fish Morphology and Hierachy. pt. I, pp. XX+789, 289. figs. Ishizaki-shoten. Tokyo (in Japanese).

6. Tanaka, S. (1913). Figures and Descriptions of the Fishes of Japan. 12 pp. 199-214. pls. 56-60.

7. Tomiyama, I., T. Abe and T. Tokioka (1958). Encyclopaedia Zoologica illustrated in Colours. 2, Fishes, Tokyo: 10306, 912 figs. (in Japanese).

## 臺灣新紀錄種魚類 *Sillago parvisquamis* Gill

張崑雄 陳章波

作者等在臺灣新竹沙岸低潮線附近採集到屬於沙鯪科 (Sillaginidae) 之 *Sillago parvisquamis* Gill (擬稱野沙鯪)。在臺灣地區係首次發現者。