

Notes on an Economically Important but Scientifically Little-known Silver Pomfret, *Pampus echinogaster* (Pampidae, Teleostei)

Tokiharu ABE and Toshio KOSAKAI

Two species of silver pomfrets of the genus *Pampus* are commonly handled at the Central Wholesale Market of Tokyo. Experienced fish-dealers there draw a distinction between the two, calling. *P. argenteus* (or, its close ally) "hon-mana" (meaning genuine silver pomfret), and *P. echinogastre* "tschô-mana" (meaning butterfly silver pomfret). The former species attains much larger size than the latter, and the adult of the former species are more highly esteemed as food than the young of the two species and the adult of *echinogaster* in winter. The Japanese name adopted by scientists* for *echinogaster* is "kôrai-managatsuo" which means silver pomfret from Korea. The name *echinogaster* was once regarded as a synonym of *argenteus***, while the young of the latter has long been regarded by some scientists to be distinct from its adult bearing the specific name of *nozawae* ("azuma-managatsuo" in Japanese).† The shape of the fins in the members of *Pampus* changes greatly with age, and it is difficult to distinguish them from one another by the shape of the fins as was done by previous authors. In view of the difficulty in getting information and material of silver pomfrets from Korea and China, it is unlikely that the names of a few species of the pomfrets of the genus *Pampus*, which are economically important in these countries and in Japan, will be decided in the near future. In this paper the present writers wish to give some notes on *echinogaster* and correct the mistake of the senior author (ABE, 1963, p. 105).††

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* MORI, 1928, p. 6. MORI and UCHIDA, 1934, p. 12. MORI, 1952, p. 139.

** OKADA and MATSUBARA, 1938, p. 161.

† ISHIKAWA, 1904, p. 8. JORDAN, TANAKA and SNYDER, 1913, p. 136. CHENG (成) *et al.*, in CHU, *et al.*, 1962, pp. 760 and 761, fig. 615. CHENG (成) *et al.*, in CHU, *et al.*, 1963, pp. 407 and 408, fig. 305.

†† *Stromateoides sinensis*, "shina-managatsuo", should read *Pampus echinogaster* (BASILEWSKY), "kôrai-managatsuo".

inaccessible in Japan. The writers also express here their sincere thanks to Mr. Y. TOMINAGA and his family for their kindness in sending specimens from East China Sea.

The original description of *echinogaster* by BASILEWSKY is far from satisfactory, and as the present writers have not been able to locate its type specimen, they tentatively follow JORDAN and METZ, 1913, who identified a Korean silver pomfret resembling *argenteus* with *echinogaster*. Little is known about the distribution, migration and growth of *echinogaster* here understood. Previous records of this species are:

? *Stromateus echinogaster* BASILEWSKY, 1852, p. 223. N. China.

Stromateoides echinogaster JORDAN and METZ, 1913, pp. 28 and 29, pl. 4. Chinnampo, Korea; Port Arthur.

————— MORI, 1952, p. 139. Chinnampo, Korea.

————— CHYUNG, 1961, p. 518, pl. 188, figs. 874 and 875 (pl. 189, fig. 876 represents another species).

Pampus echinogaster REEVES, 1927, p. 9. N. China.

————— MORI, 1928, p. 6. Chinnampo, Korea.

————— MORI and UCHIDA, 1934, p. 12. Chinnampo Korea.

? *Pampus lighti* EVERMANN and SHAW, 1927, pp. 114 and 115. Nanking. (77 mm. long).

Stromateoides sinensis ABE, 1963, p. 105.

Examination of numerous specimens of *echinogaster* collected at the Central Wholesale Market of Tokyo and those sent from East China Sea has revealed the following:

(1) It spawns in summer. (2) Pyloric caeca are much thicker and far less numerous than in *argenteus*. (3) Gill-rakers are more closely set and their number is higher (3+12 to 5+15 and 6+14) than in *argenteus* (2+8 to 3+10). (4) Total number of vertebrae is 41 and the largest of all the silver pomfrets examined from South-East Asia, China, Korea and Japan.

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