NOTE XXII.

ON ENGRAULIS JAPONICUS SCHLEGL

BY

DR. C. L. REUVENS.

June 1891.

In his "Catalogue of Fishes", Vol. VII, 1868, p. 387, Dr. Günther says, that he agrees with Valenciennes 1) in the opinion, that Engraulis japonicus Schlegel (Fauna Japonica, 1850, Pisces, p. 239, tab. CVIII, fig. 3) should be identical with E. ringens Jenyns (Voyage of the Beagle, 1842, Fishes, p. 186). On p. 390 of the same volume the author mentions Atherina japonica Houttuyn, with E. commersonianus Richards, as synonyme.

E. ringens is found at the Pacific coast of America, E. japonicus Schleg. in the Japanese seas; yet Günther considers it not a very extraordinary fact, that a same species should occur on these two widely separated coasts. As the author, in 1880, described the shore-fishes of the Challenger-expedition (Chall. exped., 1880, Zoology, Vol. I, pt. VI, p. 72), he named the specimens from the Chinese coasts, mentioned in his Catalogue under the name E. japonica, E. chinensis and uttered his opinion, that A. japonica Houttuyn should be identical with E. japonicus Schleg. According to Günther's opinion on p. 387 (Cat. of Fishes, Vol. VII, 1868) E. japonicus Schleg. is = E. ringens, therefore we should have the following two species:


Notes from the Leyden Museum, Vol. XIII.

Diagnostic: The height of the body is one-fifth of the total length (without caudal), the length of the head a little less than one-third; sides and lower parts silvery, back dark-coloured; D. 14—15, A. 19—22. Japan, Pacific coast of America.


Diagnostic: The height of the body is one-fifth of the total length (without caudal), the length of the head two-ninths; a well-defined silvery band runs along the side; D. 17, A. 22. China.

Studying *Engraulinae* in the Leyden Museum, I found a bottle from Dr. Bleeker's collection 1) (Catalogue des Collections formées et laissées par M. P. Bleeker, 1879, p. 46, n°. 74) with superscription: *Stolephorus japonicus* Schleg. 2. According to the asterisk, the specimens should be in bad condition. Examining the bottle, I saw there were 3 specimens, two of them, very damaged, belonging to one and the same, the third, entirely unimpaired, to quite another species 3). After a careful examination the latter (without a silvery band) proved to be *E. japonicus* Schleg., the first two (with a silvery band) will probably be identical with Günther's *E. chinensis*.

Comparing the descriptions of *E. ringens* Jenyns, *E. japonicus* Schleg., *A. japonica* Houttuyn 3), and *E. chinensis* Gthr. with the specimens in the Leyden Museum, I must conclude that they belong to three species with the following short diagnostics:

1) When in 1879 Dr. Bleeker's collections were sold by auction, the Leyden Museum purchased "Collection A", containing among all other species, the types of Bleeker.

2) This specimen is probably put in the bottle, after the latter has come in the Museum; the true locality, where it is found, is unknown.

3) Houttuyn says that his *Atherina japonica* has a well-defined silvery band.

Notes from the Leyden Museum, Vol. XIII.
Diagnostic: see above. Pacific coast of America.

Diagnostic: see above. China.

c. *E. japonicus* Schleg. (Fauna Japonica, 1850, Pisces, p. 239, tab. CVIII, fig. 3).
Diagnostic: The height of the body is one-seventh of the total length (without caudal), the length of the head a little less than one-fourth; sides and lower parts silvery, back dark-coloured; D. 13—14, A. 18. Japan.

I believe this comparison will sufficiently show the distinctness of the above mentioned three species.