V.—Notes on the Genus *Synaptura*, Cantor, with Descriptions of Two new Species. By C. TATE REGAN, B.A.

[Plate VI.]

IN a recent list of the fishes of Japan, Messrs. Jordan and Snyder * have separated from the genus *Synaptura*, Cantor, as a distinct genus, *Zebrias*, the section characterized by the rudimentary left pectoral, of which they recognize three Japanese species, viz., *Z. quagga*, Kaup, *Z. zebrinus*, Schlegel, and *Z. japonicus*, Bleeker.

According to Day †, examination of the actual type specimen of *Synaptura zebra*, Bloch, shows *Synaptura quagga*, Kaup, to be a synonym of it. If we turn to Bloch's description and figure, there can be little doubt as to the correct judgment of Day; the description of the cross-bands on the body as paired, but confluent posteriorly, is particularly applicable to this species, whilst the total number of cross-bands and their disposition on the head and anterior part of the body are very accurately depicted; whether the irregularity of the posterior bands is due to the imagination of the artist or to an abnormality of the specimen from which the drawing was made is a point not yet cleared up.

Synaptura zebrina, Schlegel, is undoubtedly a synonym of *Synaptura ommatura*, Richardson; and an examination of all the specimens in the British Museum collection has convinced me that *S. japonica*, Bleeker, is based on a young specimen of the same species, from which it is said to differ in having a longer nasal tube, the eyes somewhat closer together, and the dorsal and anal fins united only to the basal half of the caudal instead of being entirely confluent with it. The twenty-four cross-bands on the head and body are described as having a light centre and dark edges, instead of being uniformly brown, and the caudal is said to be without yellow spots.

A specimen of *Synaptura ommatura*, 75 millim. long, agrees perfectly with Bleeker's description of *S. japonica*, and a series of specimens shows that during growth the nasal tube becomes relatively somewhat shorter and the eyes further apart, the caudal relatively shorter and approximating to the length of the posterior rays of the dorsal and anal, and the dark edges of the cross-bands less and less well defined.

I find that in the closely allied species *S. zebra*, Bloch, and

* Annot. Zool. Japon. iii. 1901, pt. 2, p. 123.

† 'Fishes of India,' p. 430.

Æsopia cornuta, Cuvier, young examples have the caudal fin relatively longer and in its outer part free from the dorsal and anal, exactly as in the case of *S. ommatura*.

The three Japanese species admitted by Jordan and Snyder must then be reduced to two—*S. zebra*, Bloch, and *S. ommatura*, Richardson; but I have to add one from a collection of fishes recently made in the Inland Sea of Japan by Mr. R. Gordon Smith; this new species, belonging to the same section of the genus, is described below under the name of *Synaptura Smithii*. I also describe here a specimen taken by the 'Challenger' in the Arafura Sea, which was referred by Dr. Günther to *S. zebra*, Bloch, but apparently belongs to a hitherto unknown species.

Synaptura Smithii, sp. n. (Pl. VI. fig. 1.)

Depth of body $2\frac{3}{5}$ times in the total length, length of head $5\frac{1}{2}$ times. Eyes contiguous, the upper scarcely in advance of the lower, subequal in size, their diameter about $4\frac{1}{2}$ times in the length of head and equal to the length of snout. Mouth extending to below anterior part of eye. Nasal tube long, simple. D. 75; A. 62; C. 17; the posterior rays of dorsal and anal connected to the basal part of the caudal, which is quite distinct and rounded. The width of the base of the caudal fin equal to half the length of head. The upper rays of the right pectoral produced, equal to $\frac{3}{5}$ the length of head; the left pectoral short, inconspicuous. Sc. $95\frac{30}{56}$, ciliated, extending on the bases of the vertical fins in single series up each of the rays, at the most—i. e., on the posterior rays on the ocular side—not more than 8 in each series, not extending to the outer half of the fin; those on the blind side of the head mostly produced into barbel-like processes.

On the ocular side greyish, with nine pairs of dark brown cross-bands on the head and body, extending on to the vertical fins as a series of black blotches. On the blind side pale pink, the vertical fins white at the base and with a broad black border.

A single specimen, 120 millim. in total length, from the Inland Sea, Japan, presented to the British Museum by Mr. R. Gordon Smith.

Synaptura callizona, sp. n. (Pl. VI. fig. 2.)

Depth of body $2\frac{3}{4}$ times in total length, length of head $5\frac{3}{4}$ times. Eyes contiguous, the upper scarcely in advance of the lower, subequal in size, their diameter about $\frac{1}{2}$ times in the length of head and equal to the length of snout. Mouth

2.

2 a.

1a.

1.

extending to below anterior part of eye. Nasal tube long, simple. D. 82; A. 68; C. 15; the last rays of dorsal and anal connected to the basal part of the caudal, which is rounded and quite distinct. The width of the base of the caudal fin equal to $\frac{2}{3}$ the length of head. The upper rays of right pectoral produced, equal to $\frac{2}{3}$ the length of head; the left pectoral short, inconspicuous. Sc. $108\frac{32}{43}$, ciliated, extending on to the vertical fins in single series up each of the rays well on to the outer part of the fin, and posteriorly almost to the margin, there being as many as 18 small scales in a series on one of the posterior rays; a few of those on the blind side of the head are produced as barbel-like processes.

On the ocular side greyish, with brownish transverse bands with dark marginal lines on the head and body, the posterior seven of which are simple, the anterior seven, except the one behind the pectoral, bifurcating either in their upper or lower half. Vertical fins greyish, with a series of dark marginal blotches on the ocular side and with the outer half uniform dark brown on the blind side.

A single specimen, 130 millim. in total length, from the Arafura Sea.

EXPLANATION OF PLATE VI.

Fig. 1. *Synaptura Smithii*. 1 a. Blind side of head.

Fig. 2. — *callizona*. 2 a. Blind side of head.

[Reduced to $\frac{5}{8}$.]

VI.—New Forms of Pyralidæ from Spain.

By Sir GEORGE F. HAMPSON, Bart., F.Z.S., &c.

THE following descriptions of new Pyrales are from specimens taken in the Sierra de Bejar, Castille, by Dr. T. A. Chapman, in June and July 1902.

PHYCITINÆ.

Asarta nigrella, sp. n.

Black; head, thorax, and abdomen sparsely irrorated with white; palpi whitish below; tarsi ringed with white; abdomen with fine segmental white lines. Fore wing black, sparsely irrorated with white, without trace of lines. Hind wing black-brown; cilia of male with the terminal half white, of female with slight white tips.

Hab. Castille, S. de Bejar. Exp. 16–20 millim. Type in B. M.

PYRALINÆ.

Cledeobia moldavica, Esp., subsp. with the ground-colour black-brown throughout.