

A NOTE ON DETERMINATION OF AGE FROM SKELETAL  
STRUCTURES OF *POMADASYS HASTA* (BLOCH)

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Some skeletal structures like vertebrae, palatine, cleithrum and operculum appear to be useful in the determination of age of *P. hasta*. These parts have been found useful in determining age of fish by Hart (1950) Menon (1950) Pantulu (1961) and others. Le cren (1947) and Gosline (1960) studied the growth rings on bones for determining the age and growth rate of percoid fishes. An inherent physiological rhythm as a causative factor in the formation of growth

checks has been suggested by Menon (1953). Preliminary observations in this regard were made on *Pomadasys hasta* and the results are reported here.

The material was collected from Sassoon Dock. The skeletal structures were prepared from fresh fish. The specimens were boiled in fresh water and the skeletal structures were taken. Then the skeletal parts were kept in 5% KOH solution for about 48 hours to loosen the remaining muscles. Vertebrae of twelve specimens measuring 235, 304, 318, 332, 380, 423, 485, 485, 515, 515, 532, and 568 mm were taken. Palatine, cleithrum and opercular bones were taken from the fishes measuring 423, 485, 485, 515, 532, and 568 mm.

The vertebral column consists of 25 vertebrae. They are amphicoelous in nature. All the vertebrae including atlas show concentric thicker rings on the inner side of the centra. The prehaemal and caudal vertebrae show clear-cut white transparent zones alternating with equal distance. In the present study the specimens 235, 380, 485, 532 and 568 mm show 1-5 rings respectively (Fig. 1). Similarly other skeletal structures like palatine, cleithrum and operculum also show the markings on their surfaces. More data are being collected to substantiate these findings.

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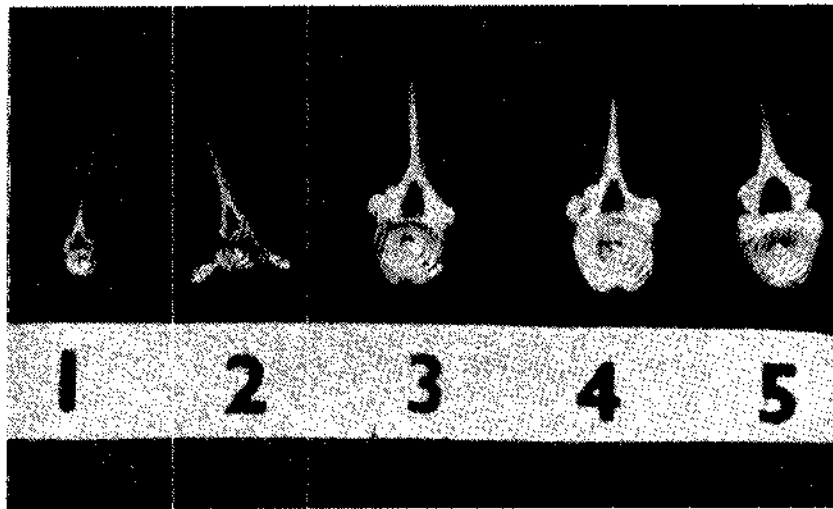


FIG. 1. Vertebrae of *Pomadasys hasta* (Bloch). 1. Length 253 mm showing 1 ring. 2. Length 380 mm showing 2 rings. 3. Length 485 mm showing 3 rings. 4. Length 532 mm showing 4 rings. 5. Length 568 mm showing 5 rings.

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