

As a result it was found that the buds continued to grow under the herbarium-sheet and by the end of sixteen weeks each of them had attained a length of about 10 mm. They were, however, vegetative in character. On dissecting one of them out, small leaves were found arranged in the manner as in the ordinary vegetative buds. Owing to their being shaded from light under the herbarium-sheet, the buds had not developed the characteristic green coloration (see photograph). Nevertheless, when exposed to light, they turned green.



Coleus barbatus: The herbarium specimen showing lax central inflorescence and the white vegetative buds (in the black square). $\times 1/10$.

At the same time, it might be mentioned here that the central inflorescence, at the outset, was compact with open flowers. But during the four months that the observations were continued, it was found that the inflorescence-axis also kept on elongating, thus making the whole inflorescence lax (see photograph). The increase in length measured 26 mm. There was, however, no such change observed in the lateral younger inflorescences in which the flower buds had not opened at all.

This peculiar behaviour of *Coleus barbatus* is really interesting as it demonstrates the enormous power of endurance of the plant even under the most unfavourable conditions of the plant press with great pressure and lack of water and light.

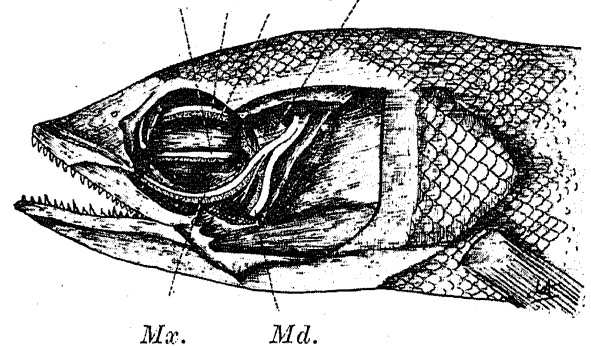
T. C. N. SINGH.

Department of Botany,
Ravenshaw College,
Cuttack.

The "Metapterygoid Process" in the Skull of *Ophiocephalus striatus*.

ONE of the few interesting cranial features of *Ophiocephalus striatus* is the presence of a flat, prominent metapterygoid process. The palatoquadrate bar articulates with the cranium not only by the palatine in front and through the hyomandibular behind, but also by the metapterygoid process, immediately behind the orbit and in front of the Trigemino-facialis chamber. The upper edge of the process is incompletely ossified. A careful study of this structure in other animals clearly shows that the metapterygoid process is homologous with the "Processus ascendens" of Dipnoi and Tetrapoda. The topographical relations of this process

Pal. Prf. Jr. Mptpr.



Dissection of the head of *Ophiocephalus striatus* to show the "metapterygoid process" and its relationship with the neighbouring blood vessels and nerves.

Jv.—Jugular vein. *Mx.*—Maxillary branch of the V nerve. *Md.*—Mandibular branch of the V nerve. *Mptpr.*—Metapterygoid process. *Pal.*—Palatine branch of the VII nerve. *Prf.*—Profundus branch of the V nerve.

and the processus ascendens with the nerves and blood vessels are identical. The profundus branch of the V nerve and the jugular vein (*vena capitis lateralis*) pass on the inner side of the metapterygoid process, while the maxillary and the mandibular branches of the Trigeminal pass on its outer side. This feature of the pterygoquadrate bar has not been so far described among any of the Teleostomi.¹ A complete comparative account of the skulls of various members of the family *Ophiocephalidae* and *Cyprinidae* (chiefly *Labeo*, *Catla*, *Cirrhina*, etc.) will be shortly published elsewhere.

B. S. BHIMACHAR.

Department of Zoology,
Bangalore,
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¹ E. S. Goodrich, *Studies on the Structure and Development of Vertebrates*, p. 413, London, 1930.