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Comparison of Ceratohyal Development in *Danio Rerio* and *Hemigrammus Erythrozonus*

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COMPARISON OF CERATOHYAL DEVELOPMENT IN *DANIO RERIO* AND *HEMIGRAMMUS ERYTHROZONUS*

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Although the tetra *Hemigrammus erthryozonus* and the zebrafish *Danio rerio* are both considered Ostariophysian fishes, they exhibit different bone and cartilage growth patterns during development. Utilizing whole mount alcian blue and alizarin red staining, we examined the pattern of growth of the ceratohyal cartilage in *Hemigrammus erythrozonus* and *Danio rerio.* Comparisons were made between these two fishes in regard to overall size and length of the ceratohyal as well as the patterns of ossification. Our data revealed that *Hemigrammus* possesses a larger ceratohyal, morphologically distinct from that of *Danio.* Moreover, the growth and subsequent ossification occurs more rapidly in *Hemigrammus*. The differences observed may correlate with discrete predatory and/or behavioral niches occupied by these fishes in their respective environments. These initial data provide a basis for further studies, including a more detailed analysis of the development of the ceratohyal cartilage and a determination of how skeletogenic genes are differentially expressed between these two species.