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CHAPTER-14

HORMONAL REGULATION OF GROWTH IN FISHES

Sambid Swain[1], Biswajit Mohanty[1], Avijit Biswas[1], Devanand T N[1], Sagarika Swain[1], Hauzou Kim[1]

[1]School of Fisheries, Centurion University of Technology and Management, R. Sitapur, India

Introduction:

Growth is defined as an increase in the cell number and or cell size concomitant with a positive change in energetic content of the organism under consideration. The growth occurs when the rate of synthesis of the body constituents exceed those for simple replacement rates.

Partioning of the resource in growth in vertebrate is controlled by number of biotic and abiotic factors with any factor altering the energetic impacting growth. Generally these factors ranges from temperature and photoperiod, through food quality and availability of anima density to circannual variability, reproductive phases and pollutant, oxygen concentration, salinity, medium density, water quality and water flow. Further the inter and intra specific, social interaction, predation and disease can impact the growth rate. Although the genetic factors also contributes for such changes.

Growth in fishes:

Few research were undertaken in this approach and it is totally different from other vertebrate as there as some short lived species like the annual fishes, fish growth is in determinant i.e. the growth continues through out there life. Although the relative growth rates are decreased with ages, same does not apply to absolute growth rates