

THE CHARACTERIZATION OF SOMATIC CHROMOSOMES OF FRESH WATER CATFISH HETEROPNEUSTES FOSSILIS BY NUCLEAR ORGANIZING REGION (NOR) AND G BANDING

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Abstract

Numerous procedures are now available for identifying chromosomes. Karyotypes are being prepared for clinical and research purposes. Although the ability to analyse the chromosome depends on size, but much depends on how well they are fixed, spread and stained. The NOR bands of the chromosomes are obtained from silver stain which represent the chromosomal sites of the 18s and 28s ribosomal R.N.A., genes which presumably were actively transcribed at a preceding interphase. G banding patterns revealed that transverse bands on them were visible after pretreatment of chromosomes with trypsin enzyme before staining with Giemsa. Generally G banding corresponds to the late replicating region of the genome which contains relatively few active genes. The present paper discusses the main technical aspects of NOR and G Banding in experimental fresh water teleost, *Heteropneustes fossilis* which can assist in the diagnosis of genotypic aberration due to unwanted environmental changes.

key words

Chromosomes, *Heteropneustes fossilis*, NOR, G banding

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