



# National Bureau of Fish Genetic Resources

(Indian Council of Agricultural Research)

Canal Ring Road, Dilkusha PO, Lucknow-226002, India



**Name** Dr. Ravindra Kumar

**Designation** Senior Scientist

**Date of birth** 10.01.1968

**Professional experience** 15+ years

**Qualification (PG and above)** M.Sc., Ph.D.



**Current area of Research**

- Physical localization of genes on fish chromosomes using fluorescence in situ hybridization (FISH)
- Genotoxic assessment of pollutants in fishes.

**Area of Research Expertise** Fish Genetics

**Awards/ Recognitions (only National and International)** Nil

#### Publication (no.)

- **Research papers** • 42
- **Reviews** • -
- **Books** • 01
- **Book Chapters** • 10
- **Popular articles** • 02
- **Others** • 02 (CD/ Database)

#### Important Research Publications

Pandey S, **Kumar R**, Sharma S, Nagpure N S, Srivastava S K and Verma M S (2005). Acute toxicity bioassays of mercuric chloride and malathion on air-breathing fish *Channa punctatus* (Bloch). *Ecotoxicology and Environmental Safety*, **61**: 114-120.

Pandey S, Nagpure N S, **Kumar R**, Sharma S, Srivastava S K and Verma M S (2006) Genotoxicity evaluation of acute doses of endosulfan to fresh water teleost *channa punctatus* (bloch) by alkaline single cell gel electrophoresis. *Ecotoxicology and Environmental Safety* **65(1)**: 56-61.

Sharma S, Nagpure N S, **Kumar R**, Pandey S, Srivastava S K, Singh P J and Mathur P K (2007) Studies on genotoxicity of endosulfan in different tissues of fresh water fish *Mystus vittatus* using the comet assay. *Archives of Environmental Contamination and Toxicology* **53**: 617-623.

- Kumar R**, Singh P J, Nagpure N S, Kushwaha B, Srivastava S K and Lakra W S (2007) A non-invasive technique for rapid extraction of DNA from fish Scales. *Indian Journal of Experimental Biology* **45**: 992-997.
- Ali D, Nagpure N S, Kumar S, **Kumar R**, Kushwaha B (2008). Genotoxicity assessment of acute exposure of chlorpyrifos to freshwater fish *Channa punctatus* (Bloch) using micronucleus assay and alkaline single-cell gel electrophoresis. *Chemosphere*, **71**: 1823-1831.
- Ali D, Nagpure N S, Kumar S, **Kumar R**, Kushwaha B, Lakra W S (2009). Assessment of genotoxic and mutagenic effects of chlorpyrifos in freshwater fish *Channa punctatus* (Bloch) using micronucleus assay and alkaline single-cell gel electrophoresis. *Food and Chemical Toxicology*, **47**: 650-656.
- Singh M, **Kumar R**, Nagpure N S, Kushwaha B, Gond I and Lakra W S (2009). Chromosomal localization of 18S and 5S rDNA using FISH in genus *Tor* (Pisces, Cyprinidae). *Genetica*, **137(3)**: 245–252.
- Kumar R**, Kushwaha B, Nagpure N S, Behera B K, Srivastava S K and Lakra W S (2009). Physical mapping of rRNA gene in endangered fish *Osteobrama belangeri* (Valenciennes, 1844) (Family: Cyprinidae). *Indian Journal of Experimental Biology*, vol. **47**, July, pp. 597-601.
- Kumar R**, Nagpure N S, Kushwaha B, Srivastava S K and Lakra W S (2010). Investigation of the genotoxicity of Malathion to freshwater teleost fish *Channa punctatus* (Bloch) using micronucleus test and comet assay. *Archives of Environmental Contamination and Toxicology*, **58(1)**: 123-30.
- Mani I, **Kumar R**, Singh M, Kushwaha B, Nagpure N S, Srivastava P K, Murmu K, Rao D S K and Lakra W S (2009). Karyotypic diversity and evolution of seven Mahseer species (Pisces, Cyprinidae) from India. *Journal of Fish Biology* **75**: 1079–1091.
- Singh M, **Kumar R**, Nagpure N S, Kushwaha B, Mani I, Lakra W. S. (2009). Extensive NOR site polymorphism in geographically isolated populations of Golden mahseer, *Tor putitora*. *Genome* **52(9)**: 783-789.
- Kushwaha B P, Mandal A, Arora A L, **Kumar R**, Kumar S and Notter D R (2009). Direct and maternal (co)variance components and heritability estimates for body weight in Chokla sheep. *Journal of Animal Breeding and Genetics* **126(4)**: 278-287.
- Singh M, **Kumar R**, Nagpure N S, Kushwaha B, Mani I, Chauhan U K and Lakra W S (2009). Population distribution of 45S and 5S rDNA in golden Mahseer, *Tor putitora*: Population specific FISH marker. *Journal of Genetics*, **88(3)**: 315-20.
- Nwani C D, Lakra W S, Nagpure N S, **Kumar R**, Kushwaha B, Srivastava S K (2010). Mutagenic and genotoxic effects of carbosulfan in freshwater fish *Channa punctatus* (Bloch) using micronucleus assay and alkaline single-cell gel electrophoresis. *Food and Chemical Toxicology*, **48(1)**: 202-208.
- Singh M, **Kumar R**, Nagpure N S, Kushwaha B, Mani I, Murmu K, Chauhan U K and Lakra W S (2010). Nucleotide sequences and chromosomal localisation of 45S and 5S rDNA in *Neolissochilus hexagonolepis* (Pisces, Cyprinidae) using dual colour FISH. *Zoological Science*, **27(8)**: 709-16.