



# National Bureau of Fish Genetic Resources

(Indian Council of Agricultural Research)

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



**Name** Dr Rajeev Kumar Singh

**Designation** Scientist (Senior Scale)

**Date of birth** 19 June 1975

**Professional experience** 11 Years

**Qualification** M.Sc (Biochemistry),  
M.Tech (Biotechnology),  
PhD (Biotechnology)



**Current area of Research** Molecular Genetics

## Area of Research Expertise

- Development of molecular markers for intra-specific genetic diversity of fishes
- Genetic Stock structure of important fish species
- Sequencing of whole mitochondrial genome
- Construction of enriched microsatellite genomic library of selected fishes

## Awards/ Recognitions

- **GATE** (Graduate Aptitude Test in Engineering) Scholarship by All India Council for Technical Education, India from 1997-1999
- Qualified CSIR-UGC National Eligibility Test (**NET**), 1998 conducted by Ministry of Human Resource and Development, Government of India

**Publication (no.)** 18  
**Research papers**

## Important Research Publications

**Singh R K**, Lal K K, Mohindra V, Punia P, Sah R S, Mishra A K, Kumar R, Mishra B N and Lakra W S (2010) Assessing genetic differentiation in geographic populations of *Labeo calbasu* (Hamilton, 1822) using allozyme markers. *Biochemical Genetics* **48 (9)**: 760-778.

Chaturvedi A, Mohindra V, **Singh R K**, Lal K K, Punia P, Ranjana, Mandal A, Narain L and Lakra W S (2010) Population Genetic Structure and Phylogeography of Cyprinid fish, *Labeo dero* (Hamilton) inferred from Allozyme and Microsatellite DNA Marker Analysis. *Molecular Biology Reports* (in press).

Mandal A, Lal K K, Mohindra V, **Singh R K**, Punia P, Chauhan U K and Lakra S W (2009) Population structure of Indian feather-back fish, *Chitala chitala* using allozyme, random amplified polymorphic DNA (RAPD) and microsatellites. *Biochemical Genetics* **47 (3-4)**:

- Singh R K** and Lal K K (2008). Identification of polymorphic allozyme markers in Golden Mahseer *Tor putitora*. *Fishery Technology* **45(1)**: 95-102.
- Singh R K**, Lal K K, Mohindra V, Punia P and Lakra W S (2008) Cross-species amplification of microsatellite loci in the cyprinid fish, *Labeo calbasu* (Hamilton, 1822) *Acta Zoologica Sinica* **54(5)**: 937-940.
- Mohindra V, **Singh R K**, Punia P, Gupta H S, Lal K K, Mishra A, Kumar R, Sah R S and Lakra W S (2007) Isolation and characterization of polymorphic microsatellite loci in yellow catfish, *Pangasius pangasius* (Hamilton, 1822). *Molecular Ecology Resources* **8**: 864–866
- Chauhan T, Lal K K, Mohindra V, **Singh R K**, Punia P, Gopalakrishnan A, Sharma P C and Lakra W S (2007) Genetic differentiation in the population of Indian major carp, *Cirrhinus mrigala* (Hamilton-Buchanan, 1882): evidence from allozyme and microsatellite markers. *Aquaculture* **269**: 135-149
- Lal K K, **Singh R K**, Mohindra V, Mandal A, Punia P, Mishra B N and Lakra W S (2007) Molecular detection of a *Labeo calbasu* x *Labeo rohita* hybrid, from the river Ganges, *Acta Zoologica Sinica* **53(4)**: 773-776
- Mohindra V, **Singh R K**, Palanichamy M, Ponniah A G and Lal K K, (2007). Genetic Identification of three species of genus *Clarias* using allozyme and mitochondrial DNA markers. *Journal of Applied Ichthyology* **1**: 104-109
- Punia P, Gupta H S, **Singh R K**, Mohindra V, Lal K K, Ranjana, Chauhan V S And Lakra W S, (2006). Polymorphic microsatellite markers isolated from partially enriched genomic library of *Chitala chitala*. *Molecular Ecology Notes*, **6**: 1263-1265.
- Lal K K, Mandal A, **Singh R K**, Punia P, Kapoor D, Chauhan U K, Singh S P and Mohindra V. (2006) Genetic divergence in two feather back fishes, *Chitala chitala* and *Notopterus Notopterus*. *Journal of Applied Ichthyology* **22 (5)**: 369-373.
- Mohindra V, Ahumala, **Singh R K**, Narain L, Punia P, Kapoor D and Lal K K 2005 Allozyme markers for population structure analysis in *Labeo dero* (Hamilton Buchanan, 1822) *Asian Fisheries Science*. **18 (1& 2)**: 71-76
- Singh R K**, Chauhan T, Mohindra V, Kapoor D, Punia P and Lal K K 2004 Identification of allozyme markers for population structure analysis in *Cirrhinus mrigala* (Hamilton-Buchanan, 1882). *Indian Journal of Fisheries*. **51(1)**: 117-122
- Lal K K, Chauhan T, Mandal A, **Singh R K**, Khulbe L, Ponniah and Mohindra V (2004) Identification of microsatellite DNA markers for population structure analysis in Indian major carp, *Cirrhinus mrigala* (Hamilton-Buchanan, 1882) *Journal of Applied Ichthyology* **20(2)**: 87-91
- Lal K K, **Singh R K**, Mohindra V, Singh B and Ponniah A G. 2003 Genetic makeup of exotic catfish *Clarias gariepinus* in India, *Asian Fisheries Science* **16**: 229-234