



National Bureau of Fish Genetic Resources

(Indian Council of Agricultural Research)

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



Name Dr. (Mrs) Vindhya Mohindra
Designation Principal Scientist
Date of birth 31st May, 1963
Professional experience 20 years
Qualification M.Sc. (Genetics), Ph.D. (Genetics)



Current area of Research

- Conservation Genetics
- Functional genomics

Area of Research Expertise

- Development of Molecular markers and genetic diversity and phylogenetic analysis.
- Bio-prospecting and characterization of genes for stress tolerance in fishes.
- Transcriptome and Gene expression profiling.

Awards/ Recognitions

- **Awarded DBT Overseas Associateship** -2006 for six months at NRC-Institute for Marine Biosciences, Halifax, Canada from March- September, 2008. Worked on Gene Expression and Genome Mapping Studies in Fishes
- **Young Scientist** of the Year 2001 ICEP Science Academy, Gorakhpur
- **NBFGR Best Scientist** of year 2010

Publication (no.)

- **Research papers** 52
- **Reviews**
- **Books** 1
- **Book Chapters** -
- **Popular articles** -
- **Others** 2

Important Research Publications

Mandal A, **Mohindra V**, Singh R K, Punia P, and Lal K K 2011. Mitochondrial DNA variation in Indian populations of endangered Feather-Back Fish, *Chitala chitala*. Molecular Biology Reports, DOI: 10.1007/s11033-011-0917-9.

Luhariya, R K, Lal K K , Singh R K, **Mohindra V**, Punia P, U. K. Chauhan U K, Gupta A and Lakra W S 2011. Genetic divergence in wild population of *Labeo rohita* (Hamilton, 1822) from nine Indian rivers, analyzed through MtDNA cytochrome b region. Molecular Biology Reports, DOI 10.1007/s11033-011-1140-4.

- Chaturvedi A, **Mohindra V**, Singh R K, Lal K K, Punia P, Srivastava R, Mandal A, Narain L and Lakra W S 2011. Population Genetic Structure and Phylogeography of Cyprinid fish, *Labeo dero* (Hamilton Buchanan) inferred from Allozyme and Microsatellite DNA Marker Analysis. *Molecular Biology Reports*, 38(5) : 3513 DOI: 10.1007/s11033-010-0462-y.
- Saini A, Dua A, **Mohindra V** and Lakra W S 2011. Molecular Discrimination of six species of Bagrid catfishes from Indus river system using randomly amplified polymorphic DNA markers. *Molecular Biology Reports* Volume 38(5): 2961._DOI: 10.1007/s11033-010-9960-1
- Lakra W S, Verma M S, Goswami M, Lal K K, **Mohindra V**, Punia P , Gopalakrishnan A, Singh K V, Ward R D and Hebert Paul, 2011. DNA Barcoding Indian Marine Fishes. *Molecular Ecology Resources* Volume 11: 60–71. DOI: 10.1111/j.1755-0998.2010.02894.x
- R K Singh, Lal K K, **Mohindra V**, Punia P, Sah R S, Mishra A K, Kumar R, Mishra B N, Lakra W S 2010. Assessing Genetic Differentiation in Geographic Populations of *Labeo calbasu* (Hamilton, 1822) using Allozyme Markers. *Biochemical Genetics* Volume 48, Numbers 9-10, 760-778.
- Habib M, Lakra W S, **Mohindra V**, Khare P, Barman A S, Singh A, Lal K K, Punia P and Khan A A 2010 . Evaluation of Cytochrome b mtDNA sequences in genetic diversity studies of *Channa marulius* (Channidae: Perciformes). *Molecular Biology Reports* 38(2): 841-6. DOI 10.1007/s11033-010-9960-1.
- Murray H M, Lall S P, Rajaselvam R, Boutilier L A, Flight R M, Blanchard B, Colombo S, **Mohindra V**, Yúfera M and Douglas S E 2010. Effect of early introduction of microencapsulated diet to larval Atlantic halibut, *Hippoglossus hippoglossus*, L. assessed by microarray analysis. *Marine Biotechnology* **12**: 214–229. DOI: 10.1007/s10126-009-9211-4.
- Murray H M, Lall S P , Rajaselvam R , Boutilier L A , Blanchard B , Flight R M , Colombo S, **Mohindra V** , Douglas S E 2010. A nutrigenomic analysis of intestinal response to partial soybean meal replacement in diets for juvenile Atlantic halibut, *Hippoglossus hippoglossus*, L. *Aquaculture* 298 : 282–293.
- Gopalakrishnan A, Musammilu K K, Basheer V S, John L, Padmakumar K G, Lal K K, **Mohindra V**, Punia P, Dinesh K , Manjebrayakath H, Ponniah A G, Lakra W S, 2009. Low Genetic Differentiation in the Populations of the Malabar Carp *Labeo dussumieri* as revealed by Allozymes, Microsatellites and RAPD. *Asian Fisheries Science*, 22 (2) : 359-391.
- 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 :216-234.
- Divya P R, Thomas P C, **Mohindra V**, Lal K K, Singh R K, Gopalakrishana A, Punia P and Lakra W S, 2009. A molecular approach to reveal the genetic identity of parrot mussel and other sympatric species distributed along the Kerala Coast. *J. Mar. Biol. Assn. India*, **51(3)**: in press.

Saini A, Dua A and **Mohindra V**, 2009. A morphometric study of giant river catfish (*Sperata seenghala*) population in Maharana Pratapsagar Lake of Pong Dam. *Ecology, Environment and Conservation*, 15(4): 857-862.

Mohindra V, Singh R K, Punia P, Gupta H S, Lal K K, Mishra A, Kumar R, Shah R and Lakra W S, (2008) Isolation and characterization of polymorphic microsatellites in yellow catfish, *Pangasius pangasius* (Hamilton, 1822). *Molecular Ecology Resources* , 8 (4): 864-866.

Abdul Muneer PM, Gopalakrishnan A, Musammilu K K, **Mohindra V**, Lal KK, Basheer VS, Lakra WS (2008) Genetic variation and population structure of endemic yellow catfish, *Horabagrus brachysoma* (Bagridae) among three populations of Western Ghat region using RAPD and microsatellite markers. *Molecular Biology Reports*. 36(7): 1779-91.