



National Bureau of Fish Genetic Resources
(Indian Council of Agricultural Research)
Canal Ring Road, Dilkusha PO, Lucknow-226002, India



Name	Dr. J. K. Jena
Designation	Director
Date of Birth	28 October, 1965
Year of experience	21 years
Qualification	M.Sc. (Mariculture); Ph. D. (Aquaculture)
Current research area	Freshwater aquaculture, Conservation genetics



Area of Research Expertise

- Breeding and husbandry of major and minor carps
- Aquaculture diversification with new species of interests
- Bioremediation
- Cryopreservation
- Freshwater pearl culture
- Conservation genetics
- Aquaculture development

Awards/Recognitions:

ICAR Award for the Team Research in Fisheries for the Biennium 2006-2007 (As Team Leader) on 16 July, 2008 for Diversification of freshwater Aquaculture.

Special onetime Award by Indian Council of Agricultural Research, New Delhi during 16 July, 1998 for contribution in formulation of carp diet.

ICAR Award for the Team Research in Fisheries for the Biennium 1997-1998 (As a Member of the Research Team) on July, 17, 2000 for Development of Technology of Wastewater Treatment through Aquaculture.

Pillay Aquaculture Award-2011 of the Pillay Aquaculture Foundation, Indian Chapter for Excellence in Aquaculture Research, Extension and Development on 19 December, 2011 under the auspices of 9th Indian Fisheries Forum at Chennai, India.

Prof. H.P.C. Shetty Award for Excellence in Fisheries Research and/or Development for 2008 by Asian Fisheries Society, Indian Branch on 25 Nov., 2008 during 8th Indian Fisheries Forum held at Kolkata.

Elected as the **Associate** of the **National Academy of Agricultural Sciences**, New Delhi for the Period **2005-2009**.

Awarded as National Fellow of ICAR, New Delhi, January, 2005- March, 2009.

Best Young Scientist Award of the Dr. Hiralal Choudhuri Fisheries Foundation, Mumbai for the year 2001 on 11 September, 2001.

Scientist of the Year Award by the Bioved Research and

Communication Centre, Allahabad on 19 February, 2000 during 2nd Indian Agricultural Scientists and Farmers Congress.

Dr. S. Z. Qasim Medal-2011 of the Bioved Research Society, Allahabad on the occasion of 13th Indian Agricultural Scientists and Farmers' Congress held during 19-20 February, 2011.

Member of the Executive Committee, Asian Fisheries Society Indian Branch, Mangalore, India since November, 2005.

Member of the Task Force of Department of Biotechnology, New Delhi for the Biotechnology Based Programme for Women during 2005-07.

Member of the Expert Committee for S&T for Women for Department of Science and Technology, New Delhi during 2008-2010.

Councilor of the Asian Fisheries Society, Kuala Lumpur for the 11th Council from 2013.

Publications:

Research papers : 91 nos

Reviews : 7 nos

Books : 5 nos

Book chapters : 20 nos

Popular articles : 57 nos

Others : 110 Abstracts, 7 documents for National Planning

Important Research Publications:

Jena, J. K., S. Ayyappan, P. K. Aravindakshan, B. Dash, S. K. Singh and H. K. Muduli, 2002. Evaluation of production performance in carp polyculture with different stocking densities and species combinations. *J. Appl. Ichthyology*, **18**: 165-171.

Jena, J. K., S. Ayyappan and P. K. Aravindakshan, 2002. Comparative evaluation production performance in varied cropping patterns of carp polyculture systems. *Aquaculture*, **207**: 49-64.

Barik, S. K., **J. K. Jena** and K. Janaki Ram, 2004. CaCO₃ crystallisation in primary culture of mantle epithelial cells of freshwater pearl mussel. *Current Science*, **8**: 730-734.

Das, P. C., S. Ayyappan, B. K. Das and **J. K. Jena**, 2004. Nitrite toxicity in Indian major carps: sub-lethal effect on selected enzymes in fingerlings of *Catla catla*, *Labeo rohita* and *Cirrhinus mrigala*. *Comp. Bio. Physiol.*, Part C, **138**: 3-10.

Biswas, G., **J. K. Jena**, S. K. Singh, P. Patmajhi and H. K. Muduli, 2006. Effect of feeding frequency on growth, survival and feed utilization in mrigal, *Cirrhinus mrigala* and rohu, *Labeo rohita* during nursery rearing. *Aquaculture*, **254**: 211-218.

Biswas, G., **J. K. Jena**, S. K. Singh and H. K. Muduli, 2006. Effect of feeding frequency on growth, survival and feed utilization in fingerlings of *Catla catla*, *Labeo rohita* and *Cirrhinus mrigala* in outdoor rearing systems. *Aqua. Res.*, **37**: 510-514.

Routray, P., A. K. Chaoudhary, S. N. Dash, D. K. Verma, C. Dash, P. Swain, **J. K. Jena**, S. D. Gupta and N. Sarangi, 2006. Cryopreservation of dead fish spermatozoa several hours after death of Indian major carp, *Labeo rohita* and its successful utilization in fish production. *Aquaculture*, **261**: 1204-1211.

- Jena, J. K.**, P. C. Das, R. Das and S. Mondal, 2007. Performance of olive barb, *Puntius sarana* (Hamilton) in fingerling rearing with rohu, *Labeo rohita* (Hamilton) and mrigal, *Cirrhinus mrigala* (Hamilton). *Aquaculture*, **265**: 305-308.
- Jena, J. K.**, P. C. Das, S. Mondal and R. Das, 2007. Compatibility of silver barb *Puntius gonionotus* (Bleeker) with Indian major carps in grow-out polyculture. *Aqua. Res.*, **38**:1061-1065.
- Sahu, P. K., **J. K. Jena**, P. C. Das, S. Mondal and R. Das, 2007. Production performance of *Labeo calbasu* (Hamilton) in polyculture with three Indian major carps *Catla catla* (Hamilton), *Labeo rohita* (Hamilton) and *Cirrhinus mrigala* (Hamilton) with provision of fertilizers, feed and periphytic substrate as varied inputs. *Aquaculture*, **262**: 333-339.
- Pattnaik, S., G B N. Chaiy and **J K Jena**, 2007. Characterization of Ca²⁺-ATPase activity in gill microsomes of freshwater mussel, *Lamellidens marginalis* (Lamarck) and heavy metal modulations. *Aquaculture*, **270**(1-4): 443-450.
- Jena, J. K.**, P. C. Das, S. Kar and T. K. Singh, 2008. Olive barb, *Puntius sarana* (Hamilton) is a potential candidate species for introduction into the grow-out carp polyculture system. *Aquaculture*, **280**: 154-157.
- Pawar, N. A., **J. K. Jena**, P. C. Das and D.D. Bhatanagar, 2009. Influence of duration of aeration on growth and survival of carp fingerlings during high density seed rearing. *Aquaculture*, **290**: 263-268.
- Jena, J. K.** and P. C. Das, 2011. Grow-out performance of Kuria labeo *Labeo gonius* (Hamilton) with major carps in carp polyculture system. *Aqua. Res.*, **42**(9): 1332-1338.
- Jena, J. K.**, P. C. Das, G. Mitra, B. Patro, D. Mohanta and B. Mishra, 2011. Evaluation of growth performance of *Labeo fimbriatus* (Bloch), *L. gonius* (Hamilton) and *Puntius gonionotus* (Bleeker) in polyculture with *Labeo rohita* (Hamilton) during fingerlings rearing at varied densities. *Aquaculture*, **319**: 493-496.
- Sahoo, P. K., J. Mohanty, S. K. Garnayak, B. R. Mohanty, B. Kar, **J. K. Jena** and H. Prasanth, 2011. Genetic diversity and species identification of *Argulus* parasites collected from major aquaculture regions of India using RAPD-PCR. *Aqua. Res.*, doi:10.1111/j.1365-2109.2011.0302.
- Bej, D., L. Sahoo, S. P. Das, S. Swain, P. Jayasankar, P. C. Das, P. Routray, S. K. Swain, **J. K. Jena** and P. Das, 2012. Complete mitochondrial genome of *Labeo rohita*. *Mitochondrial DNA*. 23(6): 441-443.
- Chaudhary, D. K., N. Sood, T. R. Swaminathan, G. Rathore, P. K. Pradhan, N. K. Agarwal and **J. K. Jena**, 2013. Establishment and characterization of an epithelial cell line from thymus of *Catla catla* (Hamilton, 1822). *Gene*, 10; 512(2): 546-53.
- Chaudhary, D. K., N. Sood, G. Rathore, P.K. Pradhan, P. Punia, N.K. Agarwal and **J. K. Jena**, 2012. Establishment and characterization of macrophage cell line from thymus of *Catla catla* (Hamilton, 1822). *Aquac. Res.*. doi:10.1111/j.1365-2109.2012.03227.x
- Das, Sofia P., D. Bej, S. Swain, P. Das, B.K. Chaudhary, **J.K. Jena**, P. Routray, S.K. Swain, P.C. Das and P. Jayasankar, 2013. Comparative and evolutionary analysis of mitochondrial genes in Indian major carps. *Biochem. System. Ecol.*, 47: 56-73.
- Hemaprasanth,, K. P., Banya Kar, S. K. Garnayak, J. Mohanty, **J.K. Jena** and P.K. Sahoo,, 2012. Efficacy of two avermectins, doramectin and ivermectin against *Argulus siamensis* infestation in Indian major carp, *Labeo rohita*. *Veterinary Parasitology*, 190(1-2): 297-304. DOI: [http:// dx.doi.org/ 10.1016/j.vetpar.2012.05.010](http://dx.doi.org/10.1016/j.vetpar.2012.05.010)
- Lal, K. K., R. K. Singh, A. Pandey, B. K. Gupta, V. Mohindra, P. Punia, S. Dhawan, J. Verma, L.

- K. Tyagi, P. Khare and **J. K. Jena**, 2012. Distribution Records of Tor Mahseer *Tor tor* (Hamilton, 1822) in the Southern India. *J. Appl. Ichth.*, DOI: 10.1111/jai.12017.
- Mir, J. I., U. K. Sarkar, A. K. Dwivedi, O. P. Gusain and **J. K. Jena**, 2013. Stock structure analysis of *Labeo rohita* (Hamilton, 1822) across the Ganga basin (India) using a truss network system. *J. Appl. Ichth.*, DOI: 10.1111/jai.12141.
- Mir, J. I., U. K. Sarkar, A. K. Dwivedi, O. P. Gusain, A. Pal and **J. K. Jena**, 2012. Pattern of intrabasin variation in condition factor, relative condition factor and form factor of an Indian Major Carp, *Labeo rohita* (Hamilton Buchanan, 1822) in the Ganges basin, India. *Eur. J. Biol. Sci.*, 4(4): 126-135.
- Pradhan, P. K., **J. K. Jena**, G. Mitra, N. Sood and E. Gisbert, 2013. Ontogeny of the digestive tract in butter catfish *Ompok bimaculatus* (Bloch) larvae. *Fish Physiol. Biochem.* 38: 1601-1617.
- Pradhan, P. K., **J. K. Jena**, G. Mitra, N. Sood and E. Gisbert, 2013. Ontogeny of the digestive enzymes in butter catfish *Ompok bimaculatus* (Bloch) larvae. *Aquaculture*, 372-375: 62-69.
- Sahoo, P. K., J. Mohanty, Hemaprasanth, Banya Kar, B. R. Mohanty, S. K. Garnayak and **J. K. Jena**, 2012. Egg laying strategies and effect of temperature on egg development of *Argulus siamensis*. *J. Parasit. Dis.* DOI 10.1007/s12639-012-0148-6
- Tripathi, R. K., V. Mohindra, A. Singh, R. Kumar, R. M. Mishra and **J. K. Jena**, 2013. Determination of critical oxygen tension and hypoxic metabolism in air-breathing Indian catfish, *Clarias batrachus* (Linnaeus, 1758) during acute experimental hypoxia. *J. Biosci.*, 38(2): 1-11