



**Dr. Bikash Chandra Mohapatra**

**Principal Scientist**

**Mob-** 09437229487

**E-mail-** [bcmohapatra65@gmail.com](mailto:bcmohapatra65@gmail.com)

[bcmohapatra65@yahoo.co.in](mailto:bcmohapatra65@yahoo.co.in)

<b>Department</b>	Aquaculture Production & Environment Division
<b>Institute/University</b>	Central Institute of Freshwater Aquaculture ( <i>Indian Council of Agricultural Research</i> )
<b>Address</b>	Central Institute of Freshwater Aquaculture P.O. - Kausalyaganga, Bhubaneswar- 751 002 Odisha, India.
<b>Date of Birth</b>	26 <sup>th</sup> June 1965
<b>Sex</b>	Male
<b>Tel</b>	0674 2465446 (Extn. 410)
<b>Fax</b>	0674 2465407

### **Educational Qualifications**

<b>1</b>	<b>D.Sc.</b> in Marine Sciences (2001), Berhampur University, Odisha
<b>2</b>	<b>Ph.D.</b> in Mariculture (1994), CMFRI, Cochin University of Science & Technology, Cochin, Kerala
<b>3</b>	<b>M.Sc.</b> in Mariculture (1994), CMFRI, Cochin University of Science & Technology, Cochin, Kerala
<b>4</b>	<b>MBA</b> in HRD (1999), Indira Gandhi National Open University, New Delhi
<b>5</b>	<b>B.F.Sc.</b> (1987), Orissa University of Agriculture & Technology, Bhubaneswar

## Academic Awards

A	Scholarships/ Fellowships	<ul style="list-style-type: none"> <li>• <b>U.P. Scholarship</b> awarded by Khurda Educational Division, Odisha in Class-V.</li> <li>• <b>National Rural Talent Scholarship</b> awarded by Board of Secondary Education, Odisha in Class- VII and stood <b>First</b> in Banapur Block, Khurda District, Odisha.</li> <li>• <b>National Scholarship</b> awarded by Board of Secondary Education, Odisha in H.S.C. and continued till the completion of B.F.Sc.</li> <li>• <b>Junior Research Fellowship</b> awarded by Indian Council of Agricultural Research (ICAR), New Delhi in M. Sc. (Mariculture).</li> <li>• <b>Senior Research Fellowship</b> awarded by ICAR, New Delhi in Ph.D. (Mariculture).</li> </ul>
B	Awards	<p><b>International</b></p> <ul style="list-style-type: none"> <li>• <b>CIGR Journal Outstanding Paper Award-2010</b> for the high quality scientific publication from the <u>International Commission of Agricultural and Biosystems Engineering (Commission Internationale du Génie Rural (CIGR))</u> on 15 June 2010 during the 17<sup>th</sup> CIGR World Congress-2010 (12-17 June 2010) held at Quebec, Canada.</li> </ul> <p><b>National</b></p> <ul style="list-style-type: none"> <li>• <b>First Rank</b> in M. Sc. (Mariculture) in Cochin University of Science and Technology, Cochin, Kerala in 1989.</li> <li>• <b>Gold Medal</b> for Outstanding group performance in the “Field Experience Training” from National Academy of Agricultural Research Management (ICAR), Hyderabad, Andhra Pradesh in 1995.</li> <li>• <b>Letter of Appreciation</b> from Dr. Panjabrao Deshmukh Krishi Vidyapeeth (University), Akola, Maharashtra State for Outstanding contributions to fisheries research in Central India and in particular Vidarbha Region, Maharashtra State in 1998</li> <li>• <b>One-time Achievement Award</b> from Dr. Panjabrao Deshmukh Krishi Vidyapeeth (University), Akola, Maharashtra State, for Book “Aquaculture: with special reference to Vidarbha, Maharashtra State, India” edition, and excellent contributions and services to Vidarbha Region, Maharashtra State for fisheries research and development in 1999.</li> </ul>

- **Best Young Scientist Award** from Central Institute of Freshwater Aquaculture (CIFA), Kausalyaganga, Bhubaneswar, Odisha in 2000.
- **Letter of Appreciation** from the Fifth Indian Fisheries Forum, CIFA, Bhubaneswar, Odisha for contribution to research and development in aquaculture in the country in January 2000.
- As a member received the **Team Award** from Central Institute of Freshwater Aquaculture (CIFA), Kausalyaganga, Bhubaneswar, Odisha in 2001.
- **Letter of Appreciation** from Fisheries Division, Indian Council of Agricultural Research, New Delhi for **exemplary team work** for “Improved version of FRP portable hatchery for carp seed production” in 2004-2005.
- **Fellowship Award** in the field of “Marine and freshwater aquaculture” from the Bioved Research Society, Allahabad, Uttar Pradesh in 2005.
- **Best Paper Presentation Award (First Prize)** in the **International Conference** on Plasticulture and Precision Farming, 17-21 Nov., 2005, the Ashok, Chanakyapuri, New Delhi. The National Committee on Plasticulture Applications in Horticulture (NCPAH), Govt. of India has organized it.
- **Letter of Appreciation** from NR International, Western Odisha Rural Livelihoods Project, Bhubaneswar for installation and commissioning of Portable hatchery unit at Sahabhagi Vikas Abhiyan (SVA), Bilenjore, Nuapada, Odisha in 2005.
- **Letter of Appreciation** from Banaras Hindu University, Varanasi, Uttar Pradesh for successful commissioning of the hatchery during 17-22 August 2006.
- **Letter of Appreciation** from Fisheries Division, Indian Council of Agricultural Research, New Delhi for exemplary team work for “Design, fabrication and demonstration of cages for enhancing fish productivity” in 2005-2006.
- **Special Appreciation** from Central Institute of Freshwater Aquaculture, Bhubaneswar, Odisha for contribution and unique support to the common cause of consolidating the Institution-building pyramid during 2005-06.
- **Special Appreciation** from Central Institute of Freshwater Aquaculture, Bhubaneswar, Odisha for valuable contribution in the field of Application of Plastics in Aquaculture in 2006.

	<ul style="list-style-type: none"> <li>As a team member received the <b>Best Division Award</b> from Central Institute of Freshwater Aquaculture (CIFA), Kausalyaganga, Bhubaneswar, Odisha in 2006.</li> <li><b>Best Extension Worker Award</b> from Central Institute of Freshwater Aquaculture (CIFA), Kausalyaganga, Bhubaneswar, Odisha in 2007.</li> <li><b>Letter of Appreciation</b> from West Utkal Agricultural Centre, Diptipur, Bargarh District, Odisha for successful commissioning of FRP Portable Carp Hatchery at Diptipur in 2007.</li> <li><b>Letter of Appreciation</b> from NR International, Western Odisha Rural Livelihoods Project, Bhubaneswar for outstanding support for installation and operation of FRP hatchery unit at Diptipur, Bargarh District, Odisha in 2007 and once again received the official appreciation in 2008.</li> <li><b>Scroll of Honour</b> from Orissa Watershed Development Mission, Agriculture Department, Government of Odisha for dedicated services for aquaculture development in Western Orissa. The Award was presented in Western Odisha Fish Farmers Mela held at WUAC, Diptipur, Bargarh, Odisha on 7 August 2008.</li> <li><b>Life Time Achievement Award</b> from the Diocese of Sambalpur, Mission Compound, Bolangir and West Utkal Agricultural Centre, Diptipur, Bargarh, Odisha for the dedicated services to the fish farming communities of Western Odisha in general and Bargarh and Nuapada Districts in particular. This Life-time achievement award was presented to me by Rt. Rev. Pinuel Dip, Bisop, Diocese of Sambalpur in the Pastor Conference held at Raj Khariar on 13 December 2009.</li> <li>As a member received the <b>Krushakbandhu Team Award</b> for distinct contribution in NAIP-SRLS project for the livelihood improvement of farm families in Sambalpur, Mayurbhanj and Keonjhar Districts of Odisha from Orissa Krushak Samaj in World Food Day, 16 October 2011.</li> </ul>
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<b>Research Experiences</b>	<ul style="list-style-type: none"> <li>Breeding, Hatchery Management &amp; Culture of Fish</li> <li>Aquatic Pollution Studies</li> <li>Development of Plastic Gadgets and Systems for Aquaculture</li> </ul>
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<p><b>Current Research Interests</b></p>	<ul style="list-style-type: none"> <li>• Breeding, Hatchery Management of Carps</li> <li>• Development of Plastic Gadgets and Systems for Aquaculture</li> <li>• Rural/ Tribal Aquaculture</li> <li>• Hi-tech Aquaculture</li> </ul>
<p><b>Commercialization of Technology</b></p>	<ul style="list-style-type: none"> <li>• As Team Leader, commercialized the <b>Portable FRP Carp Hatchery</b> for production of 1.0-1.2 million fish seed (spawn) in one operation in 2006.</li> <li>• As Associate (with intellectual inputs), commercialized <b>Immunoboost-C</b>: A product (Injection liquid) for carp brood for development of immunity and passive transfer of it to the offspring in 2006.</li> <li>• As Associate (with intellectual inputs), commercialized the <b>Portable FRP Magur Hatchery</b> for production of fifty thousand seed per operation in 2008.</li> <li>• As Team Leader, released the <b>FRP Demand Fish Feeder</b> with holding capacity of 10 kg pellet feed on 16 March 2012.</li> </ul>
<p><b>Current Research Projects</b></p>	<ol style="list-style-type: none"> <li>1. <b>Principal Investigator</b> in the project “<u>Application of Plastics in Aquaculture</u>” operating at CIFA of the All India Coordinated Research Project (AICRP) on “Application of Plastics in Agriculture”; <u>Funded by</u>: ICAR-AICRP (It is a Planned Scheme of ICAR). <u>Project Duration</u>: May 1988 onwards till date</li> <li>2. <b>Co-Principal Investigator</b> in the project “Sustainable livelihood improvement through integrated freshwater aquaculture, horticulture and livestock development in Mayurbhanj, Keonjhar and Sambalpur Districts of Odisha”. <u>Funded by</u>: NAIP-ICAR. <u>Project Duration</u>: 2009-2012</li> <li>3. <b>Co-Principal Investigator</b> in the project “Water budgeting and management in hatchery and small earthen ponds for seed production of carps”. <u>Funded by</u>: CIFA/ICAR. <u>Project Duration</u>: 2010- 2013.</li> <li>4. <b>Principal Investigator</b> in the project “Rearing of selected fish in hi-tech system for enhanced biomass per unit area”. <u>Funded by</u>: CIFA/ICAR. <u>Project Duration</u>: 2012- 2015.</li> </ol>
<p><b>Completed Projects</b></p>	<ol style="list-style-type: none"> <li>1. <b>Co-investigator</b> in the project “Flow-through system for industrial aquaculture”. <u>Funded by</u>: National Bank for Agriculture and Rural Development (NABARD). <u>Project Duration</u>: 1 September 1994 - 28 February 1999.</li> </ol>

2. **Principal Investigator** in the project “Assessment of productivity of freshwaters in Central India and formulation of practices for production enhancement”. Funded by: CIFA/ICAR. Project Duration: April 1997-March 2002
3. **Co-investigator** in the project “Improvement of spawning efficiency of brood fish and cryopreservation of male gametes of selected carps and cultivable species for multilocational transaction”, Funded by: CIFA/ICAR.
4. **Co-investigator (CCPI)** in the project “Intensive carp polyculture for employment and entrepreneurship generation”. Funded by: Dept. of Biotechnology, Govt. of India, New Delhi. Project Duration: April 2000- March 2004.
5. **Co-investigator** in the project “Long-term effect of pituitary and hypothalamic peptide combination hormone on carp brood performance and cryopreservation of female gametes of carp”. Funded by: CIFA/ICAR.
6. **Co-investigator** in the project “Standardization of hatchery technology for seed production and grow out culture of Ganga River prawn *Macrobrachium gangeticum* (Bate)”. Funded by: CIFA/ICAR. Project Duration: April 2001- March 2005.
7. **Co-investigator** in the project “Passive transfer of immunity from mother to offspring of Indian major carps and evaluation of specific and non-specific immunity parameters for protection against infectious diseases at early stage of life for healthy seed production” Funded by: ICAR ad-hoc scheme.
8. **Principal Investigator** of the **Consultancy Project** “Setting up a portable FRP carp hatchery in Bargarh District”. Agreement made between: Management Consultants of the Western Odisha Rural Livelihoods Project (WORLP MC) and CIFA, Bhubaneswar on 25 May 2007 for one year.
9. **Principal Investigator** of the **Consultancy Project** “Breeding and demonstration for FRP carp hatchery in Diptipur, Bargarh District”. Agreement made between: WORLP MC and CIFA, Bhubaneswar on 9 June 2008.
10. **Co-Principal Investigator** in the project “Cage aquaculture and its impact on the ecosystem”. Funded by: CIFA/ICAR. Project Duration: 1 May 1997- 31 March 2009.
11. **Principal Investigator** of the Network Project “Germplasm exploration, cataloguing and conservation of fish and shellfish resources of India” Sub-project “Breeding and culture of

	<p>Mahanadi Mahseer, <i>Tor mosal mahanadicus</i>” <u>Project Duration</u>: 1 April 2006 - 31 March 2009.</p> <p>12. <b>Co-Principal Investigator</b> in the project “Economic and livelihood development of SC/ST population through freshwater aquacultural technologies”. <u>Funded by</u>: Dept. of Biotechnology, Govt. of India, New Delhi. <u>Project Duration</u>: April 2006- August 2009</p> <p>13. <b>Co-Principal Investigator</b> in the project “Water budget modeling of freshwater fish pond under warm and humid climate”. <u>Funded by</u>: CIFA/ICAR. <u>Project Duration</u>: April 2006- March 2010.</p> <p>14. <b>Principal Investigator</b> of the <b>Consultancy Project</b> “Scaling up aquaculture in Western Odisha Rural Livelihoods Project (WORLP) districts”. <u>Agreement made between</u>: NR Management Consultants India Pvt. Ltd., New Delhi and CIFA. <u>Project Duration</u>: 1 June to 30 September 2009</p> <p>15. <b>Principal Investigator</b> of the <b>Consultancy Project</b> Scaling up aquaculture in WORLP districts-Phase 2. <u>Agreement made between</u>: NRMCM, New Delhi and CIFA, Bhubaneswar. <u>Project Duration</u>: 1 December 2009 to 31 March 2010</p> <p>16. <b>Co-Principal Investigator</b> in the project “Investigations on the efficacy of commercial lactic acid bacteria as freshwater fish/shellfish probiotics” <u>Funded by</u>: CIFA/ICAR. <u>Project Duration</u>: 1 April 2007- 31 March 2011</p> <p>17. <b>Mentor Scientist</b> of the project “Demonstration of FRP hatchery techniques and environmental management leading to fish seed production and rearing through women participation in Khurda District, Odisha”. <u>Funded by</u>: Dept. of Science and Technology (GoI) for the WOSB scheme of Ms Anusaya Mallick at CIFA. <u>Project Duration</u>: 14 August 2009- 2 August 2011</p> <p>18. <b>Principal Investigator</b> in the project “Carp seed production in mobile hatchery and rearing for livelihood development of SC/ST communities in selected districts of Odisha”. <u>Funded by</u>: Dept. of Biotechnology, Govt. of India, New Delhi. <u>Project Duration</u>: 9 June 2009- 8 June 2012</p>
<b>Publications</b>	
<b>Books</b>	<p>1. <b>Mohapatra, B.C.</b> and K. Rengarajan 1995. A manual on bioassays in the laboratory and their techniques. <i>CMFRI Spl. Pub.</i>, <b>64</b>: 1-75.</p>

	<ol style="list-style-type: none"> <li>2. <b>Mohapatra, B.C.</b>, P.G. Ingole and G.M. Bharad (ed.) 1999. <i>Aquaculture: With special reference to Vidarbha, Maharashtra State, India</i>. Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Akola: Pp 1-395.</li> <li>3. <b>Mohapatra, B.C.</b> and K. Rengarajan 2000. Heavy metal toxicity in the estuarine, coastal and marine ecosystems of India. <i>CMFRI Spl. Pub.</i>, <b>69</b>: 1-121.</li> <li>4. <b>Mohapatra, B.C.</b> and C. Saha 2000. <i>Aquatic Pollution and Management</i>. Central Institute of Freshwater Aquaculture, Bhubaneswar: Pp 1-363.</li> <li>5. Sahu, J.P., J.K. Sahoo and <b>B.C. Mohapatra</b> (for Pisciculture) 2006. <i>Dairy and pisciculture</i> (for IXth class). Board of Secondary Education (Odisha), Cuttack: Pp 1-138. (In Odia language)</li> <li>6. Sahoo, G., A. Mohanty, S. Nayak, J.K. Sahoo and <b>B.C. Mohapatra</b> 2007. <i>Dairy and pisciculture</i> (for Xth class). Board of Secondary Education (Odisha), Cuttack: Pp 1-90 (In Odia language).</li> <li>7. Gupta, S.D., <b>B.C. Mohapatra</b>, P. Routray, S.K. Sahoo, D.K. Verma and N. Sarangi 2008. <i>Text Book of Breeding and Hatchery Management of Carps</i>. Narendra Publishing House, Delhi: Pp 1-163.</li> <li>8. <b>Mohapatra, B.C.</b>, Bikash Sarkar, N.K. Barik and P. Jayasankar (ed.) 2011. <i>Application of Plastics in Aquaculture</i>. ICAR-AICRP on Application of Plastics in Agriculture, Cooperating Centre at Central Institute of Freshwater Aquaculture, Bhubaneswar, Odisha: Pp 1-112.</li> <li>9. <b>Mohapatra, B.C.</b>, Bikash Sarkar, N.K. Barik, B.K. Das, U.L. Mohanty and P. Jayasankar (ed.) 2011. <i>Compendium, National Workshop on Portable FRP carp hatchery technology, 11-13 July 2011</i>, ICAR-AICRP on Application of Plastics in Agriculture, Cooperating Centre at Central Institute of Freshwater Aquaculture, Bhubaneswar: Pp 1-107.</li> <li>10. <b>Mohapatra, B.C.</b>, B.K. Das, S.K. Sahoo, H.K. De, N. Sridhar and P. Jayasankar (ed.) 2012. Souvenir, <i>National Conference on "Aquaculture: Fish for Billion"</i>, 16-17 March 2012, Central Institute of Freshwater Aquaculture, Bhubaneswar: Pp 1-92.</li> </ol>
<p><b>Booklets</b></p>	<ol style="list-style-type: none"> <li>1. <b>Mohapatra, B.C.</b>, P.K. Sahoo, Bindu R. Pillai and J.K. Jena (ed.) 1997. <i>Abstracts of Thesis and Dissertations of Staff Members and Research Scholars at CIFA 1986-1996</i>. Central Institute of</li> </ol>

	<p>Freshwater Aquaculture, Bhubaneswar: Pp 1-73.</p> <ol style="list-style-type: none"> <li>Saranghi, N., J.K. Jena, B.K Das, P.K. Sahoo and <b>B.C. Mohapatra</b> (ed.) 2004. <i>CIFA Technologies</i>. Central Institute of Freshwater Aquaculture, Bhubaneswar: Pp 1- 57. (Published in Hindi in 2005)</li> <li>Jena, J.K., P.C. Das, B.K. Das, <b>B.C. Mohapatra</b>, N. Sarangi, M.J. Modayil, K.K. Vass, P. Ravichandran and S. Ayyappan (ed.) 2005. <i>Aquaculture Technologies for Farmers</i>. Indian Council of Agricultural Research, New Delhi: Pp 1-104.</li> </ol> <p>(Revised Edition: Jena, J.K., P.C. Das, B.K. Das, <b>B.C. Mohapatra</b>, N. Sarangi, M.J. Modayil, K.K. Vass, P. Ravichandran, A.G. Ponniah, G. Syda Rao, A.E. Eknath and S. Ayyappan (ed.) 2009. <i>Aquaculture Technologies for Farmers</i>. Indian Council of Agricultural Research, New Delhi: Pp 1-126.) <b>(Hindi Translation in 2011)</b></p> <ol style="list-style-type: none"> <li><b>Mohapatra, B.C.</b>, Bikash Sarkar, K.K. Sharma and N. Sarangi 2008. <i>User's manual on Portable FRP carp hatchery</i>. Central Institute of Freshwater Aquaculture, Bhubaneswar: Pp 1-12.</li> </ol>
<p><b>Research Papers</b></p>	<p><b>Published in India</b></p> <ol style="list-style-type: none"> <li><b>Mohapatra, B.C.</b> and A. Noble 1992. RNA-DNA ratio as indicator of stress in fish. <i>Comp. Physiol. Ecol.</i>, <b>17</b>(2): 41-47.</li> <li><b>Mohapatra, B.C.</b> and A. Noble 1992. Liver and kidney damage in grey mullet, <i>Liza parsia</i> (Hamilton and Buchanan) on exposure to Nuvan, an organophosphate. <i>J. mar. biol. Ass. India</i>, <b>34</b>(1&amp;2): 218-221.</li> <li><b>Mohapatra, B.C.</b> and A. Noble 1993. Changes in oxygen uptake in mullet, <i>Liza parsia</i> (Hamilton and Buchanan) exposed to dichlorvos. <i>Fish. Technol.</i>, <b>30</b>: 112-114.</li> <li>Ani, S. and <b>B.C. Mohapatra</b> 1993. Starvation study in prawn <i>Penaeus indicus</i> (H. Milne Edwards). <i>Comp. Physiol. Ecol.</i>, <b>18</b>(4): 187-189.</li> <li><b>Mohapatra, B.C.</b> and A. Noble 1993. Effect of “Nuvan” on some biochemical and physiological parameters of <i>Liza parsia</i> (Hamilton and Buchanan). <i>CMFRI Spl. Pub.</i>, <b>54</b>: 64-69.</li> <li><b>Mohapatra, B.C.</b> and K. Rengarajan 1995. Effect of some heavy metals copper, zinc and lead on certain tissues of <i>Liza parsia</i> (Hamilton and Buchanan) in different environments. <i>CMFRI Spl. Pub.</i>, <b>61</b>: 6-12.</li> <li><b>Mohapatra, B.C.</b>, V. Ajith Kumar and A. Noble 1995. Chicken viscera as a prawn feed ingredient: A survey. <i>Seafood Exp. J.</i>,</li> </ol>

26(11): 5-7.

8. **Mohapatra, B.C.** and K. Rengarajan 1997. Copper, zinc and lead accumulation by *Eichhornia crassipes* (Mart.) Solms in static laboratory experiments. *J. Aqua.*, **4**: 69-76.
9. Saha, C., **B.C. Mohapatra** and S.S. Giri 1997. Growth studies of three major carps of India in flow-through aquaculture system. *J. Aqua. Trop.*, **12**(2): 97-102.
10. **Mohapatra, B.C.** and K. Rengarajan 1997. Acute toxicities of copper sulphate, zinc sulphate and lead nitrate to *Liza parsia* (Hamilton and Buchanan). *J. mar. biol. Ass. India*, **39**(1&2): 69-78.
11. **Mohapatra, B.C.**, B.K. Das., B.P. Mohanty, C. Tosh., M.K. Kar and S. Shanmugam 1997. Agricultural and social development in Jagannathpur village of Orissa – A case study. *J. Rur. Dev.*, **16**(3): 531-539.
12. **Mohapatra, B.C.** and K. Rengarajan 1998. A new approach for finding out the bioaccumulation rate of heavy metals in tissues of *Liza parsia*. *Fish. Technol.*, **35**(1): 34-39.
13. **Mohapatra, B.C.** and G.B. Nayak 1998. Assessment of toxicity of ripe fruit pulp of Hingan, *Balanites roxburghii* on different fishes. *J. Aqua.*, **6**: 19-21.
14. Saha, C., **B.C. Mohapatra**, A.S. Ghosh and S. Ayyappan 2000. Studies on the effect of flow rates while nursing Indian major carps in flow-through aquaculture systems. *J. Aqua. Trop.*, **16**(3): 221-229.
15. Saha, C., B.N. Paul., S. Adhikari, **B.C. Mohapatra**, P. Pattamajhi and S. Ayyappan 2000. Effect of stocking density on fish production in flow-through system. *J. Aqua.*, **8**: 49-54.
16. **Mohapatra, B.C.** and B.K. Sahu 2000. Acute toxicities of sodium, potassium, calcium, manganese and their salts to *Catla catla* (Hamilton). *J. Aqua.*, **8**: 33-38.
17. **Mohapatra, B.C.** and B.K. Sahu 2000. Possibilities of aquaculture in inland saline waters of Central India. *J. Env. Res.*, **10**(2): 53-55.
18. **Mohapatra, B.C.** 2002. Use of Hingan, *Balanites roxburghii* Planch fruit pulp as a piscicide for eradication of unwanted fishes from nursery ponds. *The Fifth Indian Fisheries Forum Proceedings, Published by AFSIB, Mangalore and AoA, Bhubaneswar, India*: 45-48.

19. **Mohapatra, B.C.**, S.K. Singh, Bikash Sarkar, D. Majhi, C. Moharathi and K.C. Pani 2002. Common carp, *Cyprinus carpio* (L.) seed rearing in polyhouse pond environment during low temperature periods. *J. Aqua.*, **10**: 37-41.
20. Sarangi, N., **B.C. Mohapatra**, S.K. Singh and K.K. Sharma 2005. Application of plastics in aquaculture. *Proceedings International Conference on Plasticulture and Precision Farming, November 17-21, 2005, New Delhi, India*: pp 507-514.
21. **Mohapatra, B.C.**, S.K. Singh, B. Sarkar and N. Sarangi 2005. Portable FRP carp hatchery: An aid for rural aquaculture. In: *Ibid*: pp 515-522.
22. Singh, S.K., Bikash Sarkar, M.K. Bandyopadhyay, D. Majhi, **B.C. Mohapatra** and N. Sarangi 2007. Greenhouse pond: An experimental study for increasing fish production. In: *Proc. 3<sup>rd</sup> International Conference on Solar Radiation and Day Lighting (SOLARIS 2007)*, Vol-I, Feb., 7-9, 2007, New Delhi. Publ. Anamaya Publishers, New Delhi, India: pp 274-278.
23. Bikash Sarkar, **B.C. Mohapatra**, N. Sarangi and A. Kumar 2007. Thermal modeling of a greenhouse prawn *Macrobrachium lamarrei* (H. Milne Edwards) drying under natural convection: An experimental validation. In: *Proc. 3<sup>rd</sup> International Conference on Solar Radiation and Day Lighting (SOLARIS 2007)*, Vol-II, Feb., 7-9, 2007, New Delhi. Publ. Anamaya Publishers, New Delhi, India: pp 73-82.
24. Mohanty, B.B., B.C. Mal, K.K. Sharma and **B.C. Mohapatra** 2009. Water requirements of portable FRP carp hatchery – for rohu spawning and egg hatching. *Fishing Chimes*, **29**(5): 47-49.
25. **Mohapatra, B.C.**, Bikash Sarkar, S. Mohanty, D. Majhi and N. Sarangi 2009. Portable FRP carp hatchery: An environment friendly system for viable fish seed production. *Proc. Natl. Sem. on Agricultural Structures and Environment Control for Plants, Animals and Fisheries*, Central Institute of Post-Harvest Engineering and Technology, Ludhiana, 15-16 March 2008, pp 70-75.
26. Sarangi, N., **B.C. Mohapatra**, S. Chandra, H.K. De, D.N. Chattopadhyay, A. Mallick, P. Patnaik, D.K. Swain, S. Ghosh and B.K. Das 2009. Floriculture-cum-pisciculture – An income generation opportunity for tribal women of Keonjhar, Orissa. *e-planet*, **7**(1): 47-49.

27. Mallick, A., **B.C. Mohapatra** and N. Sarangi 2010. Bioaccumulation of sodium, potassium, calcium and magnesium in rohu, *Labeo rohita* (Ham.) fry. *Current World Environment*, **5**(1): 107-112.
28. Mallick, A., **B.C. Mohapatra** and N. Sarangi 2010. Effect of alkali and alkaline earth metals on embryonic stages of rohu, *Labeo rohita* (Ham.). *Proc. National Conference on Diversification of Aquaculture through Locally Available Fish Species (DALAF)*, 27-28 August 2010, CIFE, Kolkata. (Paper submitted for Proceedings)
29. Aravindakshan, P.K., S. K. Singh, Bikash Sarkar, D. Majhi, J.K. Jena, K.C. Pani, H.K. Muduli, S. Ayyappan, **B.C. Mohapatra** and N. Sarangi 2011. Oxygen consumption of carps during live transportation. *Indian J. Fish.*, **58**(4): 67-70.
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