

# Expert consultation cum farmers meet on sustainable development of perspectives for inland saline aquaculture in Haryana

CIFE has organized an Expert consultation-cum-farmers meet on "Sustainable development of perspectives for inland saline aquaculture in Haryana" at CIFE Rohtak Centre on 11 Feb., 2012 under the chairmanship of Dr. W.S. Lakra, Director, CIFE. Dr. R.S. Paroda, Chairman, HFC, President, TAAS and Former Secretary, DARE & DG, ICAR was the Chief Guest of the function. Several farmers from across Haryana and scientists from CIFE (in all about 150 participants) gathered at the CIFE Rohtak Centre. Chief Guest unveiled stone and declared open the newly established Catfish Research Unit at the CIFE Rohtak Centre in the presence of Director, CIFE and other dignitaries and farmers. Dr. R. S. Paroda released the fingerlings of *Pangasius sutchi* and Singhi, *Heteropneustes fossilis* in the newly constructed "Catfish Research Unit". Scientists and several progressive farmers from Haryana participated in an informal discussion.



#### **ICAR Zonal Sports Tournament**

CIFE, Mumbai participated in the ICAR Zonal Sports Tournament (2012) held at CAZRI, Jodhpur, Rajasthan during 13 to 17 February, 2012. A team of 60 participants (49 Men + 11 Women) participated in various events. The Team bagged several prizes notable being the Best March Past and Kabaddi Trophy. Our players won gold medal in 100 relay, 800m race high jump, Carrom and lable Tennis doubles.





#### In this issue...

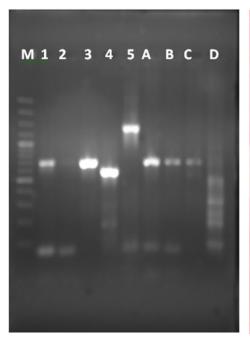
- Research
- Awards and Honours
- Strengthening the statistical computing for NARS
- Training programmes attended
- Radio Talks
- Invited lectures
- · Students' News
- Meetings Conducted Workshops/ Conferences/ Symposia etc. organized
- Science club activity
- Centre of Advance Faculty
  Training programs

# Isolation, Identification and characterization of common pathogens of *Pangasius* stocks.

Diseased samples of *Pangasius* were collected from farms in Kolkata. *Aeromonas hydrophila* was isolated from the sample and biochemical characterization was done following standard protocol of Bergey's Manual. Diseased samples of *Pangasius* were also collected from Bhimavaram and Kaikaluru region of Andhra Pradesh. Bacteria were isolated from the diseased *Pangasius* from surface and kidney. On the basis of morphological colony characteristics, seven isolates of bacteria were obtained. The individual isolates were injected to healthy fishes for survivability and pathogenicity of the isolates. Out of seven isolates, two showed clinical signs, *viz.*, haemorrhages of fins, reddening of mouth and pin-point hemorrhages on the belly. Internal swelling of kidney and accumulation of fluid in the peritoneal cavity were observed. For the first time, *E. cloaceae* was isolated from *Pangasius* in India. Identification and characterization of the bacteria by molecular techniques is under progress.

### Research

# Molecular phylogeny and DNA barcoding of elasmobranchs and selected teleosts from Indian coast





Thirty-four elasmobranch species have been collected from both east coast (Kakinada, Vizag, Tuticorin, Mandapam) and west coast (Mumbai). Eleven species of Gobidae and Elotridae fishes were collected from Astamudi lake (Kerala). Digital images were taken for all the collected specimens. Primers were designed and procured for amplification of nuclear and mitochondrial markers. PCR conditions were standardized for both nuclear and mitochondrial DNA markers

## CIFE Breeds *Pangasianodon hypophthalmus* with grand success in Raipur Chattisgarh

A successful attempt has been made in northern part of India in Village, Kurundh Raipur to develop the technology, for breeding and culture of *Pangasianodon hypophthalmus* under lab to land program at farmers level. The exotic freshwater catfish *Pangasianodon hypophthalmus* was introduced in India in the year 1996 in the state of West Bengal from Thailand through Bangladesh. The induced breeding



experiment was carried out at fish farmers farm at Kurundh in Raipur Chattisgarh. Ten sets of *P. hyphthalmus* were bred successfully, a total number of 50 lakh early fry were produced in the month of August 2012. Hatching of fertilized eggs was done in cemented glass jar hatchery and more than 80% fertilization was achieved.

# Mega Projects on "Aquatic Radioecology" In collaboration with BRNS, Mumbai, BARC, Mumbai and NPCIL, Mumbai

A mission mode mega project constituting four subprojects is aimed to assess the radionuclides in the aquatic environment and how it is being transferred through food chain. This megaproject is conceptualized for mapping radionuclide in the existing and proposed nuclear power plant in and around proposed marine and freshwater eco-system including Tarapur, Kalpakkam (existing) Jaitapur and Jabalpur (proposed). This project is first of its kind in the nuclear power era which has been undertaken by Central Institute of Fisheries Education, Mumbai



# Studies on the present status of marine radioecology and biodiversity at Kalpakkam coastal site

Sampling points were selected on the south and north side of the Madras Atomic Power Station, MAPS (reference point) Kalpakkam. Seawater samples were collected from different sites and were

analyzed for radionuclides such as, Cesium, Strontium, Iodine and Tritium. Biological samples such as planktons, benthos, fish and shellfishes were collected from different sites and identified for making biodiversity studies. Along with the analysis of radionuclides, samples of fishes, mollusc, crustacean, gorgonids and plankton were collected from different sampling sites. Finfishes-41, elasmobranch-2, shrimps-4, crabs/lobster-1, gorgonids-3, gastropods-9 and bivalve-1 were identified.



#### Science club activity

The following lectures were delivered under the Science Club activity.

Sr. No.	Date	Торіс	Delivered By
1.	13.09.2011	Nanotechnology: A new frontier in smart delivery systems	Dr. Venkateshwarlu (Principal Scientist, FRHPHM Division)
2.	22.10.2011	Commercially important molecules from microbes	Dr. Zarine Bathena (Associate Professor, Microbiology, Bhavans College, Mumbai University)
3.	08.11.2011	Pathogen recognition receptors in channel catfish	Dr. K.V. Rajendran (Principal Scientist, AEHM Division)
4.	29.12.2011	4 <sup>th</sup> International Barcode of Life Conference, Australia	Dr. W.S. Lakra (Director & VC, CIFE)
5.	29.12.2011	FAO consultancy program on fish processing in Iran	Dr. B.B. Nayak (Principal Scientist, FRHPHM)
6.	30.01.2012	mKrishi Fisheries Services	DR. V.V. Singh (Principal Scientist, CMFRI Centre, Mumbai)
7.	16.03.2012	Convergent extension education governance model for India	Dr. S.N. Ojha (Principal Scientist, FEES Division)

### **Centre of Advance Faculty Training programs**

Two training programmes under the Centre of Advance Faculty Training were successfully completed. Twenty-two participants underwent training in each programme.

- 1. Training program on "Diagnostics in Fish Health Management" was organized during January 10-30, 2012
- 2. Training program on "Development of Brood and Gene Banks for Aquaculture Production and Conservation" was organized in February 8-28, 2012.

### **Meetings Conducted**

Date	Programme	Venue
08-09 October 2011	National Dialogue on Nanotechnology	CIFE, Mumbai
14 <sup>th</sup> January 2012	The National Consultation Meeting regarding finalization of XII Plan proposals.	CIFE, Mumbai
23 January 2012	Meeting of the Sansadiya Rajbhasha Samiti	CIFE, Mumbai
13 October 2012	Program monitoring committee (PMC) meeting on coordinated research project entitled Aquatic/ marine radioecology	CIFE, Mumbai
9 November 2012	A bipartite meeting between CIFE and WBUA&FS	CIFE, Kolkata
21 November 2012	Half-yearly Institute Research Council Meeting of the institute	CIFE, Mumbai
09 December 2012	XIX Extension council meeting	CIFE, Mumbai
24-25 March 2012	Annual Institute Research Council Meeting	CIFE, Mumbai

### Workshops/ Conferences/Symposia etc. organized

Date	Programme	Venue
22 October 2011	One day hands on training workshop on Project Evaluation Techniques	CIFE, Mumbai
25 October 2011	One Day Workshop on Networking of Fisheries Cooperatives and Insurance organized by National Federation of Fishermen's Cooperative Limited (FISHCOPFED), New Delhi in Collaboration With New India Assurance and CIFE	CIFE, Kolkata
27 December 2011	Seminar on "Awareness on <i>L. vannamei</i> and <i>P. monodon</i> Culture" Organized by Lions club Tallarevu and CIFE	CIFE Kakinada
28 December 2011	Launching cum awareness workshop of NFDB funded project of CIFE at Talegaon (Pune)	Talegaon, Pune
14 January 2012	National Consultation on Prioritization of Academics, Plan of CIFE 2012-2017	CIFE Mumbai
14 January 2012	Stakeholders' Meet on Ornamental Fisheries jointly organized by CIFE & NFDB	CIFE, Mumbai
1-2 February 2012	National Workshop on Creation of awareness of CCRF and capacity building for effective implementation in India	CIFE, Mumbai
28 February 2012	ICAR- CIFE-Industry meet	CIFE Mumbai

### **Awards and Honours**

**Dr. W. S. Lakra**, Director/Vice-Chancellor, CIFE, Mumbai, was honoured with Dr. S. Z. Qasim Medal by Bioved Research Society.

First prize was awarded for the best poster presentation on 'Comparative evaluation of latency-associated genes of white spot syndrome virus (WSSV) for developing PCR test to detect latent infection' authored by Reshma K. J, Reena Yadav, M. Makesh, C. S. Purushothaman and K. V. Rajendran. at the 8th Symposium on Diseases in Asian Aquaculture, 21-25 Nov. 2011, Mangalore.

Second prize was awarded for the poster presentation on Investigations for bioactive compounds of sea anemone, *Anthopleura midori* off Mumbai coast (Authored by M.U. Shivappa, G.B. Purushottama, **K. Pani Prasad** and **Nalini Poojary**) during the 9<sup>th</sup> Indian Fisheries Forum held during 19-23 December, 2011 at Chennai.

- **Dr. Suresh Babu, P. P.,** Scientist received the best poster award for 'Observations on black gill discoloration in farmed *Litopenaeus vannamei* and its mitigation using a pond sanitizer' during the 9<sup>th</sup> Indian Fisheries Forum held during 19-23 December, 2011 at Chennai.
- Mrs. Vidyashree Bharti, Senior Scientist received the INRIA best paper award in International conference on Geospatial Technologies and Applications held from 26th to 29th February, 2012 at Indian Institute of Technology Bombay (IITB).
- **Dr. Shrinivas Jahageerdar**, Sr. Scientist of Fish genetics and biotechnology division was awarded Fellowship by the Zoological Society of India (ZSI), in recognition of his contribution to research and education in Fish Genetics and Breeding during the 22<sup>nd</sup> All India Congress of Zoology held at University of Lucknow, Lucknow on 29<sup>th</sup> December, 2012.
- **Dr. V. K. Tiwari** was honoured with the Prof. B. N. Pandey, Gold Medal by Zoological Society of India.
- **Dr. K. Pani Prasad** was awarded the Fellowship from Bioved Fellowship, 2012 during 14<sup>th</sup> Indian Agricultural Scientists and Farmers Congress on 18.2.2012 at Allahabad.

**Dr. K. Pani Prasad** was honoured with Fellow of ZSI from Zoological Society of India, Bodh Gaya at Barrackpore

#### **Others**

- **Dr. W. S. Lakra**, Director/Vice-Chancellor has been nominated as Member of High Power Committee of Association of Indian Universities.
- **Dr. W.S. Lakra,** Director/Vice-Chancellor has been nominated as a member of the Sectional Committee on Fisheries Sciences, NAAS,New Delhi.
- **Dr. W.S. Lakra**, Director/Vice-Chancellor has been nominated as a Member, Maharashtra Coastal Zone management Authority (MCZMA), Government of Maharashtra.
- **Dr. M.Krishnan**, Head and Principal Scientist, FEES Division, elected unanimously as Member of Editorial Board of the Journal, Agricultural Economics Research Review, New Delhi
- **Dr. A.K.Pal**, Head and Principal Scientist, FNBP Division was nominated as the Member, Expert Committee constituted by Govt. of India for Kudamkulam Nuclear Power Station.
- **Dr. K. V. Rajendran, Principal scientist** was nominated as the Member, Expert Committee constituted for selection of projects to be funded by the National Fund for Basic Strategic and Frontier Application Research in Agriculture (NFBSFARA), ICAR.
- **Dr. K. V. Rajendran, Principal scientist,** was nominated as a Member, Institute Management Committee, Central Institute of Brackishwater Aquaculture (CIBA), Chennai
- **Dr. N. K. Chadha** received appreciation letter from Chairman, ASRB, New Delhi, for coordinating and conducting Asstt. Grade Main Exams at Mumbai Centre.
- **Dr. V. K. Tiwar**i became Fellow of Zoological Society of India (FZSI).
- **Dr. C. S. Chaturvedi** got Fellowship of Academy of Science, Engineering and Technology, Bhopal (M.P) and a Letter of appreciation from DoF, Government of Chhattisgarh.

# Strengthening the statistical computing for NARS

Under NAIP, ICAR project three Researchers' Training Programs were organized.

- 'SAS: Multivariate Data reduction and Analysis' during 12<sup>th</sup> - 17<sup>th</sup> October, 2011
- 2. 'SAS: Genetics and Genomics Data Analysis' from 27<sup>th</sup> Feb to 3<sup>rd</sup> March 2012
- 3. 'SAS: An Overview' during 15-20 March, 2012
- 4. Installation workshop on 6<sup>th</sup> January, 2012

#### **Invited lectures**

During the period 15 faculty members of CIFE were invited for special lectures to be delivered during symposia, seminars, training programmes etc.

#### Training programmes attended

26 staff members attended various training programmes, seminars etc. during the period.

#### **Radio Talks**

Dr. C.S. Chaturvedi delivered two radio talks one on ornamental fish culture — a source of income and another on Paddy cum fish culture on 18/6/12 and 22/6/12 respectively on All India Radio, Akashvani, Port Blair Andaman and Nicobar Island.

### Students' News

#### Students' achievements

First prize was awarded for the **best poster presentation** on 'Comparative evaluation of latency-associated genes of white spot syndrome virus (WSSV) for developing PCR test to detect latent infection' (PP-C17) authored by Reshma K. J., Reena Yadav, M. Makesh, C. S. Purushothaman and K. V. Rajendran. at the 8th Symposium on Diseases in Asian Aquaculture, 21-25 November. 2011, Mangalore.

# Students' Participation in the 9<sup>th</sup> Indian Fisheries Forum and 8<sup>th</sup> Symposium on Diseases in Asian Aquaculture

A total of 108 students from CIFE, Mumbai participated in 9<sup>th</sup> Indian Fisheries Forum held in Chennai during 19-23 December, 2011 Several students also presented posters and papers. Several Students also participated in the 8<sup>th</sup> Symposium on Diseases in Asian Aquaculture held during 21-25 November, 2011.

5