



# CIBA NEWS

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CENTRAL INSTITUTE OF BRACKISHWATER AQUACULTURE, CHENNAI

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## FELLOWSHIP AWARDED TO DIRECTOR, CIBA



Dr. G.R.M. Rao, Director, CIBA.

Dr. G.R.M. Rao, Director, Central Institute of Brackishwater Aquaculture, Chennai, was awarded with the Honorary Fellowship of Association of Aquaculturists for the year 2000 in recognition of his contribution to Aquaculture and Fisheries Science. Dr. G.R.M. Rao received the award from Dr. R.S. Paroda, Secretary, DARE and Director-General, ICAR, New Delhi, on 17 January 2000, at Central Institute of Freshwater Aquaculture, Bhubaneswar.

## RESEARCH HIGHLIGHTS

### FORMULATED FEEDS FOR HATCHERY-PRODUCED FRY OF ASIAN SEABASS (*LATES CALCARIFER*)

Following the recent success in hatchery production of Asian seabass (*Lates calcarifer*), CIBA has initiated R & D programmes for the development of suitable and nutritious artificial feeds for the fry of *L. calcarifer* with the aim of substituting conventional live feeds such as *Artemia* nauplii and rotifers with formulated feeds. In this context, three trials were undertaken with six artificial larval feeds and the results obtained are presented here:

7 to 11 days old hatchery-raised fry of *L. calcarifer* were stocked at a rate of 1, 2 and 7 nos/litre in 5, 80 and 500-litre tanks respectively. Six formulated artificial feeds and one control live feed (Table 1) were tested individually or in combination. The duration of rearing was 10 days. The initial size of fry

varied from 2.9 to 3.6 mm in total length. The growth, survival and the size attained by the reared seabass fry in some of the trials is depicted in figure given in the next page.

This experiment was carried out by Dr. M. Natarajan, Senior Scientist and Dr. C. Gopal, Scientist (Senior Scale) of the Institute.

### SURVEY OF SHRIMP FARMS IN ANDHRA PRADESH

A comprehensive survey on the effect of shrimp farming on social, economical and environmental aspects, was carried out in East Godavari District, Andhra Pradesh, during 21-31 March 2000. A team of scientists visited 8 coastal mandals and collected information from 30 villages. Water, soil and biological samples were collected from 30 shrimp farms.

Edited by: Shri M. KATHIRVEL,  
Shri S. SRINIVASAGAM  
&  
Dr. (Smt.) MUNAWAR SULTANA,  
Senior Scientists

Published by: Dr. G.R.M. RAO,  
Director,  
CIBA, Chennai-34

**Central Institute of Brackishwater  
Aquaculture,**  
160, Mahalingapuram Main Road,  
Chennai-600 034

Table 1. Details on formulated artificial feeds for seabass fry

Feed No.	Type of feed	Content of Feed	Method of Feed processing	Feed Particle size ( $\mu$ )	
				Dry	Wet
1	Microparticulate	<i>Artemia</i> biomass	Freeze dried & powdered	306-757	161-580
2	Microbound	Fish roe	-do-	97-225	64-177
3	Microparticulate	Chicken yolk	-do-	145-306	97-193
4	-do-	Marine animals & terrestrial plants	Pelletised, oven-dried & powdered	8-48	8-52
5	-do-	Fish powder & terrestrial plants	-do-	8-40	8-24
6	Microbound	Fish powder & other proteins	-do-	145-274	145-209
Control	Live	<i>Artemia</i> nauplii	-	-	161-218
	Live	Rotifers	-	-	448-490

#### GROW-OUT FEED FOR SEABASS

A formula feed consisting of trash fish meal, corn gluten meal, soybean meal, starch and other additives, with a protein content of 40 % was tested under the short-term yard trials for the fingerlings of seabass (*Lates calcarifer*) having an average weight of 50 g. A feed conversion ratio of 2:1 was recorded.

#### VISITORS

The following visited CIBA Head quarters / Muttukadu Experimental Station:

- Dr. P.V. Joshi, Professor and Shri R.A. Pawar, Assistant Professor, College of Fisheries, Ratnagiri, Maharashtra, 10 January.
- Dr. (Smt.) L. Sukhavani, Reader

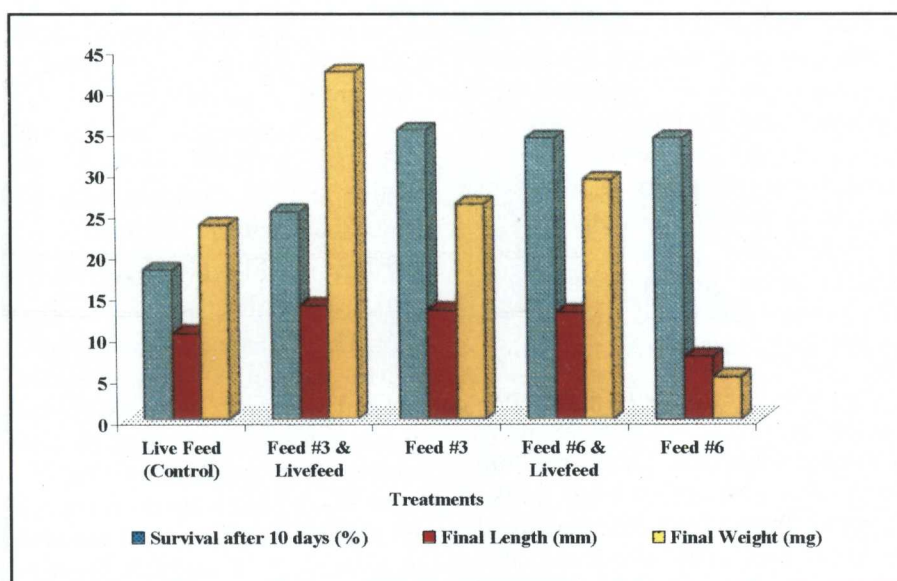
and Miss Ajantha, Lecturer, Dept. of Zoology, Ethiraj College for Women, Chennai, 11 February 2000.

- Dr. P. Das, Deputy Director General (Extension), ICAR, New Delhi, 17-18 March 2000.
- Dr. P. Rethinam, Director, NRC of Oil Palm, Elluru, Andhra Pradesh, 17-18 March 2000.
- Dr. Shukla, Assistant Director General, KVK, ICAR, New Delhi, 17-18 March 2000.
- Dr. S.P.S. Ahlawat, Director, CARI, Port Blair, 17-18 March 2000.
- Dr. C. Sriram, Dr. S.S. Ghosh and Dr. R.K. Samantha, Zonal Co-ordinators, NATP, 17-18 March 2000.

#### ENGAGEMENTS

Dr. G.R.M. Rao, Director, CIBA, attended the following Meetings / Workshops / Seminars:

- 29<sup>th</sup> Meeting of the Academic Council of Tamil Nadu Veterinary and Animal Sciences University, Chennai, 6 January 2000.
- Tenth Meeting of the Project



Growth, survival and size attained by fry of *L. calcarifer* on formulated feeds.



Dr. Dhaneshwar Beehary, Hon'ble Minister of Fisheries and Co-operatives, Republic of Mauritius (left) presents a memento to CIBA, which is being received by Dr. L.H. Rao, Head, Crustacean Culture Division (right).

Management Committee (PMC) of the NATP, at NCIPM, New Delhi and Fifteenth Meeting of the Aquaculture Authority at New Delhi, 11-14 January 2000.

- Fifth Indian Fisheries Forum, at CIFA, Bhubaneswar, 17-18 January 2000.
- Expert Committee Meeting to examine research programmes, mandate, etc. of different Fisheries Institutes, at New Delhi, 4 February 2000.
- 16<sup>th</sup> Meeting of the Aquaculture Authority, at Directorate of Fisheries, Govt. of Tamil Nadu, Chennai, 16 February 2000.
- National Workshop on "Conservation of Aquatic Resources with special reference to Mahaseer" and National Presentation on Development of Fisheries in Irrigation Reservoirs and Employment for Oustees, at Bhopal, 26-27 February 2000.
- Meeting at Fisheries Development Commissioners' Office, at Goa, regarding the working of modalities for collaborative programmes in brackishwater aquaculture

between ICAR and Dept. of Fisheries, Govt. of Goa, 2-3 March 2000.

The scientific, technical and administrative personnel attended the following meetings / Seminars / Workshops :

- Dr. M. Krishnan, Senior Scientist and Shri K. Ponnusamy, Scientist, attended the National

Conference on Fisheries Economics, Extension and Management, at CIFE, Mumbai, 5-6 January 2000 and presented papers.

- Shri M. Kathirvel, Senior Scientist, visited Kakdwip Research Centre of CIBA to discuss with the project associate on mud crab culture programme and also as a member of the Kakdwip Centre Infrastructure Development Committee to observe the progress under the pond renovation work at Kakdwip farm, 12-21 January 2000.
- Dr. S.A. Ali, Principal Scientist, Dr. C. Gopal, Dr. S.S. Mishra and Dr. K.K. Krishnani, Scientists (Senior Scale) and Dr. I.S. Azad, Scientist, participated in the Fifth Indian Fisheries Forum, at CIFA, Bhubaneswar, 17-21 January 2000 and presented papers.
- Dr L.H. Rao, H.O.D., Crustacean Culture Division, visited the Orissa University of Agriculture and Technology (OUAT), Rangailunda, Berhampur, in connection with NATP programme, 19-20 January 2000.



Dr. P. Ravichandran, Senior Scientist (extreme left) explaining the shrimp captive broodstock development programme to Dr. Dhaneshwar Beehary, Hon'ble Minister of Fisheries and Co-operatives, Republic of Mauritius (third from left). Shri K. Ravinath, Technical Officer, Integrated Fisheries Project, Ministry of Agriculture, Govt. of India, Cochin (extreme right) looks on.



Progress of renovation work in the tide-fed ponds at Kakdwip Research Centre of CIBA.

- Dr. L.H. Rao, H.O.D., Crustacean Culture Division and Dr. S.A. Ali, Principal Scientist, visited Kakdwip Research Centre of CIBA, 21-24 January 2000.
- Dr. L.H. Rao, H.O.D., Crustacean Culture Division and Dr. T.C. Santiago, Senior Scientist, attended the Fourth Meeting of the Scientific Advisory Panel of NATP, at CMFRI, Cochin, 28-30 January 2000.

#### MEETINGS

- Institute Joint Staff Council Meeting was held at CIBA, Chennai, 21 January 2000.
- The Half-yearly Staff Research Council Meeting of CIBA was held at Chennai, 31 January and 1 February 2000.
- The TAR – IVLP Interaction Workshop under the NATP programme was held at CIBA, Chennai, during 17-18 March 2000. Dr. P. Das, Deputy Director-General (Extension), ICAR, Dr. P. Rethinam, Director, NRC of Oil Palm & AED (Coastal Agro Ecosystem), Dr. G.R.M. Rao, Director, CIBA & Co-AED, Dr. Shukla, Assistant Director General, KVK, Dr. S.P.S. Ahlawat, Director, CARI, Dr. C. Sriram, Dr. S.S. Ghosh, DR. R.K. Samantha, Zonal Co-ordinators

and Principal Investigators of different NATP projects participated in the meeting.

#### ARS EXAMINATION

The Institute organized the Agricultural Research Service Examination 1999, at Chennai, 29-30 December 1999.

#### HUMAN RESOURCE DEVELOPMENT

- Shri J.K. Sundaray and Dr. (Smt.) Imelda Joseph, Scientists,

participated in a short-term training course on Coastal Zone Management, at Fisheries College, Mangalore, 10-19 January 2000.

- Shri S. Rajukumar, Technical Assistant (T-II-3) and Smt. K. Hemalatha, Junior Stenographer, participated in the training programme on Intensive Training in Hindi and Workshop, at NAARM, Hyderabad, 18-22 January 2000.
- Dr. I.S. Azad, Scientist, attended the Second Module of the Training Workshop on Molecular Diagnostics of Shrimp Viruses in the Asian Region, at Bangkok, Thailand, 21-25 March 2000.

#### TRAINING

Lectures / Demonstrations were arranged for the following at Muttukadu Field Station of the Institute:

- 16 B.F.Sc. students from College of Fisheries, Ratnagiri, Maharashtra, 10 January 2000.
- 20 MFVL trainees from CIFNET, Chennai, 10 January 2000.



Shrimp farm survey in East Godavari District in Andhra Pradesh: Dr. P. Ravichandran, Senior Scientist (extreme left), Dr. M. Kumaran, Scientist (third from right), and Dr. M. Muralidhar, Scientist (Senior Scale) (second from right) interacting with shrimp farmers.

