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Newsletter of ICAR-Central Marine Fisheries Research Institute

INSIDE

Natural pearl found in <i>Mytella</i> strigata	3
Ornate goby a potential marine ornamental species for culture	4
Improving livelihood through high saline estuarine cages under TSP	6
Grow-out culture of Portunid	10



Headlines

crabs in HDPE boxes

Survey Boat Rainbow Runner launched

The new FRP boat "Rainbow Runner" to conduct on-board sampling at sea for the National Innovations in Climate Resilient Agriculture (NICRA) project was launched by Dr.A. Gopalakrishnan, Director, ICAR-CMFRI on 23 June, 2020. With an overall length of 5.6 m and a seating capacity of 6 persons, it is well equipped for sampling of water quality parameters and plankton collection from estuarine and freshwater sites. Having an outboard four stroke engine (Suzuki Model) of 25 hp controlled by a power steering and hydraulic system, an auxiliary engine of 9.9 hp is also fitted to the boat. A detachable sampling derrick of 50 kg capacity to facilitate CTD and plankton net operations, foldable canopy roofing to facilitate sampling under hard weather and use of KIV

continue to page no. 7...

Headlines

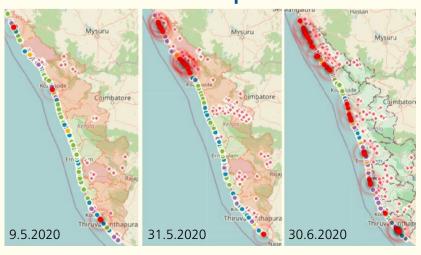
Pro-farming initiative launched

ICAR-CMFRI and the Ernakulam Krishi Vigyan Kendra kick-started a new profarming venture among government organisations, aiming at self-sufficiency and local food security. The model initiative

continue to page no. 8...

Headlines

Online GIS tracking of vicinity of fish landing centres to COVID-19 hotspots launched



In a novel initiative, an online GIS based database depicting the vicinity of marine fish landing centres to the COVID-19 hotspots in Kerala has been developed. Work is in progress to incorporate the information on landing centres in other maritime states too in the database. The database offers visualisation of the marine fish landing centres in various colour groups in accordance with their geographical proximity with the COVID-19 hotspots/containment zones within coastal districts, identified by the government. The first category includes fish-landing centers located within three kilometers from a hotspot. The second category will involve the centers located between three and five kilometers and centers at a distance of between five to 10 kilometers from the hotspot will fall under the third category. Updated on daily

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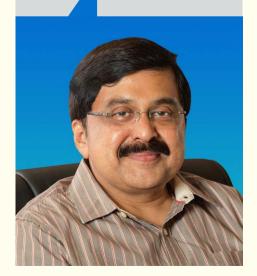
Director Speaks

Every effort in meeting challenges arising out of the COVID 19 pandemic in the marine fisheries sector is to be appreciated and the institute is playing its role actively. The efforts to supply the fishermen and fish farmers with on-line advisories and delivery of inputs such as fish seed and feed for the support of their livelihoods was noteworthy. From the development of the online GIS tracking of fish landing centres close to COVID 19 hotspots to actively involving in programmes for local food production to filling the gaps in the fish supplies unfortunately disrupted by the pandemic, the members of the ICAR-CMFRI family have been active. Sea based research activities are sure to benefit in the coming days using the services of the newly acquired FRP boat Rainbow Runner. In spite of difficult situations, let us all move forward to reach our goals for the benefit of all stakeholders in a safe and efficient manner.

With best wishes

A. Gopalakrishnan

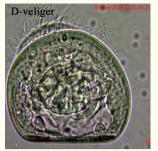
Director, ICAR-CMFRI

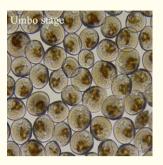


Research Highlights

Invasive mussel Mytella strigata deciphered













The invasive Charru mussel Mytella strigata (Bivalvia: Mytilidae) is threatening the local mussel species, especially Perna viridis in the backwaters of Kerala. A native of Central and South America (notably Panama, Argentina, Brazil and Venezuela) it had invaded the southern United States (mainly Florida and Georgia). Later they got transferred to Philippines, Singapore, Thailand and now, in India. With a density of 500 to 600 individuals per square metre observed in the estuaries and backwaters of Kerala it has emerged as a severe problem affecting the native species Perna viridis and clogging the net cages moored in the backwaters through bio-fouling everything underwater. Experiments were conducted at Vizhinjam Regional Centre to test the salinity tolerance in adult and spat stage. Adult animals collected from Kayamkulam backwaters spawned in the hatchery at 35 ppt salinity and were reared through all the larval stages like D-veliger, umbo, pediveliger and plantigrade to spat and juvenile of 70 days old. Further rearing is in progress to illustrate the complete life cycle to get a clear idea about its biology as

it may be of use in controlling the spread.

Eggs were lemon yellow in colour and measured 35 to 53-micron size. Newly hatched (1dph) larvae measured 77.82 μ in length and dinoflagellate Isochrysis galbana was given as feed till 15 dph and afterwards mixed algae was given. Settlement of larvae started after 13 dph and by 15 dph all larvae completed metamorphosis and settled. Substantial mortality was observed from 17 dph,. Salinity tolerance test for the spat of 60 days old of 4.2 mm average length indicated tolerance to a wide range of salinity from 1 ppt to 35 ppt. At 40 ppt salinity and 0 ppt all the spats were dead after a day of exposure. In adults survival and byssal attachment were noted only between 2-30 ppt. Treatment of ballast water before releasing at the port of call, which otherwise might trigger such invasion of alien species has to be strictly enforced to prevent this type of occurrences in the future.

(Reported by: M. K. Anil, P. Gomathy and Praveen Prasannan)

Published by: Dr. A. Gopalakrishnan, Director, ICAR—Central Marine Fisheries Research Institute, Post Box No.1603, Ernakulam North P. O., Kochi-682 018, Kerala, India. **Editor:** Dr. U. Ganga **Editorial Committee:** Dr. R. Ratheesh Kumar, Dr. Livi Wilson, Dr. N. S. jeena, Mrs. E. K. Uma, Mrs. V. Vandana **Assisted by:** Mr. Arun Surendran, Mr. C. V. Jayakumar, Mr. P. R. Abhilash

Research Highlights

Natural pearl found in *Mytella strigata*

The invasive bivalve mussel, Mytella strigata (Hanley, 1843) that has established in many estuarine and coastal areas along Kerala Coast in the recent past is a growing concern. During surveys in the Chettuva Estuary in May 2020 settlement of this species along with other commercially important bivalves in different parts of the estuary was documented. It was observed in areas where dense population of M. strigata was recorded, the species was being fished for sale in local markets. A natural pearl was obtained from a specimen of M. strigata measuring a shell length of 45.84 mm and weighing 4.75g collected by a fisherman. Nacreous lining of the inside shell of M. strigata is purplish black and the natural pearl was black with a silvery tint at one end due to incomplete pearl sac formation. The oval shaped pearl was 3.08 \pm 0.2 mm in size in the long axis. Formation of natural pearls is triggered by a foreign particle usually grains of sand or any irritant accidently entering the bivalve shell.

(Reported by: V. Venkatesan, Jenni Sharma, K. K. Sajikumar, Geetha Sasikumar, R. Vidya, P. Laxmilatha and K. S. Mohamed)◆

Rare scorpionfish found in seagrass beds of Gulf of Mannar



The rare band-tail scorpionfish (Scorpaenospsis neglecta) was found camouflaged within the seagrass meadows during an underwater exploratory survey off Sethukari coast in the Gulf of Mannar. With an ability to changes colour and carrying neurotoxic venom in its spines the

fish was reported by Dr R. Jeyabaskaran and his team of researchers. The specimen was deposited in the National Marine Biodiversity Museum of ICAR-CMFRI and the findings published in *Current Science* Vol 118 (2020) with doi: 10.18520/cs/v118/i10/1615-1620

Hatchery produced fingerlings of Silver pompano supplied to fish farmers

Even during the lockdown imposed due to COVID-19 incidence, Vizhnjam Research Centre took the initiative to distribute hatchery-produced fingerlings of Silver Pompano to the fish farmers at their doorstep. On an average, 1million yolk-sac larvae of Silver pompano are produced per month and a part of it is reared to seed size of about 7 cm and supplied to fish farmers registered under the National Fisheries Development Board (NFDB) Scheme for cage farming in selected locations in Kerala. The activity was covered by local dailies giving it wide publicity •

'വളയോട് മീൻ' കൃഷിചെയ്യാം

മിൻകുഞ്ഞുങ്ങളെ വിഴിഞ്ഞം കേന്ദ്രത്തിൽ നിന്നു വീട്ടിലെത്തിക്കും

കോവളം ► വിഴിഞ്ഞം സമുദ്ര ഗവേഷണകേന്ദ്രത്തിൽനിന്നു കുട് മത്സുക്ക്യഷിലെയ്യുന്ന കർ ഷകർക്ക് 'വളയോട് എന്ന മിനു കളുടെ ഏഴ് സെൻറിമീറ്റർ വലു പ്രുള്ള മിൻകുഞ്ഞുടങ്ങളെ വിത രണം ചെയ്യു്. ലോക്ഡൗൺകാ ലത്തെ മത്സ്വലഭ്യത കുറഞ്ഞുവ രുന്ന സാഹചര്യം കൺകിലെടു ത്താണ് മീൻകുഞ്ഞുങ്ങളെ വിത രണംചെയ്യത്.



 വിഴിഞ്ഞം സമുദ്ര മത്സ്യാരവഷണകേന്ദ്രത്തിൽനിന് വളയോട് മീൻകുഞ്ഞുങ്ങളെ കൂട് മത്സ്യക്ക്യഷിചെയ്യുന്ന കർഷകരുടെ വീടിയെത്തിച്ചുപോർ കളാണ് ഇവിടെ വിരിയിച്ചെടു ക്കുന്നത്. ഇന്ത്യൻ കൗൺവിൽ ഓഫ് അഗ്രിക്കാപ്പാൻ റിസർച്ച് (ഐ.സി.എ.ആർ.)ൻെറ കീഴി ലുള്ള കേന്ദ്ര സമ്യദ്ര മത്സ്യാരവ ഷണ സ്ഥാപനമാണ് വിഴിഞ്ഞ ത്തുള്ളത്. നാഷണൽ ഫിഷറി സ് ഡെവലപ്മെൻറ് ബോർഡി (എൻ.എഫ്.ഡി.ബി.)ൺറ സം കരണത്തോടെയാണ് വിവിധ തീ രദേശ ജില്ലകളിലുള്ള കൂട് മത്സ്യ കരർഷകർക്കായി വളയോട് മിനി ൻെറ കുഞ്ഞുങ്ങളെ വിതരണം ചെയ്യത്.

ജീവനക്കാരെ കുറച്ചതിനാൽ മത്സ്യക്കുഞ്ഞുങ്ങളുടെ ഉത്പാ ദനത്തെ ബാധിച്ചിട്ടുണ്ട്. എന്നാ ലും, ലോക്ഡൗൺ കാലയള



Ornate goby a potential marine ornamental species for culture

Fishes of the family Gobiidae are commonly known as gobies and about 2000 species are included under this family in marine realm. The diversity of gobies from the Gulf of Mannar has been reported as 70 species but the fishes of the genus *Istigobius* are rarely recorded. During a survey in the Gulf of Mannar a

live Ornate goby *Istigobius ornatus* was collected and rearing continues in the marine aquarium of the institute. Two species of gobies *Istigobius goldmanni* and *I. ornatus* occurs in the Gulf of Mannar while *Istigobius decoratrus* is reported from the Andaman & Nicobar Islands. Aquarium observation studies of *I.ornatus*

at Mandapam reveals that this species serves the role of an excellent sand cleaner in an aquarium and if captive breeding is successful it can become an excellent marine ornamental species for aquariums.

(Reported by Dr. R. Saravanan, Mandapam Regional Centre) •



Marine ornamental fish culture promoted

The Mandapam Regional Centre provided 3 varieties of clown fishes varieties to a selected group of 18 fisherwomen for undertaking marine ornamental fish seed rearing under the SCSP component of AINP on Mariculture. 1200 clown fishes of 2cm size are proposed to be reared in six sheds, each 216 sq.ft. area along with all accessories established by the Mandapam Regional Centre. Initially two sheds were commissioned by Shri. K. Muraleedharan, Member, Institute Management Committee of ICAR-CMFRI in the presence of Dr. R. Jayakumar, Scientist-in-Charge, scientists of Mandapam Regional Centre and fishers of Puthukudi village on 3 June 2020. After rearing about 30-45 days, the SHG can earn around ₹30,000 per cycle by selling the fishes that would have attained marketable sizes •

Outreach

Harvest of Seabass and Red snapper from open water cages

Harvest of the fish from open water cages demonstrated in Paduthonse village, Udupi district, Karnataka was done in June 2020.In total, 471 cages were installed under a NFDB project, "Open water cage culture in selected districts in Kerala and Karnataka". Of these, 285 and 165 cages were distributed among women and men beneficiaries respectively while 21 were allotted to the scheduled caste/scheduled tribe category. Sea bass and Red snappers attained a weight of 1.5 to 2.0 kgs and 1.0-1.4 kgs respectively in 18 months of rearing. With a survival rate of 75% for Seabass and 92% for Red snappers, 1150 kg and 1100 kg respectively were harvested. Sea bass were sold @ ₹480 per kg and Red snappers at ₹420 per kg demonstrating the economic prospects of cage farming among the locals •







Capture based aquaculture of mullet successfully executed

The Bhumija tribal community, engaged in small-scale fishing activities in coastal waters of Balasore, Odisha were identified for training in capture-based

aquaculture of *Mugil cephalus* in sea cages and saline coastal ponds under the Tribal Sub-Plan (TSP) program of the institute. A SHG named *Nilamadhab*



Matsyajibi Swayam Sahayak Gosthi formed with 16 tribal beneficiaries were provided with inputs and technical support. 3200 wild caught fingerlings of grey mullet were acclimatized in saline ponds and adapted to the supplementary diet and captive condition. Advanced fingerlings were stocked in square GI cage in required number. Complying with safety guidelines, a harvest mela was organized on 2nd June, 2020 with minimum people under a COVID-19 scenario. In the 7 months of culture, individual fish weight of 400 -650 g with a total production of 480 kg and a survival rate recorded at 62% was achieved. The fishes were sold to local vendors at price of ₹280-300 per kg earning good income for the tribal fish farmers.

(Reported by Rajesh Kumar Pradhan, Subal Kumar Roul and Biswajit Dash, Puri Field Centre) ◆





Harvest of Indian pompano (Trachinotus mookalee) reared in high saline estuarine cages by the Yanadi Tribal community was carried out on 24th May, 2020 in the presence of tribal beneficiaries, farmers and fishermen at Nagyalanka, Krishna district, Andhra Pradesh. A prime species for aquaculture, successful breeding, seed production and culture technology for Indian pompano was achieved at the Visakhapatnam Regional Centre. Aguaculture was initiated in high saline estuarine cages under Tribal Sub Plan (TSP) programmme in April, 2019, with three Galvanized Iron (GI) cages measuring 5 x 5 x 2.5 m in size were installed with the active involvement of the Yenadi tribal community attached with the Antyodaya women mutually aided co-operative society under the supervision of ALERT/ATMA, a non-governmental organization. The team of scientists including Dr. Sekar Megarajan, Dr. Ritesh Ranjan, Dr Biji Xavier, Dr. Shubhadeep Ghosh, guided by Dr. K. Madhu, Chairman, TSP, ICAR-CMFRI and thirty selected tribal beneficiaries belonging to Maripalem village, a coastal village in Krishna district were actively involved. Visakhapatnam Regional Centre provided the hatchery produced seed after nursery rearing of three months. These were further reared in the cages for 10 months with pelleted feed containing 40-45% crude protein and 10% crude fat. Environmental parameters, growth parameters and

health status of the cultured fishes were periodically monitored. The cultured fishes were harvested on 25th May, 2020 at an average weight of 745g, a survival of 97.3%, FCR of 1:1.62 and a biomass of 10.86 kg/m³. The harvested fishes were sold to Maxwell Sea Foods, Cochin at the rate of ₹330 per kg. A part of the revenue generated was shared among the tribal beneficiaries and remaining amount was kept as common corpus fund to meet the operational expenditure for the next

Institutional Biosafety Committee constituted

An Institutional Biosafety Committee (IBSC) has been constituted in the institute and approved by the Review Committee on Genetic Manipulation (RCGM) in the Department of Biotechnology, New Delhi. It is chaired by Dr.P. Vijayagopal, Head Marine Biotechnology Division, ICAR-CMFRI with Dr.S. R, Krupesha as Member-Secretary along with other members. The purpose of IBSC is to approve and monitor the projects dealing with recombinant DNA products, environmental release of genetically engineered (GE)organisms and research activities involving recombinant DNA technology. Any research proposals involving above activities need to be cleared by IBSC before they are submitted to the funding agency



culture. This successful demonstration on the culture of Indian pompano, a high value marine finfish, in low-cost estuarine cages is a morale-booster for the underpreviledged tribal communities dwelling in the coastal villages and provided them an opportunity for improving their livelihood status

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basis it will help policy makers and other concerned, in strategic execution of safety measures in accordance with COVID-19 safety protocols. With a simple click of the infographics in the ICAR's website www. cmfri.org.in in this service is available for interested parties •

Institute Research Committee meeting held on virtual platform

The annual Institute Research Committee (IRC) meeting was conducted during 16 − 18 June, 2020. In view of the travel restrictions placed due to COVID 19 pandemic in the country, 142 scientists working in 11 research centres in various maritime states of India connected online during 16-18 June, 2020 to present and discuss results of various research projects. Dr. A. Gopalakrishnan, Director, addressed the scientists and presided over the proceedings held on-line ◆

Live lobster market chains improve livelihoods of tribal communities



The Veraval Regional Centre has been offering open sea cage farming training, demonstration and hands-on exposure under the Tribal Sub-Plan (TSP) programme

during 2019-2020. The Sidi tribal group Shree Sarkar Sidi Adivasi Matsya Uchher Sahakari Mandali Ltd thus trained set up two open sea cages for lobster farming along the coast of Somnath. Lobsters with an average weight of 80-100g collected from Mahuva were stocked in two circular cages of 4m diameter. After 120 days, the lobsters reached an average size of 350g with a survival of 90%, and fetched ₹1200 per kg in live fish market following the "Harvest Mela" conducted on 21 May, 2020. In addition to providing livelihood to the tribal communities these activities have also served for the demonstration and capacity building in cage farming techniques for entrepreneurs in the region.

Tarachand Kumawat, Abdul Azeez, M. D. Fofandi, H. M. Bhint, S. K. Mojadda and K. Madhu) 🔷

(Reported by: Kapil S Sukhdhane, D. Divu , Vinaya Kumar Vase, Rajan Kumar, Shikha Rahangdale,

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Publication on Indian Oil sardine released



The hindi translation named Tarli- machalti paheli tairti chunauti of a malayalam language booklet on Indian oil sardine was released by Dr.B. Meenakumari, former DDG (Fisheries), ICAR. Based on a Special Publication of the institute The enigmatic Indian oil sardine: An insight, the reader is introduced to the intricacies of the Indian oil sardine and its fisheries nationally. The major single species fishery which contributes 17 -20% of the total marine fish landings in India is prone to sudden fluctuations in abundance which made it an enigma to researchers and fishery managers •

approved quality marine grade materials for the boat fabrication are its highlights. The boat equipped with Garmin GPS can travel at a speed of 8 knots has been registered under Kerala Inland Vessels (KIV) Rules for the operation in freshwater and estuarine water bodies •





Recording of marine mammals along Odisha coast

Carcass of a Sperm whale Physeter macrocephalus Linnaeus, 1758 was washed ashore at Agaranashi beach located within the Gahirramatha marine sanctuary, Kendrapada, Odisha on 23 May 2020. The specimen measuring 40 feet long and weighing nearly 50 tonnes. is listed as Vulnerable (VU) in the Red List of Threatened Species 2019 of the International Union for Conservation of Nature and Natural Resources (IUCN). The stranding was recorded in the days following the super cyclonic storm Amphan that occurred in May 2020 along the Odisha and West Bengal coast.

On 27 June 2020 carcass of an Indo-Pacific finless porpoise *Neophocaena phocaenoides* (Cuvier, 1829) was found washed ashore at Astaranga beach near Gundalba, Odisha. The specimen was 3 feet long and weight about 8 kg with several injury marks on the body. IUCN has assessed the species as Vulnerable (VU) in the Red List of Threatened Species 2017

Reported by Subal Kumar Roul, Puri Field Centre 🔷

.....continue from page 1

includes farming of tubers and pulses along with vegetables in an area of around 3-acre barren land on the premises of its staff residential complex in Kochi city. This assumes significance during the COVID-19 pandemic, in the wake of discussions on urgent need for self-reliance in food production in Kerala. Shri V. S. Sunil Kumar, Minister for Agriculture, Kerala government launched the programme on 14 May 2020, by planting ginger saplings. The ICAR-CMFRI Krishilokam Club that includes staff of the Institute and their families, is part of popularising the concept of production of safe food through farming under the technical guidance of Ernakulam KVK. A helpline of KVK though which experts would be providing guidance in farming, including aquaculture and animal rearing, to other organisations was also announced on the occassion



Bumper cage farmed fish harvest under TSP





A group of fish farmers from the tribal Ulladen community near North Paravoor, Ernakulam, Kerala got a bumper harvest of cage farmed pearlspot, carried out under the Tribal Sub-Plan (TSP) programme of the institute. The harvest mela was held at Perumpadanna, Kalluchira of Ezhikkara Panchayat in

North Paravoor on 2 June 2020. The cage culture and the harvest turned out to be an enormous economic support to the tribal community at a time when the farmed fish had a huge market demand in the mark owing to the scarcity of fish during the COVID 19 lockdown. The harvested fishes that ranged from 250

to 450g size each were sold at a rate of ₹500/kg. From the partial harvest of 150 kg, farmers earned ₹75,000. The farmers were guided by the Mariculture Division of the institute.

(Reported by: Dr. K.Madhu, Chairman, TSP Programme, ICAR-CMFRI) ◆

Door delivery of fresh fish facilitated during lockdown period

Closure and precautionary restrictioons in fish landing centres and retail fish outlets due to the COVID 19 pandemic in the country created crisis in fresh fish availability among consumers and farmers were also facing issues in marketing their fish and struggling to maintain fish stock due to high operational expenditure and feed cost. KVK commenced fresh fish door delivery through its SHG Kadappuram fresh fish vitharanasangam to overcome this situation. Based on orders placed through WhatsApp, the SHG collected fish from KVK's partner farmers at farm gate, cleaned and supplied to the consumer homes every day before noon. Farmers were able to get payment instantly at their farms with this arrangement which



commenced on 27th March 2020 and the average daily supply was 510 kg worth 1.6 lakhs catering to 350 homes daily.

The KVK had also imparted training to the SHG on hygiene protocols and issued a certificate for authenticity •







ICAR-Tuticorin Research Centre of Central Marine Fisheries Research Institute, Thoothukudi along with Gulf of Mannar Bioreserve Trust (GOMBRT) initiated the grow-out culture of portunid crabs in the fixed rafts established with 100 numbers of HDPE boxes (45×30×20 cm) at the stocking density of 1 crab/box in Palayakayal village. This program was started during the month of March 2020 in participatory mode to increase the income of traditional fishers of

the selected EDC coastal villages of Thoothukudi district. Four fisher groups each consisting of 4 members were identified as beneficiaries and given proper training before handing over 25 numbers of perforated HDPE crab culture boxes for marine crab fattening operation. The crab boxes were installed at the Palayakayal estuary in the depth of 1.5 m during high tide. The crab boxes were fastened with casuarina poles and stocked with water crabs or lean crabs belonging to Portunid

group caught during their daily fishing activities. The crabs were fed with clam or low value fishes collected from their own fishing operationsz at the rate of 10% of body weight once in a day. The crabs gets fattened in 15-30 days of period and selectively harvested as per market demand.

Reported by C. Kalidas, L. Ranjith, D. LingaPrabu, M. Kavitha and I. Jagadis, Tuticorin Research Centre

Personnel

Awards & recognition



The Dr. P.S.B.R. James Memorial Award 2019 for the Best Digital Presentation in the International Symposium Marine Ecosystem Challenges and Opportunities (MECOS-3) was awarded for 'Experimental validation of periodicity of increment formation in the Statolith of bigfin reef squid *Sepioteuthis lessoniana* (Cephalopoda: Lolignidae) from tropical Indian waters' authored by Sajikumar K. K., Geetha Sasikumar, R. Jeyabaskaran and K. S. Mohamed



Prof. N. R. Menon Memorial Award 2019 for Best digital presentation during the International Symposium Marine Ecosystems Challenges and Opportunities (MECOS-3) was awarded for 'Impacts and prospective resilient strategies for Indian marine fisheries sector to climate change' authored by Zacharia P. U., A. P Dineshbabu, T. M Najmudeen, S. Ghosh, J. K. Shoba, Anulekshmi Chellappan, Grinson George, K. Vinod, B. Johnson, L. Renjith and G. Rojith

Retirements



Dr. K. Sunil Mohamed Principal Scientist



Shri S. Mohan ACTO 30.04.2020



Shri A. Kumar ACTO 30.04.2020



Shri N. Ramamoorthi
Skilled Support Staff
30.04.2020



Shri Jamnadas Premji Polara Technical Officer 31.05.2020



Shri A. Udayakumar
Senior Technical Officer
31.05.2020



Shri A. Gandhi Technical Officer 31.05.2020



Shri Ganesh Bhatkal Technical Officer 31.05.2020



Shri C. Chandran Senior Technical Assistant 31.05.2020



Shri K. C. Hezhakiel
Senior Technical Assistant
31.05.2020



Shri V. Joseph Xavier Senior Technical Assistant 31.05.2020



Smt. T. Jayakumari Skilled Support Staff 31.05.2020



Shri K. Thangavelu
Skilled Support Staff
31.05.2020



Shri A. Vairamani Technical Officer 30.06.2020



Shri T. Nageswara Rao Technical Officer 30.06.2020



Shri S. Alagesan
Skilled Support Staff
30.06.2020



Shri Subhash K. Naik Skilled Support Staff 30.06.2020

Voluntary Retirement

Name	Designation	w.e.f
Dr. V. Kripa*	Principal Scientist & Head, FEMD	22.04.2020 (FN)

*Joined as Member Secretary, Coastal Aquaculture Authority (CAA), Chennai

Resignation

Name	Designation	w.e.f
Shri S. Maharajan	Lower Division Clerk	30.05.2020

Joined as Member Secretary, Coustar Aquaculture Authority (CAA), Chemis

Inter-Institutional Transfer

Name & Designation	From	То	w.e.f.
Smt. Febeena P. A., Junior Accounts Officer	ICAR-CMFRI	ICAR-CIFT	27.05.2020

Programme participation

Dr. A. Gopalakrishnan, Director

- Chaired and participated through Video Conferencing in Meeting of the Technical Committee to Review the Duration of the Ban Period and to Suggest Further measures to Strengthen the Conservation and Management Aspects held on 8 April, 2020
- Director's Conference held under the Chairmanship of DG, ICAR on 10th April, 2020
- Directors' Meeting with DDG (Fisheries) conducted on 4th, 7th and 13th April, 2020.
- Chaired a review meeting held on 15th
 April, 2020 with Joint Secretary (Fisheries)
 on progress of seven NFDB sponsored
 projects operated by ICAR-CMFRI at
 Mandapam, Vizhinjam, Visakhapatnam,
 Kochi and Mangalore
- Meeting with Director, Jio Institute, Mumbai to identify possible areas of collaboration held on 18 April, 2020
- Social Scientists Network meeting chaired by DDG (FS), ICAR. Director held on 3rd May, 2020
- Attended the Institute Biosafety Committee of Amrita Institute of Medical Science—4th May, 2020

- Chaired meeting organized on 13th May, 2020 by ICAR-CMFRI to identify strategies for fish marketing reforms in Kerala and attended by scientists from SEETTD ICAR-CMFRI, Officials from MPEDA, Matsyafed, ICAR-CIFT and Department of Fisheries, Kerala. Strategy plan developed was submitted to Honourable Minister of Fisheries, Government of Kerala.
- Attended Confederation of Indian Industry meeting on marine fish farming held on 13th May, 2020
- Attended the DBT RDAC meeting held on 14th May, 2020
- Attended meeting held 21st May, 2020 through Video Conferencing under the chairmanship of DDG (FS), ICAR and attended by Director, ICAR-CMFRI, ADG (M Fy), Principal Scientist (Fisheries Division) and Scientists from ICAR-CMFRI, ICAR-CIBA, ICAR-CIFA, ICAR-DCFR, ICAR-CIFE, ICAR-CIFRI and ICAR-NBFGR for discussions on work programme and the budget requirement for the proposed AINP project on Ornamental Fish to be implemented from 2021-22 onwards.
- Attended a meeting held on 25th May, 2020 for formulating the suggestions and recommendations to evolve a strategy for streamlining supply and demand in the fisheries sector of the state in the wake of Covid-19 pandemic chaired by the Minister of Fisheries, Harbour Engineering and Cashew Industry, Govt. of Kerala,

- Attended Department of Bio-technology (DBT) STAG meeting held on 26th May, 2020
- Attended the meeting chaired by DDG (FS), ICAR held on 30th May, 2020 for preparation of EFC Documents

Dr. Prathibha Rohit and Dr. Rajesh K. M.

 participated in meeting on Management of Marine Fisheries of Karnataka organized by Department of Fisheries, Karnataka and Karnataka Fisheries Development Corporation under the chairmanship of Fisheries Minister Shri. Kota Srinivasa Poojary on 30 June 2020 at Zilla Panchayath, Mangaluru, Karnataka.

Dr. Muktha M.

 participated in an online IUCN Grouper Fishery Monitoring & Assessment Workshop on 10-11.05.2020 and a follow-up session on 24.05.2020

Dr. R. Jayakumar and Dr. B. Johnson

 participated in the video conference meeting with Joint Secretary, Department of Fisheries, MoFAH&D, Govt. of India on PMSSY Unit cost on 15th June 2020.

Dr. R. Jayakumar

 participated in video conference review meeting of Network project on Ornamental Fish Breeding and Culture (NPOFBC) chaired by Dr. J. K. Jena, Deputy Director General, ICAR, New Delhi on 21 May 2020.



ICAR-CMFRI

The Central Marine Fisheries Research Institute is a premier research institute under the Indian Council of Agricultural Research and focusses on research and training in marine fisheries and mariculture.

Cadalmin is the quarterly newsletter of ICAR-CMFRI. This publication gives an insight into the major events of the institute, besides highlighting the salient research findings for the benefit of various stakeholders in the marine fisheries sector.

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