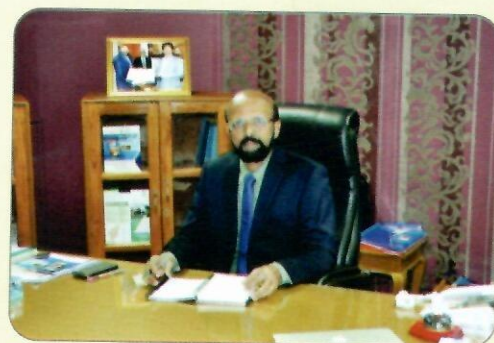


TNFU NEWS LETTER

Vol. 05 No. 05
MAY 2018

FROM THE DESK OF
VICE – CHANCELLOR.....



We kickstarted the technical activities of the KVK, Sikkal with the conduct of 'Preseason Agriculture Seminar' on 27.05.2018 to enlighten the farmers on the recommended cultivation technologies for various crops and allied activities during the ensuing crop season. Hon'ble Minister for Handlooms and Textiles, Govt. of Tamil Nadu Mr. O.S. Manian, Mr.P.V. Bharathi, MLA., Mr.V. Rathakrishnan, MLA., Dr.S. Suresh Kumar, I.A.S., District Collector, Nagapattinam graced the event with their presence. Officials from the Line Departments in the district and scientists from TNAU and TANUVAS have all supported us to conduct the technical sessions of the event.

It is a great honour for the TNJFU as the Vice-Chancellor, TNJFU has been assigned with the chairmanship of the committee formed to revamp the PG and Ph.D., syllabus for fisheries science in the country. I thank the DDG (Education), ICAR for having reposed faith in the TNJFU to assign this important task to the university.

The TNJFU in association with the WAS-APC sponsored a session on the theme "Skilling India In Fisheries Education" in the "ISAF 3 International Symposium on Aquaculture and Fisheries Education" at the CIFE, Mumbai on 17.05.2018. In this symposium, I presented a keynote address on the topic "Attracting Talents in Fisheries and Aquaculture Challenges and Opportunities" which highlighted the importance of producing skilled man power to take the vibrant aquaculture and fisheries sectors to the next level.

With a view to attract more talents to the different courses offered in the TNJFU, efforts have been made by all the constituent units of the TNJFU to create awareness about the importance of these programmes among the public and school students through various means and channels. Hope to get more number of applications for the courses offered in TNJFU for which the admission process will commence during June 2018.

Prof. S. Felix
Vice - Chancellor

EVENTS

**Pre season Agriculture Seminar**

A "Pre season Agriculture Seminar" was conducted on 27.05.2018 at KVK, Sikkal, Nagapattinam Dt. to enlighten the farmers on recommended scientific cultivation technologies for various crops and allied activities during the ensuing crop season. A total of 130 farmers participated in this seminar. The programme was inaugurated by the Hon'ble Minister for Handloom and Textiles, Government of Tamil Nadu Mr. O.S.Manian. Prof. S.Felix, Vice-Chancellor, Dr.S.Sureshkumar, IAS, District Collector, Nagapattinam, Mr.P.V.Bharathi, MLA, Sirkazhi constituency and Mr.V.Rathakrishnan, MLA, Mayiladuthurai constituency and officials of the Departments of Agriculture, Horticulture, Animal Husbandry and Agricultural Engineering were also present. The Hon'ble Minister released a booklet entitled "Fish culture in farm ponds" and a folder on "Integrated Farming System Technology", both prepared in Tamil on this occasion.

The inaugural session was followed by the technical session in which Mr.M.Narayanasamy, Deputy Director of Agriculture, Mr.K.Govinthan, Regional Joint director of Animal Husbandry, Mr.K.P.Panneerselvam, Executive Engineer, Agricultural Engineering Department, Mr.S.Neethimanikkam, Horticultural Officer delivered lectures on government schemes implemented by the respective department. In the technical session, Dr.S.Porpavai, Professor and Head, Soil and Water Management Research Institute, TNAU, Thanjavur, Dr.Suresh, Asst.Professor and Head, Veterinary University Training and Research Centre, Nagapattinam, Dr.Raja Ramesh, SMS (Agri. Ento), KVK, Thiruvavur delivered a guest lectures on scientific practices.

ISAFE 3 International Symposium on Aquaculture and Fisheries Education

TNJFU in association with WAS-APC sponsored a session on the theme "SKILLING INDIA IN FISHERIES EDUCATION" with the invited deliberations from Academia and Industry at the CIFE, Mumbai on 17.05.2018. Prof. S. Felix, Vice Chancellor, TNJFU and WAS-APC President took his initiative for the excellence of Fisheries graduates in their professional entities. His presentation on "Attracting Talents in Fisheries and Aquaculture: Challenges and opportunities" was a invited lecture from ICAR-CIFE, Mumbai. Dr. Jean-Yves, Director WAS-APC Board delivered a talk on "Skilling students to meet out the corporate expectations". Also to emphasize on the association of Industries, Dr. Rajalekshmi, Senior Scientist from M/s. Kemin Industries highlighted her talk on "Role of industry in Fisheries Academia". Dr. G. Jeyasekaran and Dr. G. Sugumar also presented their talks in this session. This sponsored session is first of its kind in ISAFE 3 and TNJFU's effort in Skilling India in Fisheries Education was appreciated by the delegates.

Vice Chancellor, TNJFU has been chosen by ICAR as the Chairman to revamp PG & Ph.D. syllabus for Fisheries Science in India

Prof. S. Felix, Vice Chancellor, TNJFU has been chosen as the Chairman of the committee of 12 scientists selected from various disciplines of Fisheries Science to revamp the syllabus of PG & Ph.D in Fisheries Science by the ICAR. The first meeting of all the Chairman and Conveners were held at New Delhi on 09-05-18 convened by the DDG, Education. General guidelines to be followed in this assignment was discussed in detail.

Second "Program Chair Meeting" for APA'19 held at Chennai

Prof. S. Felix, President of WAS-APC convened a high level meeting with the Program Chairs of APA'19 at Chennai on 30.04.2018 to monitor the progress in the Asian Pacific Aquaculture 2019. As TNJFU is hosting the event during June 19-21, 2019 this meeting helped in drafting the outline of the sessions and sub sessions for Asian Pacific Aquaculture - 2019. The second Program Chair meeting encompassed the team members Dr.J.K.Jena, DDG (Fisheries), ICAR, Dr.Mohan Joseph Modayil, independent consultant, Dr.Indrani Karunasagar, Dean, NIITE and Dr.J.Stephen Sampath Kumar, Director, CeSA.

Gram Swaraj Abhiyan:



Gram Swaraj Abhiyan programme was conducted by the Department of Agriculture, Nagapattinam Dt. on 02.05.2018 at all the 11 blocks in the district. The faculty from the TNJFU attended the events held in Nagapattinam, Thalainayeru, Kilvelur and Sirkazhi blocks. Dr.M.Nagoor Meeran, Director of Extension Education participated in the programme conducted in Thalainayeru block. Mr.S.Santhoshkumar, Asst. Prof., Dr.MGR FCRI, Thalainayeru, Mr.V.Gnanabharathi, P.A.(Tech) and Mr.R.Vetherethinam, Farm Manager, KVK, Sikkal attended the events in Sirkazhi, Kilvelur and Nagapattinam blocks, respectively.



Installation and demonstration of "File Tracking Software (FTS)" in University

The "File Tracking Software (FTS)" for monitoring the flow of all the letters / files, etc., electronically in real time mode was demonstrated its functionality by the software designers from Chennai at FCRI, Thoothukudi. All the staff attended the demonstration. Similar softwares were installed in all the



Colleges and Directorates of the University. Subsequently, the software was installed in all the departments and office of the Dean.

STUDENTS CORNER

CoFE, Nagapattinam

Production of value added fish products, marketing strategies and entrepreneurship development



College of Fisheries Engineering (CoFE), TNJFU, Nagapattinam organized a one day training program entitled 'Production of value added fish products, marketing strategies and entrepreneurship development' at Kuthalam village, Nagapattinam district jointly with NSS program on 12.05.2018. During this training program, women of the village were trained on preparation of various popular value-added fish



products like masala coated dried fish and fish noodles. This program was organized by Dr. N. Manimehalai, Dr. P. Karthic kumar and Dr. R. Brimapureswaran.

NSS special camp



CoFE, Nagapattinam organised a NSS special (week) camp in Panchayat Union Middle School, Kuthalam village Nagapattinam district during 07-13 May 2018. The theme of the camp was 'Youth for cleanliness'. In this camp, about 40 students of the institute participated. The cleaning and tree planting activities were carried out in the premises of school campus, village temple and other areas. Dr. S. Rajasekaran,



Tamilnadu State NSS Co-ordinator (Chennai) participated in the program and was the chief guest for an event. This NSS Special Camp was co-ordinated and organized by NSS Program Officers Dr. M. Ramar and Dr. D. Kesavan, Asst. Professors, CoFE.

RESEARCH HIGHLIGHTS

- Standardization and mass production of live feed at ARTP, Madhavaram



Mass production of rotifer, cladocerans and copepods in RAS based indoor tanks

Larval rearing is one of the riskiest phases of aquaculture, but it could be one of the most profitable venture. Special planning and strategies are required to overcome the risk of high mortality during this phase of culture. Success of larval culture depends on availability of live food. For getting good return from rearing of larvae of fish and shellfish they should be fed with nutrient rich diet. Zooplankton is required as a first food for many cultured fish; for others it contributes to faster growth and higher survival.

Mass production technology for three major zooplanktons viz. Rotifers, *Brachionus calyciflorus* (20 μ -50 μ), Cladocerans, *Moina micrura* (100 μ -150 μ) and Cyclops, *Thermocyclops shyalinus* (150 μ -250 μ) has been standardized. Continuous mass production in RAS based system has been developed using *Chlorella vulgaris* as food type resulting with high production of Rotifers (*Brachionus calyciflorus*) 150-200 nos/ml, Cladocerans (*Moina micrura*) 40-50 nos/ml and Cyclops (*Thermocyclops shyalinus*) 20-30 nos/ml in continuous culture system.



Mass production of rotifer, cladocerans and copepods in indoor FRP tanks

(Mangesh, Mahadevi, S. Felix and CBT. Rajagopalasamy)

- Standardization of induced breeding technology for native ornamental fishes:

a) Induced breeding of *Danio dangila* (Moustached danio):



Danio dangila

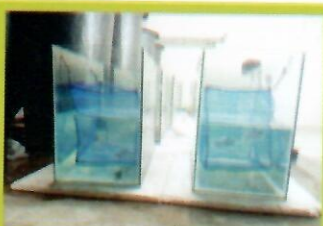
North eastern region is one of the biggest biodiversity hotspots which has number of beautiful indigenous fish varieties. *Danio dangila* is one among them. These are very popular varieties of zebras in ornamental trade. Breeding technology has been developed at the ARTP in advanced hatchery systems with RAS facilities. Both male and females

were induced with WOVA-FH @ 0.5 mL/kg body weight to female while 0.4 mL/kg for male and released into hapas (2 male: 1 female) placed in aquarium tanks. Successful breeding showed fecundity was around 1200 ± 50 eggs/7gm of female with 80% & 85% hatching and survival rates, respectively.

(Mangesh, Mahadevi and S. Felix)



Hormonal induction
to *Danio dangila*



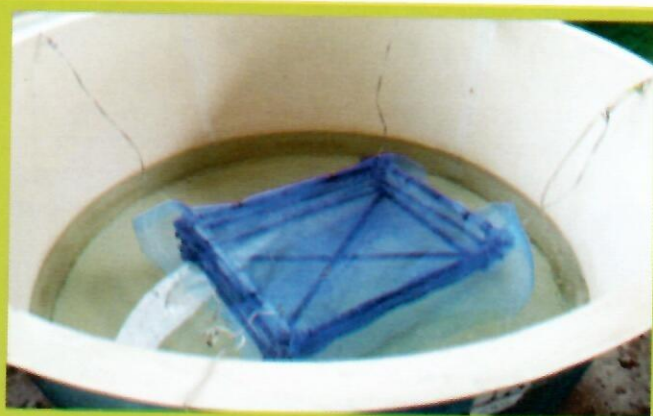
Breeding tanks' setup

b) Induced breeding of *Puntius sophore* (Spotfin swamp barb):

Puntius sophore is native to North east region, one of the popular ornamental fish with its attractive colour and tiny size in domestic as well as international market. Breeding technology has been developed at ARTP in advanced hatchery systems with RAS facilities. Both male and female were induced with WOVA-FH @ 0.4 mL/kg body weight for female while 0.3mL/kg for male and released in pairs (2 male: 1 female) into a breeding hapa in the FRP tank. Successful breeding showed fecundity around 1000 ± 50 eggs/5gm of female with 80% & 90% hatching and survival rates, respectively.



Puntius sophore



Breeding tank with hapa



Larvae of *Puntius sophore* (under microscope)

(Mangesh, Mahadevi and S. Felix)

Composting of fish waste using leaf litter as a bulking material

An experiment to understand the process of fish waste composting with leaf litter as bulking material was conducted in the Erode Centre for Sustainable Aquaculture, Bhavanisagar,



Erode dt. In this study, fish solid wastes were composted using 20% and 30% leaf litter as bulking material. The composting of fish waste was carried out with leaf litter as bulking materials in the ratio of 1:2:2 (fish waste: leaf litter: cow dung) and 3:2:5 (fish waste: leaf litter: cow dung). In an earlier study on fish waste composting process, inoculum of selected microbial colonies was applied to the compost pile and composting was quicker and completed by 60 days. However, in the present study no microbial inoculum was used and hence, the process was slower and completed in 84 days. Further, studies are essential to improve the composting process prior to commercialization.

(Ms.C.Rajeswari, Dr.S.Aanand, and Dr.J.Stephen Sampath Kumar ECeSA, Bhavanisagar)

OUTREACH PROGRAMMES

FCRI, Ponneri

Training programme on "Improving productivity in shrimp farming"

A training programme on "Improving productivity in shrimp farming" funded by Kemin Industries South Asia Private Limited was held at the Advanced Research Farm Facility (ARFF), TNJFU, Madhavaram campus during 03-04 May, 2018. The training was inaugurated by Dr. B. Ahilan, Dean



i/c, FCRI, Ponneri. Twenty Technicians of Kemin Industries South Asia Private Limited from all over India participated in the programme. Faculty of FC & RI, Ponneri handled the technical sessions. Dr. Gopala Kannan, Asst. Professor organised this programme.



NFDB- funded training programme on Ornamental fish culture

NFDB-funded training programme "Training and demonstration of ornamental fish culture" was conducted at the Aquatic Rainbow Technology Park (ARTP), Madhavaram during 8-10 May 2018. This programme was inaugurated by Dr. B. Ahilan, Dean i/c, FCRI, Ponneri. A total of 50 participants

attended this programme. During the valedictory function of the programme, Prof. S. Felix, Vice-Chancellor distributed certificates and manuals to the trainees. Vote of thanks was proposed by Dr. C.B.T. Rajagopalasamy, Project Officer, ARTP.

Skill development programme on "Basic techniques in ornamental fish culture and breeding"



A 25-day duration skill development training program titled "Basic techniques in ornamental fish culture and breeding" funded by the Tamil Nadu Skill Development Corporation was inaugurated at FCRI, Ponneri on 30.05.2018 by



Dr.B.Ahilan Dean i/c. A batch of 35 participants from different parts of Tamil Nadu will undergo this programme. In his felicitation, Dr.M.Nagoor Meeran, Director of Extension Education stressed the importance of the programme providing employment opportunities to the trainees. The schedule of this programme includes class room lectures for 19 days and farm attachment for 19 days. Ms. Agnes Daney Angeli, Head, Dept. of Fisheries Extension, Economics and Statistics at the institute coordinates the conduct of this programme.

FCRI, Thoothukudi

NFDB-sponsored skill development programme

The second batch of training programme "Empowerment of SHG fisherwomen in freshwater ornamental fish business initiatives" funded by the NFDB was conducted



the Department of Fisheries Extension, Economics and Statistics during 9th to 11th May, 2018. During the valedictory function of the program, Dr.G.Sugumar, Dean distributed the certificates to the participants. Mrs.T.Umamaheswari, Assistant Professor coordinated this programme.

Vocational training programme on "Vannamei shrimp farming"

A vocational training programme on "Vannamei shrimp farming" was conducted at the Mariculture Research Farm



Facility (MRFF), Tharuvaikulam of the FCRI, Thoothukudi during the period from 29.05.2018 to 31.05.2018. A total of 11 persons attended this training programme. In the valedictory function, Dr.G.Sugumar, Dean distributed participation certificates to the trainees and delivered the presidential address. Mr.K.S.Vijay Amirtharaj, Assistant Professor and Head i/c, MRFF organised and conducted this programme.

CoFE, Nagapattinam

Creation of awareness on Fisheries Engineering course

The CoFE prepared a pamphlet highlighting the significance of B.E. (Fish. Engg.) programme offered by the TNJFU for the first time in the whole country at the CoFE. These pamphlets were distributed among the Principals of various higher secondary schools in Nagapattinam district to create awareness among the school students about his important programme. Banners about the course were also displayed at

various locations in the district to create awareness about this programme among the parents and public.



DIVF-Ramanathapuram

Training on "Deep sea fishing and alternative livelihood opportunities"



NADP funded five-day training program on "Deep sea fishing and alternative livelihood opportunities" was conducted from 21.05.2018 to 25.05.2018, at Pamban, Ramanathapuram district by the Directorate of Incubation and Vocational Training in Fisheries(DIVF). This programme was inaugurated by Prof.D.Sukumar, Director, DIVF on 21.05.2018. A total of 25 fishermen registered for this programme. Various sessions of the programme were handled by faculty of DIVF and guest faculty from various government and private organizations. A training manual on deep sea fishing and participation certificates were distributed to the trainees on 25.05.2018. Mr.R.Velmurugan, Asst.Prof., DIVF coordinated this programme.

E-CESA

NADP training programme on 'Freshwater fish farming technologies'

A five-day training programme on 'Freshwater fish farming technologies', was organized at the Erode Centre for

Sustainable Aquaculture, Bhavanisagar from 28.05.2018 to 01.06.2018. A total of 32 participants, comprising of 18 males and 14 females attended this programme. The sessions of the training programme were handled by Dr.S.Aanand, Asst. Prof. and Head, Ms.C.Rajeswari of ECeSA, Dr.A.Suresh, Asst. Prof., IFPGS and Mr.Lakshmanan of the State Fisheries Dept.



Training programme on "Preparation of value added fishery products" at KKPCeSA

Kanyakumari Parakkai Centre for Sustainable Aquaculture (KKPCeSA) conducted a training programme on

"Preparation of value added fishery products" under the NADP scheme on "Demonstration and Training for Farmers' Capacity Building at Regional Outstations of CeSA in TNFU" from 22.05.2018 to 26.05.2018. A total of 22 participants including 11 women attended the programme. During valedictory function, a manual on "Preparation of value added fishery products" in the vernacular language was distributed along with participation certificate. Dr.K.Ravaneswaran, Prof. and Head, KKPCeSA organized this programme.



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