

## EVALUATIVE REPORT OF THE DEPARTMENT

1. Name of the Department & its year of establishment - Zoology (PG and Research) – 1961-1962

2. Names of Programmes/Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)

Sl. No.	Name of Programme	Subject	Year of affiliation	No. of sections	Sanctioned strength	Total Students strength (2011-2012)	Remarks
1.	B.Sc.	Zoology	1961	--	--	--	
2.	B.Sc.	Zoology with Biotechnology	2002	1	50	161	I, II & III Year
3.	M.Sc.	Zoology	1979	2	44	102	I & II year
4.	M.Sc.	Biotechnology	2005	2	50	55	I & II year
5.	M.Phil.	Zoology	1983	-	46	17	One Year
6.	Ph.D.	Zoology	1983	-	40	23	-
7.	P.G. Diploma	Aquaculture	1992	-	12	12	One Year
8.	Certificate Course	Aquaculture (Ornamental fish Culture)	2005	-	30	16	One Year

3. Interdisciplinary courses and departments involved

- In UG level, in **Part IV** interdisciplinary Courses like **Skill Based Elective** are offered in all the six semesters and **Non-Major Elective** in the final year as mandatory to all the students.
- In PG level, in the final year **Extra Disciplinary Courses** are offered mandatory to all the students.

Interdisciplinary courses		Departments involved
UG Level	Skill Based Elective	History, Tamil, English, Physics, Chemistry, Botany, Computer Science, Business Administration.
	Non – Major Elective	History, Tamil, English, Physics, Chemistry, Botany, Computer Science, Business Administration
PG Level	Extra Disciplinary	Tamil, Physics, Chemistry, Botany, Microbiology, Computer Science

4. Annual/ Semester/Choice Based Credit System:

Semester with choice based credit system

5. Participation of the department in the courses offered by other departments

- We offer Allied **Zoology for UG Chemistry & Botany**.
- Our department participates in the courses offered by other departments by extending Skill Based Elective and Non-Major Elective at UG level and Extra Disciplinary Courses at PG level to all the students.



### Skill Based Courses – UG Level

- ❖ Basics of Clinical Lab Technology
- ❖ Haematology
- ❖ Clinical Microbiology
- ❖ Clinical analysis of Biological samples
- ❖ Diagnostic Equipments in Clinical Labs
- ❖ Techniques in Clinical Lab (Practical)

### Non Major Elective courses – UG Level

- ❖ Aquaculture
- ❖ Vermiculture Technology

### Extra disciplinary courses – PG Level

- ❖ Clinical Lab Technology
- ❖ Principles of Biotechnology

## 6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)

### AIDED SECTION

Post	Sanctioned	Filled	Vacant
Associate Professors	-	5 (promoted)	-
Asst. Professors	15	5	5

### SELF-FINANCE SECTION

Post	Sanctioned	Filled	Vacant
Asst. Professors	12	17*	-

\* including 5 teachers appointed temporarily against permanent vacancies

## 7. Faculty profile with name, qualification, designation, specialisation (D.Sc./D.Litt./ Ph.D./M.Phil., etc.)

Sl. No.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years	Remarks
<b>Aided Section:</b>							
1.	Dr.G.Ravikumar	Ph.D.	Associate Professor	Sericulture & Toxicology	32	1 +5	---
2.	Dr.U.Bala subramanian	Ph.D.	Associate Professor	Sericulture & Toxicology	30	07	---
3.	Dr.K.Rajendran	Ph.D.	Associate Professor	Aquaculture Biotechnology	29	09	---
4.	Prof.A.Karthikeyan	M.Phil.	Associate Professor	Ornamental Fish culture	25	---	---
5.	Prof.P.Natarajan	M.Phil.	Associate Professor	Fishery Biology	20	---	Doing Ph.D.
6.	Dr.R.Damodaran	Ph.D.	Associate Professor	Entomology	22	02	---
7.	Dr.R.Rajakumar	Ph.D.	Assistant Professor	Fishery Biology & Aquatic Biotechnology	14	01	---



Sl. No.	Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years	Remarks
8.	Prof.K.Asokan	M.Phil.	Assistant Professor	Molecular Phylogeny	13	---	Doing Ph.D.
9.	Prof.C.Murthy	M.Phil.	Assistant Professor	Marine Cyanobacteria	11	---	Doing Ph.D.
10.	Dr.R.Pragashraj	Ph.D.	Assistant Professor	Aquaculture & Aquatic Microbiology	14	---	---
<b>Self – Finance Section:</b>							
1.	Dr.S.Vijayakumar	Ph.D.	Assistant Professor	Entomology	09	-	---
2.	Prof.P.Nambirajan	M.Phil.	Assistant Professor	Aquaculture	09	-	Doing Ph.D.
3.	Dr.K.Jayaseelan	Ph.D.	Assistant Professor	Toxicology	5	-	---
4.	Prof.P.Prabhu	M.Phil.	Assistant Professor	Microbiology	3	-	Doing Ph.D.
5.	Prof.G.Devendran	M.Phil.	Assistant Professor	Toxicology	3	-	Doing Ph.D.
6.	Prof.N.Markas	M.Phil.	Assistant Professor	Aquaculture	3	-	---
7.	Dr.P.Kavitha	Ph.D.	Assistant Professor	Vermi technology	9	-	---
8.	Dr.R.Jenni	Ph.D.	Assistant Professor	Toxicology	8	-	---
9.	Prof.R.Priya dharsini	M.Phil.	Assistant Professor	Breeding biology of fishes	3	-	Doing Ph.D.
10.	Prof.S.Sangeetha	M.Phil.	Assistant Professor	Aquatic Biology	5	-	Doing Ph.D.
11.	Prof.K.Malathi	M.Phil.	Assistant Professor	Fishery Biology	4	-	Doing Ph.D.
12.	Prof R.Sripriya	M.Phil.	Assistant Professor	Aquaculture Toxicology	5	-	Doing Ph.D.
13.	Prof.B.Gohila	M.Phil.	Assistant Professor	Aquaculture	9	-	Doing Ph.D.
14.	Prof.M.Ramasamy	M.Phil.	Assistant Professor	Marine Aquaculture	6	-	Doing Ph.D.
15.	Prof.K.Arun	M.Phil.	Assistant Professor	Animal Science	5	-	Doing Ph.D.
16.	Prof.S.Suguna	M.Phil.	Assistant Professor	Microbiology	5	-	Doing Ph.D.
17.	Prof.K.Kumar	M.Phil.	Assistant Professor	Sericulture	2	-	Doing Ph.D.

### 8. Percentage of classes taken by temporary faculty – programme-wise information

Sl. No.	Programmes	Morning session	Evening session
1.	UG	62	100
2.	PG	28	84
3.	M.Phil.	12	--



### 9. Programme-wise Student Teacher Ratio

Sl. No.	Name of the programme	Student teacher ratio
1	UG	14:1
2	PG	12:1
3	M.Phil.	10:1

### 10. Number of academic support staff (technical) and administrative staff: sanctioned and filled:

Sl. No.	Staff	Sanctioned	Filled
1.	Lab. Assistant	04	04
2.	Administrative	02	02

### 11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise. : Nil

### 12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received : Applied Proposal sent to DBT Star College – Sept. 2012

#### Dr.G.Swamidoss Daniel

- Fresh water Aquaculture with related discipline for viable farming system – UGC

#### Dr.M.Ayyavoo

- Characterization and Bio-mass production of marine microalgae as an alter native sources of  
Aquafeed evolving low cost technology – UGC

### 13. Research facility / centre with

#### • State recognition

- \* Our department is the **Recognized Research Centre** affiliated to Bharathidasan University, Trichirappalli
- \* The Research Advisors are members of **Doctoral Committees** of other colleges and in the affiliated University.
- \* **Guiding recognition** is obtained from Annamalai University, Chidambaram, Periyar University, Salem & Alagappa University, Karaikudi.

#### • National and International recognition

- \* The staff members have presented **Research Papers** in National and International Scientific Forums and published **Research Articles** in National and International journals.



#### 14. Publications:

- \* number of papers published in peer reviewed journals (national/international)

Sl. No.	Year of Publication	No. of papers Published	
		National	International
1.	2007 – 2008	03	--
2.	2008 – 2009	08	02
3.	2009 – 2010	04	11
4.	2010 – 2011	18	15
5.	2011 – 2012	20	09

\* Monographs : Nil

\* Chapter(s) in Books : 01

Sl. No.	Name of the faculty	Title	Publisher	Date
1.	Dr. K.Rajendran	Marketing Channels of shrimp and prawn sector in India	SELP Publication, Trichirappalli	2011

- \* Editing Books : ---
- \* Books with ISBN numbers with details of publishers : ---
- \* number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.) : ---
- \* Citation Index – range / average : ---
- \* SNIP : ---
- \* SJR : ---
- \* Impact factor – range : 0.258-10.959
- \* Impact factor – average : 2.00
- \* h-index : ---

#### 15. Details of patents and income generated : ----

#### 16. Areas of consultancy and income generated

Service oriented Consultancy for **Fresh water fish culture** is given in the College Campus Shrimp **Farm** given at our off-campus site at Eripurakkarai, Adirampattinam

#### 17. Faculty recharging strategies:

Staff members have undergone **Orientation, Refresher Courses**, attended workshops, seminars and presented papers.

#### Orientation / Refresher Courses/workshops/Training Programmes

Sl. No.	Year	Number of staff attended		Workshops/Training Programmes
		Orientation	Refresher	
1.	2008 – 2009	03	-	02
2.	2010 – 2011	-	04	
3.	2011 – 2012	02	-	02



### Seminars attended and Papers presented

Sl. No.	Year	National		International	
		Attended	Presented	Attended	Presented
1.	2007 – 2008	03	02	-	-
2.	2008 – 2009	04	06	-	-
3.	2009 – 2010	01	18	-	-
4.	2010 – 2011	01	23	-	04
5.	2011 - 2012	12	29	01	01

### 18. Student projects

- percentage of students who have done in-house projects including inter-departmental
- percentage of students doing projects in collaboration with industries / institutes

✎ In M. Sc. Bio Technology and M. Phil. Project Work is mandatory in the curriculum

Year	M.Sc. Biotechnology		M.Phil.	
	Campus	Industry	Campus	Industry
2007 – 08	16%	84%	70%	30%
2008 – 09	20%	80%	76%	24%
2009 – 10	15%	85%	81%	19%
2010 – 11	22%	78%	78%	22%
2011 – 12	26%	74%	82%	18%

✎ The following is the list of industries/institutes where Research Projects are undertaken:

- Cauvery distillaries – Trichy.
- Tanneries - Trichy
- Central Leather Research Institute(CLRI)- Chennai.
- State TB training and demonstration centre – Pondicherry
- Indian Institute of crop processing Technology(IICPT)
- Vetrinary University – Echankottai- Thanjavur.

### 19. Awards / recognitions received at the national and international level by

- Faculty:**
  - Dr. M. Ayyavoo, who served as Co ordinator in our Department is now serves as Registrar of Periyar Maniyammai University, Thanjavur.
  - Dr.U.Balasubramanian, elevated as Dean of Sciences, A.V.V.M. Sri Pushpam College, Poondi.
  - Prof.P.Natarajan, District Organizer of Youth Red Cross is the recipient of the Best District Organizer Award.
- Doctoral / post doctoral fellows** - Nil



• **Students:**

Name of the student	Award	Date	Place
Mr.A.Kannathasan	Best Presentation Award	Sept. 30, 2010	Pondicherry University
		Feb. 12, 2012	Bharathiyar University

20. Seminars/Conferences/Workshops organized and the source of funding (national/ international) with details of outstanding participants, if any :

**CONFERENCE**

- Aquaculture Biotechnology – UGC

21. Student profile course-wise:

**UG Programmes**

Year of study	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
2007-08	89	36	27	60	100
2008-09	40	19	13	71	100
2009-10	60	32	23	71	95
2010-11	58	29	23	64	100
2011-12	80	29	25	68	95

**PG Programmes (Zoology)**

Year of study	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
2007-08	49	19	22	85	100
2008-09	35	21	06	82	100
2009-10	44	19	21	95	100
2010-11	58	31	21	100	100
2011-12	77	25	25	89	94

**PG Programmes (Bio-Technology)**

Year of study	Applications received	Selected		Pass percentage
		Male	Female	
2007-08	35	13	20	96
2008-09	28	12	13	100
2009-10	36	04	28	100
2010-11	40	05	30	100
2011-12	31	07	13	100

**M.Phil. Programmes**

Year of study	Applications received	Selected		Pass percentage
		Male	Female	
2007-08	25	05	14	100
2008-09	20	05	12	100
2009-10	24	09	10	89
2010-11	18	05	12	67
2011-12	20	10	07	88



### Ph.D. Programmes

Doing		Awarded before the assessment period		Awarded during the assessment period	
Male	Female	Male	Female	Male	Female
15	08	08	05	05	00

### PG Diploma in Aquaculture

Year of study	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
2007-08	18	11	-	100	-
2008-09	12	10	-	100	-
2009-10	17	11	-	100	-
2010-11	14	12	-	100	-
2011-12	12	12	-	100	-

### Certificate Course

Year of study	Applications received	Selected	Pass percentage
2007-08	30	30	100
2008-09	28	28	100
2009-10	26	26	100
2010-11	30	30	100
2011-12	16	16	100

## 22. Diversity of students

Name of the Course (refer question no. 2)	% of students from the College	% of students from the State	% of students from other States	% of students from other countries
B.Sc.	--	100	--	--
M.Sc.	85	15	--	--
M.Phil.	55	45	--	--
Ph.D.	80	20	--	--
Certificate Courses	--	100	--	--

## 23. How many students have cleared Civil Services, Defence Services, NET, SLET, GATE and any other competitive examinations? :

- Defence service – Mr.Karthikeyan

## 24. Student progression:

Student progression	Percentage against enrolled
UG to PG	72
PG to M.Phil.	71
PG to Ph.D.	32
Ph.D. to Post-Doctoral	05
Employed	
• Campus selection	-
• Other than campus recruitment	83
Entrepreneurs	17





## 25. Diversity of staff

Percentage of faculty who are graduates	
of the same parent university	82
from other universities within the State	18
from other universities from other States	--

## 26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

Sl. No.	Year of completion	No. of faculty awarded Ph.D.
1.	2007 – 2008	02
2.	2008 – 2009	01
3.	2009 – 2010	00
4.	2010 – 2011	01
5.	2011 – 2012	02

## 27. Present details about infrastructural facilities

- \* Library : General Library : 1,347  
Department Library: 267  
List of Journals  
Indian Journal of Marine Science  
Indian Journal of Biotechnology  
Indian Science Abstract  
Marine Science Information Service  
Indian Journal of Fisheries  
Indian Journal of Biochemistry & Biophysics
- \* Internet facilities for staff and students : Internet facility is available in the department for staff and students.
- \* Total number of classrooms : 08
- \* Classrooms with ICT facility : 02
- \* Students' laboratories
- \* Zoology : 03
- \* Biotechnology : 02
- \* Microbiology : 01
- \* Research laboratories : 01  
Instruments available  
PCR  
SDS - PAGE  
Western Blotting  
Cooling Centrifuge  
UV Spectrophotometer  
Deep Freezer  
TLC



**28. Number of students of the department getting financial assistance from College.**

Year	Management Financial Assistance			Government Financial Assistance		
	UG	PG	M.Phil	UG	PG	M.Phil
2007-08	12	10	2	160	70	9
2008-09	30	20	4	72	58	8
2009-10	26	8	2	128	60	14
2010-11	35	9	2	115	64	13
2011-12	22	10	3	180	80	18

**29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.**

Based on the relevance to society, need base, interaction with external experts, opinion from outgoing students and job opportunities in varied fields, new programmes are developed in addition to the conventional Zoology, Biotechnology Programme has been introduced.

**30. Does the department obtain feedback from**

- \* **Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?**
  - i. Yes, feedback collected members of Board of studies about curriculum
  - ii. Semester wise results of the student's record are maintained in the Department
  - iii. Considering the feedback of board of study members the syllabus has been strengthened
  - iv. Introduction of innovative method of teaching was adopted by using OHP, LCD and Practical demonstrations.
- \* **Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?**
  - i. Yes, feedback collected from students to evaluate the teachers performance in the class room.
  - ii. Based on the feedback from the students subject experts(Senior faculty) were allotted to handle the specific subjects.
- \* **Alumni and employers on the programmes and what is the response of the department to the same?**
  - i. Yes, feedback obtained from the Alumni and employers
  - ii. According to Alumni and employers feedback the curriculum was useful for the students in succeeding the interviews and obtaining jobs – especially in aquaculture farms.
  - iii. According to the employers feedback the practical oriented programmes was enriched in the curriculum



**31. List the distinguished alumni of the department (maximum 10)**

SL. No.	Name of the Alumni	Designation	Place
1.	Raghavan Ramamoorthy	Agricultural Consultant	107, Old Hope Road, Kingston 6, Jamaica, West Indies.
2.	M.R.K.Panneerselvam, Ex M.L.A	Former Minister For Health	Cuddalore
3.	R.Balasubramanian	Expert, Aqua Culture	Singapore
4.	S.Semmalai M.P.	Former Minister for Education	Chennai
5.	A.Navaneetha Krishnan	Advocate General – TN	Chennai
6.	Dr.G.Arjunan	Professor And Head	Dept. of Animal Science BARD, Trichirappalli
7.	Dr.S.Kandhan	Asst. Director	MPEDA, Thanjavur
8.	Dr.BalaKrishnan	Vector Control Board	Coonoor – Ooty
9.	Dr.A.L.Muthuraman	Director	MPEDA, Thanjavur

**32. Give details of student enrichment programmes (Special Lectures/ Workshops / Seminar) with external experts.**

Sl. No.	Seminar Date	Seminar Title	Invited Talk
1.	08.03.2007	Highlights of the Department of Zoology and Biotechnology – 2007 UG Entrepreneurship Programme	Dr.K.M.Subburathinam Head, Dept. of Biotechnology, J.J.College of Arts and Science, Pudukkottai.
2.	20.08.2009	A Seminar on Recent Trends in Animal Science	Dr.G.Swamidoss Daniel, Dean of Sciences, Prist University, Thanjavur
3.	14-09 -2010	A Seminar on Bio Diversity and Bio Resources	Dr.V.Aldous J Huxley, Asst. Prof. of Zoology, Thiru.Vi.Ka. Govt. College, Thiruvarur
4.	12.08.2011	Psychology and Biology	Dr.S.S.Rajendran, Associate Professor, HOD of Zoology, Raja Serfoji Govt. College, Thanjavur-5
5.	29.08.2011	Seminar On Recent Trends in Life Science	Dr.S.Kandan, Assistant Director, MPEDA, Thanjavur
6.	26-12-2011	Transgenic Techniques	Dr.M.Jayanthi, HOD of Zoology & Biotechnology, Seethalakshmi Ramasamy College, Trichy
7.	09.03.2012	Workshop on Sericulture	Mr.V.Panneerselvam, Assistant Director of Sericulture, Trichy, Govt. of Tamil Nadu



**33. List the teaching methods adopted by the faculty for different programmes.**

Sl. No.	Programme	Teaching Methods Adopted
1.	UG	Chalk and Talk method, Teaching with models and chart, Practical demonstrations . Field trip and specimen collection.
2.	PG	Blackboard operation, Projection of OHP and LCD, Online Test. Collection and Identification of Biological specimen
3.	M.Phil.	Teaching with LCD, Seminar, Group discussion. Introduced paper on teaching methodology

**34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?**

The Programme objectives and learning outcomes are monitored and constantly met

- \* through CIA
- \* Tutorial system
- \* Feedback from students
- \* Annual review by the Management
- \* Feedback from Alumni and parents

**35. Highlight the participation of students and faculty in extension activities.**

Participation in Extension Activities is mandatory for all UG students as **Part–V** of studies. In Extension Activities we offer NSS, NCC and YRC, etc social work in adopted villages.

**Participation of faculty in Extension Activities**

Sl. No.	Name of the Faculty	Name of the Extension Activity
i.	P.Natarajan	Youth Red Cross
ii.	Dr.R. Pragashraj	NSS Programme Officer

**36. Give details of “beyond syllabus scholarly activities” of the department.**

- Conducted **YSSP** (Young Student Scientists Programme – 2012) in May 2012.
- **Farmers Training programmes on Fresh water fish culture**
- Participation in **Science exhibition** in collaboration with Physics and Chemistry in our college for the benefit of school students in 2011.
- **Honey bee Rearing Training Programme** given to women **Self Help group**.



37. State whether the programme/ department is accredited/ graded by other agencies. Give details. : -----

38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department

**Strengths:**

- i. Competent, dedicated and qualified faculty members to formulate any new socially important curriculum.
- ii. The well equipped laboratory with full fledged infrastructure facilities, even support other science departments.
- iii. Collection of rare specimen right from 1956 in our Museum
- iv. Our department having a shrimp farm for 6.5 Acres in Eripurakkarai at Adirampattinam to conduct aquaculture studies and also to educate rural shrimp culture farmers.
- v. A pond in the college premises is an added strength to cater the programme like aquaculture studies.

**Weaknesses:**

- i. The declining trend in using animals for dissection due to the policies of both State and Central Government.
- ii. Video clippings of dissection demonstration is not effective in learning the animal anatomy.
- iii. Most of our UG students coming from Tamil Medium schools find difficult to cope up the classes taught in English.
- iv. The maximum number of students are economically and socially disadvantaged ones.

**Opportunities:**

- i. The facility for a student joining UG course to pursue his studies upto Research level in Ph.D. gives him the opportunity for vertical mobility.
- ii. There is an opportunity to do Biotechnology from UG to PG level.
- iii. There are plenty of employment opportunities in government and private sectors such as fisheries department, fish farms, vector control board, zoological survey of India etc.
- iv. Opportunity for self-employment is also higher – Fisheries, Sericulture, Apiculture, Poultry, Vermiculture etc.
- v. We can offer our valid consultation to the local villagers for Fish farming, Sericulture and Apiculture

**Challenges:**

- i. To motivate our students from rural environment to undertake self employment relevant to our subjects
- ii. To enhance the communication skills for our students.
- iii. To create Public awareness programme on health care, hygienic and immunization.



### 39. Future plans of the department.

- \* To collaborate with fisheries, sericulture and animal husbandry department to enhance the course with job opportunities.
- \* To offer training programme for the farmers.
- \* To create a special laboratory for animal tissue culture.
- \* To develop the advance technique on culture of single cell protein.
- \* To develop the technique for biodegradation in collaboration with Department of Biotechnology (DBT).

### Achievements of the Department

#### MAJOR SCIENTIFIC RESEARCH PROJECTS COMPLETED

##### Dr. Abdul A Rahaman

- Sea Turtle Research & conservation (DoEN)  
– 1984 – 87 Rs.3,82,600
- An environmental investigation of Muthupet Saline Swamp/UGC  
– 1985- 87 Rs 2.25 lacs
- Survey and utilization of Natural resources/UGC  
– 1993-96 Rs.1,14,918
- Environmental impact of effluent discharge from Aquaculture pond – DoEN  
– 1994-96 Rs.2,05,339
- A recovery plan for marine turtles *Olive ridley* on the East Coast of Tamil Nadu-ICAR  
– 1986-87 Rs.1,24,000
- Integration of Artemia in solar salt work – Benefits for salt production and production of valuable by- products Artemia cyst and Artemia Biomass: DST  
– 1995 – 97 Rs.1,30,000

##### Dr.M.Ayyavoo & Dr.K.Rajendran

- Utilization of parboiled rice bran and settlings of rice-bran oil as prawn and fish feed –  
**Ministry of food processing New Delhi.**  
- 1993 – 95 Rs.2,04,000

#### MINOR RESEARCH PROJECTS COMPLETED

##### Dr.G.Swamidoss Daniel

- Fresh water Aquaculture with related discipline for viable farming system – UGC  
- 2003 – 05 Rs.70,000

##### Dr.M.Ayyavoo

- Environmental factors and their role in reproductive cycle of a few crustaceans – UGC  
- 1984 – 85 Rs.9,000
- Characterization and Bio-mass production of marine microalgae as an alternative sources of Aquafeed evolving low cost technology – UGC  
- 2003 – 05 Rs.80,000



### **EXTENSION CENTRES OF THE DEPARTMENT**

- Turtle pen Point Calimere ( Kodyakkarai)
- Shrimp Farm Eripurakkarai – Adirampattinam

### **SEMINAR**

- Sustainable development - 1996
- Recent trends in Animal Sciences - 2001

### **SYMPOSIA**

- All India Symposium on Aquatic Organisms - 1987
- International Symposium on Bio Industry - 1989

### **WORKSHOP**

- One Day Workshop on Coconut Pest Management - 2005
- One Day Workshop on Ornamental Fish Culture - 2005

### **CONFERENCE**

- Aquaculture Biotechnology – UGC - 2005

### **FOREIGN VISITS**

- **Dr. Abdul A Rahaman** - Visited **U.S.A** - 1990  
Visited **China** - 1992
- **Dr.G.Ravikumar & Dr.U.Balasubramanian**  
Presented papers in Sericulture

Conference at

**Bangkok, Thailand - 2002**

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