

**DIRECTORATE OF RESEARCH  
ANAND AGRICULTURAL UNIVERSITY  
UNIVERSITY BHAVAN, ANAND-388 110(Gujarat)**



**Dr. K. B. Kathiria**  
Director of Research & Dean PG Studies

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e-mail : dr@aaui.in

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No.AAU/DR/RES/T-2/ 5002 /2015

Date: 17-08-2015


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To,

All the Unit / Sub Unit Heads  
AAU, Anand

Please find attached herewith a letter No. TANU/HDAE/CAFT-2015 dated 3-8- 2015 received from Dr. S. Kuttalam, Professor & Head-cum-Director(CAFT), Department of Agricultural Entomology and Centre of Advanced Faculty Training Centre for Plant Protection Studies, Tamil Nadu Agricultural University, Coimbatore regarding 21 days training programme on **“Pesticide Application in agro ecosystem its dynamics and implications”** which will be held from **29<sup>th</sup> September to 19<sup>th</sup> October, 2015** at TNAU, Coimbatore. This is for your information and further necessary action.

Encl : As above

  
**Director Of Research & Dean  
Faculty Of P. G. Studies**



Department of Agricultural Entomology  
and Centre of Advanced Faculty Training  
Centre for Plant Protection Studies  
Tamil Nadu Agricultural University  
Coimbatore – 641 003  
Tamil Nadu

Dr. S. Kuttalam  
Professor & Head-cum-  
Director (CAFT)

Phone: 0422 6611214  
Fax: 0422 6611437  
Email: entomology@tnau.ac.in

No. TNAU/HDAE/CAFT-2015 dt. 03.08.2015

To

The Vice Chancellors of Agricultural Universities  
The Director, Indian Agricultural Research Institute  
The Director / Head-in-charge of the ICAR institutes  
The Heads of Department of Entomology in all State Agricultural Universities  
The Directors, Deans, Heads of Department, Research Stations, TNAU

**Sub: Centre of Advanced Faculty Training on "Pesticide Application in agro ecosystem – its dynamics and implications" from September 29 – October 19, 2015.**

Dear Sir/ Madam,

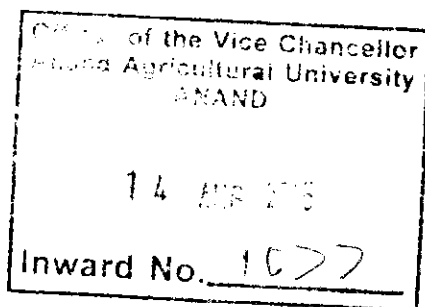
The Indian Council of Agricultural Research, New Delhi has identified the Department of Agricultural Entomology, TNAU, Coimbatore as a **Centre of Advanced Faculty Training (CAFT)**. The main objective of the CAFT is the Development of Human Resources through state-of-the-art training on the advances of Insect Science. To achieve the mandate, the CAFT designed an useful, informative and interactive advanced training course for 21 days on **"Pesticide Application in agro ecosystem – its dynamics and implications" from September 29 – October 19, 2015.**

There is no training fee. Boarding and lodging would be provided by the University as per ICAR norms. The Centre would pay to and fro rail fare by AC-III tier or by bus by the shortest route to the candidates on production of actual tickets.

Please nominate teachers / scientists in the rank of Assistant / Associate Professors engaged in teaching/research/extension to participate in the Training Course. The copy of the brochure along with application proforma is enclosed. The same is also available at TNAU website: <http://sites.tnau.ac.in/cpps>. The application duly filled by the candidate may kindly be forwarded officially by the competent authority through proper channel. **The last date for receipt of the application is August 31, 2015.**

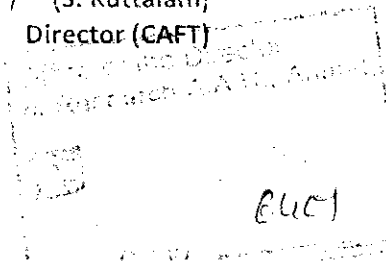
With kind regards.

DR



Yours sincerely

*(Signature)*  
(S. Kuttalam)  
Director (CAFT)



T-2  
24/8

10/8

14/8/15

Unit Working - 14/8/15  
Dr. S. Kuttalam

## PESTICIDE APPLICATION IN AGRO ECO SYSTEM – ITS DYNAMICS AND IMPLICATIONS

### APPLICATION FORM

1. Full name(in block letters) : .....
2. Designation : .....
3. Present employer and address : .....
4. Address to which reply should be sent (in block letters) along with e- mail, phone and mobile number : .....
5. Date of birth : .....
6. Sex: Male/Female : .....
7. Teaching/Research/Professional Experience(Mention post held during last 5 years and number of publications) : .....
8. Field of specialization and current area of research/teaching : .....
9. Mention if you have participated in any Summer/Winter School/Short Course, etc., during the last 3 years under ICAR and other organizations : .....

### 10. Academic record

Degree	Subject	Year of passing	Class	University or Institution
UG				
PG				
Ph.D				

11. Authority who shall issue relieving orders in the event of selection (Address & e mail ID) : .....

12. Recommendations of the Head of the Department : .....

Place: ..... Signature of the applicant  
Date: .....  
Department

### Certificate

It is certified that the information furnished above are correct.  
Date: ..... Signature and Designation of the Sponsoring authority with office seal



### For further information:

**Dr.S.KUTTALAM**  
**Professor and Head, Director of CAFT**  
Department of Agricultural Entomology  
Centre for Plant Protection Studies,  
Tamil Nadu Agricultural University  
Coimbatore 641 003  
Email: [entomology@tnau.ac.in](mailto:entomology@tnau.ac.in)  
Phone: 0422 6611214 / 6611414  
URL: <http://sites.tnau.ac.in/cpps>



CENTRE OF ADVANCED FACULTY TRAINING  
ON



## PESTICIDE APPLICATION IN AGRO ECO SYSTEM – ITS DYNAMICS AND IMPLICATIONS

September 29<sup>th</sup> to October 19<sup>th</sup>, 2015



**Course Director**  
**S.KUTTALAM**  
Professor and Head

**Course Coordinators**  
J.S. Kennedy, Professor  
K.Bhuvaneshwari, Professor  
B. Virothkumar, Assistant Professor  
A.Suganthi, Assistant Professor

**Sponsored by**  
Indian Council of Agricultural Research  
New Delhi

**Organised by**  
Department of Agricultural Entomology  
Centre for Plant Protection Studies,  
Tamil Nadu Agricultural University  
Coimbatore 641 003



## PESTICIDE APPLICATION IN AGRO ECO SYSTEM - ITS DYNAMICS AND IMPLICATIONS

Pesticide is a chemical used to control, repel, attract, or kill pests which are inimical to mankind like insects, weeds, birds, rat and other non insect pests. With the advent of many groups of synthetic organic insecticides, pest management was made much more effective by preventing crop losses. But the use of insecticides has also resulted in several serious problems, chief among them is environmental contamination. Organochlorine pesticides (aldrin, chlordane, DDT, dieldrin, endrin, heptachlor, mirex, toxaphene, hexachlorobenzene (HCB)) constitute nine of the twelve chemical substances/groups (dirty dozen) currently defined under the Stockholm Convention on POPs (persistent organic pollutants). It would be a tough challenge for India and similar developed countries to produce enough food for the growing population, protect plant, animal, and human health and at the same time to conserve the environment.

India is the second largest pesticide producer in Asia next to China and twelfth largest producer globally. However considering the consumption of pesticide, India is one of the lowest in the world. Despite low consumption of pesticides, India has more problems of pesticide residues vis-a-vis other countries and these have entered into food products and underground water because of non adherence to best recommended practices. Hence the training was proposed with the objective of sharing knowledge on the dynamics of agrochemicals in the environment, detection and determination of pesticide residues and their implications on environment, to improve pesticide management for minimizing contamination of our natural resources and ultimately to protect our environment.

The department of Agricultural Entomology, of Tamil Nadu Agricultural University (TNAU), crossed hundred years of its service to farming community in managing pest problems. Pesticide Toxicology laboratory of this department has made tremendous progress in the bio-efficacy evaluation since 1960s. With the establishment of analytical facilities in 1970s, various aspects of pesticide toxicology like pesticide kinetics, pesticide residues, insecticide resistance monitoring and its mechanism were studied. The research accomplishments in the various aspects of pesticide toxicology continued through the infrastructure development of the laboratory equipped with modern

analytical equipments like GC, GC-MS, HPLC, LC-MS and LC-MS/MS. The laboratory got accredited by NABL during the year 2011 in the field of chemical testing for analysing pesticide residues and sustains its status through continual improvement and strict quality control.

### COURSE OUTLINE

- ❖ Pesticide contamination in India: Status and issues
- ❖ Safety concerns and misinterpretations about pesticides
- ❖ Environmental impact of pesticides
- ❖ Pesticide regulation in India
- ❖ Pesticide classification and importance
- ❖ Compatibility of insecticides
- ❖ Improved pesticide application technologies
- ❖ Metabolism of insecticides
- ❖ Biological evaluation and field testing of pesticides
- ❖ Pesticide compatibility with bio control agents
- ❖ Environmental fate of pesticides in soil, water and atmosphere
- ❖ Modern approaches in pesticide residue analysis
- ❖ Impact of insecticides on earthworm, avians and silkworms
- ❖ Impact of insecticides on biodiversity
- ❖ Pesticide risk assessment
- ❖ Occupational exposure of workers to pesticides
- ❖ Non pesticidal environmental contaminants
- ❖ Insecticide resistance management
- ❖ Green chemistry and green pesticide molecules
- ❖ BIS standards on pesticides
- ❖ GAP and GLP
- ❖ Instrumentation in pesticide residue analysis
- ❖ International standards of pesticide residues in food and drinking water
- ❖ Nano pesticides
- ❖ Pesticide residues in export commodities
- ❖ Method validation and uncertainty measurement in residue analysis

### ELIGIBILITY

Participant should be a post graduate entomologist from an ICAR institute or State Agricultural University and shall preferably be below the age of 45 years. Candidates who have undergone any training related to this field of research earlier at Tamil Nadu Agricultural University need not apply.

### VENUE

Department of Agricultural Entomology  
Tamil Nadu Agricultural University  
Coimbatore 641 003

### TRAVEL

The centre would pay to and fro rail fare by AC-III tier or by bus by the shortest route to the candidates on production of actual tickets. The candidates have to provide a certificate to the effect that they have not been given TA and DA by the sponsoring institute for travel.

### ACCOMMODATION

Boarding and lodging will be provided for the participants in the campus according to the budget provided by the ICAR

### LOCATION AND SEASON

Coimbatore is located near the picturesque Western ghats. The Weather during September will be mild and pleasant.

### APPLICATION AND SELECTION

Candidates are requested to visit the website of Capacity building programme of ICAR at <http://iasri.res.in/cbp/> and create login ID and apply online for the CAFT course. They are also requested to send filled in application forms through proper channel to the following address by post. Advance copy can be sent by email.

**Dr.S.KUTTALAM**

**Professor and Head, Director of CAFT**

Department of Agricultural Entomology  
Centre for Plant Protection Studies,  
Tamil Nadu Agricultural University  
Coimbatore 641 003

Email: [entomology@tnau.ac.in](mailto:entomology@tnau.ac.in)

Fax: 0422 6611437 Phone: 0422 6611214 / 6611414

URL: <http://sites.tnau.ac.in/cpps>

- ❖ Last date for receipt of application : 31.08.2015 through the sponsoring institute is
- ❖ Candidates will be informed of their selection before : 04.09.2015