

**INDIAN COUNCIL OF AGRICULTURAL RESEARCH
KRISHI BHAVAN: NEW DELHI-1**

F.No.ADMN/7/ 78 /2017-WS

Dated the 27 July, 2017

OFFICE MEMORANDUM

Subject: Capacity Building Programme on Technologies for utilization of entomopathogenic nematodes for sustainable management of soil insect pests from 28.08.2017 to 01.09.2017 at NBAIR, Bangalore.

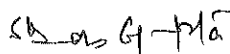
National Bureau of Agricultural Insect Resources (NBAIR), Bangalore has invited nomination for Capacity Building Programme on Technologies for utilization of entomopathogenic nematodes for sustainable management of soil insect pests to be held from 28.08.2017 to 01.09.2017 at NBAIR, Bangalore. A copy of the brochure containing details of the said programme is enclosed.

Eligibility: The Capacity Building programme is open for participants from ICAR institutes/SAUs/CAUs/Agriculture Faculty of NARES in the cadre of Assistant Professor or equivalent and above and currently actively engaged in research on EPN.

Course fee: No registration fee is charged from the participants or their sponsoring organizations.

The eligible Scientists of ICAR Hqr. who desirous to attend the said training programme may send their nomination in the prescribed nomination form (enclosed) through proper channel latest by **03.08.2017** for onward transmission to NBAIR, Bangalore.

The Officers who have already attended this training course need not apply. The applicants will not be allowed to withdraw their nominations after acceptance by NBAIR, Bangalore.


(Suparna Dasgupta)
Under Secretary (WS)
E-mail ID: suparna.icar@nic.in

Encl: As above

Distribution:

1. All Scientific Personnel of ICAR Hqrs, KB.,/KAB-I&II/NASC through web-site.
2. DKMA, KAB, Pusa for uploading the same on ICAR web-site.
3. Guard File



Capacity Building Program on

Technologies for utilization of entomopathogenic nematodes for sustainable management of soil insect pests

August 28- September 1, 2017



Organized by



Human Resources Development Cell,
ICAR-National Bureau of Agricultural Insect Resources,
P.B.No.2491, HA Farm Post, Bally Road, Bengaluru-560024

Ms. S.J.
20-7-12

S/no (18)

About the Capacity Building Program:

Entomopathogenic nematodes (EPN) like *Steinernema* spp. and *Heterorhynchus* spp. and their symbiotic bacteria (*Xenorhabdus* spp. in *Steinernema* and *Phaenobothus* spp. in *Heterorhynchus*) are important biotic factors in suppression of insect pest populations in soil and cryptic habitats. They are widely distributed in soils throughout the world. Infective juveniles (I₁), the only free-living stage, penetrate insect hosts through natural openings (mouth, anus, and spiracles) or directly through the cuticle. After entering the insect the haemocoel, I₁ releases their bacterial symbionts, which are responsible for killing the host with 24 to 48 h. The bacterial symbiont digests the host tissues, thereby providing suitable nutrient and environment for nematode growth and development. The virulent species of these nematodes are commercially produced as biological control agents all over the world. India has a great potential to exploit these beneficial nematodes for the suppression of insect pests.

ICAR-NBAIR, erstwhile, Project Directorate of Biological Control (PDBC) hand-in-hand with AICRP Biological control of Insects, Diseases, Weeds and Nematodes have immensely contributed to the science of biological control of insect pests, diseases, weeds and nematodes, and is considered as the centre of excellence for microbial biocontrol in the country. The expertise and technological knowledge evolved by the scientists have been formulated in to a training module for the benefit of enthusiastic scientists, faculty and researchers pursuing biological control of insect pests across the country. The current program envisages capacity building in the field of biological control.

About the Bureau

ICAR-National Bureau of Agricultural Insect Resources (NBAIR), formerly National Bureau of Agriculturally Important Insects (NBAII) is located in Bengaluru, Hebbal in the same premises at which The Commonwealth Institute of Biological Control (CIBC), Indian Station was established in 1957. The advent of CIBC marked the beginning of organized and systematic biological control research in India. During this period, our knowledge of natural enemies of crop pests and weeds increased manifold. CIBC, Indian station was closed during 1987 and All India Coordinated Research Project on Biological Control of Crop Pests and Weeds (AICRP-BCCP&W), which was launched in 1977 under the aegis of the Indian Council of Agricultural Research was shifted to the same campus in 1988. The centre was named as Biological Control Centre and the entire program functioned under the administrative/financial control of the National Centre for Integrated Pest Management (ICAR). In the eighth five-year plan, the project was elevated to an independent Project Directorate of

Biological Control, with its headquarters in Bangalore during 1993. PDBC was the nodal agency in the country that organizes biological control research at the national level with 16 centres spread across the country. The Directorate at Bangalore carried out basic research on the bio-systematics of important groups of insect bioagents. The reference collection maintained at PDBC was catalogued in the form of a technical bulletin on and also available in a retrievable, electronic format. Besides, work on strain development, molecular characterization, mass production technologies, semiochemicals, biopesticides work for insect and disease management was intensified. During XI plan, PDBC was upgraded as National Bureau of Agriculturally Important Insects (NBAIL) to act as a nodal agency for collection, characterization, documentation, conservation, exchange and utilization of agriculturally important insect resources (including mites and spiders) for sustainable agriculture. In the twelfth five year plan the Bureau is now renamed as ICAR-National Bureau of Agricultural Insect Resources (NBARI) and the bureau's activities are divided in three divisions.

How to Reach

ICAR-NBAR is located on the Bengaluru-Bellary Highway NH 7 towards the Kemppegowda International Airport, opposite CBI Bus stop, Gangenahalli. The Bureau is located 6 km from Cantonment railway station/about 6 km from Yaswanthpur railway station/ 8 km from Kranaviva Sangoli Rayanna Bengaluru railway station and 28 km from Kemppegowda International Airport, Devanahalli. Buses plying to Yelahanka, Devanahalli, Doddaballapur, international airport halt at Gangenahalli or CBI Bus stop on NH 7. Participants are requested to alight at CBI/Gangenahalli bus stop to reach ICAR-NBAR. Pre-paid three-wheeler/taxis can be availed from Airport/Railway stations/Bus stations.

Eligibility

The Capacity Building program is open for participants from ICAR institutes/SAUs/CAUs/Agriculture Faculty of NARES in the cadre of Assistant Professor or equivalent & above and currently actively engaged in research on EPN/A maximum of 10 participants will be selected for the training. Interested participants need to get sponsored by their respective institutes for their travel, boarding and lodging. No registration fee is charged from the selected participants or their sponsoring organizations/institutes.

Travel, Boarding and Lodging

Participants essentially need to get sponsored from their respective organizations. No TA, DA or free accommodation will be provided by the

Bureau. Participants shall be provided accommodation as per ICAR Guesthouse rates in the ICAR-NBAR guesthouse/trainee hostel, with dining and cook facilities. Wholesome meals and refreshments shall be provided at the rates approved by the Council. The participants are requested not to bring their spouse or any family members as the accommodation is sufficiently enough for the trainees/participants. Bureau shall provide trainees with tea during sessions. Outstation participants are requested to reach one day prior & plan their departure on last day of training program after 16.00 hrs.

How to Apply

1. The complete application may be sent to below correspondence addresses.
2. The application should be submitted through proper channel.
3. Capacity Building Program details are also available online at <http://www.nbar.res.in/>

4. The selected candidates will be informed by e-mail/website of the institute. Once the candidates are intimated about their selection for CBP, they need to confirm their acceptance latest by August 15, 2017.

Important Dates

- Last date for receiving of application: August 05, 2017
- Notification of selection: August 08, 2017
- Commencement of Capacity Building Program: August 28, 2017

Correspondence

All the correspondence to be addressed to

In-Charge, HRD Cell

Dr. K. Satyvasi Murthy, Principal Scientist,
Email: ksatmurthy.nbar@icar.gov.in, Mobile: 9449051687

Course Director

Dr. M. Nagesh, Principal Scientist,
Email: nagesh.m@icar.gov.in, nageshmnbar@icar.gov.in,
Mobile: 9845753113

Co-Coordinator

Dr. Jagadeesh Paill, Scientist
Email: pailljagg@icar.gov.in
Mobile: 8050321486

Dr. Mahesh S. Yandige, Sr. Scientist
Email: maheshs@icar.gov.in
Mobile: 9480046850

ICAR - National Bureau of Agricultural Insect Resources
H.A. Farm Post, Bengaluru-560 024

Registration/Application Form

HRD Capacity Building Program on
"Technologies for production of entomopathogenic nematodes for sustainable management of soil insect pests"
August 28-September 1, 2017

(Last date for receiving of application: August 05, 2017; Notification of selection: August 08, 2017; Commencement of Capacity Building Programme: August 28, 2017)

1. Full name (in block letters): _____
2. Designation: _____
3. Present employer and address: _____
4. Address for correspondence (along with email and contact number):

5. Date of Birth: _____
6. Sex (Male/Female): _____
7. Teaching/research/professional experience relevant to the training:

8. Mention if you have participated in any Summer/Winter School/Short course/Training programme on Biological control, EPN etc. during the last 5 years at ICAR-NBAIR or at any ICAR/other organizations:
Title, duration, location _____
9. Accommodation required: Yes/No
10. Academic record:

Examination passed	Subjects Main/subsidiary	Year of passing	Class ranks, distinction etc.	University or Institution
Bachelor's degree				
Master's degree				
PhD				
Other certificates, Diplomas etc.				

11. Current research activities:

Signature of the applicant

Recommendations of the forwarding Institute

Dr./Shri./Ms. _____ is hereby nominated and sponsored for participation in the ICAR-NBAIR, Bengaluru sponsored HRD Capacity Building Program on "Technologies for production of entomopathogenic nematodes for sustainable management of soil insect pests" from August 28-September 1, 2017.

Signature with date:

Designation & Address

Office Seal of the Sponsoring Authority