ICAR-National Bureau of Agricultural Insect Resources
Bengaluru

Foreign Visits - 2017

Dr. Deepa Bhagat: Participated in the International Conference on Emerging Trends in Integrated Pest and disease Management for Quality food production held at Kuching, Malaysia 25-27th July 2017

Dr. K. Sreedevi: Training on "Phylogeny and Biogeography of Indian Sercini Chafers" at ZoologischesForchungsmusuem, Bonn, Germany 16th September - 15th December, 2017 under Dr. DrikArhens

Dr. Y. Lalitha: Participated in the 14th IOBC-MRQA workshop from 14-17th November 2017 at Merida, Mexico

Performance evaluation report of scientists after Foreign Deputation

Category of foreign deputation	SMD	Institute	No. of Scientists deputed for Foreign affairs/ activities		Major areas of activities (Themes of Research/ Technology/ Training)	Immediate benefit to the institute in terms of capacity building to achieve institute mandate
			2010-14	2014-19		
Short term Visit (<15 days)	CS	ICAR-NBAIR	Nil	1 (DrSelvaraj)	SAARC regional training on integrated pest management at Bangladesh Agricultural Research Institute from 28-31 May, 2018 (4 days)	Hands on training on Integrated Pest Management
			Nil	1 (DrSelvaraj)	Biological control of invasive pest species at CSIRO, Brisbane, Australia (9 days)	1. Mass production of whitefly parasitoid for large scale release 2. Biological control of invasive pest species including weeds 3. Exposure to Plant quarantine facilities at CSIRO
			Nil	1 (Dr K Subaharan)	Resource person nanotechnology workshop organized by DST and Mauritius Research Council from April 6-7 2016	Nanotechnology based pest management technologies developed
Medium term days(>15days to <6 months)	CS	ICAR-NBAIR	Nil	1 (DrAnkita Gupta)	Taxonomic study of Indian wasps at the Natural History Museum, London for one month from 7th May to 7th June 2019	Capacity building as digitization of Indian parasitic wasp types/ vouchers of around 100 species was done at NHM
			Nil	1 (Dr K Sreedevi)	Three months training to Division of Arthropoda,	1. Trained in morphological and moleceular characterization of Indian

					Alexander Koenig Museum, Bonn, Germany from 17th September to 14th December 2017. 1. Gaining taxonomic expertise for identification of the species (Indian fauna) belonging to Tribe Sericini of Order Coleoptera and also learning biogeographical and phylogenetic analysis tools 2. To gain knowledge in the recent research advances in Scarabaeidae taxonomy and systematics at global level.	fauna of Tribe Sericini of Coleoptera for holistic species identification. 2. Exploration of species diversity in India and discovery of 17 new species and documentation of several new locality records. 3. Building up of reference collection for identification of the species and catering identification services.
			1(Dr M.Nagesh)	Nil	Training on Genomics and Bioinformatics in Washington state university, Pullman, USA from 01.09.2013 to 20.11.2013	Basic training on genomics and bioinformatics
			1 (Dr R Gandhi Gracy)	Nil	Undergone training in Cornell University Bioinformatics in Entomology from October 2010 to December 2010	Initiated Bioinformatics work at ICAR-NBAIR, There were 3 trainings Organized Training on Subjectmatter and sensitization on Basic and Application of Bioinformatics under National Agricultural Bioinformatics Grid(NABG)
			1 (Dr M. Mohan	-	Training on expression profiling of genes related to insecticide resistance and bioinformatic analysis in University of Kentucky,	Whole genome sequencing and analysis of genes involved in fitness attributes

					Lexington, USA from 18.09.2013 to 16.12.2013	
			1 (Dr Mahesh Yandigeri)	-	Training on Microbial Molecular Taxonomy in University of California, USA from 18.09.2013 to 16.12.2013	Study has helped in understanding of the endosymbionts genome in insects and also gained expertise in handling of genomic libraries and use of qPCR in designing experiments.
			1 (Dr T Venkatesan)	-	Allele Mining with reference to Genetic Variation in Insects during Mar-April 2011 at West Virginia State University	1.Trained 75 Scientists/Assistant professors, research scholars and students on Allele Mining with reference to study the Genetic variation using microsatellite markers in agriculturally important insects 2. Trained Two Ph.D students on the theme area of development of microsatellite markers for studying the genetic variation among mealybugs and diamond back moth.
			1 (Dr. Deepa Bhagat)	-	China international centre for agricultural training (CICAT) fellowship to attend training on crop diseases and pests ecological control for developing countries at South China Agricultural University, Guangzhou, P. R. China from 24.05.2010 - 04.07.2010. NAIP-HRD International fellowship to attend training on "Synthesis of nanomaterials to enhance	five patents

					shelf life of semiochemicals and act as sensor for semiochemicals in pest management" at The University of California, Davis from February 5, 2011 to May 5, 2011.	
Long term(>6 months)	CS	ICAR-NBAIR	**-**	**-**	**-**	**-**

Note:

(i) Attending seminar, conference, for paper/poster presentations to be avoided

ii) Any other relevant matters to be added in separate columns, as appropriate

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ICAR

Proforma for Outcome Evaluation of the Foreign Deputation ICAR Scientists/Officers

S.No.	Particulars	Details
1.	Name of the Scientist/Officer	Dr. Chandish R. Ballal
2.	Name of the Institute/SMD/Section	ICAR-NBAIR,Bengaluru Crop Science Division
3.	Country visited	Nepal
4.	Institutions Visited	-
5.	Purpose of the Visit	Attending workshop on preparedness for Fall armyworm in Nepal
6.	Outcome of the Visit (in bullet form)	1. Explored the possible collaboration with NPPO, Nepal for future invasive insects and management 2. Discussed management options for Fall armyworm. 3. Gained first hand information on the incidences of maize fall armyworm at high attitudes of Nepal

Date: 28.10.2019

Place: Bengaluru

Signature: _____

भाकृअनुप
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Proforma for Outcome Evaluation of the Foreign Deputation ICAR Scientists/Officers

S.No.	Particulars	Details
1.	Name of the Scientist/Officer	Dr. A. N. Shylesha
2.	Name of the Institute/SMD/Section	ICAR-NBAIR,Bengaluru Crop Science Division
3.	Country visited	Nepal
4.	Institutions Visited	-
5.	Purpose of the Visit	Attending workshop on preparedness for Fall armyworm in Nepal
6.	Outcome of the Visit (in bullet form)	1. Explored the possible collaboration with NPPO, Nepal for future invasive insects and management 2. Discussed management options for Fall armyworm. 3. Gained first hand information on the incidences of maize fall armyworm at high attitudes of Nepal

Date: 30.10.2019

Place: Bengaluru

Signature: _____

भाकृअनुप
ICAR

Proforma for Outcome Evaluation of the Foreign Deputation of ICAR Scientists/Officers

S.No.	Particulars	Details
1.	Name of the Scientist/Officer	Dr P. Sreerama Kumar
2.	Name of the Institute/SMD/Section	ICAR–National Bureau of Agricultural Insect Resources, Bengaluru
3.	Country visited	Spain
4.	Institutions Visited	Not applicable
5.	Purpose of the Visit	To participate in a scientific congress in Valencia [2019 International Congress on Invertebrate Pathology and Microbial Control & 52nd Annual Meeting of the Society for Invertebrate Pathology & 17th Meeting of the IOBC-WPRS Working Group on Microbial and Nematode Control of Invertebrate Pests]
6.	Outcome of the Visit (in bullet form)	• A strong linkage with the Society for Invertebrate Pathology has been forged. • Foldscope was demonstrated to the delegates at the meeting. • Upon return, demonstrations were conducted for farmers on the utility of the Foldscope in crop protection.

Date: 28 October 2019

Place: Bengaluru

Signature: _____

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Proforma for Outcome Evaluation of the Foreign Deputation ICAR Scientists/Officers

S.No.	Particulars	Details
1.	Name of the Scientist/Officer	Dr. K. Selvaraj, Scientist (Entomology)
2.	Name of the Institute/SMD/Section	ICAR-National Bureau of Agricultural Insect Resources, Hebbal, Bengaluru
3.	Country visited	Australia
4.	Institutions Visited	Commonwealth Scientific and Industrial Research Organisation, Brisbane, Australia
5.	Purpose of the Visit	Participation in an international exposure visit on biological control and invasive species management under the guidance of Dr Raghu Sathyamurthy, CSIRO, Brisbane
6.	Outcome of the Visit (in bullet form)	• Gain knowledge on plant quarantine, bio- security, invasive species management, mass production technique for whitefly parasitoid, *Eretomocerus hayati* for large scale release and demonstration. • Undergone, hands on training on mass production of *E. hayati* which may be replicated and used for management of whiteflies in cotton and other important crop plants in India for area wide management. Similar protocol may be extended to other whitefly parasitoids i.e *Encarsia guadeloupae* and *E. transvena* for management of rugose spiralling whitefly and cotton whitefly respectively. • Learned the strategies for invasive species management especially through biocontrol agents. • Discussed about future R & D collaborative project on invasive species management including weed under future changing climatic scenarios" likely under Indo- Australia strategic programme

Date: 25.10.19

Place: Bengaluru

Signature: K. 25/10/19

भाकृअनुप
ICAR

Proforma for Outcome Evaluation of the Foreign Deputation ICAR Scientists/Officers

S.No.	Particulars	Details
1.	Name of the Scientist/Officer	**Dr. R. Gandhi Gracy**
2.	Name of the Institute/SMD/Section	**ICAR-National Bureau of Agricultural Insect Resources**
3.	Country visited	**Spain**
4.	Institutions Visited	**NA**
5.	Purpose of the Visit	To attend and present research paper at the 8th International Symposium on Insect Molecular Science, at Sitges, Barcelona, Spain from 7 to 10th July, 2019.
6.	Outcome of the Visit (in bullet form)	➢ This was a great opportunity for me to interact with the eminent researchers in my field of interest especially the molecular aspects of insect science. This field is an emerging field, so I have interacted with the researchers across the world that helped me to strengthen my research thought process and motivated me to achieve my goal. ➢ The presentation at the symposium helped me to know the advanced technology; especially the genome editing, molecular phylogeny research in global perspective. ➢ At present I am doing research on molecular mechanism of insecticide resistance through functional genome approach and also the DNA barcoding. Interaction with the researchers helped me to understand the methodology for DNA extraction, especially from the museum specimens.

Date: 29.10.2019

Place: Bangalore

Signature: R Gandhi Gracy