



**CENTRE OF ADVANCED FACULTY TRAINING
DEPARTMENT OF ENTOMOLOGY
CCS HARYANA AGRICULTURAL UNIVERSITY, HISAR**

Introduction

The Department of Entomology at CCSHAU, Hisar, Haryana was established in the year 1962 while M.Sc. and Ph.D. degree programmes were started in 1965 and 1968, respectively. Till date the department has awarded 226 M.Sc. and 84 Ph.D. degrees. At present there are 20 M.Sc. and 5 Ph.D. students on rolls in the department.

There are 39 faculty members in the Department of Entomology (Table 1) who are specialized in the fields of economic entomology, insecticide toxicology, biological control, apiculture, storage and seed entomology, insect ecology, taxonomy and biosystematics, insect physiology and host plant resistance. Each field of specialization is well equipped with laboratory and field facilities. Besides, the Department has well developed pesticide residue and biological control laboratories.

Objective of CAFT:

The objective of CAFT is to impart advanced training to the scientists and academic staff within the National Agricultural Research and Education System in the country to upgrade their skills in frontier areas of science and technology relevant to their discipline.

Faculty: Name & Designation (as on 30.09.2011):

1. Dr. R.K. Saini	Sr. Entomologist
2. Dr. R.S. Jaglan	Prof. (on deputation)
3. Dr. K.K. Mrig	Professor
4. Dr. S.K. Sharma	Sr. Entomologist
5. Dr. S.S. Sharma	Sr. Entomologist
6. Dr. V.S. Malik	Professor
7. Dr. G.S. Yadav	Professor
8. Dr. Ombir	Sr. Extension Specialist
9. Dr. Pala Ram	Sr. Entomologist
10. Dr. Ram Singh	Professor
11. Dr. Roshan Lal	Sr. Entomologist (on lien)
12. Dr. Yogesh Kumar	Entomologist
13. Dr. (Mrs.) Beena Kumari	Sr. Analytical Chemist
14. Dr. S.S. Yadav	Asstt. Scientist
15. Dr. Krishna Rolania	Asstt. Scientist
16. Dr. H.D. Kaushik	Sr. Entomologist (on lien)

Human Resource Development:

Particulars of Short Courses / Training program for HRD conducted during XI plan period : All the training courses organized were of 21 days duration.

<i>S.No.</i>	<i>Name of the Program</i>	<i>Period</i>	<i>No. of Participants</i>		
			<i>Internal</i>	<i>External</i>	<i>Total</i>
2007-08	1. Use of biotechnological approaches in Entomology	4-24 March, 2008	0	12	12
2008-09	1) Recent Approaches in Storage and Household Entomology	14 Nov. to 4 Dec. 2008	1	15	16
	2) Recent Advances in Pest Population Dynamics and Monitoring Techniques	17 Feb. to 9 March, 2009	0	15	15
2009-10	1. Recent Advances in Bio-intensive Integrated Pest Management	2-22 March, 2010	0	17	17
2010-11	1. "Molecular basis of host plant resistance to insects"	11-31 Jan., 2011	1	24	25 th
2011-12	Advances in diagnosis of arthropod pest damage and crop loss assessment methodology	6-26 Sept., 2011	2	21	23
	2. Advances in Bio-ecology and Management of insect Pollinators of Crop Plant.	21 Feb. to 12 March, 2012	1	10	11

Total trainings conducted= 27
Total scientific power trained= 469

Infrastructure development (equipments etc.): The following items were purchased:

Multimedia Projector; CPU with speakers, key board, mouse, Public Address System installation, etc.

Renovation of Lecture Room/Laboratories:

Carpeting of Conference Hall; curtain, painting & polishing of the Hall.

Library upgraded:

As many as 66 books were procured from the funds provided for the purpose under CAFT and added to the Departmental Library.

Awards/Recognitions:

Dr. R.K. Saini :

- Fellow of Society for the Advancement of Insect Science, Ludhiana.

Dr. Ram Singh:

- Best Teacher Award sponsored by ICAR for the year 2007-08.
- Fellow of Royal Entomological Society, London.
- Fellow of Plant Protection Association of India, Hyderabad.

Publications*

International Journal

- Reena and Ram Singh 2007. Insecticidal potential of *Pongamia pinnata* seed fractions of methanol extract against *Earias vittella* (Lepidoptera: Noctuidae). *Entomologia Generalis*. 30 (1): 51-62.
- H. Basavaraja, B. S. Chhillar and Ram Singh 2007. Age-specific effect of *Bacillus thuringiensis* transgenic cotton crop on biological traits of *Helicoverpa armigera* (Hubner). *Biopesticides International* 3(2): 146-155.
- Chauhan, Reena, Chopra, Indu, Madan, V.K. and Kumari, Beena, 2007. Laboratory degradation studies of propiconazole in clay loam soil. *In: Pesticide Chemistry-Environmental Fate and Ecological Effects* (Eds. A.A. M. Del Re, E. Capri, G. Fragoulis and M. Trevisan). pp.142-145.
- Kumari, Beena, Madan, V.K. and Kathpal, T. S., 2008. Status of insecticide contamination of soil and water in Haryana, India. *Environ. Monit. and Assess.*, 136: 239-244.
- Kumari, Beena, 2008. Effects of household processing on reduction of pesticide residues in Vegetables. *ARPN J. of Agric. and Biologi. Sci.*3(4):46-48.
- Rachna Gulati, H.D. Kaushik, H. Basavaraja, Monika Geroh and Ram Singh. 2008. Virulence of *Beauveria bassiana* (Balsamo) Vuillemin against *Helicoverpa armigera* Hubner and *Spodoptera litura* (Fabricius). *Biopest. Int.* 4(2): 138-144.
- C.H. Chandrashekhar, V.S. Malik and Ram Singh. 2009. Morphological and biochemical factors of resistance in eggplant against *Leuconodes orbonalis* (Lepidoptera: Pyralididae). *Entomologia Generalis* 31(4): 337-345.
- Rekha Kumar, Seema Bhutani, Ram Singh, R. Chauhan, V.K. Chowdhury and R.K. Jain. 2009. Enhanced resistance against the rice leaf folder (*Cnaphalocrocis medinalis*) in transgenic rice plants containing the potato proteinase inhibitor II gene. *Entomologia Generalis* 32(1): 11-22.
- S.K. Singh and Ram Singh. 2009. Field evaluation of methanolic extracts of plants against cotton bollworms. *Biopesticides International* 5 (1): 41-51.
- Kumari Beena and Kathpal, T.S. 2009. Pesticide residues in vegetarian diet. *Environ. Monit. and Assess.*, 151:19-26.
- Chopra, Indu and Kumari Beena, 2009. Dissipation of fipronil in water under laboratory conditions. *Bull. Environ. Contam. Toxicol.*, 83: 828-831.
- Chopra, Indu, Kumari, Beena and Sharma, S.K., 2010. Evaluation of leaching behavior of pendimethalin in sandy loam soil. *Environ. Monit. and Assess.*, 160:123-126.
- Duhan, Anil , Kumari Beena and Gulati, Rachna, 2010. Effect of household processing on fenazaquin residues in okra fruits. *Bull. Environ. Contam. Toxicol.*, 84: 217-220.

- Walia, Shweta , Boora, Pinky and Kumari, Beena, 2010. Effect of processing on dislodging of cypermethrin residues on Brinjal. *Bull. Environ. Contam. Toxicol.*, 84:465-468.
- Chopra Indu, Chauhan Reena , Kumari Beena and Dahiya K. K. 2010. Fate of fipronil in cotton and soil under tropical climatic conditions. *Bull. Environ. Contam. Toxicol.* 86:242-245.
- Kumari Beena and Duhan Anil. 2011. Persistence of dicofol residues in cotton lint seed, and soil. *Bull. Environ. Contam. Toxicol.* 182 (1):129-132.
- Duhan Anil, Kumari, Beena, 2011. Degradation studies of fenazaquin in soil under field and laboratory conditions. *Bull. Environ. Contam. Toxicol.* 87:180-183.
- Samriti, Chauhan Reena and Kumari Beena. 2011. Persistence and effect of processing on reduction of chlorpyrifos residues in okra fruits. *Bull. Environ. Contam. Toxicol.* 87:198-201.
- 13 .Samriti, Chauhan Reena and Kumari Beena .2011. Persistence and effect of processing on reduction of chlorpyrifos residues in okra fruits. *Bull Environ Contamn Toxicol.* 87:198-201.
- 14 Duhan Anil, Duhan Saroj and Kumari Beena .2011. Behaviour of endosulfan in cabbage (*Brassica oleracea* L.). *Toxicological & Environmental Chemistry* 93(10): 1960-1970.
15. Kaur Prabhjot, Yadav, G.S. Chauhan Reena and Kumari Beena. 2011. Persistence of cypermethrin and decamethrin residues in/on brinjal fruits. *Bull Environ Contamn Toxicol.* 87:693-698.
- Chauhan Reena, Samriti, and Kumari Beena. 2012. Effect of processing on reduction of λ - cyhalothrin residues in tomato fruits. *Bull Environ Contamn Toxicol.* 88(3):352-357.
- Samriti, Chauhan Reena and Kumari Beena. 2011. Persistence and dissipation behaviour of chlorpyrifos in soil under okra crop. *J. Environ. Res. and Development.* 6(2):255-260.
- Chauhan Reena and Kumari Beena. 2011. Reduction of endosulfan residues in brinjal fruits during processing. *Sci. Revs. Chem. Commun.* 1(1):42-48.
- Samriti and Kumari Beena. 2011. Persistence of cypermethrin and chlorpyrifos in soil under okra crop following application of pre-mix formulation. In: *Proceedings of the 12th International Conference on Environmental Science and Technology.* Rhodes, Greece 8-10 September. B-930-B-935.

Indian Journal

- G.S. Dhaliwal, A.K. Dhawan and Ram Singh. 2007. Biodiversity and ecological agriculture: issues and perspectives. *Indian Journal of Ecology* 34(2): 100-109.
- Reena and Ram Singh 2007. Bio-efficacy of karanj, *Pongamia pinnata* methanolic seed extract fractions against *Helicoverpa armigera*. *Journal of Medicinal and Aromatic Plant Sciences.* 29: 63-69.
- Reena and Ram Singh 2007. Influence of *Pongamia pinnata* seed extracts and fractions on biology of *Earias vittella*. *Indian Journal of Plant Protection.* 35 (1): 68-72.
- Reena and Ram Singh 2007. *Helicoverpa armigera* biology as affected by *Pongamia pinnata* seed extract and fractions. *Indian Journal of Entomology* 69 (1): 63-70

- Reena and Ram Singh 2007. Efficacy and methanolic extracts of karanj (*Pongamia pinnata*) seeds against *Earias vittella* (Fabricius). Indian Journal of Entomology 69(2): 141-148.
- H. Basavaraja, B. S. Chhillar and Ram Singh 2007. Effect of transgenic Bt cotton top leaves on biological parameters of *Spodoptera litura* (Fab.) (Lepidoptera: Noctuidae). Green Farming 1(3): 4-6.
- MKSRD Samarasinghe, B.S. Chhillar and Ram Singh 2007. Insecticidal properties of methanolic extract of *Allium sativum* L. and its fractions against *Plutella xylostella* (L.). Pesticide Research Journal 19(2): 145-148.
- Kumar, S. and Saini, R.K. 2007. Diapause in *Helicoverpa/Heliothis* spp. (Lepidoptera : Noctuidae) – a review. *J. Cotton Res. Dev.* 21(1) : 80-87.
- Kumari, Beena, Madan, V.K. and Kathpal, T. S., 2007. Pesticide residues in rain water from Hisar, India. *Environ. Monit. and Assess.*, 133: 467-471.
- Deivendran, A.; Yadav, G.S. and Rohilla, H.R. 2007. Efficacy of different novel insecticides against diamond back moth, *Plutella xylostella* (L.) on cauliflower. *Journal of Insect Science.* 20(1): 107-110.
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- Asrani, S., Kaushik, S., Sharma, S.K. and Kaushik, H.D., 2007. Prospects of beekeeping in Haryana: Perceived needs, constraints and enablers. *J. Dairying, Foods & Home Sci.* 26(1): 48-53
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- MKSRD Samarasinghe, B.S. Chhillar and Ram Singh 2008. Effect of garlic, *Allium sativum* Linnaeus extract and its fractions on feeding by *Earias vittella* (Fabricius). *Journal of Insect Science* 21(2): 120-123.
- H. Basavaraja, B.S. Chhillar and Ram Singh. 2008. Effect of Bt cotton fruiting bodies on consumption-utilization indices of *Helicoverpa armigera* (Hubner) larvae. *Journal of Insect Science* 21(2): 154-160.
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Financial Statement

Expenditure under CAFT during XI plan

Head	2007-08	2008-09	2009-10	2010-11	2011-12
Operating cost of Training	136211	239335	91525	209451	614379
Recurring Contingency	62000	110000	70400	134150	145549
Non-Recurring Contingency	0	0	0	0	150000
T.A.	4216	0	0	0	6500
Library	49881	49824	29798	0	30000
	252308	399159	191723	343601	946428

