

**Centre of Advanced Faculty Training
Achievement of HRD Section Three Year Plan
(2017-20)**

Name of the CAFT/Department/Division: Entomology

Brief Introduction about the department (about 100 words)

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 306 M.Sc. and 116 Ph.D. degrees. At present there are 24 M.Sc. and 24 Ph.D. students on rolls in the Department. The Department has strength of 30 faculty members (Table 1) who are specialized in various fields such as economic entomology, insecticide toxicology, biological control, apiculture, storage and seed entomology, insect ecology, and host plant resistance. Each field of specialization is well equipped with laboratory and field facilities. Besides, the Department has well equipped pesticide residue and biological control laboratories.

Table 1. Faculty position in the Department of Entomology

Stream	Total Faculty	Posted at	
		Hisar	Out-stations
Teaching	5	4	1
Research	15	9	6
Extension	10	2	8
Total	30	15	15

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 15.01.2020):

Name of Faculty	Designation
Dr. Yogesh Kumar	Professor & Head
Dr. Krishna Rolania	Assistant Scientist
Dr. Surender Singh Yadav	Assistant Director
Dr. Sushil	Assistant Chemist
Dr. Deepika Kalkal	Assistant Scientist
Dr. Harish Kumar	Assistant Scientist
Dr. Lomash Kumar	Assistant Professor
Dr. Sunita Yadav	Assistant Scientist
Dr. Tarun Verma	DES
Dr. Bhupinder Singh	DES
Dr. Anil	Assistant Entomologist
Dr. Bajrang Lal Sharma	Assistant Scientist
Dr. Ankit Kumar	Assistant Professor
Dr. Manoj Kumar Jat	Assistant Professor
Dr. O.P.Chaudhary	Professor

Dr. P. Bhatnagar	SES
Dr. Jai Lal Yadav	SES
Dr. Dilbag Singh Gehlawat	PES*
Dr. Rajesh Kumar	Assistant Scientist
Dr. Narender Kumar	DES
Dr. Satyapal Yadav	Assistant Scientist
Dr. Dilbag Singh Ahlawat	Assistant Scientist
Dr. Balbir Singh	DES
Dr. Maha Singh	Assistant Scientist
Dr. Ram Karan	Assistant Scientist
Dr. Dalip Kumar	Assistant Scientist
Dr. Swati Mehra	Assistant Professor
Dr. Meenu	DES
Dr. Chitralekha	Assistant Scientist

*PES is equivalent to Professor.

Human Resource Development:

Particulars of Short Courses / Training program for HRD conducted during 2017-20:
All the training courses organized were of 21 days duration.

S.No.	Name of the Program	Period	No. of Participants		
			Internal	External	Total
1	Innovative Strategies of Plant Protection for Insect-Pests Management in Changing Agricultural Scenario	2017-18	2	14	16
2	Recent trends in pests status, pesticide usage and pest management Strategies in Agriculture”	2018-19	1	16	17
3	Advances in Biology, Conservation, Rearing and Management of <i>Apis</i> & non- <i>Apis</i> bees	2019-20	0	24	24

Total trainings conducted= 34
Total scientific power trained= 598

Publications*

Research papers

Sr.No.	Details of Research paper
1.	Jat, B L; Yadav, S. S. and Lal, R. (2016). Bioassay of new chemistry insecticides against pod borer, <i>Helicoverpa armigera</i> on chickpea. <i>Indian Journal of Plant Protection</i> 44(2): 185-188.
2.	Duhan, A; Sushil, Kaur, P and Punia, S.S. and Singh, S. (2016). Terminal Residues of Imazethapyar in clusterbean grains, straw and soil. <i>Agriculture Research Journal</i> 53(3): 450-453.
3.	Duhan, A; Sushil, Punia, S.S. and Singh, S. (2016). Determination of harvest

	time residues of halosulfuron in sugarcane and soil. <i>Agriculture Research Journal</i> 53(2): 280-282.
4.	Jakhar, P; Kumar, Y; Ombir and Janu, A. (2016). Diversity, abundance and pollination efficiency of honey bees on <i>Raphanus sativus</i> L. at Hisar, Haryana (India). <i>Research in Environment and Life Sciences</i> 9(1):59-62.
5.	Kamboj, R; Karan, R and Kumar, Y. (2016). Biology of castor hairy caterpillar (<i>Euproctis lunata</i> Walker) on castor in Haryana conditions. <i>International Journal of Farm Sciences</i> 6(3):146-154.
6.	Kumar A., Ram Lakhi, Yadav S. S. and Kumar S. (2017). Effect of Herbicidal application on incidence of insect pests and natural enemies. <i>International Journal of Agriculture Sciences</i> , 9(5): 3755-3758.
7.	Kumari, N, Avtar, R, Sushil, Babita and Thakral, N. (2017). Comparative evaluation of nutritive qualities in seed meal of selected genotypes of Indian mustard. <i>Research in Environment and Life Sciences</i> 10(4): 390-392.
8.	Lalita and Kumar, Y. (2017). Diversity and abundance of insect visitors and pollinators on pumpkin, <i>Cucurbita moschata</i> (Duch.ex Lam). <i>Indian Journal of Ecology</i> , 44: 281-285.
9.	Lalita and Kumar, Y. (2017). Foraging behavior of major insect pollinators on pumpkin, <i>Cucurbita moschata</i> (Duch.ex Lam). <i>Journal of Applied and Natural Science</i> , 9 (2): 1208 - 1213.
10.	Mandhania, S.; Pundir, S.R.; Sangwan, R.S., Rolania, K., Sangwan O. and Janu, A. (2016). Allelochemicals studies in cotton genotypes having differential reaction of Leafhopper (<i>Amrasca devastans</i>). <i>Ecology Enviornment & Conservation</i> 22: S195-S198.
11.	Devi, M; Duhan, A; Kumari, B. and Yadav, G.S. (2016). Determination of dimethoate, lambda-cyhalothrin and malathion residues in guava fruits using GCMS- tandem mass spectrometry. <i>Indian Journal of Horticulture</i> 73(2): 197-201.
12.	Mehra, S. and Rolania, K. (2017). Seasonal abundance of whitefly <i>Bemisia tabaci</i> (gennadius) on <i>Bt</i> cotton in relation to meteorological parameters under haryana condition. <i>International Journal of Agriculture Sciences</i> 9(5): 3759-3762.
13.	Rathee, M. and Ram, P. (2016). Mortality of <i>Aenasius bambawalei</i> Hayat following cold storage in mummies of <i>Phenacoccus solenopsis</i> Tinsley. <i>Research in Environment and Life Sciences</i> 9 (10): 1215-1217.
14.	Rathee, M. and Ram, P. (2016). Overwintering of <i>Aenasius arizonensis</i> (Girault) (= <i>Aenasius bambawalei</i> Hayat) (Hymenoptera: Encyrtidae) under screen house/semi-natural conditions. <i>Journal of Biological Control</i> 30(1): 5-10.
15.	Rolani, K; Poonia, H. and Bhargava, M. C. (2016). Efficacy of some plant powders against <i>Lasioderma serricornis</i> Fab. in fennel. <i>Indian Journal of Ecology</i> 43 (2): 455-458.
16.	Singh, Y; Singh, B; Singh S.P; Yadav, S.S. And Devi, S. (2016). Efficacy biology of castor semilooper (<i>Achaea janata</i> L.) Infesting castor crop. <i>International Journal of Agriculture Sciences</i> 8(51), 2332-2334.
17.	Saini, T.C; Jaglan, M.S; Yadav, S. S. and Garg, R. (2016). Biology of citrus whitefly, <i>Dialeurodes citri</i> (Ashmead) on <i>Citrus reticulata</i> (Mandarin) var. Kinnow. <i>Journal of Applied and Natural Science</i> 8(4): 1735-1739.

18.	Saini, T.C; Jaglan, M. S; Yadav, S. S. and Yadav, M. (2016). Bio-efficacy of Different Insecticides in the Management of Citrus Whitefly, <i>Dialeurodes citri</i> (Ashmead) on Citrus Mandarin (var. Kinnow). <i>Pesticide Research Journal</i> 28 (2): 231-236.
19.	Saini, T.C; Jaglan, M.S; Yadav, S. S.; Jakhar, P. and Garg, R. (2016). Population dynamics of citrus whitefly, <i>Dialeurodes citri</i> (Ashmead) on <i>Citrus reticulate</i> (Mandarin) var. Kinnow as influenced by weather conditions. <i>Journal of Applied and Natural Science</i> 8(3): 1452 – 1455.
20.	Vijaya and Ram, P. (2016). Influence of temperature on the biology of <i>Aenasius arizonensis</i> (Girault) (Hymenoptera: Encyrtidae), a parasitoid of solenopsis mealybug, <i>Phenacoccus solenopsis</i> Tinsley. <i>Journal of Biological Control</i> 30(4): 210-216.
21.	Yadav, G.S., Kumar, H. and Yadav, S.S. (2016). Studies on biology of mealybug, <i>Drosicha stebbingi</i> Green on guava. <i>Journal of Insect Science</i> 29(1):49-51.
22.	Ahlawat Sushil; Rani, Savita and Chauhan, Reena.(2017). Study of organophosphates residue in vegetables using gas chromatography–Tandem mass spectrometry. <i>Journal of Entomology and Zoology Studies</i> , 5(6): 1954-1959.
23.	Anita; Ahlawat Sushil and Devi Sudesh.(2018) Impact of Different Decontamination Processes on the Reduction of Pesticide Residues in Fruits andVegetables. <i>International Journal of Current Microbiology and Applied Sciences</i> 7(5): 869-876
24.	Bawaskar, D.M., Yadav, S., Singh, S.P., Kumarnag, K.M. and Nadaf, A.V. (2017). Efficacy and economics of seed treatment and foliar spray with insecticides against <i>Bagrada hilaris</i> (Burmeister) in Indian mustard (<i>Brassica juncea</i> L.).
25.	Hemant Sharma*, M. S. Jaglan and S. S. Yadav 2017. Population dynamics of pink stem borer, <i>Sesamia inferens</i> (Walker) on maize as influenced by weather conditions. <i>Journal of Applied and Natural Science</i> 9 (4): 1975 -1980
26.	Hemant Sharma*, Maha Singh Jaglan and S. S. Yadav 2017.Biology of pink stem borer, <i>Sesamia inferens</i> (Walker) on maize, <i>Zea mays</i> . <i>Journal of Applied and Natural Science</i> 9 (4): 1994—2003
27.	Kamboj, Robin; Gaur, R.K.; Kumar, Yogesh, 2018. Efficacy of various insecticides against castor hairy caterpillar (<i>Euproctis lunata</i> Walker) on castor. <i>International Journal of Farm Sciences</i> 8(1): 45-49.
28.	Lalita, Yogesh Kumar and Sunita Yadav 2018. Seasonal incidence of Greater wax moth, <i>Galleria mellonella</i> Linnaeus in <i>Apis mellifera</i> colonies in ecological condition of Hisar. <i>Journal of Entomology and Zoology Studies</i> 2018; 6(1): 790-795
29.	Mehra, Swati and Rolania, Krishna (2017). Seasonal abundance of whitefly, <i>Bemisia tabaci</i> (GENNADIUS) on Bt cotton in relation to meteorological parameters under Haryana condition. <i>International Journal of Agriculture Sciences</i> 9 (5): 3759-3762.
30.	Pandey, S., Jaglan, R.S. and Yadav, Sunita (2018). Biology of leaf webber and capsule borer, <i>Antigastra catalaunalis</i> (Duponchel) on sesame.
31.	Rani, Savita and Sushil*(2018). pest management by nanotechnology <i>International Journal of Current Microbiology and Applied Sciences</i> 7(3): 3197-3208
32.	Rani, D. Devika, Yadav, S., Kaushik, H. D. and Kumar G. N. (2016). Diversity and abundance of insect pollinators on summer squash (<i>Cucurbita pepo</i> L.).
33.	Rolania, Krishna and Mehra, Swati (2017). Efficacy of Neem Based Insecticides in Combination with Conventional Insecticides for Managing <i>Bemisia tabaci</i> (Genn.) on Cotton under Haryana Condition. <i>Chemical Science Review and Letters</i> 6(23): 1520-

	1523.
34.	Sangeeta Tiwari, Surinder Yadav and Anasar Nadaf 2017. Influence of some biochemical components on the incidence of <i>Maruca vitrata</i> (Geyer) on short duration pigeonpea <i>Cajanus cajan</i> (L.) Mill sp. <i>International Journal of Chemical Studies</i> 2017; 5(4): 1339-1341
35.	Ahlawat, S., Gulia, S., Malik, K., Rani, S. and Chauhan, R. (2019). Persistence and decontamination studies of chlorantraniliprole in <i>Capsicum annum</i> using GC–MS/MS. <i>Journal of Food Science and Technology</i> .DOI: 10.1007/s13197-019-03757-y.
36.	Chitralekha, Yadav, G.S. and Verma, T. (2018). Efficacy of insecticides against <i>Helicoverpa armigera</i> on chickpea. <i>Journal of Entomology and Zoology Studies</i> 6(3): 1058-1061.
37.	Dahiya, K.K., Rolania, K., Jaglan, R.S. and Janu, A. (2018). Influence of abiotic factors on the population dynamics of leafhopper, in upland cotton. <i>Journal of Agrometeorology</i> 20 (Special Issue): 349-354.
38.	Kalkal, D., Rolania, K., Mehra, S., Yadav, S. S. and Janu, A. (2018). Impact of different management schedules on parasitization of whitefly, <i>Bemisia tabaci</i> (Gennadius) by <i>Encarsia</i> spp on cotton. <i>Indian Journal of Applied Entomology</i> 32(1): 24–27.
39.	Kumar, D., Ahlawat, D.S., Yadav, S.S., Kalkal, D., Saini, V.K. and Singh, D. (2018). Phenetic resistance in sugarcane, tentative conclusions and new research directions. <i>Journal of Entomology and Zoology Studies</i> 6(4): 999-1003
40.	Kumar, D., Ahlawat, D.S., Yadav, S.S., Kumar, L., Kalkal, D. and Saini, V.K. (2019). Biochemical resistance in sugarcane, tentative conclusions and new research directions-I. <i>Journal of Entomology and Zoology Studies</i> 7(1): 551-555. (ISSN: 2349-6800)
41.	Kumar, K., Jaglan, M.S., Verma, T. (2018). Screening of sugarcane genotypes for resistance to early shoot borer, <i>Chilo infuscatellus</i> Snellen. <i>Indian Journal of Applied Entomology</i> 32(1): 49-52.
42.	Kumar, P., Ahlawat, S., Chauhan, R., Kumar, A., Singh, R. and Kumar, Ashwani (2018). Bio-efficacy and post harvest residual toxicity of new fungicides against sheath blight (<i>Rhizoctonia solani</i>) of rice (<i>Oryza sativa</i>). <i>Indian Journal of Agricultural Sciences</i> 88(10):1587-1592.
43.	Kumar, P., Ahlawat, S., Chauhan, R., Kumar, A., Singh, R. and Kumar, Ashwani (2018). In vitro and field efficacy of fungicides against sheath blight of rice and post-harvest fungicide residue in soil, husk, and brown rice using gas chromatography-tandem mass spectrometry. <i>Environmental Monitoring and Assessment</i> 190: 503, 1-9.
44.	Kumar, P., Yadav, S.P., Rolania, K., Yadav, S., Singh, S. and Vikas (2018). Population dynamics of <i>Amrasca biguttula biguttula</i> on <i>Bt</i> and Non <i>Bt</i> Cotton and its correlation with abiotic Factors. <i>International Journal of Current Microbiology and Applied Sciences</i> 7(09):2927-2934
45.	Kumari, A., Goswami, T.N., Vishwakarma, R., Anil and Kishore, C. (2018). Evaluation of mustard germplasm against aphid <i>Lipaphis erysimi</i> (Kalt.). <i>Indian Journal of Entomology</i> 80(4): 1456-1459.
46.	Lalita and Kumar, Y. (2018). Effect of different modes of pollination on yield and quality parameters of pumpkin, <i>Cucurbita moschata</i> (Duch.ex lam), fruits. <i>Journal of Insect Science</i> . 30(2): 149-154.
47.	Lalita, Kumar, Y. and Yadav, S. (2018). Effectiveness of different plant extracts against <i>Galleria mellonella</i> larvae in laboratory. <i>Archives in Agriculture and Environmental Sciences</i> 3(1): 64-67
48.	Lalita, Kumar, Y. and Yadav, S. (2018). Seasonal incidence of greater wax moth, <i>Galleria mellonella</i> Linnaeus in <i>Apis mellifera</i> colonies in ecological conditions of

	Hisar. <i>Journal of Entomology and Zoology Studies</i> 6(1): 790-795
49.	Manisha, Verma, T., Lal, R., Nadaf, A.V. and Devi, M. (2018). Seasonal incidence of major insect pests infesting field pea. <i>Journal of Entomology and Zoology Studies</i> 6(2): 2213-15
50.	Mehra, S. and Rolania, K. (2018). Management of Cotton Whitefly <i>Bemisia Tabaci</i> (Gennadius) (Hemiptera:Aleyrodidae). <i>Indian Journal of Entomology</i> 80(3): 1-4.
51.	Purti, Rinku, Jaglan, R.S. and Rolania, K. (2018). Biological control of coleopteran pests. <i>International Journal of Bio-resource and Stress Management</i> 9(3): 421-434.
52.	Rolania, K., Janu, A, and Jaglan, R.S. (2018). Role of abiotic factors on population build up of whitefly (<i>Bemisia tabaci</i>) on cotton. <i>Journal of Agrometeorology</i> 20 (Special Issue): 292-296.
53.	Saini, Reena, Verma, T., Lal, R. and Solanki, Y.P.S. (2018). Effect of plant phenotypic characters on the incidence of whitefly, <i>Bemisia tabaci</i> (Gennadius) on urdbean, <i>Vigna mungo</i> (L.) Hepper. <i>Journal of Food Legumes</i> 31 (1): 38-40.
54.	Sharma, D., Yadav, S. P. and Yadav, S. (2019). Population dynamics of mustard aphid, <i>Lipaphis erysimi</i> Kalt in various <i>Brassica</i> spp. <i>International Journal of Current Microbiology and Applied Sciences</i> 8(02):2952-2959
55.	Singh, G., Jaglan, M.S. and Verma, T. (2018). Management of maize stem borer, <i>Chilo partellus</i> (Swinhoe) in Kharif maize with cowpea intercropping. <i>Journal of Entomology and Zoology Studies</i> 6(3): 1791-1794.
56.	Sushil, Chauhan, R., Kumari, B. and Jaglan R.S. (2018). Studies on persistence and dissipation behavior of selected pesticides in hot pepper (<i>Capsicum annum</i>). <i>International Journal of Chemical Studies</i> 6(1): 1791-1794.

Research bulletins/Manuals

- Kumar, Y; Jaglan, R.S. and Kumar H. (2017). Teaching Manual on Apiculture, Department of Entomology, CCSHAU, Hisar. pp.112.
- Yadav, G.S. and Jaglan, R.S. (2017). Manual on Insecticide Toxicology, Department of Entomology, CCSHAU, Hisar. pp. 112.
- Yadav, S. and Jaglan, R.S. (2017). Teaching Manual on “Insect Ecology and Integrated Pest Management including beneficial insects” Department of Entomology, CCSHAU, Hisar. pp.133.
- Yadav, S.S. and Jaglan, R.S. (2017). Teaching Manual on “Insect Morphology and Systematics”, Department of Entomology, CCSHAU, Hisar. pp.128.

Books (authored)

- Jakhar, P. and Kumar, Yogesh, 2018. Honey Bee Pollinators for Radish (*Raphanus sativus* L.). Lambert Academic Publishing, 17-Meldrum Street, Beau Bassin-71504, Mauritius. (ISBN No. 978-613-9-58676-9).pp. 1-57.

Compendium published

- Compendium on “Recent Trends in Pests Status, Pesticide Usage and Pest Management Strategies in Agriculture”, Yogesh Kumar, S. S. Yadav and Harish Kumar (eds). Published by Department of Entomology under CAFT, ICAR: pp.1-367.
- Compendium on “Innovative strategies of plant protection for insect pest management in changing agricultural scenario”. Editors- Yogesh Kumar, K. K. Dahiya and Krishna Rolania. Published by Department of Entomology under CAFT, ICAR: pp.1-339.

Souvenir published

- Souvenir on ‘National Seminar on Awareness, Motivation and Technology Transfer in Beekeeping’. Published by Department of Entomology, CCS Haryana Agricultural University, Hisar & Maharana Pratap Horticultural University, Karnal. pp. 1-96.

Papers abstracted in Conferences/Seminars/Symposia/Workshops

1. Rathee, M. Ram, P. (2017). Encouraging survival of cotton mealybug parasitoid, *Aenasius arizonensis* using cold storage technique. *Proceedings of International Conference on Emerging Areas of Environmental Science and Engineering (EAESE- 2017) held at GJUS&T, Hisar, from February 1-18, 2017.*
2. Chauhan, R; Sushil and Kumari, B. (2017). Dissipation and decontamination of bifenthrin and λ -cyhalothrin residues in tomato fruits under room and refrigerated conditions. In: “*International Conference on Emerging Areas of Environmental Science and Engineering (EAESE-2017)* ” Organized by Department of Environmental Science & Engineering, Guru Jambheshwar University of Science & Technology, Hisar on February 16-18, 2017, pp.193.
3. Sushil, Chauhan, R;, and Kumari, B .2017. Standardization and validation of a multi-residue method for rapeseed mustard by gas chromatography -tandem mass spectrometry (GC-MS/MS). In: “*International Conference on Emerging Areas of Environmental Science and Engineering (EAESE-2017)*” Organized by Department of Environmental Science & Engineering, Guru Jambheshwar University of Science & Technology, Hisar on February 16-18, 2017,pp.213.
4. Suman, Dhanker, P. and Sushil. (2017). Persistence and dissipation of Chlorantraniliprole in chilli by using HPLC In: “*International Conference on Emerging Areas of Environmental Science and Engineering (EAESE-2017)* ” Organized by Department of Environmental Science & Engineering, Guru Jambheshwar University of Science & Technology, Hisar on February 16-18, 2017, pp.101.
5. Dhanker, P; Suman, Bisht, S. and Sushil (2017). Estimation of residues of tebuconazole in chilli by using gas chromatography tandem mass spectrometer (GC-MS/MS) In: “*International Conference on Emerging Areas of Environmental Science and Engineering (EAESE-2017)*” Organized by Department of Environmental Science & Engineering, Guru Jambheshwar University of Science & Technology, Hisar on February 16-18, 2017, pp.97.
6. Devi S; Ombir and Kumar,Y. (2016) Abundance of major insect pollinators of seed crop of Broccoli (*Brassica oleracea* L. var. *italic* Plenck) Variety- DPH. *Journal of Agroecology & Natural Resource Management*, 3:85.
7. Yadav, S. and Kumar, Y. (2016). Effect of different modes of pollination on quantitative and qualitative parameters in Indian Mustard (*Brassica juncea*). In: *Proceedings of the Indian Ecological Society International conference-2016 on Natural resource management:Ecological perspective* from 18-20 February, 2016 organized by SKUAST-Jammu:776.
8. Lalita ,Kumar, Y. and Ombir (2017).Effect of number of visits by *Apis dorsata* F. on Pumpkin, *Cucurbita moschata* (Duch.ex Lam) flowers on fruit set,yield and quality parameters.Natural Resource Management:Ecological Perspectives. In: *Proceedings of the Indian Ecological Society International conference-2016 on Natural resource management:Ecological perspective* from 18-20 February, 2016 organized by SKUAST-Jammu:858.

9. Nagpal, K., Yadav S., Kumar, Y. and Singh, R. (2017). Effect of pollination modes on yield components in Indian mustard (*Brassica juncea* L.). In: Souvenir of 3rd National *Brassica* Conference (NBC 2017) on “*Enhancing Oilseed Brassica Production through Climate-Smart Technologies*” from 16-18 February, 2017 organized by ICAR-IARI, New Delhi:198
10. Yadav, S. and Tiwari, S. (2017). Quality aspects of honey with reference to food safety. In: *National conference on Food processing for value addition: Trends and Innovations* organized by Department of Food technology, MDU, Rohtak on 7th November, 2017: 61
11. Nagpal, K., Yadav, S. and Singh, R. (2017). *Apis* spp. (Hymenoptera:Apidae) as potential visitor of Indian mustard, *Brassica juncea* (L.) Czern and Cosso. In: *International Conference on Advances in Agricultural and Biodiversity conservation for sustainable development* from October 27-28, 2017 at C.C.S. University, Meerut (U.P.): 391
12. Nagpal, K., Yadav, S. and Singh, R. (2017). Diversity of insect visitors on Indian mustard, *Brassica juncea* (L.) Czern and Cosso. In: *International Conference on Advances in Agricultural and Biodiversity conservation for sustainable development* from October 27-28, 2017 at C.C.S. University, Meerut (U.P.): 392
13. Yadav, S., Singh, K.P., Kumar Anil, Ganghas, B.S., Sarita, Yadav, A. and Boora A. (2018). Doubling the farmer income by diversification in buffalo farming through women participation. In: *ABC-2018 IX Asian Buffalo Congress* from 1-5 February, 2018 organized by CIRB, Hisar, Haryana: 171.
14. Rolania, Krishna, Kalkal, Deepika and Mehra, Swati (2018). “Evaluatuion of different management schedule against whitefly, *Bemisia tabaci* in cotton”. International Congress on “Cotton and Other Fibre Crops” February 20-23, 2018, ICAR Research Complex for NEH Region, Umiam (Barapani) Meghalaya : 80
15. Rolania, Krishna, Jaglan, R S and Janu, Arun (2017). Role of abiotic factors on population build up of whiltefly, *Bemisia tabaci* on cotton. National seminar on “Agrometeorology for Sustainable Development with special emphasis on Agrometeorological Practices for Climate Resilient Farming and Food Security” October,12-14, 2017, Association of Agrometeorologists and CCS HAU, Hisar : 75
16. Dahiya, K K, Jaglan, R S, Rolania, Krishna and Janu, Arun (2017). Influence of abiotic factors on the population dynamics of leafhopper, in upland cotton. National seminar on “Agrometeorology for Sustainable Development with special emphasis on Agrometeorological Practices for Climate Resilient Farming and Food Security” October,12-14, 2017, Association of Agrometeorologists and CCS HAU, Hisar : 78
17. Perti, Rinku and Rolania, Krishna (2017). Biological control of Coleopteran pests. Third international conference on “Bioresource and Stress Management” November,8-11, 2017, Society for bioresource and stress management, Visva-Bharati University, ICAR, RKM Foundation at Jaipur, (Raj.) India : 270
18. Perti, Jaglan, R S and Rolania, Krishna (2017). Genetically modified crops in integrated pest management. International conference on “Global Research Initiatives for Sustainable Agriculture & Allied Sciences (GRISAAS)” December, 2-4 2017, MPUAT, Udaipur (Raj.) India: 444
19. Sharma, B.L., Kamboj, B.R. and Kumar, S. (2019). Comparative study of Pink stem borer, *Sesemia inferrence* on wheat sown under different tillage conditions. International Symposium on “*Innopreneurship: A need of sustainable Agriculture*”, Feb 2-3, 2019, CCS Haryana Agricultural University, Hisar, Haryana. 331.
20. Garg, R., Yadav, S. and Jat, M. K. (2018). Household Processing- Reduces Insecticide Residues level in/on Onion. *International conference on Novel Approaches in*

Agro-ecology, Forestry, Horticulture, Aquaculture, Animal Biology and Food Sciences for Sustainable Community Development (Agro-tech-2018), Nov. 24, 2018 JNU, New Delhi. 46.

21. Garg, R., Yadav, S., Singh, D. and Vijaya (2018). Comparative Study of Chemical and Botanical Insecticides for Sustainable Agriculture. *International conference on Sustainable Agriculture, Energy, Environment and Technology (ICSAEET-2018)*, Nov. 24, 2018, MDU, Rohtak.
22. Kalkal, D., Rolania, K. and Kumar, H. (2019). Impact of abiotic factors on the population dynamics of whitefly and leafhopper in cotton. International conference on “*Recent Advances in Agriculture, Aquaculture, Food Technology, Environmental Dynamics and Climate Change (AFTEC- 2019)*”, March, 2, 2019, Dr. G.C. Mishra Educational Foundation, Jawaharlal Nehru University, New Delhi: 49.
23. Kumar, H, Anil, Kumari, P., Arya, S. (2019). Screening of sorghum genotypes for resistance against shoot fly and spotted stem borer under natural field conditions. International Symposium on “*Innpreneurship: A need of sustainable Agriculture*”, Feb 2-3, 2019, CCS Haryana Agricultural University, Hisar (Haryana).
24. Kumar, A., Yadav, S. and Yadav, S. S. (2019). Evaluation of different *Brassica* species for the management of mustard aphid, *Lipaphis erysimi* (Kaltenbach). Souvenir & Abstracts of “*4th National Brassica Conference*” Feb., 1-3, 2019, CSAUA&T, Kanpur: 68-69.
25. Kumar, Amit, Yadav, S., Kumar, A. and Dalal, P. K. (2019). Sustainable strategies to maintain the beekeeping oriented farm practices in villages of Western Haryana. *International symposium on “Innpreneurship: A need of sustainable Agriculture & Rao Bahadur Dr. Ram Dhan Singh Fifth Memorial Lecture*”, Feb. 2-3, 2019, CCS HAU, Hisar: 119-120.
26. Kumar, P., Yadav, S.P., Rolania, K. and Yadav, S. (2018). Population dynamics of *Amrasca biguttula* on Bt and Non Bt Cotton and its correlation with abiotic factors. National Symposium on “*Alternative Approaches in plant health Management for Enhancing Farmers Income*”, Nov, 2-3, 2108 at UHF, Nauni Solan (H.P): 52.
27. Kumari, P., Sindhu, Anil, Kumar, H. and Kumar, L. (2019). Rapid decomposition of biodegradable waste using black soldier fly for environmental and economic sustainability: An innovative approach. *International symposium on “Innpreneurship: A need of sustainable Agriculture & Rao Bahadur Dr. Ram Dhan Singh Fifth Memorial Lecture*”, Feb. 2-3, 2019, CCS HAU, Hisar.
28. Lalita and Kumar, Y. (2018). Correlation between weather parameters and comb area damage by *Galleria mellonella* in *Apis mellifera* colonies with different frame strength. International seminar on “*Sustainable environment and agriculture under global climate change*”, Feb. 21, 2019, MDU, Rohtak: 237-38.
29. Lalita and Kumar, Y. (2018). Seasonal incidence of *Galleria mellonella* in *Apis mellifera* colonies with different frame strength and its correlation with weather parameters. International symposium on “*Advances in agrometeorology for managing climate risks of farmers*”, Feb. 11-13, 2019, JNU, New Delhi: 101-102.
30. Lalita and Kumar, Y. (2018). Effects of frame strength on the comb area damage by greater wax moth, *Galleria mellonella* in stored combs and its correlation with weather parameters. International Conference on “*Global Research Initiatives for Sustainable Agriculture & Allied Sciences*”, Oct. 20, 2018, RARI, Jaipur (Raj.): 305.
31. Nagpal, K., Yadav, S. and Singh, R. (2019). Nectar secretion rhythms and nectar energetic of Indian mustard flowers (*Brassica juncea* L.) under agro-climatic conditions of Hisar, Haryana. Souvenir & Abstracts of “*4th National Brassica*

- Conference*”, Feb. 1-3, 2019, CSAUA&T, Kanpur :53-54.
32. Nagpal, K., Yadav, S. and Singh, R. (2019). Pollination efficiency of *Apis* spp. on Indian mustard, *Brassica juncea* L. flowers. Souvenir & Abstracts of “4th National Brassica Conference”, Feb. 1-3, 2019, CSAUA&T, Kanpur: 53.
 33. Rathee, M., Chaudhary, O.P. and Yadav, S. (2019). Evaluation of consumption pattern and sustainability of artificial carbohydrate diets to *Apis mellifera* (L.) colonies during dearth period. *International symposium on “Innopreneurship: A need of sustainable Agriculture & Rao Bahadur Dr. Ram Dhan Singh Fifth Memorial Lecture”* Feb. 2-3, 2019, CCS HAU, Hisar: 88-89.
 34. Sindhu, Kalkal, D., Kumar, H. Phogat, M. and Sharma, N. (2019). Environmental sustainability. International seminar on “Sustainable environment & agriculture under global climate change” Feb. 21, 2019, Department of Environmental Science, Maharshi Dayanand University, Rohtak, Haryana in collaboration with Society for Sustainable Agriculture and Resource Management(SSARM), Hisar: 221-222.
 35. Beniwal, S.K., Jakhar, D. S., Satyavan and Sharma, B.L. (2019). Effect of irrigation water quality on yield, Nutrient Content and uptake by wheat. *International symposium on “Innopreneurship: A need of sustainable Agriculture & Rao Bahadur Dr. Ram Dhan Singh Fifth Memorial Lecture”* Feb. 2-3, 2019, CCS HAU, Hisar: 331.
 36. Yadav, S., Rathore, V. and Rolania, K. (2019). Agroecological analysis of various insect-pests on *Brassica* crops. *International symposium on “Innopreneurship: A need of sustainable Agriculture & Rao Bahadur Dr. Ram Dhan Singh Fifth Memorial Lecture”* Feb. 2-3, 2019, CCS HAU, Hisar: 284-285.
 37. Yadav, S., Rathore, V. and Yadav, S. S. (2019). Management of painted bug [*Bagrada hilaris* (Brumeister)] in Indian mustard (*Brassica juncea* L.) *International symposium on “Innopreneurship: A need of sustainable Agriculture & Rao Bahadur Dr. Ram Dhan Singh Fifth Memorial Lecture”* Feb. 2-3, 2019, CCS HAU, Hisar: 286.

Articles published in souvenir

- Harish Kumar, Sunita Yadav and Yogesh Kumar (2017). Madhumakhi paalan shuru karne ke liye anivaryataye. *Souvenir of ‘National Seminar on Awareness, Motivation and Technology Transfer in Beekeeping’* held on 7-8 July, 2017 at CSSRI, Karnal. Sponsored by National Bee Board, New Delhi and organized by Department of Entomology, CCS Haryana Agricultural University, Hisar & Maharana Pratap Horticultural University, Karnal. Pp: 19-22.
- Sunita Yadav, Yogesh Kumar and Harish Kumar (2017). Madhumakhi paragan ka krishi avum baagwani fasalo me mahtava. *Souvenir of ‘National Seminar on Awareness, Motivation and Technology Transfer in Beekeeping’* held on 7-8 July, 2017 at CSSRI, Karnal. Sponsored by National Bee Board, New Delhi and organized by Department of Entomology, CCS Haryana Agricultural University, Hisar & Maharana Pratap Horticultural University, Karnal. Pp: 16-18.
- Sunita Yadav and Harish Kumar (2017). Beeflora: An essential requirement for honey bees. *Souvenir of ‘National Seminar on Awareness, Motivation and Technology Transfer in Beekeeping’* held on 7-8 July, 2017 at CSSRI, Karnal. Sponsored by National Bee Board, New Delhi and organized by Department of Entomology, CCS Haryana Agricultural University, Hisar & Maharana Pratap Horticultural University, Karnal. Pp: 59-62.
- Yogesh Kumar, Rachna Gulati and Sunita Yadav (2017). Madhumakhi vansho ka vibhin mausamo me prabandh. *Souvenir of ‘National Seminar on Awareness, Motivation and Technology Transfer in Beekeeping’* held on 7-8 July, 2017 at CSSRI,

Karnal. Sponsored by National Bee Board, New Delhi and organized by Department of Entomology, CCS Haryana Agricultural University, Hisar & Maharana Pratap Horticultural University, Karnal. Pp: 23-24.

- Yogesh Kumar, Harish Kumar and R. S. Jaglan (2017). Madhumakhi vansho ka nirikshan kyu or kaise ? *Souvenir of 'National Seminar on Awareness, Motivation and Technology Transfer in Beekeeping'* held on 7-8 July, 2017 at CSSRI, Karnal. Sponsored by National Bee Board, New Delhi and organized by Department of Entomology, CCS Haryana Agricultural University, Hisar & Maharana Pratap Horticultural University, Karnal. Pp: 25-26.
- Yogesh Kumar and Rachna Gulati (2017). Madhumakhiyo me chatta chhodne ke kaaran va upay. *Souvenir of 'National Seminar on Awareness, Motivation and Technology Transfer in Beekeeping'* held on 7-8 July, 2017 at CSSRI, Karnal. Sponsored by National Bee Board, New Delhi and organized by Department of Entomology, CCS Haryana Agricultural University, Hisar & Maharana Pratap Horticultural University, Karnal. Pp: 27-28.
- Yogesh Kumar and R. S. Jaglan (2017). Maunvansho ka vibhajan. *Souvenir of 'National Seminar on Awareness, Motivation and Technology Transfer in Beekeeping'* held on 7-8 July, 2017 at CSSRI, Karnal. Sponsored by National Bee Board, New Delhi and organized by Department of Entomology, CCS Haryana Agricultural University, Hisar & Maharana Pratap Horticultural University, Karnal. Pp: 29-30.
- Yogesh Kumar (2017). Madhumakhi vansh me ek saath adik raniya kaise banaye ? *Souvenir of 'National Seminar on Awareness, Motivation and Technology Transfer in Beekeeping'* held on 7-8 July, 2017 at CSSRI, Karnal. Sponsored by National Bee Board, New Delhi and organized by Department of Entomology, CCS Haryana Agricultural University, Hisar & Maharana Pratap Horticultural University, Karnal. Pp: 31-32.
- Yogesh Kumar (2017). Shahad: Nishkashan, shodhan avum bhandaran. *Souvenir of 'National Seminar on Awareness, Motivation and Technology Transfer in Beekeeping'* held on 7-8 July, 2017 at CSSRI, Karnal. Sponsored by National Bee Board, New Delhi and organized by Department of Entomology, CCS Haryana Agricultural University, Hisar & Maharana Pratap Horticultural University, Karnal. Pp: 33-34.
- G. S. Gatoria, Reet Verma and Yogesh Kumar (2017). Modern techniques for mass queen bee rearing. *Souvenir of 'National Seminar on Awareness, Motivation and Technology Transfer in Beekeeping'* held on 7-8 July, 2017 at CSSRI, Karnal. Sponsored by National Bee Board, New Delhi and organized by Department of Entomology, CCS Haryana Agricultural University, Hisar & Maharana Pratap Horticultural University, Karnal. Pp: 45-51.
- Jaspal Singh and Yogesh Kumar (2017). Migratory beekeeping- The need for *Apis mellifera* beekeeping, its prospects, management and problems. *Souvenir of 'National Seminar on Awareness, Motivation and Technology Transfer in Beekeeping'* held on 7-8 July, 2017 at CSSRI, Karnal. Sponsored by National Bee Board, New Delhi and organized by Department of Entomology, CCS Haryana Agricultural University, Hisar & Maharana Pratap Horticultural University, Karnal. Pp: 52-58.

- P. K. Chhhuneja and Yogesh Kumar (2017). *Apis mellifera* for Indian apiculture. Souvenir of 'National Seminar on Awareness, Motivation and Technology Transfer in Beekeeping' held on 7-8 July, 2017 at CSSRI, Karnal. Sponsored by National Bee Board, New Delhi and organized by Department of Entomology, CCS Haryana Agricultural University, Hisar & Maharana Pratap Horticultural University, Karnal. Pp: 63-68.
- Yogesh Kumar and Harish Kumar (2017). Role of honey bees in pollination of crops. Souvenir of 'National Seminar on Awareness, Motivation and Technology Transfer in Beekeeping' held on 7-8 July, 2017 at CSSRI, Karnal. Sponsored by National Bee Board, New Delhi and organized by Department of Entomology, CCS Haryana Agricultural University, Hisar & Maharana Pratap Horticultural University, Karnal. Pp: 74-76.

Popular Articles

- Yadav, S; Kumar, Y. and Kumar, H. (2016). Madhu ke atirikt prapt hone wale maunvansh utpad avum unki upyogita. *Haryana Kheti*, 49(8). Pp:11-12.
- Kumar, N; Kumar, H. and Yadav, S. (2017). Madhumakkhi paalan ek rozgar. *Haryana Kheti*, 50(2). pp:11-12.
- Yadav, S.P., Yadav, S., Rolania, K. and Sangwan, N. (2016). *Sabjiyon me ras chusak keet avam unka niyantran*. *Haryana Sahkari Prakash*, 47(12) % 17-18
- Kalkal, D., Yadav, S. and Rolania, K. (2016). Jaivik keet niyantran : labh tatha sarankshan. *Krishi Samvad*, 48(10) % 22-24.
- Rolania, K; Sangwan, R. and Mehra, S. (2017). *Baigan ki Fasal ka keeton v rogon se bachav : kaise* . *Harayan Kheti*, 4 (9) p-8, 10. Narender Kumar, Bhupinder Singh and Surender Yadav, 2016. Kapas main safed makhi ka niyantran. *Haryana Kheti* (7) 49 pp 23.
- Yadav, S., Yadav, S.S. and Kalkal, D. (2016). *Mom: Madhumakhi Palan ka ek Mulyawan Utpad*. *Bee care*, 4(4): 16-19.
- Yadav, S., Yadav, S.S. and Kalkal, D. (2016). Beeswax: A valuable byproduct of beekeeping. *Bee care*, 4(4): 29-32.
- Kumar, N.; Singh, B. and Yadav, S. (2017). Madhumakhi Palan : Kuch Sujhav. *Haryana Kheti* (1) 50 pp 07.
- Kumar, N.; Singh, B. and Yadav, S.K. (2017). Payaj va Lahsun Main Thrips : Niyantran. *Haryana Kheti* (2) 50 pp 07.
- Kumar, N.; Singh, B; Yadav, S.K. and Kumar, H. (2017). Rasaynik keetnashak : Prayog se Haani. *Haryana Kheti* (2) 50 pp 23.
- Yadav, J.L.; Yadav, S. S. and Singh, N. (2017). Madhumakhi vansho main Kartrim bhojan ki Avayashakta: Kab or Kyon. *Haryana Kheti* 49 (4) pp 9-10.
- i. Kumar, N., Singh, B. and Yadav, S. (2017). *Madhumakhi Palan – Ek Rojgar*. *Haryana Kheti*, 2: 11-12
- ii. Kumar, N., Singh, B. and Yadav, S. (2017). Monvanshon kaa nirakshan – avashyakta. *Haryana Kheti*, 2: 9-10
- iii. Kumar, H., Yadav, S., and Kumar, Y. (2017). Madhumakhi palan shuru karne ke liya anivaryaatain. In: Souvenir on 'Awareness, Motivation and Technology Transfer in Beekeeping' organized by CCS HAU, Hisar; MHU, Karnal and NBB, New Delhi from 7-8 July, 2017. Pp 19-22

- iv. Kumar, Y., Gulati, R. and Yadav, S. (2017). Madhumakhi vanshon kaa vibhin mosmon me parabandhan. In: Souvenir on 'Awareness, Motivation and Technology Transfer in Beekeeping' organized by CCS HAU, Hisar; MHU, Karnal and NBB, New Delhi from 7-8 July, 2017. Pp 23-24
- v. Narender Kumar, Surender kumar Yadav and Bhupender Singh 2018. Greesmkalin mung ki fasal main Ekikrat keet Prabandhan. Haryana Kheti 51(4),4.
- vi. Narender Kumar, Harish Kumar and Sunita Yadav (2018). Lahsun va pyaz me thrips ki roktham. *Haryana kheti*, 51(3). Pp: 8.
- vii. Pandey, Shalini, Yadav, S. and Kumar, Y. (2017). Phaslon ke hanikarak chuhe evom unki roktham.
- viii. Purti, Rinku and Rolania, Krishna (2017). Neenbu vargeeya poudhon ke pramukh keet v unki roktham. *Haryana Kheti* 50(9) 22-23
- ix. Purti, Rinku and Rolania, Krishna (2018). Tamatar ke pramukh keeton ka prabandhan. *Haryana Kheti* 51(1) 6-7.
- x. Rawal, Roomi and Rolania, Krishna (2017). Baingan ke keeton ko karen kaboo. *Krashak Jagat* 18 December, 2017.
- xi. Singh, S., Yadav, S. and Ahlawat, D. S. (2017). Madhu ke atirikat prapat hone wale monvansh utpad evom unki upyogita. In: Souvenir on 'Awareness, Motivation and Technology Transfer in Beekeeping' organized by CCS HAU, Hisar; MHU, Karnal and NBB, New Delhi from 7-8 July, 2017. Pp 14-15
- xii. Yadav, S and Pandey, Shalini (2017). Teel ki phasal ke mudhya keet evom unki roktham. *Haryana Kheti*, 6: 2
- xiii. Yadav, S.P., Yadav, Sunita, Balbir and Gaur, Ramkaran (2017). Arand ke hanikarak kidde va unka parbandhan. *Haryana Kheti*, 12: 2-3
- xiv. Yadav, S., Pandey, Shalini and Poonia, Rinku (2017). Sarson kee phasal ke mudhya keet evom unki roktham. *Haryana Kheti*, 9: 4-6
- xv. Yadav, S.P., Yadav, Sunita, and Gaur, Ramkaran (2017). Arand me ekikrit keet parabandhan. *Haryana Sehkari Prakash*, 9: 21-22.
- xvi. Yadav, S., Kumar, Y. and Kumar, H. (2017). Madhumakhi paragon kaa krishi evom bagwani phaslon me mehatav. In: Souvenir on 'Awareness, Motivation and Technology Transfer in Beekeeping' organized by CCS HAU, Hisar; MHU, Karnal and NBB, New Delhi from 7-8 July, 2017. Pp 16-18
- xvii. Gulati, R. and Kumar, Y. (2018). Madhumakhi vansho ke kritrim bhojan kee avashyakta kab or kyon. Technical bulletin on Beekeeping, ICAR-CIRB, Hisar: 27-29.
- xviii. Kumar, Y. and Kumar, H., (2018). Madhumakhi palan ka mehatav avom labh. Technical bulletin on Beekeeping, ICAR-CIRB, Hisar: 1-3.
- xix. Kumar, Y., Yadav, S. and Kumar, H. (2018). Madhumakhi palan ki shurawat kaise kare. Technical bulletin on Beekeeping, ICAR-CIRB, Hisar: 9-11.
- xx. Kumar, Y. and Kumar, H. (2018). Madhumakhi vansho ka nirakshan kyon or kaise. Technical bulletin on Beekeeping, ICAR-CIRB, Hisar: 16-18.
- xxi. Kumar, Harish, Yadav Sunita and Kumar Yogesh, 2018. Shahad: Aushdhiye goon, upay, nishkasan, shodhan avom bhandaran. Technical bulletin on Beekeeping, ICAR-CIRB, Hisar: 36-43.
- xxii. Kumar, Y., Yadav, S. and Kumar, H. (2019). Madhumakhi palan kee shuruat kaise Karen? Technical bulletin on Beekeeping, ICAR-CIRB, Hisar: 9-11
- xxiii. Kumar, H., Yadav S. and Kumar, Y. (2019). Shahad: aushdhiye goon, upyog, nishkasan, shodhan evom bhandaran. Technical bulletin on Beekeeping, ICAR-CIRB, Hisar: 36-43
- xxiv. Kumar, Y. and Yadav S. (2019). Madhumakhi vanshon me rani parjanan kee jankari. In: Technical bulletin on Beekeeping published by ICAR-CIRB, Hisar: 61-63.

- xxv. Kumar, Ashwani, Saharan, H.S., Godara, A., Raj, Hans, Verma, Tarun, Malik, D.P., Hooda, V.S., Sarita and Singh, Sube. (2019). *May Maah Ke Krishi Karya*, 52(4): 13-17.
- xxvi. Kumar Harish and Yadav S.S. (2018). Madhumakhi vanshon ka keetnashkon se bachao. Technical bulletin on Beekeeping, ICAR-CIRB, Hisar: 52-53.
- xxvii. Kumar Yogesh and Yadav Sunita, 2018. Madhumakhi vanshon me raani parajnan kee jankari. Technical bulletin on Beekeeping, ICAR-CIRB, Hisar: 61-63.
- xxviii. Mehra, S., Verma, Tarun and Yadav, H.S. (2018). *Moong fasal Ke Mukhye Keet Avam Bimariya: Roktham Ke Upay. Haryana Kheti*, July: 4.
- xxix. Rawal, R., Kumar, Y. and Kumar, A. (2018). Mungfali kee phasal me hanikarak keeton ke nuksan se bachao karke le bharpur paidawar. *Modern Kheti*, Nov.(11): 50.
- xxx. Rawal, R. and Verma, T. (2018). Bajra ki fasal ke mukhya keet avam parbandan. *Haryana Kheti*, July: 6-7.
- xxxi. Rawal, R. and Verma, T. (2018). Til ki fasal: Hanikarak keeto ki roktham : Bharpur paidawar. *Haryana Kheti*, August: 18,20.
- xxxii. Rawal, R., Verma, T. and Kumar, K. (2018). Tamator ki fasal me keeto ki roktham karke le adhik paidawar. *Modern Kheti*, August, 2018 : 40.
- xxxiii. Satpal, Kumari, P. and Sharma, B.L. (2019). Jawar ek adharsh chara phasal. *Haryana Kheti*, 52(5): 6-7.
- xxxiv. Sharma, B.L. Kamboj, B. R. and Rawal, R. (2018). Integrated Pest Management (IPM) in OKRA for Quality Fruit Production. *Haryana Kheti*, 51(4): 31-32
- xxxv. Sharma, B.L., Kamboj, B.R. and Singh, D. (2018). Badhte tapmaan me Karen bengan ki mite ka niyantaran. *Haryana Kheti*, 51(7). 6.
- xxxvi. Sharma, B.L. Kamboj B.R. and Kumar, A. (2018). Biological Management of *Parthenium hysterophorus* (Congress Grass). *Haryana Kheti*, 51(8) : 29 & 32
- xxxvii. Sharma, B.L. Taya, R.V., Goyal, N.K. and Kamboj, B.R. (2018). Ganne Me Kali Kidi and Chhoti Bedhak Keedo ka Uchhit Prabandhan. *Krishi Samvad* : 20-21.
- xxxviii. Sharma, B.L., Rawal, S., Singh, D. and Kumar, N. (2018). Badlate Mausam Me Zero Budget Kheti ke Fayede . *Kheti Duniya*, July: 11
- xxxix. Sharma, B.L. and Kumar, N. (2019). Safe and Judicious use of Pesticides. *Haryana Kheti*, 52 (1): 28-29.
- xl. Tiwari, S., Narender, K. and Yadav, S. (2019). Mitar kiton kaa kheti mein mehatav. *Haryana Kheti*, 52 (2): 11.
- xli. Yadav, S.S., Yadav, S. and Rathee M. (2019). Amrood ke parmukh keet evom unka samnvit parbandhan. *Haryana Kheti*, 3: 7-8.
- xlii. Yadav, S.P., Singh, B., Yadav, S. and Satyajeet (2019). Uchit samaya par hee Karen phaslon me keet niyantaran. *Sahkari Parkash*, 50(2): 22-24.
- xliiii. Yadav, S., Verma, T. and Dalal, P. (2019). Pashchatya Madhumakhi ka jivan chakar evom parivarik sangathan. Technical bulletin on Beekeeping, ICAR-CIRB, Hisar:6-8
- xliv. Yadav, S., Dalal, P. and Rathee, M. (2019). Monpalan ke liye avashyak samagri. Technical bulletin on Beekeeping, ICAR-CIRB, Hisar:12-15
- xlv. Yadav, S., Dalal, P. and Rathee, M. (2019). Madhumakhi parivaron me vakchhut evom gharchhut ki samasya tatha niyantaran. Technical bulletin on Beekeeping, ICAR-CIRB, Hisar: 33-35
- xlvi. Yadav, S. and Kumar, A. (2019). Madhumakhi paragon ka krishi evom bagwani phaslon me mahatav. Technical bulletin on Beekeeping published by ICAR-CIRB, Hisar: 49-51
- xlvii. Yadav, S. (2019). Madhumakhiyon ka parmukh shatru evom rogon se bachav. Technical bulletin on Beekeeping published by ICAR-CIRB, Hisar: 54-60

- xlvi. Yadav S. (2019). Monvansh kea nay utpad, upyogita evom oshdhiya gun. Technical bulletin on Beekeeping, ICAR-CIRB, Hisar: 44-48
- xlix. Yadav S. and Kumar A. (2019). Madhumakhi Palan Ki Vibhin Prakriyaen. Technical bulletin on Beekeeping, ICAR-CIRB, Hisar: 23-26

Technical bulletin:

1. Yadav, S. (2019). Monpalan: Rojgaar, Gramin Vikas evom Phaslon ki paidawar tatha gunwata badhane hetu uchit vayawsaye. Published by ICAR-Central Institute for Research on Buffaloes under FARMER FIRST PROGRAMME on Diversified Farming through Livestock and Agriculture. Pp: 66
2. Ghanghas, B.S., Baloda, S. and Yadav, S. (2019). Haryana ke kisano ke liye vardan: Anar ki adhunik kheti. Published by ICAR-Central Institute for Research on Buffaloes under FARMER FIRST PROGRAMME on Diversified Farming through Livestock and Agriculture. Pp: 34
3. Jakhar, D., Kumar, S., Sharma, B.L., Kumar, D. and Ompraksh. (2019). Rabi and Kharif Faslo me Mashik Krishi Kriyaye. Krishi Vigyan Kendra Sirsa.
4. Jakhar, D., Kumar, D., Kumar, S., Sharma, B.L. and Ompraksh. (2019). Rabi Faslo ki unnat Kheti. Krishi Vigyan Kendra Sirsa.

Financial Statement

Expenditure under CAFT

Sr. No.	Head of Expenditure	2017-18	2018-19	2019-20
1.	T.A.	0	0	0
2.	O.E. (R)	108232	107719	70000
3.	POL	18784	23825	0
4.	M&S	239905	146962	195521
5.	M&E (Books)	0	35000	0
6.	OC	656500	656500	656000
	i) Boarding & lodging			
	ii) TA & DA to participants			
	iii) Office supply/ Manual			
	iv) Honorarium to Secretarial, Clerical, Tech., Labs., Class – IV staff			
	v) Honorarium to Director, other academic staff			
	TA & Hon. To guest speakers			
	Misc.& Contingency			
	Total	1023421	970006	921521

