DEPARTMENT OF AGRICULTURAL ENTOMOLOGY

Name of Professor & Head	Dr. D. B. Sisodiya
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- He is in teaching at UG and PG level since 2013.
- He guided 6 students (M. Sc.-6 & Ph. D.-2) and presently guiding 1 M. Sc. (Agri.) and 5 Ph. D. students.
- He is working as Principal Investigator in 03 other agency projects and one National project.
- About 13 recommendations are given for the management of insect pests in various crops.
- Total 04 insect species were recorded first time in Gujarat.
- He published 64 research articles in various National and International reputed journals and more than 130 popular articles in various magazines.
- He has attended 44 State/ National/ symposia/conference etc.
- He is one of the authors who have published 02 practical manuals at UG level, 01 practical manual at PG level and 10 books/training manuals/booklet in vernacular language.
- He has also published more than 17 pamphlets/folders/short notes/crop pests literatures etc. in local language.
- He has also taken more than 130 lectures at various trainings organized for technical personals and farmers.
- He has been a rapporteur/co-chairman/ members in various committees formed at University / State level.
- He is a member of plant protection related association and journals
- He has worked as **Rector and DDO** at COA, AAU, vaso as well as **Unit Head & Assoc. Research Scientist** at ARS, AAU, Arnej.
- He is presently working as a **ELUs coordinator** and **Rector**, International hostel, AAU, Anand.
- He is a member of Board of studies, faculty of Agriculture, BACA, AAU, Anand.
- He was awarded **with eight different awards,** out of which **05 for Academic Achievements** and **03 for scientific contribution.**
- He is awarded with **Best teacher** in higher agricultural education amongst all the faculties of AAU. Anand for the year 2021-22.

Brief Information of the Department

- Department of Agricultural Entomology came in to existence in the year 1947, with a primary objective to impart education to undergraduate students leading to the degree of B. Sc. (Agri.).
- Later on the post graduate program was introduced in the year 1963

OBJECTIVES:

- Teaching undergraduate and postgraduate students.
- Undertaking research projects sponsored by State Government, ICAR, Private Pesticide/Seed Companies, other Agencies etc.
- Providing diagnostic services to the farmers for insect pests infesting different crops.

- Training on pest management during training programs organized by Director of Extension, AAU, Anand, State Agricultural Department, NGO, KVK and other extension agencies.
- Publication of extension literatures (Popular articles, leaflet, folder *etc*.) on Pest Management.
- Publication of research related to insect pests and its management carried out in the Department.

Courses offered by department in Under Graduate Programme (5th Dean`s Committee)

Sr. No.	Course Number	Course Title	Credit hours	Semester in which subject offered
1	Ag. Ento. 3.1	Fundamentals of Entomology	2+1=3	Third
2	Ag. Ento. 4.2	Principles of Integrated Pest Management	1+1=2	Fourth
3	Ag. Ento. 4.3	Management of Beneficial Insects	1+1=2	Fourth
3	Ag. Ento. 5.4	Pests of Crops and Stored Grain and their Management	1+1=2	Fifth
4	Ag. Ento. 6.5	Pests of Horticultural Crops and their Management	1+1=2	Sixth
5	Ag. Ento. 7.7	Student READY Programme	20	Seventh
6	ELP 8.5	Commercial Bee Keeping	0+10=10	Eighth

Courses offered by department in Post Graduate level (as per BSMA – 2022-23)

1.	Insect Morphology	ENT 501 (2+1)	Odd Sem. (2022-23)
2.	Insect Anatomy and Physiology	ENT 502 (2+1)	Even Sem. (2022-23)
3.	Insect Taxonomy	ENT 503 (1+2)	Odd Sem. (2022-23)
4.	Insect Ecology	ENT 504 (2+1)	Even Sem. (2022-23)
5.	Biological Control of Insect Pests and Weeds	ENT 505 (2+1)	Odd Sem. (2022-23)
6.	Toxicology of Insecticides	ENT 506 (2+1)	Even Sem. (2022-23)
7.	Host Plant Resistance	ENT 507 (1+1)	Odd Sem. (2022-23)
8.	Concepts of Integrated Pest Management	ENT 508 (2+0)	Even Sem. (2022-23)
9.	Pests of Field Crops/ Pests of Horticultural and Plantation Crops	ENT 509/510 (2+1)	Odd Sem. (2022-23)
10.	Post-Harvest Entomology	ENT 511 (1+1)	Odd Sem. (2022-23)
11.	Insect Vectors of Plant Pathogens	ENT 512 (1+1)	Even Sem. (2022-23)
12.	Principles of Acarology	ENT 513 (1+1)	Odd Sem. (2022-23)
13.	Vertebrate Pest Management	ENT 514 (1+1)	Even Sem. (2022-23)
14.	Techniques in Plant Protection	ENT 515 (0+1)	Odd Sem. (2022-23)
15.	Apiculture	ENT 516 (2+1)	Even Sem. (2022-23)
16.	Sericulture	ENT 517 (2+1)	Odd Sem. (2022-23)
17.	Lac Culture	ENT 518 (2+1)	Even Sem. (2022-23)
18.	Molecular Approaches in Entomology	ENT 519 (2+1)	Odd Sem. (2022-23)

19.	Plant Quarantine, Biosafety and Biosecurity	ENT 520 (2+0)	Even Sem. (2022-23)
20.	Edible and Therapeutic Insects	ENT 521 (1+1)	Odd Sem. (2022-23)
21.	Medical and Veterinary Entomology	ENT 522 (1+1)	Even Sem. (2022-23)
22.	Forest Entomology	ENT 523 (1+1)	Odd Sem. (2022-23)
23.	Insect Phylogeny and Systematics	ENT 601 (1+2)	Odd Sem. (2022-23)
24.	Insect Physiology and Nutrition	ENT 602 (2+1)	Even sem. (2022-23)
25.	Insect Ecology and Diversity	ENT 603 (2+1)	Odd Sem. (2022-23)
26.	Insect Behaviour	ENT 604 (1+1)	Even sem. (2022-23)
27.	Bio-Inputs for Pest Management	ENT 605 (2+1)	Odd Sem. (2022-23)
28.	Insect Toxicology and Residues	ENT 606 (2+1)	Even sem. (2022-23)
29.	Plant Resistance to Insects	ENT 607 (1+1)	Odd Sem. (2022-23)
30.	Acarology	ENT 608 (1+1)	Even sem. (2022-23)
31.	Molecular Entomology	ENT 609 (1+1)	Odd Sem. (2022-23)
32.	Integrated Pest Management	ENT 610 (2+0)	Even sem. (2022-23)

On-going Research Projects in the department (2021-22)						
Sr. No.	**Title of the project (B.H.)**	**Name of PI**	**Name of Co-PI**	**Sponsoring Authority**	**Category of Project**	**Financial outlay (Rs. In Lakh)**
1	**2**	**3**	**4**	**5**	**6**	**7**
1.	Integrated Pest Management (12988-02)	Dr. D. B. Sisodiya	--	GOG, Gandhinagar	Plan	18.00
2.	Integrated Pest Management and Bio-control, Govt. of Gujarat (12964)	Dr. D. B. Sisodiya	--	GOG, Gandhinagar	Plan	8.00
3.	Apiculture and Sericulture (12931)	Dr. D. B. Sisodiya	--	GOG, Gandhinagar	Plan	4.00
4.	Efficacy of thiamethoxam 30% FS as seed treatment Against Early Crop Stage Insect-pests in cumin (18559-51)	Dr. D. B. Sisodiya	Dr. M. D. Suthar	Sygenta India Pvt. Ltd.	Other agency	9.68
5.	Honey bee training “Mission Honey bee” (18559-53)	Dr. D. B. Sisodiya	Dr. M. D. Suthar	GOG, Gandhinagar	Plan	3.0

Research projects completed by the Department						
Sr. No.	**Title of the project**	**Name of PI**	**Name of Co-PI**	**Sponsoring Authority**	**Category of the Project**	**Year of Completion**
1	**2**	**3**	**4**	**5**	**6**	**7**
1	Bio-efficacy of KN 128 (Indoxacarb) 15 EC for the control of *Helicoverpa armigera* (Hubner) Hardwick in cotton	Dr. R. C. Jhala	Dr. T. M. Bharpoda	M/s. E. I. Dupont India Pvt. Ltd., Manjusar	Other agency	2005
2	Bioefficacy of KN 128 (Indoxacarb) 15 EC for the control of *Helicoverpa armigera* (Hubner) Hardwick in pigeon pea	Dr. R. C. Jhala	Dr. T. M. Bharpoda	M/s. E. I. Dupont India Pvt. Ltd., Manjusar	Other agency	2005
3	Implementation and promotion of an integrated pest management strategy for the control of eggplant fruit and shoot borer (*Leucinodes orbonales*) in Indo gangetic plains of South Asia	Dr. R. C. Jhala	Dr. M. G. Patel	DFID,-AVRDC, UK, Taiwan	International	2006
4	Cotton IPM using PB Rope LTT (MATING DISRUPTION) for pink bollworm (*Pectinophora gossypiella* (Saunder)) in Gujarat	Dr. R. C. Jhala	Dr. D. M. Mehta	PI Industries Ltd., Gurgaon	Other agency	2006
5	Large scale demonstration of PB Rope LTT against PBW (*Pectinophora gossypiella* (Saunder)) infesting cotton in Gujarat	Dr. R. C. Jhala	Dr. D. M. Mehta	PI Industries Ltd., Gurgaon	Other agency	2006
6	Bioassay of Biosoft (*Beauveria bassiana*), Vangourd (Azadirachtin 1500 ppm) and Quinalphos 25 EC against diamond back moth (*Plutella xylostella*) under laboratory condition.	Dr. R. C. Jhala	Dr. T. M. Bharpoda	M/s. Agriland Biotech Ltd., Mota-Motipura, District Baroda, Gujarat	Other agency	2007
7	Bio-efficacy of NNI 0001 (Flubendiamide) 480 SC against diamondback moth (*Plutella xylostella*) in cabbage	Dr. R. C. Jhala	Dr. J. J. Patel and Dr. P. K. Borad	Bayar crop science Ltd., Mumbai	Other agency	2007

8	Bio-efficacy of larvin (Thiodicarb) 75 WP against Lepidoptera insect pests (*H. armigera, Maruca vitrata and Spodoptera litura*) in black gram	Dr. R. C. Jhala	Dr. J. J. Patel and Dr. P. K. Borad	Bayar crop science Ltd., Mumbai	Other agency	2007
9	Bio-efficacy of E2Y45 for the control of bollworm complex in cotton	Dr. R. C. Jhala	Dr. T. M. Bharpoda	M/s. E. I. DuPont India Pvt. Ltd., Manjusar	Other agency	2007
10	Pioneering Development of A Public-private Partnership in the Use of Agribiotechnology for Sustainable Solution to Insect Problems on Crucifer Crops in India	Dr. R. C. Jhala	Dr. T. M. Bharpoda	AVRDC – Taiwan and Vater und Sohn Eiselen-Stiftung, Ulm, Germany	International	2007
11	Demonstration on area wide management of cotton pink bollworm (*Pectinophora gossypiella*) using PB-ROPE LTT (mating disruption)	Dr. R. C. Jhala	Dr. D. M. Maheta	M/s. PI Industries Ltd., Gurgaon	Other agency	2007
12	Bio-efficacy of Imidacloprid 40% + Fipronil $0% - 80 WG against sucking pest in cotton	Dr. R. C. Jhala	Dr. T. M. Bharpoda	M/s. Bayar crop science Ltd., Mumbai	Other agency	2008
13	Bio-efficacy of E2Y45 20 SC against pod borer complex in pigeon pea	Dr. R. C. Jhala	Dr. T. M. Bharpoda	M/s. E.I. Dupont India Ltd., Manjusar	Other agency	2008
14	Bio-efficacy of E2Y45 20 SC against fruit borer, *H. armigera* (Hubner) Hardwick in tomato	Dr. R. C. Jhala	Dr. T. M. Bharpoda	M/s. E.I. Dupont India Ltd., Manjusar	Other agency	2008
15	Pyridalyl(S-1812) 10 EC alone and in mixture with fenpropathrin and fenavalerate against pod borer cowpea in pigeon pea	Dr. M. G. Patel	--	M/s. Sumitomo chemical India Pvt. Ltd., Mumbai	Other agency	2008
16	Bio-efficacy of NNI 0001 (Flubendiamide) 480 SC against lepidopteran pod borer and defoliators (*Maruca vitrata, Helicoverpa armigera and Spodoptera litura*) in black gram	Dr. T. M. Bharpoda	Dr. J. J. Patel Dr. P. K. Borad	M/s. Bayar crop science Ltd., Mumbai	Other agency	2008

17	Bio-efficacy of flubendiamide 24% +thiacloprid 24% - 48% SC (w/v) against bollworms and sucking pests of crops of cotton crop	Dr. R. C. Jhala	Dr. M. G. Patel	M/s. Bayar crop science Ltd., Mumbai	Other agency	2008
18	Bio-efficacy of UPI-206 (Flonicamide) 50 WG against sucking pest in cotton	Dr. T. M. Bharpoda	Dr. M. G. Patel	United Phosphorus Ltd., Mumbai	Other agency	2009
19	Bio-efficacy of Applaud 25% (Buprofezin) against mealy bugs, *Phenacoccus solenopsis* Tinsley (Hemiptera : Pseudococcidae) in cotton	Dr. R. C. Jhala	Dr. M. G. Patel Dr. N. M. Vaghela	M/s. Rallis India Ltd., Mumbai	Other agency	2009
20	Bio-efficacy of UPI-106 (Chlorfluazuron 5 EC) against pests of cabbage	Dr. T. M. Bharpoda	Dr. M. G. Patel	United Phosphorus Ltd., Mumbai	Other agency	2009
21	Estimation of population/infestation of with an emphasis on pink bollworm on Bollgard, Bollgard-II and Non-*Bt* cotton crop	Dr. R. C. Jhala	Dr. T. M. Bharpoda	Ms. Mahyco Monanto Biotech (India) Ltd., Bangalore	Other agency	2010
22	Bio-Efficacy of HGW86 10% OD against insect pests complex of cabbage	Dr. P. K. Borad	Mr. N. B. Patel	M/s. E. I. Dupont India Private Ltd., Gurgaon	Other agency	2011
23	Bio-efficacy of HGW86 10% OD (Cyazypyr 10 OD) against insect pests of cotton	Dr. T. M. Bharpoda	Mr. N. B. Patel	M/s E.I. DuPont India Pvt. Ltd., Manjusar	Other agency	2012
24	Bio-efficacy of Flubendiamide 480 SC (Fame 480 SC) against leaf Webber cum stem borer & fruit borer of Jatropha	Dr. C. C. Patel	Mr. N. B. Patel Dr. R. S. Fougat	M/s Bayer CropScience, Ahmedabad	Other agency	2012
25	Evaluation of RIL-021/F2 (70%DF) for bio-efficacy against sucking insect pests, Phytotoxicity and its safety to natural enemies on cotton	Dr. T. M. Bharpoda	Mr. N. B. Patel	M/s. Rallis India Ltd., Bangalore	Other agency	2012

26	Evaluation of Bio-efficacy & Phytotoxicity of Fipronil 200 SC against insect pest (Thrips) of cotton	Dr. C. C. Patel	Dr. R. K. Thumar and Dr. L. V. Ghetiya	M/s Bayer Crop Science Ltd., Ahmedabad	Other agency	2013
28	Evaluation of Bio-efficacy & Phytotoxicity of BYI 02960-SL 200 against sucking pest complex of cotton	Dr. C. C. Patel	Sh. N. A. Bhatt, Dr. L. V. Ghetiya	M/s Bayer Crop Science Ltd., Ahmedabad	Other agency	2013
29	Evaluation of Bio-efficacy of Diafenthiuron 50 WP from New Source against Cotton insect pest	Dr. C. C. Patel	Sh. N. A. Bhatt and Dr. L. V. Ghetiya	M/s Syngenta India Ltd., Pune	Other agency	2013
30	National information system for pest management (Bt cotton)	Dr. T. M. Bharpoda	Dr. M. G. Patel (2008-11), Dr. R. K. Thumar (2012-13),	NCIPM (ICAR), New Delhi	ICAR, New Delhi	2008-2013
31	Bio-safety Research Trial Level-1 (BRL-1) for Insect Resistant Transgenic Corn Hybrids (MON 89034)	Dr. C. C. Patel	Dr. B. N. Patel	M/s Monsanto India Ltd., Mumbai	Other agency	2014
32	Bio-efficacy and phytotoxicity of bio-pesticides (Brahmastra, Agniastra and Neemastra) against sucking insect-pests of cotton	Dr. T. M. Bharpoda	Prof. N. A. Bhatt	M/s. Transchem agritech Ltd., Vadodara	Other agency	2015
33	Bio-efficacy & Phytotoxicity of Agro clean, a bio-product against sucking insect pests of *Bt* cotton	Dr. T. M. Bharpoda	Prof. N. A. Bhatt	by M/s Shukla Ashar Impex Pvt. Ltd., Rajkot	Other agency	2015
34	Bio-efficacy and phytotoxicity of bio-pesticides (*Brahmastra, Agniastra* and *Neemastra*) against sucking insect-pests of okra	Dr. T. M. Bharpoda	Prof. N. A. Bhatt	M/s. Transchem agritech Ltd., Vadodara	Other agency	2015

35	Bio-efficacy and phytotoxicity of Solomon 300 OD against sucking insect pests in cotton	Dr. T. M. Bharpoda	Dr. R. K. Thumar	M/s. Bayar crop science Ltd., Ahmedabad	Other agency	2016
36	Evaluation of bio-efficacy and Phytotoxicity of Movento 150 OD (Spirotetramat 15% w/v OD) against sucking pest complex of Cotton	Dr. R. K. Thumar	Dr. C. C. Patel	M/s. Bayer Crop Science Limited, Ahmedabad	Other agency	2016
37	Bio-efficacy and phytotoxicity of imidacloprid 200 SL (imidacloprid 17.1 %w/w SL) against sucking insect-pests of cotton	Dr. C. C. Patel	Dr. R. K. Thumar	M/s. Bayer cropscience Ltd., Ahmedabad	Other agency	2016
38	Bio-efficacy and phytotoxicity of combi product SLR- 525 against sucking insect-pests in cotton	Dr. T. M. Bharpoda	Dr. R. K. Thumar	M/s. GSP crop science Ltd., Ahmedabad	Other agency	2016
39	Online pest monitoring and advisory services (OPMAS)	Dr. T. M. Bharpoda	Dr. R. K. Thumar	GOI and ICAR-NCIPM, New Delhi	GOI and ICAR-NCIPM, New Delhi	2014-2016
40	Evaluation of MAIRM-08 (Diafenthiuron 47% + Bifenthrin 9.4% SC) against sucking pests (Jassid, whitefly, aphid and thrips) and bollworms in cotton	Dr. C. C. Patel	Dr. M. D. Suthar	ADAMA India Pvt. Ltd., Telangana, Hyderabad	Other agency	2017
41	Evaluation of Buprofezin 15% + Acephate 35% against sucking pests in cotton [B.H. 18457-24(1)]	Dr. R. K. Thumar	Dr. M. D. Suthar	ADAMA India Pvt. Ltd., Telangana, Hyderabad	Other agency	2017
42	Bio-efficacy and Phytotoxicity of flonicamid 50% WG against mango hoppers in Mango [B.H. 18457-27(2)].	Dr. R. K. Thumar	Ms. M. V. Lunagariya	UPL Ltd., Mumbai	Other agency	2017
43	Bio-efficacy evaluation of new insecticide molecule PII 8007 20 % SC on insect pests of pomegranate	Dr. C. C. Patel	Dr. M. D. Suthar	PI Industries Ltd., Udaipur	Other agency	2018
44	Management of pink bollworm, *Pectinophora gossypiella* (Saunders)	Dr. C. C. Patel	Dr. M. D. Suthar	PI Industries Ltd., Gurgaon, Haryana	Other agency	2018

	using PB Rope L and its effect on sucking pests and beneficial fauna in *Bt* cotton					
45	Bio-efficacy and Phytotoxicity of Spiromesifen 22.9 % SC against whitefly and mites in *Bt* cotton [B.H. 18457-52].	Dr. T. M. Bharpoda	Dr. C. B. Varma	Meghmani Organics Ltd., Ahmedabad	Other agency	2018
46	Bio-efficacy and Phytotoxicity of POWEROIL GARNET AG (2.5% v/v) against sucking pests and pink bollworm in *Bt* cotton [B. H.18457-66]	Dr. C. C. Patel	Dr. C. B. Varma	APAR Industries Ltd., Mumbai	Other agency	2018
47	Bio-efficacy and Phytotoxicity of flonicamid 50% WG against sucking pests in *Bt* cotton [B.H. 18457-51]	Dr. C. B. Varma	Dr. M. D. Suthar	Meghmani Organics Ltd., Ahmedabad	Other agency	2018
48	Bio-efficacy and Phytotoxicity field evaluation of insecticides Lufenuron 5.4% EC against American bollworm, *Helicoverpa armigera* (Hubner) Hardwick in cotton [B.H. 18457-97].	Dr. M. D. Suthar	Dr. C. B. Varma	Meghmani Organics Ltd., Ahmedabad	Other agency	2018
49	Standardization of PB Rope L required for the Management of pink bollworm, *Pectinophora gossypiella* (Saunders) in *Bt* cotton [B.H. 18457-05]	Dr. C. C. Patel	Dr. C. B. Varma	PI Industries Ltd., Gurgaon, Haryana	Other agency	2018
50	Evaluation of bio-efficacy of Thiamethoxam 12.6% + Lamda cyhalothrin 9.5% ZC% (Alika 247 ZC) against cumin pests [B. H.18557-27]	Dr. C. B. Varma	Dr. M. D. Suthar	Syngenta India Ltd., Pune	Other agency	2019
51	Bio-efficacy field trial of insecticide against fall armyworm, *Spodoptera frugiperda* (J. E. Smith) infesting maize [B. H. 18558-06]	Dr. D. B. Sisodiya	Dr. M. D. Suthar	Crystal Crop Protection Limited, New Delhi	Other agency	2020
52	Evaluation of bioefficacy of cyantraniliprole 20% + lufenuron 20%	Dr. D. B. Sisodiya	Dr. M. D. Suthar	Syngenta India Limited, Ahmedabad.	Other agency	2021

	w/v SC (400 SC) against cotton pests [18558-57]					
53	Evaluation of insecticide, Dimethoate 30% EC for bio-efficacy (against pests) in potato, its safety to natural enemies and phytotoxicity effect on the crop [18558-67]	Dr. M. D. Suthar	Dr. H. C. Patel	Shivalik Rasayan Limited, New Delhi.	Other agency	2021
54	Evaluation of RIL- 165/F1 (30% SE) against *Spodoptera litura, Helicoverpa armigera*, semi looper and girdle beetle infesting soybean [18558-13]	Dr. D. B. Sisodiya	Dr. C. B. Varma	Rallis India Ltd., Ahmedabad	Other agency	2021
55	Evaluation of RIL-173//F1 (22.5% SC) against sucking pests (aphid, jassid, whitefly, thrips and mealybug) in cotton [18558-14]	Dr. R. K. Thumar	Dr. C. B. Varma	Rallis India Ltd., Ahmedabad	Other agency	2021
56	Diversity of honey bee, its attractants and impact of pollination by Apis mellifera L. on the yield of bottle gourd, Lagenaria siceraria (molina) standl [18558-81]	Dr. D. B. Sisodiya	Dr. H. C. Patel	National Bee Board, New Delhi.	Other agency	2021
57	crop safety evalution of betacyfluthrin 90g/L + Imidacloprid 210 g/L (Solomon) on cotton crop applied through drone	Dr. D. B. Sisodiya	Dr. H. C. Patel	Bayer Cropscience Limited, Indore (MP).	Other agency	2023
58	Evaluation of CI-1136 against whitefly, black aphid, jassids in cotton [18558-84]	Dr. H. C. Patel	Dr. M. D. Suthar	Crystal Crop Protection Limited, New Delhi	Other agency	2023
59	Evaluation of MOLCI 2021/1 20 + 8 % SC on sucking pest complex of cotton [18558-87]	Dr. D. B. Sisodiya	Dr. H. C. Patel	Meghmani Organics Limited, Ahemdabad	Other agency	2023

Research Recommendations made by department for scientific community (Since 2004)		
Sr. No.	**Title of research information**	**Year**
1.	**Study on biodiversity of insect fauna through light traps** Among the different types of light used in the light trap, visible and ultra violet lights found more effective and efficient to monitor the insects under field conditions. The coleopterans and dipterans insects were maximum in ultraviolet light, while hemipteran and hymenopteran insects in visible light.	2015
2.	**Screening of Brassica species against aphid** The genotypes RAYAD 9602, NRCM 120, NRCM 353 (*Brassica juncea*) and PUSA SWARNIM (*B. carinata*) found highly resistant to aphid, *Lipaphis erysimi* Kalt. under field condition.	2015
3.	**Bio-efficacy of different insecticides against anar butterfly, *Virachola isocrates* (Fabricius) infesting pomegranate** Two sprays of flubendiamide 39.35 SC 0.015 per cent (3 ml/10 litre of water) or chlorantraniliprole 18.5 SC 0.006 per cent (3 ml/10 litre of water) or emamectin benzoate 5 SG 0.0025 per cent (5 g/10 litre of water) first at initiation of the pest and second at 30 days after first spray proved effective for the control of anar butterfly, *Virachola isocrates* (Fabricius) infesting pomegranate in *mrugbahar*.	2016
4.	**Bio-efficacy of newer insecticides against *Spodoptera litura* (Fabricius) infesting castor** For effective and economical management of leaf eating caterpillar, *Spodoptera litura* (Fabricius) in castor, spray any one of the following insecticides at initiation of pest. 1. Emamectin benzoate 5 SG, 0.002 %, 4 g/10 L of water 2. Chlorantraniliprole 18.5 SC, 0.006 %, 3 ml/10 L of water 3. Spinosad 45 SC 0.009 %, 2 ml/10 L of water	2018
5.	**Evaluation of root dip treatment and foliar spray of insecticides against aphid infesting gaillardia (var. Lorenziana)** Dipping the roots of gaillardia for two hours in the solution of thiamethoxam 25 WG, 0.0125 % (5 g/10 L of water) coupled with foliar spray of dimethoate 30 EC, 0.03 %, (10 ml/l0 L of water) at initiation of aphid and second spray after 15 days of first spray give effective and economical control of the pest.	2018
6.	**Bio-efficacy of different insecticides against capsule borer, *Dichocrosis punctiferalis* Guenee infesting castor** For effective and economical control of capsule borer in castor, spray any one of the following insecticides at initiation of the pest damage and second at 15 days of the first spray. 1. Chlorantraniliprole 20 SC, 0.006 %, 3ml /10 L of water 2. Flubendiamide 48 SC, 0.015 %, 3 ml /10 L of water 3. Indoxacarb 15.8 EC, 0.0079 %, 5 ml /10 L of water 4. Emamectin benzoate 5 SG, 0.0025 %, 5 g/10 L of water	2018

7.	**Bio-efficacy of insecticides against aphid in cumin** For effective and economical control of cumin aphid, spray any one of the following insecticides, first spray at initiation of aphid and if required, second spray at 15 days after first spray. 1. Flonicamid 50 WG, 0.015 %, 3 g/ 10 L of water 2. Clothianidin 50 WDG, 0.02 %, 4 g/ 10 L of water 3. Carbosulfan 25 EC, 0.04 %, 16 ml/ 10 L of water 4. Thiacloprid 24 SC, 0.024 %, 10 ml/ 10 L of water	2018
8.	**Bio-efficacy of insecticides against thrips, *Scirtothrips dorsalis* Hood in pomegranate** Application of spinosad 45 SC, 0.01% (2.20 ml/10 litre water, 100 g a.i./ha) or *buprofezin 15% + acephate 35% (50 WP), 0.063% (12.5 g/10 litre water, 625 g a.i./ha) when thrips population attain 5 thrips/10 cm shoot and second after 15 days for effective control of thrips in maize. **Note**: *Banned with effect from 31.01.2020	2020
9.	**Evaluation of insecticides against leaf eating caterpillar in drumstick** Chlorantraniliprole 18.5% SC, 0.006% (3.00 ml/10 litre water, 30 g a.i./ha) or emamectin benzoate 5% SG, 0.0019% (3.80 g/10 litre water, 9.50 g a.i./ha), first at appearance of pest and second after 15 days proved effective against drumstick leaf eating caterpillar.	2020
10.	**Efficacy of granular insecticides against fall armyworm, *Spodoptera frugiperda* (J. E. Smith) in maize** Whorl application of fipronil 0.6% GR, 20 kg/ha (120 g a.i./ha) first at appearance of pest and second after 15 days for effective control of fall armyworm, *Spodoptera frugiperda* in maize.	2020
11.	**Evaluation of bio-pesticides against fall armyworm, *Spodoptera frugiperda* (J. E. Smith) in maize** Application of *Nomuraea rileyi* 1% WP (2×10^8 cfu/g) @ 40 g/10 litre water first at initiation of pest and subsequent two sprays at 10 days interval for effective and economical control of fall armyworm, *Spodoptera frugiperda* infesting maize.	2020
12.	**Bio-efficacy of organic inputs against aphid in fennel** Application of two sprays either of *Lecanicillium lecanii* 1.15% WP (1 x 109 cfu/g) 40 g or *Metarhizium anisopliae* 1.15% WP (1 x 109 cfu/g) 40 g per 10 litre of water along with sticker 0.1% (10 ml/ 10 litre of water) first at starting of colony formation of aphid and second at fifteen days after the first spray was found effective for the management of aphid infesting fennel.	2023

Research recommendations made by the department for farming community (Since 2004)		
Sr. No.	**Title of Recommendation**	**Year**
1.	**Evaluation of the Integrated Management strategy for *Helicoverpa armigera* (Hubner) Hardwick** From the view point of safety to environment and natural enemies, following eco-friendly IPM module is recommended for the control of pod borer,	2005

	(*Helicoverpa armigera* (Hubner) Hardwick. Hand pick in chickpea (var. ICCC 4) cultivated in Middle Gujarat, it is found comparatively safer to natural enemies and also found cost effective (ICBR 1:13.03). a) Installation of T-shaped perches @ 100/ha to attract the predatory birds at two weeks after germination. b) Spray of neem based formulation 1% EC (Azadirachtin 10,000 ppm) @ 5 ml in 10 liter water (Azadirachtin 0.0005%) on appearance of first instar larvae.	
2.	**Evaluation of effective dose and source of Azadirachtin against mango hopper, *Amritodus atkinsoni*** The mango growers of middle Gujarat who want to use neem-based formulations are advised to spray azadirachtin based EC formulation at 0.0018 per cent or neem seed kernel extract at 5 per cent or neem oil at 0.5 per cent for the management of mango hopper.	2006
3.	**IPM for fruit and shoot borer in brinjal** In order to reduce load of pesticides in the environment and to conserve natural enemy *Trathela flavo-orbotalis* following eco-friendly IPM strategy has been recommended to the farmers of middle Gujarat and south Saurashtra region for the management of fruit and shoot borer, *Leucinodes orbonalis* in brinjal crop: **1)** Removal of previous year brinjal crop residue from farm before planting **2)** Prompt cutting and disposal of damaged shoots. **3)** Installation of pheromone-baited traps @ 40 / ha throughout the field once at flowering starts. The trap should be installed in such a way that the lure remains 1 feet above canopy level. The lure should be changed at least at monthly interval.	2007
4.	**Control of mango leaf weber** One spray application of dichlorvos @ 0.05 % or chlorpyriphos @ 0.04 % is recommended to the farmers of middle Gujarat for the control of mango leaf weber. The spray application covering the whole canopy of the tree should be made at the initiation of tent formation usually in the month of August – September. The costs of application for one spray of above insecticides are Rs. 4 and 11 per tree, respectively.	2007
5.	**Fruit fly in small gourd** In Middle Gujarat Agro-climatic Zone, *Bactrocera cucurbitae* and *Dacus ciliatus* are only species of fruit fly damaging small gourd. Therefore, the farmers of middle Gujarat are advised not to use methyl eugenol for the control of *Bactrocera cucurbitae* and *Dacus ciliatus*. For effective and economical management of above mentioned fruit flies following strategy is recommended. Installation of Cue-lure impregnated wood blocks @ 16/ha at the initiation of the fruiting followed by spot application of poison bait made by mixing of Jaggary at 5% and **Fenthion at 0.1%** in water (500 g Jaggary + 10 ml of Fenthion 85EC in 10 liter of water) @8 liters/ha in the form of coarse droplets undersides the foliage at weekly interval. The spots should be spaced at 7 m x 7 m distance. The traps should be placed or hung at the border of the pendal and just 1 foot below the foliage or vines. (CBR 1:17.46). **OR**	2008

	Spot application of poison bait made by mixing Jaggary at 5% and Fenthion at 0.1% in water (500 g Jaggary + 10 ml of Fenthion 85EC in 10 liter of water) @8 liters/ha in the form of coarse droplets undersides the foliage at weekly interval starting from initiation of fruits. The spots should be spaced at 7 m x 7 m distance (ICBR 1:12.79). **OR** Installation of cue lure impregnated wood block trap @ 16/ha at equal distance. The traps should be placed or hung at the border of the pendal and just 1 foot below the foliage or vines (ICBR 1:7.45). If fenthion is not available, **dichlorvos** 76% @ 5 ml/10 litres should be used.	
6.	**Fruit fly in bitter gourd** The farmers of middle Gujarat are advised to execute male annihilation technique using Cue-lure impregnated wood blocks @ 10/ha OR bait application technique using 3% protein hydrolysate poison bait as wide area/village level control of fruit fly in bitter gourd. If protein hydrolysate is not easily available, jaggary 3% bait can be used.	2008
7.	**Control of cotton mealy bug** The cotton growers are advised to apply methyl parathion 2% dust on the soil @ 25 kg ha^{-1} one month after germination followed by spray application of profenophos 50 EC 0.1% (20 ml in 10 litre water) OR carbaryl 50 WP 0.2% (40 g in 10 litre) OR triazophos 40EC 0.1% (25 ml in 10 litre) OR methyl-o-demeton 25 EC 0.05% (20 ml in 10 litre) at appearance of mealy bug (*Phenacoccus solenopsis*) infestation in the field for its effective control. Add detergent powder @ 10 g in 10 litres of spray fluid.	2009
8.	**Standardization of number of pheromone traps for mass trapping of *Helicoverpa armigera* (Hubner) Hardwick in chickpea** The farmers of middle Gujarat growing chickpea are advised to install pheromone traps with *Helicoverpa armigera* lures @ 40 traps ha^{-1} for effective and economical management of pod borer (*H. armigera*). The traps should be installed one month after sowing and at one feet height above the crop canopy covering the whole field uniformly. The lure should be changed after every 3 weeks.	2009
9.	**Standardization of number of pheromone traps for mass trapping *Earias vittella* Fabricius in okra** The farmers of middle Gujarat growing okra are advised to install pheromone traps with *Earias vittella* lures @ 60 traps ha^{-1} for effective and economical management of shoot and fruit borer, *E. vittella*. The traps should be installed 3 weeks after germination and at one feet height above the crop canopy covering the whole field uniformly. The lure should be changed after every 3 weeks.	2009
10.	**Bio-efficacy of neem based formulation against aonla leaf roller, *Gracillaria acidula*** The aonla growers are advised to apply one spray of neem oil 0.5% (50 ml neem oil + 10 g detergent powder in 10 litres of water) at the appearance of leaf roller, *Gracillaria acidula* for its effective and economical suppression.	2010
11.	**Field evaluation of bio-efficacy of insecticides against aonla aphid, *Cerciaphis emblica***	2010

	The aonla growers are advised to apply one spray of imidacloprid 0.005% (3 ml of imidacloprid 17.8 SL in 10 litres of water) at the appearance of aphid, *Cerciaphis emblica* for its effective and economical suppression.	
12.	**Evaluation of IPM module for the management of sucking pests in *Bt* cotton** Following IPM module found cost effective and safer to the natural enemies is recommended for the management of aphid, jassid, whitefly and thrips in *Bt* cotton (BG II) cultivated in middle Gujarat. **a)** One need based (5 aphids or leafhoppers or whiteflies/leaf) application of *Beauveria bassiana* (2 x 10^8 cfu/g) @ 40 g/10 litre water followed by need based application of thiamethoxam 25 WG 0.01% (4 g/10 litre water) (50 g a.i./ha). **b)** Need based (5 thrips/ leaf) application of acephate 75 SP 0.075% (1 g/ litre water) (375 g a.i./ha). **c)** The waiting period of thiamethoxam 25 WG 0.01% (50 g a.i./ha) and acephate 75 SP 0.075% (375 g a.i./ha) should be maintained 21 and 15 days after application, respectively.	2012
13.	**Evaluation-cum-demonstration of management strategies for the control of fruit flies (*Bactrocera cucurbitae* and *Dacus ciliatus*) in bitter gourd orchard** Bitter gourd growers of middle Gujarat are advised to install pheromone traps with Cue-lure impregnated wood blocks @ 16/ha at the initiation of the flowering followed by spot application of poisoned bait made by mixing of 400 g Jaggary + 8 ml of dichlorvos 76 EC in 10 litres of water at fortnightly (15 days) interval. The spots should be spaced at 7 × 7m distance. The bait should also be applied on border/field boundaries.	2012
14.	**Management of mustard aphid** Farmers of middle Gujarat growing mustard are advised to spray any of the following insecticides twice, first at 1.5 aphid index and second after 15 days. **1.**Dimethoate 30 EC @ 0.03% (10 ml/ 10 litre of water) [150 g a.i./ ha] **2.** Imidacloprid 70 WG @ 0.014% (2 g/ 10 litre of water) [70 g a.i./ ha] **3.** Thiamethoxam 25 WG @ 0.01% (4 g/ 10 litre of water) [50 g a.i./ ha] The pre-harvest interval of 30 days is recommended for imidacloprid and thiamethoxam. As per CIB recommendation, dimethoate is safe at harvest from residue point of view.	2013
15.	**Management of sucking pests in *Bt* cotton** The farmers of middle Gujarat growing *Bt* cotton are advised to spray any of the following insecticides on initiation of sucking pests (aphid, leafhopper, whitefly and thrips) and subsequently two sprays at 15 days interval. **1)** Imidacloprid 17.8 SL @ 0.009 % (5 ml/ 10 litre of water) (44.5 g a.i./ha) **2)** Diafenthiuron 50 WP @ 0.05% (10 g/ 10 litre of water) (250 g a.i./ha) The pre-harvest interval of 30 days is recommended for imidacloprid and diafenthiuron.	2013
16.	**Management of pod borer in black gram** The farmers of middle Gujarat growing black gram are advised to spray emamectin benzoate 5 WG @ 0.0025 % (5 g/ 10 litre of water; 7.5 g a.i./ha) or flubendiamide 480 SC @ 0.01% (2 ml/10 litre of water; 28.8 g a.i./ha) at the initiation of pest incidence for the control of pod borers.	2013

	The pre-harvest interval of 20 and 11 days is recommended for emamectin benzoate and flubendiamide, respectively.	
17.	**Management of termite through seed treatment in wheat** The farmers of middle Gujarat growing wheat are advised to treat the seeds before 12 hours of sowing with any one of the following insecticides for the control of termite. **1)** Chlorpyriphos 20 EC @ 4 ml in 50 ml water /kg seed (0.8 g a.i./ kg seed) **2)** Fipronil 5 SC @ 5 ml in 50 ml water /kg seed (0.025 g a.i./ kg seed)	2013
18.	**Control of mango hoppers** The farmers of middle Gujarat are advised to spray any one of the following insecticides at 5 nymphs per inflorescence. 1) Imidacloprid 17.8 SL @ 0.009 % (5 ml/ 10 litre of water) 2) Acetamiprid 20 SP @ 0.01% (5 g /10 litre of water) 3) Thiamethoxam 25 WG @ 0.0125% (5 g /10 litre of water) The pre-harvest interval of 45 days is recommended for imidacloprid, acetamiprid and thiamethoxam.	2013
19.	**Bio-efficacy of some insecticides against Bihar hairy caterpillar, *Spilosoma oblique* Walker on cowpea, *Vigna unguiculata* (Linnaeus) Walpers** For effective and economical control of Bihar hairy caterpillar, *Spilosoma obliqua* Walker in cowpea, farmers of middle Gujarat are recommended to apply one spray of any one of the following insecticides at the initiation of the pest. 1. Thiodicarb 75 WP, 0.15% (20 g/10 litre of water) 2. Indoxacarb 15.8 EC, 0.0158% (10 ml/10 litre of water) 3. Emamectin benzoate 5 SG, 0.0025% (5 g/10 litre of water)	2017
20.	**Integrated management of termite in wheat** The farmers of middle Gujarat growing irrigated wheat are recommended to apply cake before sowing and sow the seeds air dried for 12 hours after treating with any one of the following insecticides diluted in 5 litre of water for the management of termite. 1. Castor cake @ 1 ton/ha and fipronil 5 SC 500ml/100 kg seeds 2. Castor cake @ 1 ton/ha and chlorpyriphos 20 EC 400ml/100 kg seeds 3. Neem cake @ 1 ton/ha and fipronil 5 SC 500 ml/100 kg seeds	2017
21.	**Bio-efficacy of selected insecticides against pink bollworm in *Bt* cotton** The farmers of Gujarat growing *Bt* cotton are recommended to apply any one of the following insecticides alternatively, first spray at 75 days after sowing and second at 15 days of first spray for effective management of pink bollworm. 1. Indoxacarb 15.8 EC, 0.0079 % (5 ml/ 10 litre of water) 2. Emamectin benzoate 5 SG, 0.0025 % (5 g/10 litre of water) 3. Spinosad 45 SC, 0.014 % (3 ml/10 litre of water)	2017
22.	**Standardization of pheromone traps required for mass trapping of pink bollworm in *Bt* cotton** The farmers of Middle Gujarat Agro-climatic Zone are recommended to set up 40 pheromone traps/ha, 30 cm above crop height at equidistantly one week prior to flowering and change the lure at one-month interval till last picking	2018

<table>
<tr><td></td><td>of Bt cotton for effective and economical management of pink bollworm in Bt cotton.</td><td></td></tr>
<tr><td>23.</td><td>Evaluation of pre-harvest spray of insecticides for control of pulse beetle, Callosobruchus spp. in green gram
Green gram seed producers of middle Gujarat Agro-climatic Zone are advised to spray indoxacarb 14.5 SC, 0.012 % (8 ml/10 L water) at pod maturity stage to check the infestation of pulse beetle during storage up to two months without adverse effect on seed germination.</td><td>2019</td></tr>
<tr><td>24.</td><td>Biorational management of cumin pests
Farmers of middle Gujarat Agro-climatic Zone are advised 22 to spray neem oil, 1% (100 ml/10 L water) or garlic extract, 5% at appearance of pest and second spray at 10 days after first spray for effective control of aphid and thrips in cumin. For preparation of 5% garlic extract, 500 g garlic cloves to be crushed in required quantity of water followed by filtration and dilution in 10 litres of water.</td><td>2019</td></tr>
<tr><td>25.</td><td>Efficacy of insecticides against fall armyworm, Spodoptera frugiperda (J. E. Smith) infesting maize
Spinetoram 11.7 SC, 0.0117% (10 ml/10 l water) or emamectin benzoate 5 SG, 0.0025% (5 g/10 L water) or chlorantraniliprole 18.5 SC, 0.006% (3 ml/10 L water) or chlorantraniliprole 0.4% G (whorl application, 20 kg/ha), or poison bait consisting maize flour 25 kg + jaggery 5 kg + thiodicarb 75 WP 250 g/ha (for preparation of poison bait, dissolve 5 kg jaggery in 5litre of water and add in 25 kg rice bran/maize flour 10- 12 hrs in advance before its application, add 250 g thiodicarb in this bait and mix properly) or spray Bacillus thurengiensis 0.5 WP (108 cfu /g) @20 g/10 L of water or Nomuriarileyii1.15 WP (2 x 106 cfu/g) 40 g/10 L of water were found effective in checking the population and damage caused by Spodoptera frugiperda in maize.</td><td>2019</td></tr>
<tr><td>26.</td><td>Study on foraging activities of honeybees in middle Gujarat on various crops
Farmers interested to start the bee keeping are advised to grow following various crops in different seasons to settle 23 bee colonies in their area.
<table>
<tr><th>Season</th><th>Crops</th></tr>
<tr><td>Kharif</td><td>Shankhavali, sesame, sunflower, golden rod, bajara, green gram, cowpea, maize, pigeon pea, senna, castor, damaro, cotton, water lily, rudrakh, basil and gallardia</td></tr>
<tr><td>Rabi</td><td>Shankhavali, fennel, mustard, lucerne, coriander, sunflower, maize, fenugreek, water lily, damaro and gallardia</td></tr>
<tr><td>Summer</td><td>Sesame, sunflower, Shankhavali, green gram, bajara and maize</td></tr>
</table>
These crops should be grown periodically to provide pollen and nectar to bees.</td><td>2019</td></tr>
<tr><td>27.</td><td>Bio-efficacy of insecticides against thrips, Scirtothrips dorsalis Hood in pomegranate
The pomegranate growers of middle Gujarat Agro-climatic zone are advised to apply cyantraniliprole 10.26 OD, 0.008% (7.50 ml/10 litre water) when thrips population attain 5 thrips/10 cm shoot and second after 15 days for effective control of thrips.</td><td>2020</td></tr>
</table>

28.	**Efficacy of insecticides against fall armyworm, *Spodoptera frugiperda* (J. E. Smith) infesting maize** Farmers of middle Gujarat Agro-climatic zone are advised to spray spinetoram 11.7 SC, 0.0117 % (10 ml/ 10 litre of water) or emamectin benzoate 5 SG, 0.0025% (5 g/ 10 litre of water) or chlorantraniliprole 18.5 SC, 0.006% (3 ml/ 10 litre of water) or thiodicarb 75 WP, 0.11% (15 g/ 10 litre of water) first at initiation of pest and second after 15 days for effective and economical control of fall armyworm, *Spodoptera frugiperda* infesting maize. PHI of 30 days should be kept.	2020
29.	**Efficacy of granular insecticides against fall armyworm, *Spodoptera frugiperda* (J. E. Smith) in maize** Farmers of middle Gujarat Agro-climatic zone are advised to give whorl application of chlorantraniliprole 0.4% GR, 20 kg/ha, first at appearance of pest and second after 15 days for effective and economical control of fall armyworm in maize. PHI of 30 days should be kept.	2020
30.	**Evaluation of bio-pesticides against fall armyworm, *Spodoptera frugiperda* (J. E. Smith) in maize** Farmers of middle Gujarat Agro-climatic zone are advised to spray *Nomuraea rileyi* 1% WP (2 x108 cfu/g) @ 40 g/10 litre water or *Bacillus thuringiensis* var. *kurstaki* 1% WG (2 x108 cfu/g) @ 20 g/10 litre water first at initiation of pest and subsequent two sprays at 10 days interval for effective and economical control of fall armyworm, *Spodoptera frugiperda* infesting maize.	2020
31.	**Efficacy of poison baits against fall armyworm, *Spodoptera frugiperda* (J. E. Smith) infesting maize** Farmers of middle Gujarat Agro-climatic zone are advised to apply poison baits: • Rice bran 25 kg + jaggery 5 kg + thiodicarb 75 WP 250 g/ha **or** • Maize flour 25 kg + jaggery 5 kg + thiodicarb 75 WP 250 g/ha **or** • Rice bran 25 kg + jaggery 5 kg + emamectin benzoate 5 SG 125 g/ha First at initiation of pest and second after 15 days for effective and economical control of fall armyworm in maize. **Note:** Dissolve 5 kg jaggery in 5 litres of water, mix 25 kg of bran/flour in to it and keep it overnight, next day add insecticide in bait before application.	2020
32.	**Evaluation of bio-pesticides against fall armyworm, *Spodoptera frugiperda* (J. E. Smith) in maize** Farmers of middle Gujarat Agro-climatic zone are advised to spray *Bacillus thuringiensis* var. *kurstaki* 1 % WG @ 20 g/10 litre water first at initiation of pest and subsequent two sprays at 10 days interval for effective and economical control of fall armyworm, *Spodoptera frugiperda* infesting maize.	2020
33.	**Biorational management of mango hoppers** Mango growers of middle Gujarat Agro-climatic zone are advised to apply neem seed kernel extract 5% (500 g/10 litre water) or neem oil 0.5% (50 ml/10 litre water) or neem leaf extract 10% (1000 g/10 litre water) first when hopper population crosses ETL (*i.e.*, 5 hoppers/panicle) and second at 10 days after first spray for effective management of hoppers in mango.	2021

34.	**Bio-efficacy of botanicals against aphids on coriander** Farmers growing coriander in middle Gujarat Agro-climatic zone are advised to spray tobacco dust aqueous extract 2% (200g/10 litres water) or ginger rhizome aqueous extract 5% (500g/10 litres water) first at aphid population start building up and forming colony on branches and second after 10 days for effective management of aphid in coriander.	2021
35.	**Effect of date of sowing on incidence of fall armyworm, *Spodoptera frugiperda* (J. E. Smith) infesting maize** Sweet corn growers of Gujarat are recommended to sow the crop during 3rd week of November as the infestation of fall armyworm, *Spodoptera frugiperda* (J. E. Smith) remains low and higher green cob as well as fodder yield can be obtained.	2022
36.	**Evaluation of attractants on foraging activity of honey bee in mustard** Mustard growers of Gujarat are advised to give first spray of sugar syrup 10% (1 kg/ 10 litre water) as attractant at 10% flowering and second spray after 10 days of the first spray to increase the foraging activity of honeybees and thereby increasing seed yield.	2022
37.	**Bio-efficacy of insecticides against thrips, *Thrips parvispinus* (Karny) infesting chilli (*Ad-hoc*)** Chilli growers of middle Gujarat agro climatic zone are recommended to spray spinetoram 11.7 SC, 0.012 % (10 ml/ 10 litre of water) or tolfenpyrad 15 EC, 0.03 % (20 ml/10 litre of water) for effective management of new invasive thrips species, *Thrips parvispinus* (Karny).	2022
38.	**Evaluation of bio-pesticides against thrips, *Thrips parvispinus* (Karny) infesting chilli (*Ad-hoc*)** Chilli growing farmers of Gujarat are recommended to spray azadirachtin 10000 ppm, 0.003% (30 ml/ 10 litre of water) or *Pseudomonas fluorescens* 1% WP, 2 x 10^8 cfu/g (40 g/ 10 litre of water) for management of black thrips, *Thrips parvispinus* (Karny).	2022

Sr. No.	Number of Research Papers/Books/Popular articles published by faculties of the department (Since 2004)	
1	Research paper published in International journals	91
2	Research paper published in National journals	118
3	Popular article published	612
4	Book/pocket diary	02: Student reading books 04: Pocket diary (Gujarati) 12: IPM Books (Gujarati) 2: Abstract book
5	Practical manual	19
6	VCDs	3
7	Folders	85

No. of post graduate thesis submitted

Sr. No.	Title of thesis	Name of student	Name of major guide	Year of passing
M. Sc.				
1.	Studies on native insect pathogens for biological control of DBM, *Plutella xylostella Linnaeus* and head borer, *Helicoverpa armigera* (Hubner) Hardwickon Cabbage	Shri Deepkumar Gaurana	Dr. R. V. Vyas	2004
2.	Bionomics, Population dynamics and management of leaf webber, *Orthaga euadrusails* in mango	Shri D. B. Patel	Dr. P. K. Borad	2004
3.	Management of Pulse beetle, *Callosobruchus maculates* (Fabricius) infesting stored green gram.	Shri K. B. Patel	Dr. A. M. Patel	2004
4.	Bio-efficacy of *Bacillus thuringiensis* isolates against spotted pod borer, *Maruca testulalis* (Geyer) on cowpea	Shri B. D. Patel	Dr. R. V. Vyas	2004
5.	Population dynamics and management of major insect pests of cabbage	Shri M. J. Patel	Dr. P. K. Borad	2004
6.	Microbial control of *Helicoverpa armigera* (Hubner) Hardwickand*Spodoptera litura* (Fabricius) on tomato using native insect pathogens	Shri R. J. Talati	Dr. R. V. Vyas	2004
7.	Population dynamics of insect pest complex of Indian bean and their management.	Shri M. M. Dalwadi	Dr. D. M. Korat	2005
8.	Bionomics, population dynamics and management of *Uroleucon compositae* (Theobald) infesting *Gaillardia pulchella* Foug.	Shri N. A. Bhatt	Dr. P. K. Borad	2005

9.	Bio-ecology and management of stem borer, *Chilo partellus*Swinhoe infesting maize.	Shri. P. J. Patel	Dr. P. K. Borad	2005
10.	Bio-ecology and management of *Helicoverpa armigera* (Hubner) Hardwick infesting okra	Shri. K. D. Parmar	Dr. P. K. Borad	2006
11.	Carry over and Biology of lady bird beetle, *Cheilomenes sexmaculata* (Fabricius)under middle Gujarat conditions	Shri B. D. Tank	Dr. D. M. Korat	2006
12.	Population dynamics, residual toxicity and management of pest complex of forage maize	Shri. Y. R. Patel	Dr. C. C. Patel	2005
13.	Biology of cowpea semilooper, *Plusia orichalcea* (Fabricius)population dynamics and bio-efficacy of different insecticides against insect-pests of forage cowpea	Shri. D. H. Rabari	Dr. C. C. Patel	2006
14.	Population dynamics of red pumpkin beetle, *Aulacophora foveicollis* (Lucas) on different cucurbitaceous vegetables and its management on bottle gourd	Shri. S. T. Rathod	Dr. P. K. Borad	2006
15.	Effect of various organic manures and botanical insecticides on pests infesting okra	Miss. Anke Adilakshmi	Dr. D. M. Korat	2006
16.	Biology at different temperatures, population dynamics and management of diamondback moth (*Plutella xylostella* (Linnaeus) infesting cabbage (*Brassica oleraceae var. capitata* L.)	Shri. Rajeshkumar S.	Dr. D. M. Mehta	2007
17.	Life table on different hosts and managements of diamondback moth (*Plutella xylostella* (Linnaeus) infesting cabbage (*Brassica oleraceae var. capitata* L.)	Shri M. R. Dabhi	Dr. D. M. Mehta	2007
18.	Bio-ecology, insecticidal resistance and insecticidal resistance management of leaf eating caterpillar, *Spodoptera litura* Fabricius	Shri R. F. Solanki	Dr. C. C. Patel	2007
19.	Bionomics, seasonal abundance and management of lucerne (*Medicago sativa* L.) thrips, *Caliothrips indicus* Bangnall (Thripidae: Thysanoptera)	Shri D. D. Patel.	Dr. C. C. Patel	2007
20.	Bio-ecology and management of shield-backed bug, S*cutellera nobalis* (Fabricius) infesting jatropha, *Jatropha curcus* Linnaeus.	Shri P. K. Patel	Dr. P.K. Borad	2008
21.	Bio-ecology and management of red spider mite, *Tetranychus*	Shri B. V. Patel	Dr. P. K. Borad	2008

	cinnabarinus (Boisduval) infesting okra			
22.	Study on population dynamics, biology and management of citrus psylla, *Diaphorina citri* (Kuwayano)	Shri C. C. Patel	Dr. A. M. Patel	2008
23.	Population dynamics and management of lepidopteron insect pests of black gram	Shri Prudhvi Muddu Krishna	Dr. P.K. Borad	2008
24.	Population dynamics, varietal susceptibility and management of sucking pests of okra	Shri S. R. Bhoi	Dr. D.B. Jyani	2008
25.	Management of shoot and fruit borer, *Earias vittella* (Fabricius) in okra (*Abelmoschus esculentus* (L.) Moench) grown for seed purpose	Shri Papal S. A	Dr. T. M. Bharpoda	2008
26.	Bionomics of *Cnaphalocrosis medinalis* (Guenee) and population dynamics as well as management of lepidopteron foliage feeders on transplanted paddy	Shri Momin Haidarali Gulamhusen	Dr. P.K. Borad	2008
27.	Biology, population dynamics and evaluation of poison baits for Ethiopian Fruit Fly, *Dacus ciliatus* (Loew) (Diptera: Tephritidae)	Shri D. N. Patel	Dr. R.C. Jhala	2008
28.	Biology, varietal susceptibility and control of Pulse beetle, *Callosobruchus chinensis* (Linnaeus) (Bruchidae: Coleoptera) in stored chickpea	Miss. P. K. Pokharkar	Dr. D. M. Mehta	2008
29.	Population dynamics and management of pest complex of lucerne, *Medicago sativa* Linnaeus	Shri K. R. Dengale	Dr. C. C. Patel	2008
30.	Nest site characteristics and breeding ecology of Spotted owlet, *Athene brama temminck* – An insectivorous nocturnal predator	Shri P. V. Shah	Dr. B. M. Parasharya	2008
31.	Roost site characteristics and food habit of spotted owlet, *Athene brama* Temminck – An insectivorous nocturnal predator	Shri N. G. Patel	Dr. B. M. Parasharya	2009
32.	Life table studies and control of diamondback moth, *Plutella xylostella* (L.) on cress (*Lepidium sativum* L.)	Shri Y. D. Joshi	Dr. D. M. Mehta	2009
33.	Biology, population dynamics and management of Teak skeletonizer, *Eutectona machaeralis* (Walker) (Lepidoptera: Pyralidae) on Teak, *Tectona grandis* L.	Shri N.R. Chauhan	Dr. M. G. Patel	2009
34.	Management of Aphid, *Macrosiphoniella sanborni* (Gillette)	Shri V. K. Kathiriya	Dr. T. M. Bharpoda	2009

	(Aphididae: Hemiptera) in Chrysanthemum, *Chrysanthemum coronarium* Linnaeus			
35.	Biology, host range and chemical control of cotton mealybug, *Phenacoccus solenopsis* Tinsley (Hemiptera : Pseudococcidae)	Shri N. D. Nikam	Dr. B. H. Patel	2009
36.	Biology, population dynamics and management of shoot fly, *Atherigona soccata* Rondani (Diptera : Muscidae) infesting fodder Sorghum, *Sorghum bicolor* (L) Moench	Shri R. A. More	Dr. C.C. Patel	2009
37.	Seasonal abundance, biology, predatory potential and toxicity of some insecticide against green lacewing, *Chrysoperla carnea* (Stephens)	Dola chakraborty	Dr. D. M. Korat	2009
38.	Population dynamics and management of insect pest complex of vegetable cowpea [*Vigna unguiculata* (L.) Walpers] in Middle Gujarat condition	Shri S. K. Patel	Dr. B. H. Patel	2009
39.	Bio-ecology and management of yellow stem borer, *Scirpophaga incertulas* (Walker) infesting paddy, *Oryza sativa* L. under Middle Gujarat condition	Dike Sameer Subhashrao	Dr. V. J. Patel	2009
40.	Population build up, varietal screening and management of pulse beetle, *Callosobruchus maculatus* (Fabricius) (Bruchidae : Coleoptera) in stored soybean seed	Kadam Mangesh Digambarrao	Dr. A. M. Patel	2009
41.	Evaluation of food sources for the egg parasitoid, *Trichogramma chilonis* Ishii (Hymenoptera : Trichogrammatidae)	Shri R. S. Patil	Dr. D. N. Yadav	2009
42.	Biology and management of Rice moth, *Corcyra cephalonica* (Stainton); (Pyralidae: Lepidoptera) infesting sorghum, *Sorghum bicolor* (L.) Moench under storage condition	Shri S. J. Patil	Dr. C. C. Patel	2009
43.	Studies on predatory spiders in rice ecosystem in Middle Gujarat condition	Shri M. P. Dalwadi	Dr. V. J. Patel	2010
44.	Bionomics and management of aphid, *Uroleucon compositae* (Theobald) (Aphididae: Hemiptera) in Safflower, *Carthamus tinctorius* Linnaeus	Shri S. R. Pawar	Dr. T. M. Bharpoda	2010
45.	Population dynamics of lepidopterous pests and evaluation of insecticides	Shri Y. U. Munde	Dr. P. K. Borad	2010

	against *Plutella xylostella* (Linnaeus) in cabbage			
46.	Biology and management of rice moth, *Corcyra cephalonica* Stainton (Lepidoptera : Pyralidae) infesting oat (*Avena sativa* Linnaeus) under storage condition	Shri S. B. Patel	Dr. C. C. Patel	2010
47.	Population dynamics and management of major sucking insect pests in *Bt* cotton	Shri S. M. Patel	Dr. T. M. Bharpoda	2010
48.	Morphological and biochemical basis of resistance to stem borer, *Chilo partellus* (Swinhoe) [Lepidoptera : Pyralidae] infesting forage sorghum, *Sorghum bicolor* (Linnaeus) Moench	Shri C. T. Patel	Dr. C. C. Patel	2010
49.	Biology, seasonal occurrence and management of aphid, *Aphis nerii* Boyer de Fonscolombe infesting dodi, *Leptadenia reticulate* (Retzius) Wight & Aruott	Shri B. K. Patel	Dr. D. M. Korat	2010
50.	Morphological and biochemical basis of resistance to stem borer, *Chilo partellus* [Lepidoptera: Pyralidae] infesting forage maize, *Zea mays* L.	Vinod Ngongwa	Dr. C. C. Patel	2011
51.	Population dynamics and management of pod borer, *Helicoverpa armigera* (Hubner) Hardwick (Noctuidae: Lepidoptera) in chickpea, *Cicer aritinum* Linnaeus	Babar Kiran Sadashiv	Dr. T. M. Bharpoda	2011
52.	Population dynamics, varietal susceptibility and management of thrips (*Thrips tabaci* Lindeman) in onion (*Allium cepa* Linnaeus)	Shri H. C. Patel	Dr. J. J. Patel	2011
53.	Population dynamics and management of shoot and fruit borer, *Leucinodes orbonalis* Guenee in brinjal, *Solanum melongena* Linnaeus	Shri K. D. Shah	Dr. T. M. Bharpoda	2011
54.	Management of shoot and fruit borer *Earias vittella* (Fabricius) and residue status of some insecticides on okra, *Abelmoschus escuentus* (Linnaeus) Moench in summer	Miss. N. R. Bangar	Dr. J. J. Patel	2011
55.	Biology and predatory efficacy of *Cryptolaemus montrouzieri* Mulsant and evaluation of some insecticides for their safety to the predator	Shri A. M. Patel	Dr. D. M. Korat	2011
56.	Bionomics, host stage preference and evaluation of insecticides for their safety to *Aenasius bambawalei*Hayat	Shri P. M. Sangle	Dr. D. M. Korat	2011

	an endoparasitiod of cotton mealybug, *Phenacoccus solenopsis* Tinsley			
57.	Varietal susceptibility and evaluation of grain protectants against *Sitophilus oryzae* Linnaeus on maize under storage condition	Sushma deb	Dr. P. K. Borad	2011
58.	Population dynamics, varietal susceptibility and management of thrips (*Thrips tabaci* Lindeman) in garlic (*Allium sativum* Linnaeus)	Shri P. B. Patel	Dr. J. J. Patel	2011
59.	Morphological and biochemical basis of resistance against shoot fly, *Atherigona soccata* (Rondani) infesting fodder sorghum, *Sorghum bicolor* (L.) Moench	Miss. M. S. Bangar	Dr. C. C. Patel	2011
60.	Biology, seasonal incidence and control of mealy bug *Phenacoccus solenopsis* Tinsley (Hemiptera: Pseudococcidae) infesting bidi tobacco	Babulal Jat	Dr. D. M. Mehta	2011
61.	Insect pests succession and management of sucking insect pests of groundnut	Mukeshkumar Yadav	Dr. P. K. Borad	2011
62.	Insect pest succession and management of sucking insect pests of cluster bean	Shri N. N. Panchukar	Dr. P. K. Borad	2011
63.	Seasonal occurrence and management of major insect pests of paddy (*Oryza sativa*) under middle Gujarat condition	Shri N. S. Sankpal	Dr. V. J. Patel	2011
64.	Life table studies of tobacco leaf eating caterpillar *Spodoptera litura* Fabricus (Noctuidae: Lepidoptera) on different varieties of bidi tobacco (*Nicotiana tabacum* Linnaeus) and its chemical control	Shri R. A. Patil	Dr. D. M. Maheta	2011
65.	Population dynamics and impact of nitrogen fertilizer on major insect pests and management of aphid, *Lipaphis erysimi* (Kaltenbach) in mustard *Brassica juncea* (Linnaeus)	Khedkar Aniket aba	Dr. M. G. Patel	2011
66.	Bio-efficacy of insecticides against pod borer, *Maruca vitrata* (Geyer), *Helicoverpa armigera* and their residue status in cowpea, *Vigna unguiculata* (Linnaeus) Walpens	Shri M. N. Joshi	Dr R. C. Jhala	2011
67.	Investigation on some medicinal and aromatic plants for their biological activities on *Spodoptera litura* (Fabricius) under laboratory condition	Shri H. V. Prajapati	Dr. T. M. Bharpoda	2011

68.	Morphological and biochemical basic of resistance against aphid *Therioaphis maculata* (Buckton) (Aphididae: Homoptera) infesting lucerne, *Medicago sativa* Linnaeus	Shri C. J. Chaudhari	Dr. C. C. Patel	2012
69.	Comparative biology, seasonal occurrence and chemical control of mealy bug, *Phenacoccus solenopsis*Tinsley (Hemiptera: Pseudococcidae) on different host	Shri C. B. Varma	Dr. D. M. Mehta	2012
70.	Survey and management termites in wheat	Shri V. C. Gadhiya.	Dr. P. K. Borad	2012
71.	Influence of Food, temperature and relative humidity on biological attributes of green lacewing*Chrysoperla zastrowi* sillemi (Esben-Petersen)	Neethu Nandan	Dr. D. M. Korat	2012
72.	Bio-efficacy of some synthetic and eco-friendly insecticide against major insect pest of Indian bean (*Lablab purpureus*)	Chaudhari Apeksha	Dr. D. M. Korat	2012
73.	Varietal susceptibility and evaluation of grain protectants against *Rhizopertha dominica* (Fabricius) on maize under storage condition	Miss. J. V. Sajan	Dr. P. K. Borad	2012
74.	Bionomics of cabbage aphid, *Lipaphis erysimi* (Kaltenbach) and its management	Shri N. R. Sangekar	Dr. T. M. Bharpoda	2012
75.	Evaluation of newer insecticides and bio-pesticides against insect pest of cowpea and residue status of some synthetic insecticides in green pods	Shri M. I. Rohit	Dr. D.M. Korat	2012
76.	Bionomics and management of anar butterfly, *Virachola isocrates* Fabricus infesting pomegranate	Shri J. B. Bhut	Dr. P. K. Borad	2012
77.	Bionomics of *Helicoverpa armigera* and management of lepidopteron insect pests of groundnut	Shri H. A. Gadhiya	Dr. P. K. Borad	2012
78.	Varietal susceptibility and management of leaf miner, *Liriomyza trifolii* (Burgess) in tomato	Shri M. V. Variya	Dr. J. J. Patel	2012
79.	Bionomics and management of capsule borer, *Dichocrocis punctiferalis* (Guenee) in castor	Shri R. D. Patel	Dr. P. K. Borad	2012
80.	Seasonal abundance and management of sucking pests infesting okra	Shri P. A. Patel	Dr. B. H. Patel	2012
81.	Influence of planting methods on major insect pests of rice and their management under middle Gujarat condition	Shri C. A. Gole	Dr. V. J. Patel	2012

82.	Impact of sowing periods, plant spacing and nitrogenous fertilizers on major sucking insect pests in *Bt* cotton	Shri C. K. Patel	Dr. T. M. Bharpoda	2012
83.	Eco-friendly management of thrips (*Scirtothrips dorsalis* Hood) in chilli	Barot Bhavikkumar	Dr. J. J. Patel	2012
84.	Varietal susceptibility and evaluation of grain protestants against *Callosobruchus chinensis* L. on soybean under storage condition	Suman Choudhary	Dr. T. M. Bharpoda	2012
85.	Varietal susceptibility and evaluation of grain protestants against *Callosobruchus chinensis* L. on cowpea under storage condition	Mamata devi Choudhari	Dr. T. M. Bharpoda	2012
86.	Evaluation of insecticides on threshold and time based schedule to control shoot and fruit borer, *Earias vittella* on okra	Shri S. R. Vasava	Dr. C. C. Patel	2012
87.	Bio-ecology of house crow (*Corvus splendes*) and jungle crow (*Corvus macrorhynchos*) in agricultural landscape	Shri P. C. Jadav	Dr. B.M. Parasharya	2012
88.	Management of sucking pests in brinjal (*Solanum melongena* Linnaeus)	Shri A. A. Shailohjulaya	Dr. J. J. Patel	2012
89.	Evaluation of biorational products for their efficacy against insect pests infesting brinjal (*Solanum melongena* Linnaeus)	Shri D. D. Karkar	Dr. D. M. Korat	2012
90.	Population dynamics and evolution ofinsecticides against psylla, *Diaphorina citri* Kuwayama and leaf miner *Phyllocnistis citrella* infesting Kagzi lime	Shri G. D. Bhut.	Dr. P. K. Borad	2012
91.	Population dynamics and eco-friendly management of *Helicoverpa armigera*	Shri R. S. Patil	Dr. H. P. Patel	2012
92.	Morphological and biochemical basic of resistance against shoot fly, *Atherigona approximata* Malloch and stem borer, *Chilo partellus* Swinhoe infecting forage pearl millet	Shri M. R. Mehta	Dr. C. C. Patel	2012
93.	Morphological and biochemical basic of resistance against different insect pests of fodder cowpea	Shri M. M. Jadav	Dr. C. C. Patel	2013
94.	Evolution of schedule and threshold based insecticides application strategies on concentration and acute ingredient against sucking pests in okra	Shri M. B. Zala	Dr. T. M. Bharpoda	2013
95.	Schedule and threshold basis evolution of insecticide applied on	Nikoshe Akash Prakash	Dr. T. M. Bharpoda	2013

	concentration and acute ingredient against *Helicoverpa armigera* (Hubner) Hardwick in chickpea			
96.	Studies on rearing of rice moth, *Corcyra cephalonica* a factitious host for mass production of important biocontrol agent	Miss. E. K. Saneera	Dr. D. M. Korat	2013
97.	Ovipositional preference of *Helicoverpa armigera* (Hubner) Hardwick implication for refuge strategy in *Bt* cotton	Miss. J. P. Lodaya	Dr. C. K. Borad	2013
98.	Bionomics, seasonal incidence and control of tobacco capsule borer, *Helicoverpa armigera* (Hubner) Hardwick on tobacco (Seed crop)	Shri C. G. Solanki	Dr. D. M. Mehta	2013
99.	Bio-ecology and activity of *Diaeretiella rapae* - An endo-parasitoid of aphids infecting cruciferous crop	Shri N. K. Kavad	Dr. D. M. Korat	2013
100.	Bio-efficacy and management of leaf eating caterpillar, *Spodoptera litura* Fabricius on castor, *Ricinus communis* Linnaeus	Mayur Kanani	Dr. P. K. Borad	2013
101.	Bionomics of aphid *Aphis gossypii* Glover and its biorational management of coriander	Ahelibam Ranila Devi	Dr. P. K. Borad	2013
102.	Management of termites in Groundnut	Shri A. L. Gohil	Dr. P. K. Borad	2013
103.	Effect of different levels of phosphatic fertilizers on incidence of insect pests of seed and vegetable purpose cowpea	Shri H. S. Khernar	Dr. C.C. Patel	2013
104.	Forage activities and morphometric studies of different spp. of honeybee in middle Gujarat	Shri J. J. Chhayani	Dr. C.C. Patel	2013
105.	An inventory and population dynamics of odonata in central Gujarat	Shri V. B. Rohamare	Dr. B.M. Parasharya	2013
106.	Varietal susceptibility and evaluation of grain protectants against *Callosobruchus chinensis* Linnaeus on black gram under storage condition	Miss. M. D. Suthar	Dr. T. M. Bharpoda	2014
107.	Food habit and predatory potential of some common odonata	Miss. D. M Rathod.	Dr. B. M. Parasharya	2014
108.	Varietal susceptibility and evaluation of grain protectants against *Callosobruchus chinensis* Linnaeus on mungbean under storage condition	Miss. V. R. Parmar	Dr. B. H. Patel	2014
109.	Seasonal abundance and eco-friendly management of aphid, *Aphis gossypii* Glover infesting isabgol	Miss. S. R. Patel	Dr. D. M. Korat	2014

110.	Biology and chemical management of papaya mealybug, *Paracoccus marginatus*	Shri M. V. Patel	Dr. D. M. Mehta	2014
111.	Evaluation of sub-lethal effect of pesticides on *Trichogramma chilonis*	Sunnapu Rajesh	Dr. C. K. Borad	2014
112.	Evaluation of Neo-nicotinoid insecticides as seed treatment alone and in combination with foliar spray against insect pest infesting cowpea and green gram	Mithu Antu	Dr. D. M. Korat	2014
113.	Population dynamics and integrated pest management of *Helicoverpa armigera* (Hubner) Hardwick infesting pigeon pea under middle Gujarat condition	Shri P. V. Savale	Dr. H. P. Patel	2014
114.	Biology and management of Bihar hairy caterpillar, *Spilosoma obliqua* Walker on cowpea, *Vigna unguiculata* (Linnaeus) Walpers and its population dynamics on various pulse crops	Shri. V. H. Desai	Dr. C. C. Patel	2015
115.	Bionomics, population dynamics and management of aphid, *Lipaphis erysimi* (Kaltenbach) on cauliflower	Miss. N. M. Patel	Dr. P. H. Godhani	2015
116.	Bionomics, population dynamics and management of Bihar hairy caterpillar, *Spilosoma obliqua* Walker on castor	Shri. R. J. Patel	Dr. C. C. Patel	2015
117.	Insect pests succession and management of aphid, *Lipaphis erysimi* (Kaltenbach) infesting mustard, *Brassica juncea* (Linnaeus) Czern and Coss	Shri R. I. Chaudhary	Dr. C. C. Patel	2015
118.	Odonate diversity reflected by wetland quality and DNA barcoding	Shri S. G. Dholu	Dr. B. M. Parasharya	2015
119.	Population dynamics and management of aphid, *Uroleucon compositae* (Theobald) infesting *Gaillardia pulchella* Foug	Jyoti Ranjan Roul	Dr. T. M. Bharpoda	2015
120.	Population dynamics and management of stem borer, *Chilo partellus* (Swinhoe) infesting maize	Dindor Mukeshkumar U.	Dr. B. H. Patel	2015
121.	Nest site selection by house sparrow *Passer domesticus* (Linnaeus, 1758)	H. K. Chaudhary	Dr. C. K. Borad	2016
122.	Pest Succession and impact of nitrogenous fertilizer and insecticides on incidence of leaf hopper, *Amrasca biguttula biguttula* (Ishida)	Miss. N. P. Pathan	Dr. T. M. Bharpoda	2016
123.	Aphid diversity of agriculture landscape of Anand	Chuadhary Jankkumar	Dr. C. K. Borad	2016

124.	Bionomics of sesame leaf webber, *Antigastra catalaunalis* Duponchel and management of pest complex of sesame	Chitra H. S.	Dr. P. K. Borad	2016
125.	Bionomics, population dynamics and management of chicku moth, *Nephopteryx eugraphella* (Ragonot) infesting sapota, *Manilkara achras* (Mill.) Forsberg	Chaudhari Heerabhai Kalabhai	Dr. R. K. Thumar	2016
126.	Pest succession ande evaluation of insecticide against sucking pests and green gram Vigna radiate(L)	B. Sujatha	Dr. P. K. Borad	2016
127.	Population dynamics and management of pod fly *Melanagromyza obtuse* Malcoh infesting pigeonpea *Cajanus cajan* (L) Millspaugh	Chaudhary S. J.	Dr. P. K. Borad	2016
128.	Bio–ecology of aphid, *Myzus persicae* (Sulzer) infesting cumin, *Cuminum cyminum* L and its chemical control	Italiya Lalajeebhai M.	Dr. D. B. Sisodiya	2017
129.	Management of leaf webber and capsule borer, *Antigastra catalauralis* Duponchel in sesame	Pruthvi K. Patel	Dr. P. K. Borad	2017
130.	Eco-friendly management of insect pest of black gram. *Vigna mungo* (L.) Hepper	Berani Nikul Khodabhai	Dr. P. H. Godhani	2017
131.	Dissipation and decontamination of insecticide in/on brinjal, Solanum melongena Linnaeus	Patel jaykumar Pravinbhai	Dr. K. D. Paramar	2017
132.	Management of fruit borer in okara, *Abelmoschus esculentus* (L.) Moench	Subbireddy K. B.	Dr. H.P. Patel	2017
133.	Bio-efficacy of insecticides and botanicals gram pod borer, *Helicoverpa armigera* (Hubner) Hardwick	Anjali Sivadasan	Dr. C. C. Patel	2017
134.	Evaluation of honeybee as Entomovector of HaNPV	Vakasliya mustufa Abdulrahim	Dr. C. K. Borad	2017
135.	Bio-ecology and management of aphid, *Aphis craccivora*Koch, infesting fenugreek, *Trigonella foenum-graecum* Linnaeus	Sarvaiya Rameshbhai Mathurbhai	Dr. R. M. Patel	2017
136.	Bio-efficacy of insecticides and botanicals against castor leaf eating caterpillar, *Spodoptera litura* fabricius	Baria Minalben	Dr. R. K. Thumar	2017
137.	Biology and management of aphid, *Aphis crecivora* Koch on green gram	Baladhiya Hinalkumari Chimanlal	Dr. D. B. Sisodiya	2018
138.	Inventory of thrips species and management of thrips, *Scirtothrips dorsalis* Hood in Bt cotton	Padaliya Shivam Rameshbhai	Dr. R. K. Thumar	2018

139.	Role of honeybees in seed production of sunflower, *Helianthus annus* L and onion, *Allium cepa* L.	Kapadiya Tanviben Bipinbhai	Dr. C. C. Patel	2018
140.	Population dynamics and management of aphid, *Aphis craccivora* Koch in cowpea, *Vigna unguiculata* Walp grown for seed purpose	Borad Mayur Goradhanbhai	Dr. H. P. Patel	2018
141.	Population dynamics and management of pink bollworm *Pectinophora gossypiella* (Saunders) in Bt cotton	Mayur Damor	Dr. P. H. Godhani	2018
142.	Sex ratio and its distorter endosymbiotic bacteria in whitefly, *Bemisia tabaci* (Gennadius)	Bhavin Rupapara	Dr. C. K. Borad	2018
143.	Bio-efficacy of microbial insecticides against pest complex infesting okara, *Abelmoschus esculentus* (L.) Moench	Pipaliya Gaurangkumar K.	Dr. D. M. Maheta	2018
144.	Behavioural observation on fruitflies	Prajapati V. B.	Dr. C. K. Borad	2018
145.	Population dynamics and management of termite in cotton	Channabasava	Dr. P. K. Borad	2019
146.	Population dynamics and management of leaf miner *Liriomyza trifolii* (Burgess) on watermelon	Rohit Ramesh	Dr. M. R. Dabhi	2019
147.	Soil macroinvertebrate diversity in Anand district	Aniyaliya Manisha Dhirubhai	Dr. C. K. Borad	2019
148.	Comparative biology, biopesticidal management of pulse beetle, *Callosobruchus maculatus* (Fabricius) and varietal susceptibility in chickpea during storage	Amruthavalli Sindhura Kopparthi	Dr. P. H. Godhani	2019
149.	Population dynamics and management of Hopper, Amritodus atkinsoni Lethierry infesting mango	Mohapatra Atul Raghunath	Dr. R. K. Thumar	2019
150.	Population dynamics, avoidable losses and management of pink stem borer, *Sesamia inferens* Walker infesting duram wheat	Timbadiya Brazilkumar Givindbhai	Dr. D. B. Sisodiya	2019
151.	Population dynamics of sucking pest complex of potato, *Solanum tuberosum* L.	Patel Nikunj Kirtibhai	Dr. H. P. Patel	2019
152.	Population dynamics of various insect pests and management of pod borers in indian bean *Lablab purpureus* L.	Bhagora Jitendrakumar Kanubhai	Dr. R. M. Patel	2019
153.	Bionomics and management of Rice moth, *Corcyra cephalonica* (Stainton) in stored groundnut	Ramanaji Nardasetti	Dr. M. V. Dabhi	2020

154.	Bioecology and management of fall armyworm, *Spodoptera frugiperda* (J. E. Smith) infesting maize	Patel Harsh B.	Dr. D. B. Sisodiya	2020
155.	Diversity of moths (Lepiodptera: Heterocera) in agricultural landscape	Renuka Hiremath	Dr. C. K. Borad	2020
156.	Succession of major pests and management of red pumpkin beetle, *Aulacophora foveicollis* Lucas on cucumber	Patel Denisha R.	Dr. R. M. Patel	2020
157.	Comparative biology, population dynamics and management of cabbage aphid, *Lipaphis erysimi* (Kalt.)	Chavada Kavan Mansukhbhai	Dr. P. H. Godhani	2020
158.	Bio-ecology and evaluation of insecticides against mealybug, *Ferrasia virgata* (Cockerell), infesting custard apple	Sapteshwriya Shivam Vipulkumar	Dr. A. H. Barad	2020
159.	Survey and biological control of fall armyworm, *Spodoptera frugiperda* (J. E. Smith) infesting maize	Patel Piyushkumar H.	Dr. D. B. Sisodiya	2020
160.	Relative bio-efficacy and residue dynamics of insecticides in tomato	Arunasai M. P.	Dr. K. D. Parmar	2020
161.	Life table, feeding potential and relative toxicity of insecticides to ladybird beetle, *Cheilomenes sexmaculata* (Fabricius)	Neelam A. Singh	Dr. M. R. Dabhi	2020
162.	Management of thrips, *Scirtothrips dorsalis* hood in chilli	Vala Hitesh S.	Dr. H. P. Patel	2021
163.	Evaluation of insecticides on aphids infesting coriander	Patel Khushbu N.	Dr. R. K. Thumar	2021
164.	Comparative biology of fall armyworm (*Spodoptera frugiperda* (J. E. smith)) on different host plants	Rajamahanthi Jyotshna Padmavathi Patnaik	Dr. C. K. Borad	2021
165.	Biology and management of aphid infesting radish, *Raphanus sativus* (L.)	Raval Abhishek T.	Dr. A. H. Barad	2021
166.	Population dynamics of sucking pests and management of red spider mite, *Tetranychus urticae* Koch infesting *Dodi*, *Leptadenia reticulata* (Retzius) Wight And Aruott	Prabhakaran V.	Dr. R. K. Thumer	2021
167.	Seasonal incidence and management of pod fly,	Amin Nikunj D.	Dr. H. P. Patel	2021

	Melanagromyza obtusa (Malloch) infesting pigeon pea			
168.	Life table and predatory efficiency of *Chrysoperla zastrowi sillemi* (Esben-Peterson) on different hosts and evaluation of novel insecticides for their safety to the predator	Chaudhari Pintu G.	Dr. M. R. Dabhi	2021
169.	Pest succession and ecofriendly management of insect pests of cabbage (*Brassica oleracea* var. *capitata* L.)	Vipul	Dr. D. B. Sisodiya	2021
170.	Eco-friendly management of rice weevil, *Sitophilus oryzae* Linnaeus in stored wheat	Chauhan Anjaliben	Dr. M. V. Dabhi	2021
171.	Management of insect-pests through intercropping and evaluation of insecticides against *Earias vittella* (Fabricius) AND *Helicoverpa armigera* (Hubner) hardwick in okra	Chaudhari Ami R	Dr. R. M. Patel	2021
172.	Seasonal incidence and management of aphid, *Rhopalosiphum maidis* (Fitch) infesting wheat	Patel Apurvkumar K.	Dr. C. B. Varma	2021
173.	Population dynamics and management of jassid, *Amrasca biguttula biguttula* (Ishida) infesting okra	Barot Ruta C.	Dr. S. D. Patel	2021
174.	Population dynamics, comparative biology and management of tobacco leaf eating caterpillar Spodoptera Litura F. infesting groundnut	Dodiya Ravikumar D.	Dr A. H. Barad	2022
175.	Bionomics, population dynamics and eco-friendly management of aphid, Hyadaphis coriandris (Das) infesting dillseed	Patel Parthumar J.	Dr. P. H. Godhani	2022
176.	Bio-efficacy of insecticides against insect pest of okra Ablemasters esculentus (L.) Moench and residue dynamics in okra fruits	Patel Ashutoshkumar K.	Dr. K. D. Parmar	2022
177.	Bio-efficacy of insecticides against plant hoppers and it's residues in rice grains	Barad Bhumiben D.	Dr. K. D. Parmar	2022

178.	Inventory of plant mites and management of two spotted spider mite, Tetranychus urticae Koch in okra	Gamit Swatikumari S.	Dr. C. B. Varma	2022
179.	Population dynamics and management of spotted pod borer, Maruca vitrata (Fabricius) infesting greengram	Bhuva Krishnaben J.	Dr. S. D. Patel	2022
180.	Natural occurrence and efficacy of NPV with insecticides against fall armyworm, Spodoptera frugiperda (J. E. Smith) in maize	Pavan J. S.	Dr. N. B. Patel	2022
181.	Biology, seasonal incidence and evalution of different sex pheromone trap designs against shoot and fruit borer, Leucinodes orbonalis (Guenee) in brinjal	Kahkashan Wali	Dr. C. B. Varma	2022
182.	Seasonal incidence, biology and insecticidal management of spotted pod borer, Maruca vitrata (Fabricius) infesting cowpea	Patel Rashmit M.	Dr. H. C. Patel	2022
183.	Biology, seasonal occurrence and management of corn leaf aphid, Rhopalosiphum maidis Fitch infesting maize	Parmar Rachana H.	Dr. M. R. Dabhi	2022
184.	Bioefficacy of insecticides against thrips and their residues in chilli fruits	Italiya Jay V.	Dr. R. L. Kalsariya	2022
185.	Compatibility of Entomopathogenic fungi Metarhizium anisoplie (Metchnikoff) sorokin with insecticides against hopper, Idioscopus nitidulus Walker infesting mango	Baldaniya Ajay M.	Dr. N. B. Patel	2022
186.	Seasonal incidence and management of fall armyworm, *Spodoptera frugiperda* (J. E. Smith) infesting fodder maize	Dobariya Urveshkumar R.	Dr. D. B. Sisodiya	2022
187.	Biology, population dynamics and management of aphid, *Aphis craccivora* Koch in Indian bean	Bhamat Ayushi H.	Dr. R. K. Thumar	2022
Ph. D.				
1.	Succession of major insect pests, their population dynamics and management in Brinjal (*Solanum melongena* L)	Shri H. V. Bhatt	Dr. D. J. Koshiya	2004

2.	Bio-ecology of spotted pod borer, *Maruca Vitrata* Fb., Bio-efficacy and residual status of some insecticide in relation to insect pest complex	Bindu M. K. Panickar	Dr. R. C. Jhala	2004
3.	Impact of habitat manipulation on natural enemies of *H. armigera* Hb. tomato	Shri Y. C. Patel	Dr. D. N. Yadav	2005
4.	Biometrical analysis and bio-ecology of *S. litura* Fab. on different host along with its management in castor	Shri. A. B. Maghodia	Dr. D. J. Koshiya	2005
5.	Exploring feasibility of rearing of common green lace wing *Chrysoperla carnea* Ste. Its factitious prey Rice grain moth *Corcyra cephalonica* Ste**.** under net house condition	Ku. P. Komala devi	Dr. D. N. Yadav	2004
6.	Population dynamics of major insect-pests of Mustard in relation to dates of sowing, life table on different hosts and management of *AthalialugensProxima* (Klug).	Shri. H. M. Patel	Dr. D. J. Koshiya	2005
7.	Biology, population dynamics and some aspects of management of Thrips, *Scirtothrips dorsalis* Hd. on chilies	Shri. B. H. Patel	Dr. D. J. Koshiya	2006
8.	Survey and population dynamics of major insect-pests and management of gall forming black caterpillar, *Betousa stylophora* Swinhoe: Thyrididae on aonla, *Emblica officinalis* Geartn	Shri. T. M. Bharpoda	Dr. D. J. Koshiya	2006
9.	Impact of arthropods natural enemies on the insect pests suppression in organically raised hybrid cotton-10	Shri. B. H. Patel	Dr. D. N. Yadav	2006
10.	Exploring feasibility of mass rearing *Mallada boninensis* (Okamato) (Neuroptera: Chrysopidae) in outdoor insectary	Shri P. D. Bhatt	Dr. D. N. Yadav	2006
11.	Impact intercropping on the insect pests suppression in hybrid cotton-10	Shri P. H. Godhani	Dr. D. N. Yadav	2006
12.	Evaluation of vegetables oils and insecticides as grain protectants and verities for susceptibility against *Rhizopertha dominica* (Fabricius) (Coleoptera: Boostrichidae) Infesting wheat under storage condition.	Shri R. H. Kher	Dr. R. C. Jhala	2007
13.	Impact of habitat manipulation on natural enemies of insect pests in hybrid cotton-10	Shri R. K. Chaudhari	Dr. D. N. Yadav	2007
14.	Bio- ecology and management of melon fly *Bactrocera cucurbitae* (Coquillett) (Diptera: Tephritidae)	Shri D. B. Sisodiya	Dr. R. C. Jhala	2007

15.	Population dynamics, Biology and management of two spotted spider mite (*Tetranychus urticae* (Koch)) infesting brinjal (*Solanum melongena*)	Shri H. R. Jadav	Dr. D. J. Koshiya	2007
16.	Population dynamics and eco-friendly management of serpentine leaf miner, *Liriomyza trifolii* (Burgos) (Diptera: Agromyzidae) in cucumber, *Cucumis sativus* L.	Shri J. J. Patel	Dr. R. C. Jhala	2008
17.	Succession, population dynamics and management of major pests of okra (*Abelmoschus esculentus* L. Moench)	Shri M. V. Dabhi	Dr. D. J. Koshiya	2008
18.	Studies on *Bracon hebetor* Say (Hymenoptera: Braconidae) an ecto-larval parasitoid of lepidopteron hosts	Shri M. R. Dabhi	Dr. D. M. Korat	2010
19.	Relative bio-efficacy of some insecticides / miticides against pest complex of okra, *Abelmoschus esculentus* (L.) Moench and their residues in okra fruits	Shri K. D. Parmar	Dr. D. M. Korat	2010
20.	Population dynamics and management of pod borer complex in pigeonpea, *Cajanus cajan* (L.) Millsp.	Shri L. V. Ghetiya	Dr. D. M. Mehta	2010
21.	Sapota [*Manilkara achras* (Miller)] pest complex and bionomics and management of bud borer (*Anarsia achresella* Bradley)	Shri R. K. Thumar	Dr. P. K. Borad	2010
22.	Survey, population dynamics and management of mango hopper, *Amritodus atkinsoni* (Lethierry)	Shri S.T. Rathod	Dr. P. K. Borad	2011
23.	Impact of *Bt* transgenic cotton on insect pest complex and their major natural enemies.	Shri R. F. Solanki	Dr. D. M. Korat	2011
24.	Comparative Biology and mass production of *Corcyra cephalonica* (Stainton) (Pyralidae: Lepidoptera) on different food materials.	Shri R. M. Patel	Dr. D. M. Mehta	2011
25.	Studies on biodiversity, life history and biotic potential of predatory *Coccinellids* of Anand region of Gujarat	Dola Chakraborty	Dr. D. M. Korat	2012
26.	Laboratory studies on biology and feeding potential of Mexican beetle *Zygogramma bicolorata* Pallister on *Parthenium hysterophorous* L and evaluation of herbicides for their safety to the bioagent.	Shri S.R. Pawar	Dr. D. M. Korat	2013
27.	Status of insecticides resistance, its management and morphometric studies of leaf eating caterpillar	Shri K. D. Shah	Dr. C. C. Patel	2014

	Spodoptera litura Fabricius in different location of Gujarat			
28.	Life table and management of spotted pod borer *Maruca vitrata* (Geyer)in green gram, *Vigna radiata* (Linneous) (wildzeck)	Shri H. C. Patel	Dr. P. K. Borad	2014
29.	Succession of pests and ecofriendly management of red spider mite *Tetranicus urticae* Koch in summer okra	Shri P. B. Patel	Dr. P. K. Borad	2014
30.	Relative bio-efficacy and certain newer insecticides and acaricides against sucking pests infesting chilli (C*apcicum annum* l.) and their residue at harvest	Shri Sangle P. M.	Dr. D. M. Korat	2014
31.	Succession of insect pests, life table and management of fruit borer *Helicoverpa armigera* (Hubner) in tomato	Ku. Sushma Deb	Dr. T. M. Bharpoda	2014
32.	Succession, Distribution pattern and management of sucking insect pests in *Bt* cotton	Shri C. B. Varma	Dr. T. M. Bharpoda	2015
33.	Effect of silicon on insect pests of Rice, *Oryza sativa* Linnaeus	Shri S. D. Patel	Dr. P. K. Borad	2016
34.	Succession and management of major insect pests of soybean	Lodaya Jalpaben Prakashbhai	Dr. P. K. Borad	2016
35.	Management of brinjal mite, *Tetranychus urticae* Koch under middle Gujarat conditions	N. B. Patel	Dr. C. C. Patel	2017
36.	Investigation of entomopathogenic fungi infesting papaya mealybug, Paracoccus marginatus willanmus and erranara de willink	M. V. Patel	Dr. D. M. Maheta	2017
37.	Odonates diversity of Gujarat and their DNA barcoding for taxonomic validation	Rathod D. M.	Dr. B. M. Parasharya	2017
38.	Status of insecticidal resistance, morphometric studies and management of *Helicoverpa armigera* (Hubner) Hardwick in pigeonpea from defferent location of middle Gujarat	Vaisali R. Paramar	Dr. C. C. Patel	2017
39.	Succession of major insect pest, biology and management of gall midge, *Procontarinia matteiana* kieffer and Cecconi on mango	M. B. Zala	T. M. Bharapoda	2018
40.	Biology, seasonal incidence and management of tomato pinworm, *Tuta absoluta* (Meyrick)	Patel Nehaben Manilal	Dr. D. M. Maheta	2018

41.	Pests succession and management of major insect pests in fennel (*Foeniculum vulgare* L.)	Chirag P. Shewale	Dr. P. K. Borad	2020
42.	Diamide insecticides resistance in diamondback moth, *Plutella xylostella* (Linnaeus)	Chaudhari Janakkumar D.	Dr. C. K. Borad	2020
43.	Survey of insect pests and management of leaf eating caterpillar, *Noorda blitealis* Walker in drumstick, *Moringa oleifera* Lam.	Suthar Meeral D.	Dr. P. K. Borad	2020
44.	Orientation response of *Helicoverpa armigera* (Hübner) to different host plant volatiles	Shivam R. Padaliya	Dr. C. K. Borad	2021
45.	Fitness costs of *bt* resistance in *Helicoverpa armigera* (Hübner): implication for refugee strategy in *bt* cotton	Thangavel S.	Dr. C. K. Borad	2021
46.	Population dynamics, DNA Barcoding and management of stem fly, *Melanagromyza sojae* (Zehntner) infesting blackgram (*V. mungo* L.)	Pathan Naziyabanu P.	Dr. D. B. Sisodiya	2022
47.	Succession and management of insect pests in black gram	Barinela Kuruva Sreedhar	Dr. R. K. Thumar	2022
48.	Diversity, foraging dynamics and frequency of pollinators vis-a-vis insecticide toxicity in cucumber	Trivedi Nikhil P.	Dr. D. B. Sisodiya	2022
49.	Biology population dynamics and toxicity of insecticides in relation to *Cheilomenes sexmaculata* Fabricious on mustard aphids	Aniyaliya Manisha D.	Dr. R. K. Thumar	2022
51.	Pest sucession and management of insect pests in okra, *Abelomoschus esculentus* (L.) Moench.	Vaja Abdulmunaf Shafi	Dr. R. K. Thumar	2023

No. of trainings/Khedut shibirs/farmers days condcuted by the Department

Sr. No.	Title of the trainings	Duration of training	Training sponsored by	Nos. of beneficiaries
1	PI/ Co-PI/ DPO Training under NISPM	02 days	NCIPM (ICAR), New Delhi	46
2.	Management of Insect Pests and Diseases in Cotton with Special Reference to *Bt* Cotton	02 days	NCIPM (ICAR), New Delhi	59

3	Crop protection and soil health.	03 days	Coromandel International Ltd.	19
4	*Khedut Shibirs* on IPM in Cotton	**Total 81** *Khedut Shibirs*, one day	NCIPM (ICAR), New Delhi under NISPM and OPMAS projects	3332
5	Integrated Pest Management	**Total 125** training periods: 3, 4 and 7 days	Govt. of Gujarat	4601
6	Field Scout training: Insect Pests of Cotton and scouting	**Total 32:** One day	NCIPM (ICAR), New Delhi under NISPM and OPMAS project	216
7	Farmer`s day organized	**Total 32**: One day	Govt. of Gujarat	--
8	Honey bee training under "Mission Honey bee"	**Total 2**: Two day	Govt. of Gujarat	69
9	TV talk/ programme/ Radio talk	179	--	--

Awards won by faculties of department (Since 2004)			
Sr. No.	**Name of award**	**Award conferred by**	**Year of award**
1	Awarded First Prize for paper presentation in Entomological Research Association National Conference 2005, National Conference on Applied Entomology: Current Status, Challenges and Opportunities organized by Department of Entomology, Rajasthan College of Agriculture, MPUAT, Udaipur	Jhala RC**,** Chavda AJ, Sisodiya DB and Patel MG	2005
2	Certificate of Excellence for best research papers and presentation in National Seminar on Pheromone Technologies: Development and Commercialization for Strengthening Eco-friendly Agriculture in India organized by *Asthagiri* Herbal Research Foundation & South Asian Society for Advancement of Pheromone Technology and held at Vel's University, Chennai	Jhala RC, Sisodiya DB and Bharpoda TM	2008
3	Certificate of Excellence for best research papers and presentation in National Seminar on Pheromone Technologies: Development and Commercialization for Strengthening Eco-friendly Agriculture in India organized by *Asthagiri* Herbal Research Foundation & South Asian Society for Advancement of Pheromone Technology and held at Vel's University, Chennai	Patel MG and Jhala RC	2008
4	Certificate of Excellence for best research papers and presentation in National Seminar on Pheromone Technologies: Development and Commercialization for Strengthening Eco-friendly Agriculture in India organized by *Asthagiri* Herbal Research Foundation & South Asian Society for Advancement of Pheromone Technology and held at Vel's University, Chennai	Jhala RC, Patel MG, Bharpoda TM and Chavda AJ	2008
5	Certificate for Best Poster Presentationin "National Conference on Invasive Alien Insects and Emerging Pests Threatening Agriculture, Horticulture and Forest Ecosystems" organized by Department of Agricultural Entomology, College of agriculture, University of Agricultural Sciences (UAS), Dharwad (Karnataka) at UAS, Dharwad	Patel MG, Jhala RC, Vaghela NM and Chauhan NR	2010

6	Certificate for Best Poster Presentation in "National Conference on Plant Protection in Agriculture through Eco-friendly Techniques & Traditional Farming Practices" organized by Entomological Research Association, Udaipur and held at Department of Entomology, Agricultural Research Station, Swami Keshwanand Rajasthan Agricultural University, Durgapura, Jaipur	Sisodiya DB and Jhala RC	2010
7	Certificate for Best Poster Presentation in "National Conference on Plant Protection in Agriculture through Eco-friendly Techniques & Traditional Farming Practices" organized by Entomological Research Association, Udaipur and held at Department of Entomology, Agricultural Research Station, Swami Keshwanand Rajasthan Agricultural University, Durgapura, Jaipur	Jhala RC, Bharpoda TM and Dabhi MR	2010
8	Certificate for Second Best Poster Presentation in "National Conference on Plant Protection in Agriculture through Eco-friendly Techniques & Traditional Farming Practices" organized by Entomological Research Association, Udaipur and held at Department of Entomology, Agricultural Research Station, Swami Keshwanand Rajasthan Agricultural University, Durgapura, Jaipur	Patel MG, Patel JR and Rathod ST	2010
9	Certificate for second best paper presentation (oral) in National Seminar on "Technology for development and production of rainfed cotton", organized on October 24-25, 2013 by Navsari Agricultural University, Navsari (Gujarat) at Regional Cotton Research Station, Bharuch, Gujarat	Suthar MD, Patel CC, Bharpoda TM and Borad PK	2013
10	Certificate for third best Paper presentation inInternational Conference: Changing Scenario of Pest Problems in Agri-Horti Ecosystem and their Management, organized by Entomological Research Association, Udaipur and Department of Entomology Rajasthan College of Agriculture at Maharana Pratap University of Agriculture & Technology, Udaipur	Bharpoda TM, Zala MB, Borad PK and Shashidharan	2014
11	Best Teacher Award in the faculty of Agriculture	Dr. T. M. Bharpoda	2015
12	'*Uttammlekh* Award' *Krushigovidya* Awarded by AAU, Anand	Lunagariya MV, Bharpoda TM and Borad PK	2015

13	'*Uttammlekh* Award' *Krushigovidya* Awarded by AAU, Anand	Thumar RK, Zala MB, Bharpoda TM, and Borad PK	2016
14	Young Scientist Award	Zala MB, Bharpoda TM, Thumar RK and Borad PK	2016
15	Chancellor Medal for the best Ph. D. thesis of AAU, Anand	Varma CB	2016
16	"Outstanding Scientist Award" - IJTA (Indian Journal of Tropical Agriculture) "3rd International Conference on Agriculture, Horticulture & Plant Science" held at New Delhi on June 25-26, 2016	Bharpoda TM	2016
17	"Best Oral Presentation Award" in National seminar held by SEEG-2016 on March 18-19, 2016 at JAU, Junagadh	Thumar RK	2016
18	"Third Rank in Uttam Lekh Award" for Jivat Calendar-February, 2018 in Krushigovidhya, from DEE, AAU, Anand	Varma CB and Borad PK	2018
19	"First Uttam Lekh Award" for Jivat Calendar-February, 2018 in Krushigovidhya, from DEE, AAU, Anand	Sisodiya DB, Raghunandan BL, Shevale CP, Timbadiya BG and Borad PK	2018
20	"Third Rank in Uttam Lekh Award" for Jivat Calendar-April, 2019 in Krushigovidhya, from DEE, AAU, Anand	Suthar MD and Board PK	2019
21	"Shree Varadhbhai Ambaidas Patel Best UG teacher Award" for UG 2nd year from BACA Alumni Association, BACA, AAU, Anand	Sisodiya DB	2019
22	Best article award for "e-Pest Surveillance: A Innovative Approach for Integrated Pest Management" from Agriculture & Food: e-Newsletter	Patel HB, Varma CB, Sisodiya DB and Patel PH	2020
23	Associate Scientist award-2020 in a state level seminar on *Jivat Ane Rogona Jaivik Niyantran Dwara Bagayati Ane Khadhya Pakni Gunvatta Ane Salamatini Jalavani* organized by Plant Protection Association of Gujarat at Navsari Agricultural University, Navsari on December 30, 2021.	Sisodiya DB	2021
24	Uttam lekh award for *Jivat Calendar* - January, 2021 published in *Krushigovidhya*, Anand Agricultural University.	Sisodiya DB and Suthar MD	2021
25	Outstanding Achievement Award by Astha foundation in International Web Conference on Innovative and Current Advances in Agriculture	Sisodiya DB	2021

	& Allied Sciences (ICAAAS-2021) during July 19-21, 2021.		
26	First Best Article award for Kali Thrips: Marchino navo dushman Published in krushigovidhya March 2022, 74(11): 5-7.	Suthar MD, Lodaya JP, Patel HC, Sisodiya DB, Patel Rashmit and Dobariya Urvesh	2022
27	Innovative Article Award for article ID: 37502 entitled Recent Trends in Non-protein Amino Acid and its Role in Host Plant Resistance, Agriculture & Food: E-Newsletter, July 2022, 4(7): 7-9.	Atul R. Mohapatra, Kopparthi AVS and Sisodiya DB	2022
28	Best Teacher Award in Agricultural Higher Education amongst all the faculties in Anand Agricultural University at 19th Annual convocation of AAU	Sisodiya DB	2023
29	Certificate for second best paper presentation (oral) in ISMPP 42nd Annual conference & National Symposium on "Plant health Management: A way forword for food safety security and sustainability", organized on May 10-12, 2023 by Anand Agricultural University, Anand (Gujarat)	Dr. H. C. Patel, Dr. C. B. Varma, Dr. D. B. Sisodiya and Dr. R. K. Thumar	2023