

1. Department of Entomology

Teaching

List of UG courses

Sr. No.	Course No.	Title of the course	Credits	Semester
(A)	Horticulture			
1.	PPT.3.2	Fundamentals of Entomology	3(2+1)	III
2.	PPT.4.2	Insect Pests of Fruit, Plantation, Medicinal and Aromatic Crops	3(2+1)	IV
3.	PPT.6.1	Apiculture	1(0 +1)	VI
4.	PPT.6.2	Insect Pests of Vegetable, Ornamental and Spice Crops	3(2+1)	VI
(B)	Forestry			
5.	F.W.E. 7.2.1	Experiential Learning	2(1+1)	VII
6.	FBT.6.1	Forest Entomology and Nematology	3(2+1)	VI

List of M.Sc. and Ph.D. courses

Sr. No.	Course No.	Title of the course	Credits
1.	FOR 507	Forest Protection	2(1+1)
2.	PT 524	Management of Insect-Pests and Diseases	2(1+1)
3	HENT 501/FENT 501*	Insect Morphology	2(1+1)
4.	HENT 502/FENT 502*	Insect Anatomy, Physiology and Nutrition	3(2+1)
5.	HENT 503/FENT 503 *	Principles of Taxonomy	2(2+0)
6.	HENT 504/FENT 504*	Classification of insects	3(2+1)
7.	HENT 505/FENT 505/ *	Insect Ecology	2(1+1)
8.	HENT 506/FENT 506	Insect Pathology	2(1+1)
9.	HENT507/FENT 507*	Biological control of crop pests and weeds	2(1+1)
10.	HENT 508/FENT 508*	Toxicology of Insecticides	3(2+1)
11.	HENT 509/FENT 509	Plant Resistance to Insects	2(1+1)
12.	HENT 510/FENT 510*	Principles of Integrated Pest Management	2(1+1)
13.	HENT 511*	Pests of Vegetable and Ornamental crops	3(2+1)
14.	FENT 511 *	Forest Entomology	3(2+1)
15.	HENT 512/FENT 512*	Pests of Fruit and Plantation crops	2(1+1)
16.	HENT 513/FENT513*	Pests of Medicinal, Aromatic, Condiments & Spice crops	2(1+1)
17.	HENT 514/FENT 514	Insect Vectors of Plant Viruses and other Pathogens	2(1+1)
18.	HENT 515/FENT 515	General Acarology	2(1+1)
19.	HENT 516/FENT 516	Soil Arthropods and their Management	2(1+1)
20.	HENT 517/FENT 517	Vertebrate Pest Management	2(1+1)
21.	HENT 518/FENT 518	Techniques in Plant Protection	1(0+1)
22.	HENT 519/FENT 519	Commercial Entomology	2(1+1)
23.	HENT 520/FENT 520	Plant Quarantine	2(2+0)
24.	HENT 591/FENT 591	Masters Seminar	1(0+1)
25.	HENT 599/FENT 599	Masters Research	20
26.	HENT 601/FENT 601	Advanced Insect Systematics	3(1+2)
27.	HENT602/FENT 602	Immature Stages of Insects	2(1+1)
28.	HENT 603/FENT 603	Advanced Insect Physiology	2(2+0)
29.	HENT604/FENT 604	Advanced Insect Ecology	2(1+1)
30.	HENT 605/FENT 605	Insect Behaviour	2(1+1)

31.	HENT606/FENT 606	Recent Trends in Biological Control	2(1+1)
32.	HENT607/FENT 607	Advanced Insecticide Toxicology	3(2+1)
33.	HENT608/FENT 608	Advanced Host plant Resistance	2(1+1)
34.	HENT609/FENT 609	Advanced Acarology	2(1+1)
35.	HENT 610/FENT 610**	Agricultural Ornithology	2(1+1)
36.	HENT 611/FENT 611**	Molecular Approaches in Entomological Research	2(1+1)
37.	HENT 612/FENT 612**	Advanced Integrated Pest management	2(2+0)
38.	HENT 613/FENT 613	Plant Biosecurity and Biosafety	2(2+0)
39.	HENT 614/FENT 614	Forest Entomology	2(1+1)
40.	HENT 615**	Advances in Pests of Fruit and Plantation crops	3(2+1)
41.	HENT 616**	Advances in Pests of Vegetable crops	3(2+1)
42.	HENT 617**	Advances in Pests of Ornamental, Medicinal & Aromatic Plants	3(2+1)
43.	FENT 614**	Advances in Forest Entomology	3(2+1)
44.	FENT 615**	Pest of Forest Seeds	2(1+1)
45.	FENT616**	Pests of Felled trees and stored timbers	2(1+1)
46.	FENT 617**	Research techniques in Forest Entomology	1(1+0)
47.	HENT 691/FENT691	Doctoral Seminar – I	1(1+0)
48.	HENT 692/FENT 692	Doctoral Seminar- II	1(1+0)
49.	HENT 699/FENT 699	Doctoral Research	45

* Compulsory course at M.Sc. level ** Compulsory course at Ph.D. level

Number of passed out students

Passed out students	Numbers
M.Sc.	18

List of students who have cleared NET

Sr. No.	Name of PG student	Year
1	Patel Sachinkumar Rameshchandra	2013
2	Patel Shaileshkumar Dahyabhai	2013
3	Swathi Yadav Kattula	2014
4	Birakati Swaranalata	2014
5	Deshmukh S.S.	2014

List of students who have won poster paper awards

Sr. No.	Name of the student	Awards	Year
1.	Bande V.S.	Best Poster Award	2012
2.	Deshmukh S.S.	Best Poster Award	2013
3.	Patel S.D.	Best Poster Award	2014
4.	Dave P.P.	Best Poster Award	2016

List of M.Sc. thesis submitted

Sr. No.	Title of the thesis	Year	Name of PG student	Name of the Major Guide
1	Development of integrated pest management practices for major insect pests of cabbage (<i>Brassicae oleracea</i> var. <i>capitata</i>)	2010	Deshmukh S.S.	Dr. H.V. Pandya
2	Evaluation of suitable pest management strategy against major insect pests of gram, <i>Cicer arietinum</i> L.	2011	Bande V.S.	Dr. H.V. Pandya
3	Seasonal abundance, morphology, species diversity and toxicity studies of some entomopathogens	2011	Patel N.K.	Dr. S.P. Saxena

	against banana thrips			
4	Effect of some mulberry cultivars on growth and development of mulberry silkworm, <i>Bombyx mori</i> L. (Lepidoptera: Bombycidae) under South Gujarat condition	2012	Patel S.R.	Dr. H.V. Pandya
5	Pest abundance and screening of genotype against major insect pest of tomato	2013	Patel S.D.	Dr. H.V. Pandya
6	Seasonal incidence and management of major pests of brinjal (<i>Solanum melongena</i> L.)	2013	Dahatonde Jayshree A.	Dr. H.V. Pandya
7	Biology, population dynamics and bioefficacy of biopesticides against shoot and fruit borer, <i>Earias vittella</i> (Fab.) on okra [<i>Abelmoschus esculentus</i> (L.) Moench]	2013	Gaikwad Vaishali R.	Dr. Snehal M. Patel
8	Biology of diamond back moth, <i>Plutella xylostella</i> (Linnaeus), seasonal abundance and relative bio-efficacy of some insecticides against major insect pests of cabbage	2013	Bhure K.Y.	Dr. H.V. Pandya
9	Population dynamics, screening of genotypes against major insect pests and chemical control of pest complex of cowpea [<i>Vigna unguiculata</i> (L.) Walp.]	2014	Swathi Yadav Kattula	Dr. H.V. Pandya
10	Screening of genotypes and bio-efficacy of botanicals and biopesticides under field condition against major insect pests of okra [<i>Abelmoschus esculentus</i> (L.) Moench]	2014	P. P. Dave	Dr. H.V. Pandya
11	Population dynamics and chemical control of pest complex of Indian bean [<i>Lablab purpureus</i> (L.) Walp.]	2014	Patel Kshama B.	Dr. Snehal M. Patel
12	Evaluation of bio-efficacy of various insecticides against aphid (<i>Aphis craccivora</i> Koch) infesting cowpea [<i>Vigna unguiculata</i> (L.) Walp.]	2014	Birakati Swarnalata	Dr. Snehal M. Patel
13	Seasonal abundance, screening of genotypes and chemical control of gladiolus thrips, <i>Thrips simplex</i> (Morison)	2015	Saiyad M.M.	Dr. H.V. Pandya
14	Seasonal abundance, screening of genotypes and chemical control of gerbera aphid	2015	Patel, P.P.	Dr. H.V. Pandya
15	Biology, population dynamics and chemical control of thrips attacking ficus, <i>Ficus benjamina</i>	2015	Patel D.G.	Dr. Snehal M. Patel
16	Evaluation of botanical extracts against jassid [<i>Amrasca biguttula biguttula</i> (Ishida)] and whitefly [<i>Bemisia tabaci</i> (Gennadius)] on okra [<i>Abelmoschus esculentus</i> (L.) Moench]	2016	Chaudhary A.T.	Dr. H.V. Pandya
17	Evaluation of botanical extracts against thrips (<i>Thrips tabaci</i> Lindeman) infesting garlic	2016	Shah J.N.	Dr. H.V. Pandya
18	Evaluation of botanical extracts against pod borer [<i>Helicoverpa armigera</i> Hubner] and pod fly [<i>Melanagromyza obtusa</i> Malloch] infesting vegetable pigeon pea	2016	Pandya S.M.	Dr. Snehal M. Patel

Recommendations for farmers' community:

1. Efficacy of different insecticides against sucking pests viz; thrips and whitefly as well as their safety to silkworm (*Bombyx mori* L.). "The mulberry silkworm growers of South Gujarat heavy rainfall zone agro ecological situation III are advised to utilize safely mulberry leaves 7 days after spraying of DDVP 76 0.050 % for the control of sucking pests i.e. thrips and whitefly as well as for successful silkworm rearing. (2007).
2. Farmers of South Gujarat Heavy Rainfall Agro-climatic Zone, agro-ecological situation I-IV are advised to rear eri silkworm on leaves of castor variety GCH-4 or GCH-5 to obtain higher eri silk (2009).

3. Farmers of South Gujarat Zone situation I to IV are advised to rear silkworm race, Nistari x NB₄D₂ on mulberry variety S-1635 or TR-10 or K2 for higher production of mulberry silk (2010).
4. For effective management of pod borer and pod fly in pigeon pea, farmers of South Gujarat are advised to apply two sprays of flubendiamide 20 WDG @ 50 g a.i./ha (5 g/10 litre of water) first spray at the time of pod setting and second spray at 15 days after first spray for higher yield and better return. A pre-harvest interval (PHI) of 10 days is recommended for flubendiamide. (2014)
5. For effective control of tomato fruit borer, farmers of South Gujarat (AES III) are advised to apply two sprays of flubendiamide 20 WDG @ 2.5 g/10 l or chlorantraniliprole 18.5 SC @ 3.0 ml/10 l, first at the time of flowering and second at 15 days after first spray for obtaining higher yield and better return. Further, the residue content of this insecticides remains below MRL in tomato fruits after three days. (2015)

Recommendations for scientific community:

1. Indian bean growers of South Gujarat (AES-III) are advised to keep waiting period of seven days after spray of thiamethoxam 25 WG (35 g a.i. /ha), novaluron 10 EC (33.5 g a.i. /ha), indoxacarb 14.5 SC (60 g a.i./ha), spinosad 45 SC (75 g a.i./ha), acetamiprid 20 SP (20 g a.i. /ha) and flubendiamide 39.35 SC (50 g a.i. /ha) and ten days for imidacloprid 17.8 SL (25 g a.i. /ha) (2015).
2. The residues of imidacloprid 17.8 SL (25 g a.i. /ha), thiamethoxam 25 WG (35 g a.i. /ha), novaluron 10 EC (33.5 g a.i. /ha), indoxacarb 14.5 SC (60 g a.i. /ha), spinosad 45 SC (75 g a.i. /ha), acetamiprid 20 SP (20 g a.i. /ha) and flubendiamide 39.35 SC (50 g a.i./ha) observed below detectable level in Indian bean after *Ubadia* preparation (2015).
3. Among various brinjal genotypes screened, lowest shoot and fruit borer damage (3.35%) and lowest jassid (3.19/ leaf) population are recorded in genotype NSRP-1 whereas lowest whitefly population (2.27 / leaf) was recorded in GBL-1. (2015)
4. Among various brinjal genotypes screened, minimum little leaf infection (3.58%) was recorded in GJB-2.

Projects and objectives:

1. Testing of new products (18943):2007-10: Other Agency

- Testing Betacyfluthrin 9 % + Imidacloprid 21 % - 300 OD (Solomon 300 OD) against hopper and thrips at Agricultural Experimental Station; NAU; Paria, District: Valsad, Gujarat

2. Exploration of Biodiversity of Insect fauna of teak (18952) :2009-14: Other Agency

- To know the biodiversity of insect fauna of teak in Dangs forest
- To know the peak period of activity of these pests

Publication

Research paper

Sr. No.	Name of Authors	Title of research paper	Name of Journal, Year, Vol No., Issue No. and Page No.
1	Patel, S.M. ; G.G. Radadia; Pandya, H.V. and Patel, M.B.	Seasonal abundance of green lace wing, <i>Chrysoperla zastrowi arabica</i> Henry <i>et al.</i> on cotton.	<i>Indian J. Applied Entomology</i> , (2011), 25(1): 82-84.
2	Kalariya G.B., Radadia, G.G. and Pandya, H.V.	Management of early shoot borer in Sugarcane.	<i>Cooperative Sugar</i> , (2012), January, pp. 1-7.
3	Patel, S.R.; Pandya, H.V.; Patel, S.D. and Naik, M.M.	Biology of <i>Bombyx mori</i> L. (Lepidoptera: Bombycidae).	<i>Int. J. Pl. Prot.</i> , (2013), 6(2): 382-389.
4	Dahatonde, J.A.; Pandya, H.V.; Raut, S.B. and Patel, S.D.	Screening of some genotypes of brinjal for their relative resistance against jassid and whitefly.	<i>Asian J. Bio Sci.</i> , (2014), 9: 137-1381.
5	Dahatonde, J.A.; Pandya, H.V.; Raut, S.B. and Patel, S.D.	Seasonal abundance of jassid and whitefly on brinjal (<i>Solanum melongena</i> L.) in relation to major abiotic factors.	<i>Int. J. Pl. Prot.</i> , (2014), 7(1): 257-259.

6	Dahatonde, J.A.; Pandya, H.V.; Raut, S.B. and Patel, S.D.	Relative bio-efficacy of some newer molecules against shoot and fruit borer (<i>Leucinodes orbonalis</i>) of brinjal.	<i>Int. J. Agril. Sci.</i> , (2014), 10 (2): 831-833.
7	Patel, S.D.; Pandya, H.V.; Dahatonde, J.A.; Patel, S.R. and Bhambhaniya, K.C.	Population dynamics of through pheromone trap and correlation coefficient between moth catches with weather parameters	<i>Int. J. Pl. Prot.</i> , (2014), 7(1): 240-242
8	Kumar,Sushil; Desai, H. R.; Patel, Z. P.; Bhatt, B. K. and Naik, J. R.	Impact of climate variability and crop phenology on abundance of mango hopper.	<i>Indian J. Applied Entomology.</i> , (2014), 28(2): 106-116.
9	Darandale, S.A.; Pandya, H.V. Patel, S.D.; Patel, S.M.; Saiyad, M.M. and Dave, P.P.	Screening niger varieties against major sucking pests	<i>Trends Biosci.</i> , (2015), 8(4): 908-912
10	Jadhav, P.B.; Padhiar, B.V.; Ahlawat, T.R. and Chavan, S. M.	Record of peacock: As a pest in papaya (<i>Carica papaya</i>) in South Gujarat.	<i>Int. J. Curr. Res.</i> , (2015), 5(13): 155-159.
11	Dave, P.P.; Pandya,H.V.; Patel, S.D. and Saiyad, M.M.	Eco-friendly management of major pests of Okra, <i>Abelmoschus esculentus</i> (L.) Moench	<i>Multilogic Sci.</i> (2015), 4(12): 198-205.
12	Ande, S. B.,; Rathod,J. H.; Pandya, H. V.; Patel, S. D.	Management of okra jassid, <i>Amrasca biguttula biguttula</i> (Ishida)	<i>Multilogic Sci.</i> , (2015), 4(12): 97-103.
13	Patel, S.D., Pandya H.V.; Patel S.M.; Dahatonde, J.A.; Patel, Bhoomika A.; Dave P.P. and Tandel, Y.N.	Screening of tomato genotypes against fruit borer [<i>Helicoverpa armigera</i> (Hübner)]	<i>Multilogic Sci.</i> (2015), 4(12): 59-61.
14	Ande, S. B.; Rathod, J. H.; Pandya, H. V.; Patel, S. D. and Patel, N.G.	Biology of jassid, <i>Amrasca biguttula biguttula</i> (Ishida) on okra	<i>Multilogic Sci.</i> (2015), 4(11): 148-154.
15	Patel, S.D.; Pandya, H.V.; Dahatonde, J.A.; Bhure, K.Y.; Patel, K.A. Darandale, S.A. Patel, N.G. and Dave, P.P.	Screening of tomato genotypes against leaf defoliator [<i>Spodoptera litura</i> (Fabricius)] and leaf miner [<i>Liriomyza trifolii</i> (Burgess)]	<i>Multilogic Sci.</i> (2015), 4(11): 180-182.
16	Bhure, K.Y.; Pandya, H.V. ;Patel, S.D.; Darandale, S.A. ; Saiyad, M.M. and Patel, N.G.	Incidence and abundance of major insect-pests of cabbage (<i>Brassica oleracea</i> var. <i>Capitata Linnaeus</i>) in relation to weather parameters	<i>Multilogic Sci.</i> (2015), 4(11): 175-179
17	Deshmukh Somnath; Pandya, H.V.; Patel, S.D.; Saiyad, M.M. and Dave, P.P.	Development of suitable integrated pest management module for major lepidopteran insect pests of cabbage (<i>Brassica oleracea</i> var. <i>Capitata</i>)	<i>Asian J. Bio Sci.</i> , (2015), 10 (1): 48-56
18	Swarnalata, B.; Patel, Snehal M. Pandya, H.V. and Patel, S.D.	Bio-efficacy of insecticides against aphid (<i>Aphis craccivora</i> Koch) infesting cowpea [<i>Vigna unguiculata</i> (L.) Walp.]	<i>Asian J. Bio Sci.</i> , (2015), 10 (1): 83-88.
19	Patel, Snehal M.; Radadia, G.G. Pandya, H.V.; Patel, S.D. and Dave, P.P.	Comparative biology and predatory potential of green lace wing on different aphid species	<i>Int.J. Pl. Prot.</i> (2015), 8 (1): 13-20.
20	Darandale, S.A.; Pandya, H.V. Patel, S.D. and Patel, Snehal M.	Population dynamics of major sucking pests infesting niger and their relation to weather parameters	<i>Int. J.Pl. Prot.</i> (2015), 8 (1): 61-64.
21	Yadav Swathi, K.; Pandya, H.V.; Patel, Snehal M.; Patel, S.D. and Saiyad, M.M.	Population dynamics of major insect pests of cowpea [<i>Vigna unguiculata</i> (L.) Walp.]	<i>Int. J.Pl. Prot.</i> (2015), 8 (1): 112-117.

22	Parmar, S.G., Naik, M.M.; Pandya, H.V.; Rathod, N.K.; Patel, S.D.; Dave, P.P. and Saiyad, M.M.	Bio-efficacy of some insecticides against pest complex of blackgram [<i>Vigna mungo</i> (L.) Hepper]	<i>Int. J. Pl. Prot.</i> (2015), 8 (1): 162-168.
23	Swarnalata, B.; Patel, Snehal M. Pandya, H.V.; Patel, S.D.; Dave, P.P.; Patel, P.P. and Saiyad, M.M.	Persistent Toxicity of Different Chemical Insecticides Against Aphid (<i>Aphis craccivora</i> Koch) in Cowpea [<i>Vigna unguiculata</i> (L.) Walp.]	<i>Trends Biosci.</i> , (2015), 9(4): 272-277.
24	Pandya, H.V., Patel,S.D.; Patel, Snehal M.; Dave , P.P. and Patel, P.P.	Population fluctuation of <i>Helicoverpa armigera</i> (Hubner) in relation to weather parameters in tomato (<i>Lycopersicon esculentum</i> Miller)	<i>Multilogic Sci.</i> , (2016), 5 (15): 156-158
25	Patel, P.P.; Pandya, H.V; Saiyad, M.M.; Patel, S.D. and Dave, P.P.	Chemical control of gerbera aphid	<i>Multilogic Sci.</i> , (2016), 5 (15): 168-173

Book

Sr. No.	Name of the Authors/Editors	Title of the book	Year of Publication	Publisher
1	Gajjar, S.N.; Patel, M.B.; Radadia, G.G.; Pandya, H.V. and Purohit, M.S.	<i>Jantunashak davana salamat vaparash angeni jaankari</i>	2010	NAU, Navsari
2	Radadia, G.G.; Sabalpara, A.N.; Pandya, H.V. ; Patel, M.B. and Chawda, S.K.	<i>Mojani ane nigah adharit pak rog pourvaanumaan padhdhti</i>	2010	NAU, Navsari
3	Radadia, G.G.; Pandya, H.V. ; Patel, M.B.; Purohit, M.S. and Naik, M.M.	<i>Sangrahela anaajni jivaato ane tenu sankalit niyantra</i>	2010	NAU, Navsari
4	Pandya, H.V. ; Radadia, G.G.; Patel, M.B. and Purohit, M.S.	<i>Undaronu sankalit niyantran vyavasthapan</i>	2010	NAU, Navsari
5	Naik, M.M.; Patel, M.B.; Purohit, M.S.; Radadia, G.G. and Pandya, H.V.	<i>Ericulture-divelana reshamma kidano uchher</i>	2010	NAU, Navsari
6	Pandya H.V.	<i>Shakbhaji pakoma pak sanrakshan</i>	2012	ATMA, Valsad
7	Radadia, G.G.; Patel, M.B.; Purohit, M.S. and Pandya, H.V.	<i>Undaronu sankalit niyantran vyavasthapan</i>	2012	NAU, Navsari
8	Radadia, G.G.; Pandya, H.V.; Parmar, K.D. and Ghetiya, L.V.	<i>Souvenir: Dharuvadiya ane raxit khetima pak sanrkhan</i>	2013	PPAG and NAU, Navsari
9	Radadia, G.G.; Solanki, V.A.; Pandya, H.V.; Ghetiya, L.V.; Rakholiya, K.B. and Patel, S.R.	<i>Souvenir: Sajiv khetima pak sanrakshan</i>	2016	NAU, Navsari

Practical Manuals published

1. PPT.3.2 Fundamentals of Entomology
2. PPT.4.2 Insect Pests of Fruit, Plantation, Medicinal and Aromatic Crops
3. PPT.6.1 Apiculture
4. PPT 6.2 Insect Pests of Vegetable, Ornamental and Spice Crops

Pictures of different activities





2. Department of Plant Pathology

Teaching

List of UG courses

Sr. No.	Course No.	Title	Credits	Sem. No.
1	B.Sc.1.5	Introductory Microbiology	2(1+1)	1 st (Horti.)
2	PPT.3.1	Fundamentals of Plant Pathology	3(2+1)	3 rd (Horti.)
3	PPT.3.3	Nematode Pest of Horticultural Crops and their Management	2(1+1)	3 rd (Horti.)
4	PPT. 4.4	Mushroom Culture	1(0+1)	4 th (Horti.)
5	FBT. 4.6	Forest Pathology	3(2+1)	4 th (Forestry)
6	PPT.5.6	Diseases of Fruit, Plantation and Medicinal and Aromatic Crops	3(2+1)	5 th (Horti.)
7	PPT.5.7	Diseases of Vegetable, Ornamental and Spice Crops	3(2+1)	5 th (Horti.)

List of M.Sc. and Ph.D. courses

Sr. No.	Course No.	Title	Credits
1	HORTI. PATH/FOREST PATH./PL PATH 501*	Mycology	3(2+1)
2	HORTI. PATH / FOREST PATH./PL PATH 502*	Plant Virology	3(2+1)
3	HORTI. PATH/ FOREST PATH./PL PATH 503*	Plant Bacteriology	3(2+1)
4	HORTI. PATH/ FOREST PATH./PL PATH 504*	Principles of plant pathology	3(3+0)
5	HORTI. PATH/ FOREST PATH./PL PATH 505*	Detection and diagnosis of plant diseases	2(0+2)
6	HORTI. PATH/ FOREST PATH./PL PATH 506	Principles of plant disease management	3(2+1)
7	HORTI. PATH/ FOREST PATH./PL PATH 507	Diseases of field and medicinal crops	3(2+1)
8	HORTI. PATH/ FOREST PATH./PL PATH 508	Diseases of fruits, plantation and ornamental crops	3(2+1)
9	HORTI. PATH/ FOREST PATH./PL PATH 509	Diseases of vegetable and spices crops	3(2+1)
10	HORTI. PATH/ FOREST PATH./PL PATH 510	Seed health technology	3(2+1)
11	HORTI. PATH/ FOREST PATH./PL PATH 511	Chemicals in plant disease management	3(2+1)
12	HORTI. PATH/ FOREST PATH./PL PATH 512	Ecology of soil-borne plant pathogens	3(2+1)
13	HORTI. PATH 591	Master's Seminar	1(1+0)
14	HORTI. PATH 599	Master's Research	20
15	HORTI. PATH/ FOREST PATH./PL PATH 601	Advanced Mycology	3(2+1)
16	HORTI. PATH/ FOREST PATH./PL PATH 602	Advanced Virology	3(2+1)
17	HORTI. PATH/ FOREST PATH./PL PATH 603	Advanced bacteriology	3(2+1)
18	HORTI. PATH/ FOREST PATH./PL PATH 604**	Molecular basis of host-pathogen interaction	3(2+1)
19	HORTI. PATH/ FOREST PATH./PL PATH 605	Principles and procedures of certification	1(1+0)
20	HORTI. PATH/ FOREST PATH./PL PATH 606	Plant biosecurity and biosafety	2(2+0)

21	HORTI. PATH/ FOREST PATH./PL PATH 691	Doctoral Seminar I	1(1+0)
22	HORTI. PATH/ FOREST PATH./PL PATH 692	Doctoral Seminar II	1(1+0)
23	HORTI. PATH/ FOREST PATH./PL PATH 699	Doctoral Research	45

* Compulsory at M.Sc. level ** Compulsory at Ph.D. level

Number of passed out students (M.Sc. and Ph.D.)

Passed out students	Plant Pathology	
	M.Sc.	Ph.D.
Total	21	1

List of M.Sc. and Ph.D. thesis

M.Sc. thesis

Sr. No.	Title of the thesis	Year	Name of PG student	Name of the Major Guide
1	Investigation on wilt [<i>Fusarium solani</i> (Mart.) Sacc.] of muskmelon (<i>Cucumis melo</i> L.), under South Gujarat Condition.	2006	Jaimin R. Pandya	Dr. D. M. Joshi
2	Investigation on wilt [<i>Fusarium solani</i> (Mart.) Sacc.] of gerbera (<i>Gerbera jamesonii</i> L.), under South Gujarat Condition.	2006	Hitesh R. Dhamsania	Dr. D. M. Joshi
3	Leaf spot (<i>Colletotrichum gloeosporioides</i> Penz. & sacc.) of rose (<i>Rosa spp.</i>) and its management	2006	Gohel Dharmendrasinh Pravinsinh	Dr. P. N. Rajkule
4	Wilt (<i>Fusarium solani</i> (Mart.) Sacc. of tomato (<i>Lycopersicon esculentus</i> Mill.) and its management	2007	LadYogeshbhai Gajanandbhai	Dr. P. N. Rajkule
5	Studies on <i>Fusarium</i> wilt of gladiolus	2008	Jitendra R. Patel	Dr. D. M. Joshi
6	Investigation of leaf blight of tuberose (<i>Polyanthus tuberosa</i> L.) caused by <i>Alternaria alternata</i> (Fr.) Keissler, under South Gujarat condition.	2008	Nirav K. Gajre	Dr. D. M. Joshi
7	Investigation on anthracnose (<i>Colletotrichum capsici</i> (Syd.) Butler and Bisby) of yam (<i>Dioscorea alata</i> L.), under south Gujarat condition.	2009	Ms. Pooja B. Mehetre	Dr. D. M. Joshi
8	Investigation on grey leaf spot/blight of coconut (<i>Cocos nucifera</i> L.) Caused by <i>Pestalotia palmarum</i> (Coock) Steyert, under South Gujarat condition.	2009	Ms. Rajeshree A. Rokade	Dr. D. M. Joshi
9	Investigation on leaf tip blight (<i>Curvularia eragrostidis</i> (Henn.) J.A.Mey. Of spiderlilly, under South Gujarat condition	2010	Viral P. Prajapati	Dr. D. M. Joshi
10	Investigation on leaf spot/blight (<i>Drechslera</i> state of <i>Trichocomasphaeria holmii</i> (Luttrell) Subramaniam & Jain) of <i>Heliconia</i> (<i>Heliconia orthotricha</i>) under South Gujarat condition.	2011	Ms. Shivangi S. Kansara	Dr. D. M. Joshi
11	Leaf blight (<i>Curvularia lunata</i> (Wakker) Boedijn of lemongrass (<i>Cymbopogon spp.</i>) and its management	2011	Deshmukh Sachin Raosaheb	Dr. P. N. Rajkule
12	Investigation on leaf spot (<i>Colletotrichum gloeosporioides</i> Penz. & sacc.) of ornamental orchid (<i>Dendrobium Sonia Jo 'Eiskul'</i> , under South Gujarat condition	2012	Bharat A. Patel	Dr. D. M. Joshi

13	Characterization of <i>Fusarium oxysporum</i> f. Sp. <i>lycopersici</i> (Sacc.) Synder and Hans, causing wilt of tomato (<i>Lycopersicon esculentum</i> Mill.) under South Gujarat conditions.	2012	Chopada Gopalkumar Babubha	Dr. Pushpendra Singh
14	Investigation and management of leaf blight (<i>Colletotrichum gloeosporioides</i>) of anthurium (<i>Anthurium andraeanum</i>)	2013	Miss. S. K. Sonawane	Dr. P. R. Patel
15	Symptomatology, morphology and management of stem rot of cowpea [<i>Vigna unguiculata</i> (L.) Walp] caused by <i>Sclerotium rolfsii</i> Sacc.	2013	Mr. Kachhadia Mayur Vasantrai	Dr. P. R. Patel
16	Characterization of (<i>Colletotricum capsici</i>) causing anthracnose and ripe fruit rot of chilli (<i>Capsicum annum</i> L.) under South Gujarat	2013	Mr. Naveen Kumar Parashar	Dr. Pushpendra Singh
17	Histopathology, epidemiology, varietal screening and management of leaf spot of gerbera (<i>Gerbera jamsonii</i> H. Boluxes J. D. Hook) caused by <i>Alternaria spp.</i> under control conditions	2013	Mr. Mahesh Kerunath Pansare	Dr. Pushpendra Singh
18	Investigations on stem rot of chilli caused by <i>Sclerotium rolfsii</i> Sacc.	2014	Miss Nidhika D. Mehta	Dr. P. R. Patel
19	Dissecting pathological and bio-chemical changes during brinjal [<i>Phomopsis vexans</i> (Sacc. & Syd.) Harter] interaction.	2014	Pandey Jayshreeben K.	Dr. Pushpendra Singh
20	Diversity analysis and management of <i>Colletotrichum gloeosporioides</i> causing leaf spot in dracaena.	2015	Desai Bhumi Rajeshbhai	Dr. P. R. Patel
21	Screening of chilli phylloplane and endophytic microflora in against <i>Colletotrichum</i> sp.	2015	Patel Vilas Nareshbhai	Dr. P. R. Patel

Ph.D. Thesis

Sr. No.	Title of the thesis	Year	Name of the student	Name of the Major Guide
1	Mycoflora involved in post harvest fruit rot of papaya (<i>Carica papaya</i> L.) and its management	2013	Patel Jitendra Bharatbhai	Dr. B. P. Mehta

Recommendations for Farmers

1. Farmers of South Gujarat Heavy Rainfall Zone-I growing banana cv. Grand Naine are advised to plant healthy sucker of banana followed by drenching of Streptocyclin sulphate 9% + Tetracyclin hydroxide 1%-SP @ 500 ppm (0.5 g/litre) 1 litre (0.005%; 150 g a.i./ha) solution per plant at 15 days, 2 month and 4 months after planting with green manuring of sunhemp (three times) in the interspaces till 6 months of planting for effective management of bacterial rhizome rot disease. The PHI for this combination product is 180 days (2014).
2. The farmers of South Gujarat Heavy Rainfall Zone-I, growing papaya are advised to raise the papaya seedlings under Nylon net (40-60 mesh) and spraying of acephate 75 SP 1.5 g/litre of water at 3 days before planting as well as use of two rows of border crop of maize sown 15 days before planting. Apply 1% Neem oil @ 2 ml/litre with acephate 75 SP 1.5 g/litre of water (0.11%; 675 g a.i./ha) at 15 days interval up to 5 month for effective management of papaya ring spot virus disease. PHI for Acephate is 240 days (2014).

For Scientific Community

- Tomato genotype, NTL-2, NTL-6, NTL-7 and NTL-10 are resistant, while genotype N TL-1, NTL-8, NTL-9, and GT-2 are moderately resistant against tomato wilt. (2015).
- Alternaria* sp, *Aspergillus* spp., *Fusarium* sp, *Trichoderma* sp are found the most frequently associated fungal genera with six forest trees viz., *Tectona grandis* (Teak), *Leucaena leucocephala* (Subabul), *Delonix regia* (Gulmohar), *Acacia mangium* (Mangium), *Adenanthera pavonina* (Ratangunj) and *Cassia fistula* (Garmalo) using blotter and agar plate method.. (2015).
- Among various brinjal genotypes screened, minimum little leaf infection (3.58%) was recorded in GJB-2. (2016).

Project and objectives

- Evaluation of DU PONT fungicide Proquinazid 20EC against powdery mildew of mango (2015-16): (329-18115): Other Agency
 - To evaluate the bio-efficacy and determine effective dose of Proquinazid 20 EC against powdery mildew of Mango
 - To evaluate phytotoxicity of Proquinazid 20 EC in Mango

Publication:

Research Papers

SN	Name of Authors	Title of research paper	Name of Journal, Year, Vol. No., Issue No. and page No.
1.	Patel, P.R. and Shukla, Abhishek	Investigation on seasonal incidence of banana aphid, <i>Pentalonia nigronervosa</i> (Coquer L.) and bunchy top disease.	<i>Uttar Pradesh J. Zool.</i> , (2011), 31(2): 191-193.
2.	Waghunde, R. R.; Mehta, B.P.; Sabalpara, A.N.; Naik, B.M. and Patel, P. P.	Biological control of finger millet (<i>Elusinecoracana</i> L.) leaf blast incited by Magnaporthe grisea (Cke) Sacc.	<i>J. Mycopathol.</i> (2013), 51(1)125-130.
3.	Patel, J. B.; Mehta, B. P.; Patil, V. A. and Kotgire, G. S.	Physiological Characterization of <i>Colletotrichum gloeosporioides</i> inciting fruit rot of Papaya	<i>J. Pure and Applied Microbiology</i> , (2013), 7(4), 3251-3253
4.	Patil,V.A.; Mehta, B. P. Sabalpara, A.N.; Deshmukh, A.J. and Patel, J.B.	Effect of temperature against Pestalotia cardii causing grey leaf blight disease of mango <i>in vitro</i> Macrophomina and Stem end rot –New post harvest diseases of papaya in Gujarat	<i>J.Pl. Dis. Sci.</i> , (2014), 9(1): 98-99.

Books

Sr. No.	Name of the Authors/Editors	Title of the book	Year	Publisher	ISBN Number/ NAU Number
1	Dr. A. N. Sabalpara, Dr. B. P. Mehta, Dr. K. B. Rakholiya Dr. Priya Jhon, Dr. Lalit Mahatma, Prof. B. M. Naik, A. I. Deshmukh and J. B. Patel and Mr. J. R. Pandya	An appropriate technology for mass multiplication of Trichoderma bio pesticides at village level.	2011	NAU	-
2	Dr. A. N. Sabalpara, Dr. B. P. Mehta, Dr. Priya Jhon, Dr. K. B. Rakholiya, Mr. R. A. Waghunde and Mr. J. R. Pandya	<i>Trichoderma</i> Powerful Bio agent for seed and soil borne diseases.	2011	NAU	-
3	Dr. A. N. Sabalpara, Dr. B. P. Mehta, Dr. K. B. Rakholiya, Dr. Priya Jhon, Dr. Lalit Mahatma, Prof. B. M. Naik, A. I. Deshmukh and J. B. Patel and Mr. J. R. Pandya	<i>Kheduto Khetare niyantrak Trichoderma jathabandh utpodononi vividh tantric padhatiyo.</i>	2011	NAU	-
4	Dr. B. P. Mehta	Investigation and Management of lablab bean Anthracnose.	2013	LAP	978-3-8465-1675-1

Chapters

Patel, P. R. (2015). Integrated Disease Management in Horticultural In: *Commercial Horticulture*, New India Publishers Agency, New Delhi, pp. 277-292.

Teaching manuals published

1. BSC.1.6 Introductory microbiology
2. PPT.3.1 Manual of Fundamentals of Plant Pathology
3. PPT3.3 Nematode pests of horticultural crops and their management
4. PPT.4.4 Mushroom culture
5. PPT5.6 Diseases of Fruit, Plantation, Medicinal and Aromatic crops
6. PPT.5.7 Diseases of vegetable, ornamental and spice crops



Powdery mildew disease in gerbera caused by *Erysiphe cichoracearum*



Colletotrichum gloeosporioides causing leaf blight in Anthurium



Colletotrichum gloeosporioides causing leaf spot in Dracaena



Bio control of stem rot of chilli caused by
Sclerotium rolfsii



Stereotriangular and research trinocular microscopes with CCD camera and photomicrographic attachments



Instrumentation Laboratory



Dissecting Microscopes



Refrigerated Centrifuge



Digital colony counter



Orbital shaker



Spectrafuge



Digital Balance (1 to 2000 g)



Doble distillation apparatus



Analytical digital balance



Herbarium cabinets



Microwave oven