

CURRICULM VITAE

OBJECTIVE

To obtain an administrative position that will utilize my abilities in communications, public relations, curriculum, collaborations and supportive leadership which will result in a positive learning environment ensuring the success for all stakeholders.



1. PERSONAL INFORMATION

- a) Name : DR. SHANKAR LAXMAN LAWARE
b) Date of birth : April, 2,1965
c) Nationality : Indian
d) Marital status : Married
e) Postal Address and contact details.
College : Arts, Commerce and Science College, Sonai, Tal. Newasa,
Dist. Ahmednagar, Pin- 414105
Email ID: laware_sl@yahoo.com and sllfergusson@gmail.com
Residence : A1, Flat No.304, 10 Elite, Pimple Gurav, Pune - 411061.
(M) 9822742384

2. ACADEMIC QUALIFICATIONS:

Sr. No.	Degree	Year of passing	University	Subject	Grade/Class
1	B.Sc.	1987	Savitribai Phule Pune University, Pune	Botany	1 st Class Dist.
2	M.Sc.	1989		Botany (Cytogenetics & Plant breeding)	1 st Class
3	Ph.D.	2001		Botany (Cytogenetics & Plant breeding)	

Place of research work: Dept of Botany, University of Pune, Pune-411 007.
Title of Ph.D. Topic: Mutational studies in strawberry (*Fragaria x ananassa* Duch)

3. APPOINTMENT AND DESIGNATION

- (a) **Present designation** : Principal (Arts Commerce & Science College Sonai, Newasa, A' Nagar)
(b) **Date of appointment as Principal** - 4 August 2016 (Shri Dnyaneshwar Mahavidyalaya , Newasa , A' Nagar)
(c) **Date of appointment as Asst professor:** 17 July 1991 (Fergusson College, Pune)
(d) **Date of confirmation as Asst./ Professor** : 17 July 1993 (Fergusson College, Pune)

4. EXPERIENCE:

- (i) **Teaching:** (a) Undergraduate: **26 years** (b) Postgraduate: **17 year**
(ii) **Recognised PG Teacher /Research guide (Research experience- 14 Years)**
(a) **Recognized PG Teacher:** Postgraduate graduate teacher recognition (by paper) in Botany from 31-7-2002 - Pune University **Ref. BUTR/ 5791 dated 9/9/2002**
(b) **Recognized PG Teacher:** Postgraduate graduate teacher recognition (Guiding and teaching M. Phil. and Ph.D. students) in Botany from

(i) 29-04-2004 to 28/04/2012.- SP Pune University. **Ref. BUTR/4090 (13/07/2004)**

(ii) 29-04-2012 to 28/04/2020- SP Pune University. **Ref. BUTR/0740 (26/06/2013)**

5. SPECIALIZATION (at M. Sc. and M.Phil. / Ph.D.)

A. **M.Sc. :** Botany -Cytogenetics and Plant breeding

B. **Ph.D. :** Botany- Induced Mutations

C. **Topic of interest in teaching:** Genetics, Molecular biology, Plant physiology, Plant biotechnology

D. **Topic of Interest in research:** Drought Physiology, Plant biotechnology, Organic farming, Herbal formulations and Nanotechnology.

6. AWARDS AND ACHIEVEMENTS

(1) **Team leader Award** (State level Avishkar,2017) – Savitribai Phule Pune University, Pune (2018)

(2) Teacher excellence Award (2015) 5th Sept 2015, Pune Municipal Corporation, Pune

(3) **Best team leader** (State level Avishkar,2014) – Savitribai Phule Pune University, Pune (2015)

(4) **Best teacher award (Gold medal)** Uttarbhartiay Sangh, Pune (2014)

(5) **Gold medal** for oral presentation at National Conference on “Frontiers in Life Sciences”, held at Sharadabai Pawar Mahila Mahavidyalaya, Baramati (Date: 11th to 13th Jan. 2011)

(6) **First Prize** (Teachers category) at University level Research Festival “Avishkar-2010” held at Maharashtra University of Health Sciences, Nasik, Maharashtra. (Dec. 2010.)

(7) **First Prize** (Teachers category) at 5th Inter-University Research Festival “Avishkar-2010” held at Maharashtra University of Health Sciences, Nasik, Maharashtra. (Date: 20th to 23rd Jan. 2011.

(8) **Merit certificate:** Recipient of prize certificates for standing first (1988) and third (1989) in order of merit in M. Sc. Botany examinations, P.V. P. College, Pravanagar (University of Pune).

(9) **Teacher Fellow:** U.G. C. Teacher fellowship (1999-2001).

(10) **First prize and Merit certificate:** for business plan competition conducted by Indus World School of Business at National Zonal of Shrijan 10. Held at Mumbai. Jan.10

(11) **First prize and Merit certificate:** for business plan competition conducted by Indus World School of Business at National Final of Shrijan 10. held at Delhi Feb.10

7. INNOVATIONS (Patents -Awarded, Published and filed)

• **Awarded : 01**

(1) Culture medium Composition : Patent No.SI No. 0022/12/07 No. 260402 Date 29/04/2014

• **Published : 02**

(1) Formulation for treatment of bacterial blight disease (No. 2070/MUM/ July 2010)- published in patent journal, Nov.2012.

(2) Enzyme conjugated metal oxide nano-particles and its application in sugar production (No.2537/MUM/2014) Published in Patent journal, August 2014.

• **Filed : 01**

(1)Topical medication (No. 1054/MUM/ March, 2009)

8. RESEARCH CITATIONS, IMPACT FACTOR, AND ACADEMIC PERFORMANCE INDEX (Last five years):

(1) Academic performance index (Last 5 years -2009-2014) API : 970

(2) Total research citation and H-index : 335 (10)

- (3) Total Impact factors of publications : 25.778
 (4) Total papers in indexed journals and SNIP/SJR : 45 (12)

9. RESEARCH ACTIVITIES:

(1) Research Guide

- a) Research students completed Ph.D. : 07
 b) Research students submitted Ph.D. Thesis : 02
 c) Research students registered for Ph. D. Degree : 06

Name of Ph.D. student	Title of Thesis	Remark
(1) Mr. Abhijit Limaye	Assessment of some species of <i>Adiantum</i> with reference to secondary metabolites, amylase inhibitors and antioxidant”	Ph.D. Awarded Dec-2009
(2) Mr. Bajirao Shinde	“Physiological studies in ground nut under drought stress”	Ph.D. Awarded Dec-2011
(3) Mr. Gopal Deore	studies on Liquid organic fertilizer for enhancing the productivity in red pepper and tomato”	Ph.D. Awarded May- 2012
(4) Mr. Morteza Siavoshi	“Effect of Liquid organic fertilizer on growth and productivity in Rice”	Ph.D. Awarded July- 2012
(5) Mr. Yogesh Dushing	“Antioxidant potential fermented biomedicines (<i>Arishta</i> and <i>Asava</i>): An in-vitro assessment”(Registration) 29/06/2009	Ph.D. Awarded 1 st July- 2013
(6) Mr. Rajkumar Datir	Production and uses of amino acid micronutrient chelates in vegetable cultivation	Ph.D. Awarded 10 th July- 2013
(7) Ms. Shital. Bomble	“Ex- situ conservation of medicinal ferns from Mahabaleshwar under Pune condition.”	Ph.D. Awarded 12 May 2014
(8) Ms. Shilpa Raskar	“Influence of ZnO and TiO ₂ Nanoparticles on Cytology and Growth in Onion (<i>Allium cepa</i> L.)” (Registration) 04/01/2011	Ph.D. Awarded 1 st July- 2015
(9) Ms. Tahsin Kazi	Antioxidant Potential of Finger Millet (<i>Elusine coracana</i> (L.) Gaertn.)	Ongoing
(10) Mr. Chetan Pawar	Morphological and biochemical characterization of rice germplasm	Ongoing
(11) Mr. Sachin Golait	Studies on wild edible plants, Nasik dist. (MS.) India	Ongoing

(2) Research projects

Title of the Project	Name of the funding Agency	Duration	Remarks
(1) A minor research project on “Cytogenetic and macromolecular analysis of mutgeneic effects of sodium azide on brown mustard (<i>Brassica juncea</i> L.)”-	UGC, New Delhi	1997-1999	Completed
(2) Botanical Garden Development for <i>ex- situ</i> conservation of endangered plants.	Ministry of forest and environment	1997-1999	Completed
(3) Assessment of genotoxic potentials of herbal extracts by <i>Allium</i> test.	Dr. S. G. Kane Pune	2001-2001	Completed
(4) Assessment of Herbal and natural products by Using Different Bioassays	Dr. S. G. Kane Pune	2003-2005	Completed
(5) Assessment of <i>Jatropha</i> Species from Pune District	UGC	2006-2008	Completed CoI
(6) Comparative assessment of anti-cancerous ayurvedic preparations and individual herbs for their antioxidant activity	PICC, Pune and Muktangan Exploratory Science Centre, Pune	2008-2009	Completed

(7) Cross-linked polymeric cages for encapsulation and sustained release of drugs and fertilizers	DST, New Delhi	2009-2012	Completed
(8) Effect of TiO ₂ nanoparticles on oxidative enzymes	PICC, Pune and Mukangan Exploratory Science Centre, Pune	2009-2010	Completed
(9) Effect of TiO ₂ nanoparticles on growth and utilization of food in Bacteria and fungi.	PICC, Pune and Mukangan Exploratory Science Centre, Pune	2010-2012	Completed
(10) Preparation of value added organic liquid fertilizer for organic vegetable production	BCUD, University of Pune, Pune-07	2009-2012	Completed
(11) Antioxidant potentials of Arishtas	BCUD, SPP University of Pune, Pune-07	2013-2015	Ongoing

10. PUBLICATIONS (BOOKS AND RESEARCH PAPERS/ARTICLES):

(1) Books published (See Annexure –I)

National	: 12
International	: 04

(2) Research papers published (See annexure –II)

National	: 22
International	: 46
Proceedings	: 10

11. CONFERENCES /SEMINARS /WORKSHOPS (See Annexure –III)

National	: 72
International	: 07

12. EXTENSION WORK / COMMUNITY SERVICE:

(A) Extension work:

- (1) Member-NAAC (SSR) Coordination committee (3rd cycle)- Fergusson College Pune
- (2) Coordinator- Environmental awareness course - Fergusson College Pune (from 2006 - 2016.)
- (3) Coordinator- Research coordination committee- Fergusson College Pune (from 2014 – 2016.)
- (4) Academic and Research Coordinator (ARC) - Fergusson College Pune (from 2014 –2016.)
- (5) Coordinator- B.Sc. Biotechnology (voc) Fergusson College Pune (from 2004 to 20011).
- (6) **Member of subcommittee – BOS in Botany and vocational Biotechnology** for UG and PG level Syllabus Revision SSP Pune University
 - Botany Syllabus UG and PG (2013-2014).
 - Voc. Biotechnology Syllabus revision –UG (2014).

(B) Community Service:

- (1) Delivered total 15 lectures on e-herbarium to Class-I officers, Forest Department, Government of Maharashtra at YSADA, Pune.
- (2) Guiding pomegranate farmers, in controlling oily spot disease and plant nutrition.
- (3) Guiding nurserymen- liquid organic fertilizers and micro-nutrient management.

13. PARTICIPATION IN CORPORATE LIFE:

a) College / University / Institution:

- (1) Member of Avishkar coordination committee- from 2009- till date
- (2) Member organizing committee – National conference – Fergusson College, Pune-4
- (3) Member of organizing committee –National conference, Arts, Commerce and Science College, Satral A'nagar.

b) Co-curricular activities:

- (1) Worked as a Chairman and Paper Setter, Moderator, examiner for theory as well as Coordinator of practical examination in subjects like Botany and Biotechnology (Voc).
- (2) Delivered lead/plenary lectures in national and state level conferences and seminars

c) Enrichment of Campus Life:

- (1) Participated in Tree plantation drives organized by college and development of Botanical garden, planted medicinal plants (2009-10). Identified and mapped plants in Fergusson College campus (2013-14).
- (2) Involved in campaigns related to green campus. Helped in energy and water audit of the college campus.

14. STUDENTS WELFARE AND DISCIPLINE:

- (1) **Seminars/workshops:** Organized one day seminars/workshops for UG and PG students on Current trends in life sciences (2008), advanced techniques in Biosciences (2009), Concepts in biotechnology (2013), workshop “Avishkar 2013”, “Avishkar -2014”, Regional conference “Innovation 2015”.
- (2) **Problem solving sessions:** Always counseling students to appear for competitive exams like MH-CET, M. Sc. entrance test, SET, NET, MPSC etc.
- (3) **Post graduate projects:** Guiding students of M.Sc. Botany, Zoology and Biochemistry for research projects from 2010, till date.
- (4) **Research competitions:** Guided UG, PG and Ph.D. students for Avishkar and Anveshan Research competition.

Sr. No.	Year	Name of student	Participation (activity)	Outcome
1	2010	Mr. Gopal B. Deore	3rd National Research Convention “Anveshan-2010” Held at Amritsar, Punjab	Awarded FIRST PRIZE in ANVESHAN 2010- Under Ph.D. category (Basic Sciences)
2	2010	Mr. Gopal B. Deore	West Zone 3rd National Research Convention “Anveshan-2010” held at Vadodara Gujra, June 2010	Own 2nd in ANVESHAN (West Zone- Wadodra) under Ph.D. category (Basic Sciences)
3	2011	Miss Parul Sharma	Inter University Research Festival “Avishkar-2011” at Maharashtra Medical University Nasik, Jan. 2011.	Awarded FIRST PRIZE in – Under UG. category (Agriculture)
4	2013	Mr. Yogesh Dushing	Inter University Research Festival “Avishkar-2012” at KKV, Dapoli, Jan. 2013.	Awarded SECOND PRIZE – Under Ph.D. category (Agriculture)
5	2013	Miss. Urvi Khandelval	Inter University Research Festival “Avishkar-2012” at KKV, Dapoli, Jan. 2013.	Awarded SECOND PRIZE - Under UG. Category Agriculture)

- (6) **Botany Association:** Worked as In-charge of Botany Association 2007-08, 2009-10 and 2012-13.
- (7) **Science Exhibition:** Organized science exhibition named Flora 2008, 2010 and 2013 which includes various activities throughout the year like, Lectures of eminent scientists, projects, debates, competitions like quiz, poster presentation, seminars, salad making, photography, rangoli, flower arrangement etc.

- (8) **Guest lecture:** Delivered lectures on recent topics like Plant tissue culture, organic fertilizers and Nano-biotechnology, to degree college students of Pune University affiliated colleges.
- (9) **Study tours:** Accompanied many study tours of F.Y., S.Y. and T.Y. B.Sc. Botany in Maharashtra, Goa and South India from 1992 to date.
- (10) **Student empowerment:** Motivates students in environmental awareness campaigning and blood donation and other social work related issues.

e) Membership of academic or administrative Bodies / Committees:

- (1) Life member of horticultural society of India
- (2) Member of editorial committee –Journal of environmental science and water resource.

15. Other relevant information:

- (1) Research and extension work covered by media (Daily , Lokmat, DNA, Pune Mirror)
- (2) Worked as subject referee for Ph.D. Thesis evaluation and Pre-Synopsis viva
- (3) Worked as subject expert for Avishkar competitions (College and University levels)
- (4) Visited countries like- Thailand, Dubai, Nepal and Australia

Shankar Laware

Annexure-1

BOOKS PUBLISHED

Name of the book	Author	ISBN No.	Year	Edition	Publisher
A textbook of horticulture	S.L. Laware	-	1997	-	Gaaj Prakahana Ahmednagar
A textbook of fundamental Botany (Plant Diversity)	Shankar Laware	-	2002	-	Narendra Prakashan, Pune
A textbook of Applied Botany Part I	Shankar Laware	-	2002	-	Narendra Prakashan, Pune
A textbook of Applied Botany Part II	Shankar Laware	-	2003	-	Narendra Prakashan, Pune
A textbook of fundamental botany (Morphology & Anatomy)	Shankar Laware	-	2003	-	Narendra Prakashan, Pune-2
A Textbook of Botany- Taxonomy of Angiosperms	Shankar Laware	-	2003	-	Narendra Prakashan, Pune
A Textbook of Botany- Plant ecology and utilization of plants	Shankar Laware	-	2003	-	Narendra Prakashan, Pune
A Textbook of Botany- Plant biotechnology	Shankar Laware	-	2004	-	Narendra Prakashan, Pune
Recombinant DNA Technology	Shankar Laware Sangita Sontakke	8187575883	2007	1 st ed.	Vision Publication,Pune
Recombinant DNA Technology	Shankar Laware Sangita Sontakke	8187575883	2008	2 nd ed.	Vision Publication, Pune
Recombinant DNA Technology	Shankar Laware Sangita Sontakke	81-87575-88-3	2010	1 st ed	Vision Publication, Pune
Recombinant DNA Technology	Shankar Laware Sangita Sontakke	81-87575-88-3	2011	2 nd ed.	Vision Publication, Pune
Liquid organic fertilizer	Gopal Deore Shankar Laware	978384731569 8	2011	1 st ed	Lambert Germany
Drought Stress in Peanut	Shankar Laware Bajirao Shinde	978384840809 2	2012	1 st ed	Lambert Germany
<i>Adiantum</i> – A Medicinal herb	Shankar Laware Abhijit Limaye	978365912018 3	2012	1 st ed	Lambert Germany
Organic fertilizer for Rice	Morteza Siavoshi Shankar Laware	978365944330	2013	1 st ed	Lambert publication, Germany

Annexure –II

RESEARCH PAPERS PUBLISHED

Full Length Publications:

Year: 1999

1. Sushma Kirtane, **S. L. Laware** and K. N. Dhumal (1999). Effects of Ultragin and Tribhuvan kirti on root tip cells of *Allium cepa* L. *J. Cytol. Gent.* 34 (2): 147-151.

Year: 2000

2. Dhumal K. N. and **Laware S. L.** (2000). Biochemical studies in viable macro mutants of strawberry. *In Proc. DAE-BRNS symposium on the use of nuclear molecular techniques in crop improvement* pp264-271.
3. **Laware S. L.** and K. N. Dhumal (2000). Mutagenic effects of ethyl methanesulphonate and sodium azide in strawberry. *In Proc. DAE-BRNS symposium on the use of nuclear molecular techniques in crop improvement* pp279-284.

Year: 2001

4. Deshmukh R.N. **S.L. Laware** and K.N. Dhumal (2001). Metabolic alterations in *Sorghum bicolor* under water- stress. *J. Maharashtra Agrcl. Univ.*, 26(1): 50-53
 5. E.B. Bhalerao, **S. L. Laware**, R. R. Vaiday and K. N. Dhumal (2001). Effects of *Aspidium cicutarium* rhizome extract on seed germination and seedling growth in Jowar and Bajra. *Journal of Medicinal & Aromatic Plant Sciences* Vol. No.22/4A & 23/1A: 499-501
 6. E.B. Bhalerao, **S. L. Laware**, R. R. Vaiday and K. N. Dhumal (2001). Influence of leaf leachates of *Pteridium* and *Aspidium* species on physiology of *Mentha*. *Journal of Medicinal & Aromatic Plant Sciences* Vol. No.22/4A & 23/1A: 502-504.
- Year: 2002**
7. Bhalerao E.B., **Laware S. L.**, Bhusare S.S and K. N. Dhumal (2002) Bio-prospective role of *Pteridium aquilinum* in food and agriculture. *In Proc. National seminar on ethnobotany and sacred groves: role in conservation strategies of India, AIR Pune.*
 8. **Laware S.L.** Chinmay Lokare, Hrishikesh Seth and Savita Bhusare (2002). Assessment of *Oxalis corniculata* L., leaves for enzymic and non-enzymic antioxidants. *In Proc. National seminar on Recent advances in plant, microbial and environmental biotechnology, C. T. Bora College, Shirur, Pune. pp.*
- Year: 2004**
9. Khapake S.L., **Laware S.L.**, R.K. Aher and K.N. Dhumal (2004). Screening of drought stress tolerance in soybean (*Glycine max* L.) cultivars. *Asian Jr. Microbial, Biotech.Env. Sc.* 6 (1): 57-60.
 10. Phatak M.S., Badekar S.U., Parale A.P. and **S.L. Laware** (2004). *Oxalis* leaves blended antioxidant rich salads. *In Proc. National conference on Human health and Nutrition: A biotechnological approach, Thane. pp.* 167-171.
- Year: 2005**
11. Anuradha Parale, Sarika Badekar, Santosh Satbhai and **S. L. Laware** (2005): Isolation and partial purification of Amylase Inhibitors from *Clitoria ternatea* seeds. *In Proc. National Conference In Plant Sciences, Pravaranagar: Vol. II pp-375-379.*
 12. **Laware S.L.** and K.N. Dhumal (2005) Improvement in ascorbic acid content in strawberries through induced mutations *In Proc. National Conference in Plant Sciences, Pravaranagar: Vol. II pp-380-384.*
 13. Santhosh Satbahi, **S. L. Laware** and Sushama Subharwal (2005): Characterization of alpha amylase inhibitors (AAI) isolated from cowpea seeds. *In Proc. National Conference In Plant Sciences, Pravaranagar: Vol. II pp-324-326.*
- Year: 2008**
14. Sandip Dhoble, Trupti Thite, **S.L.Laware**, C.V.Rode, Soumya J. Koppikar, Ruchika Kaul Ghanekar and S.N.Kale (2008) Zinc oxide nanoparticles as novel alpha amylase inhibitors, *Journal of Applied Physics* **104**, 094907-1-5. (IF 2.14)
- Year: 2009**
15. Deore G.B.; Limaye A.S.; Gatkal S.B.; Dushing Y.A.; and **S.L. Laware** (2009). Production of micronutrient chelate using seed amino acid. *In Proc. National conference on biodiversity, sustainable development and human welfare, Dhule. pp-* 120-124
 16. Shinde, B.M., Limaye, A. S., Deore, G. B and **Laware, S. L.** (2009) Response of Groundnut Varieties to Drought Stress during Seed Germination and Early Seedling Growth. *In Proceedings: National Conference on Climate Change and Challenges in Biodiversity Conservation. Organized by Department of Zoology, Fergusson College, Pune. pp.:* 177-181 (Date: Dec. 11-12, 2009).
 17. Shital Bomble and **S. L. Laware** (2009). Conservation of *Tectaria macrodonta* (Fee) C. Chr. under Pune climatic conditions. *In Proc. National conference on biodiversity, sustainable development and human welfare, Dhule. pp-* 130-132.
 18. Sumedha Kondekar, Yadnesh Kesari, Abhijit Limaye, Gopal Deore, Shashikant Gatkal and **S. L. Laware** (2009) Evaluation of some anticancer plants mentioned in ayurveda for their radical scavenging activity. *In Proc. National conference on biodiversity, sustainable development and human welfare, Dhule. pp-* 125-129.
- Year: 2010**
19. Shinde, B.M., Limaye, A. S., Deore, G. B and **Laware, S. L.** (2010) Physiological Responses of Groundnut (*Arachis hypogaea* L.) Varieties to Drought Stress. *Asian Journal of Experimental and Biological Science, Special Vol. No. 1:* 68-71 (Oct 2010)

20. Shinde, B.M., and **Laware, S. L.** (2010) Effect Of Drought Stress On Agronomic And Yield Contributing Characters In Groundnut (*Arachis Hypogaea* L.). *Asian Journal of Experimental and Biological Science*,1(4): 968-971. (Oct 2010)
21. Shinde, B.M., and **Laware, S. L.** (2010) Effect of Drought Stress on Morphological Characters in Groundnut (*Arachis Hypogaea* L.). *Flora and Fauna, Special issue pp* 128-131. (**Jan 2010**)
22. Limaye A. S., Deore G. B., Shinde B. M. and **S. L. Laware** (2010) Assessment of *Adiantum trapeziforme* L. for antioxidant activities. *Asian Journal of Experimental and Biological Science, Special Vol. No. 1:* 79-84. (Oct 2010)
23. Datir R.B. Dr. **S. L. Laware** and Dr. B. J. Apparao (2010) Effect of Organically Chelated Micronutrients on Growth and Productivity in Okra. *Asian Journal of Experimental and Biological Science. Special Vol. No. 1:* 115-117. (Oct 2010)
24. Deore G. B., Limaye A. S., Shinde B. M. and **S. L. Laware** (2010) Effect of Novel Organic Liquid Fertilizer on Growth and Yield in Chilli (*Capsicum annum* L.). *Asian Journal of Experimental and Biological Science. Special Vol. No. 1:* 15-19. (Oct 2010)
25. Dipen Parande, A. S. Limaye and **S. L. Laware** (2010) Use of Phytoessence in making of Soaps and Body Lotion *Asian Journal of Experimental and Biological Science, Special Vol. No. 1:* 165-167. (Oct 2010)

Year 2011

26. S. N. Kale, J. Mona, Sandip Dhobale, Trupti Thite, and **S. L. Laware** (2011) Intramolecular and intermolecular crosslinked poly (vinyl alcohol)–borate complexes for the sustained release of fertilizers and enzymes. *Journal of Applied Polymer Science*.10.1002/app.33776. (**IF 2.14**) (Aug 2011)
27. Dhobale, S.; Joshee, P.; Deore, G.; **Laware, S. L.** and Kale, S. N. (2011) Nanostructured glucose-oxidase immobilized SnO₂ thin films for glucose sensing. *Applied Physics Letters*, 98 (7), 073704-1-3. (**IF 2.14**) (16 Feb 2011)
28. **Laware S. L.**, G.B. Deore, Y. A Dushing, P.S. Patil and A.S. Limaye (2011) Preparation and Characterization of Hibiscus Flower Based Antioxidant Rich Energy Drinks. *In Proceeding of State level Seminar, NAC&S College Shevgaon.* pp: 1-6.
29. **Laware S. L.**, Datir R. B. And B. J. Apparao (2011) Influence of Micronutrient Supplemented Organic Fertilizer on Growth and Productivity of Okra. *In Proceeding of State level Seminar, NAC&S College Shevgaon.* pp: 13-17.
30. **Laware S. L.**, G.B. Deore, Y. A Dushing, P.S. Patil and A. S. Limaye (2011) Survey of Edible Plants Used by Dhangars from Ahmednagar District. *In Proceeding of State level Seminar, NAC&S College Shevgaon.* pp: 20-25.
31. **Laware S.L.**, Parul Sharma, Anjali Vyas, G.B. Deore, Sandip Dhobale and Sangita Kale (2011) Improvement of Amylase Enzyme Stability with Zinc Oxide Nanoparticle. *In Proceeding of State level Seminar, NAC&S College Shevgaon.* pp: 29-34.
32. Deore Gopal, Limaye A. S., Dushing Y. A., Shinde B.M. And **S.L. Laware** (2011) Rock Phosphate Solubilization By *Aspergillus niger*. *In Proceeding of State level Seminar, NAC&S College Shevgaon.* pp: 34- 38.
33. Dipen.Parande and **S.L. Laware** (2011). Use of phytoessence in making bath and skincare products In Proc. : The International conference on the Effect of Science on Globalization held at Yashwantrao Chavan, Academy of Development Administration Pune pp-90-103
34. **Laware. S. L.**, Parul Sharma, Anjali Vyas, G.B.Deore, Sandip Dhobale and S.N.Kale (2011). Studies on interactions of zinc oxide nanoparticle with bacterial amylase. *In Proc.: The International conference on the Effect of Science on Globalization held at Yashwantrao Chavan, Academy of Development Administration Pune.* pp-105-111.
35. Punam Patil, Yogesh Dushing, Gopal Deore, Abhjit Limaye, B.M.Shinde and **S.L.Laware** (2011) Ashokarishta enhances photosynthetic pigments in mungbean. *In Proc.: The International conference on the Effect of Science on Globalization held at Yashwantrao Chavan, Academy of Development Administration Pune.* pp:112-117
36. Morteza Siavoshi and **S.L.Laware** (2011) Effect of organic fertilizers on yield and its components in rice (*Oryza sativa* L.) *In Proc.: The International conference on the Effect of Science on Globalization held at Yashwantrao Chavan, Academy of Development Administration Pune.* pp-126-137.

37. Morteza Siavoshi, Alireza Nasiri and **S.L.Laware** (2011) Effect of organic fertilizers on growth and yield components in rice (*Oryza sativa* L.) *Journal of Agricultural Science* (published by Canadian center of science and education 3(3) –217-224. (IF=2.878) (Sept 2011)

Year 2012

38. Rohini Kitture, Sougata Ghosh, Parag Kulkarni, X. L. Liu, Dipak Maity, S. I. Patil, Ding Jun, Yogesh Dushing, **S. L. Laware**, B. A. Chopade, and S. N. Kale (2012). Fe₃O₄-Citrate-Curcumin: Promising conjugates for superoxide scavenging, tumor suppression and cancer hyperthermia. *J. Appl. Phys.* **111**, 064702; <http://dx.doi.org/10.1063/1.3696001> (IF 2.14) (28 March 2012)
39. Datir R.B., **S.L.Laware** and B.J Apparao (2012). Application of amino acid chelated micronutrients for enhancing growth and productivity in chili (*Capsicum annum* L.) *Plant Sciences Feed*, **2** (7): 100-105. (July 2012)
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 135. Limaye A. S., Shinde B. M., Deore G. B., Dushing Y. A. and **S. L. Laware** (2010), A Comparative Study of α -Amylase Inhibitory Activity of *Adiantum* species, XXXIII conference of IBS & international symposium on the new horizons of botany, Shivaji uni., Kolhapur, pp 104 (Date: 10th to 12th November 2010)
 136. Dipen .S. Parande, Yogesh .A. Dushing and **S.L. Laware** (2010) Use of Plant Essences in making Natural Bath and Body products, Annual Biotechnology Conference for Students (ABSC) School of Biotechnology, (I square IT, Pune, India) (Date: 13th- 14th November 2010).

137. Vyas A., P. Sharma, G. Deore, Y. Dushing, S. Dhoble and **S.L. Laware** (2010), Zinc Oxide Nanoparticles Enhance Activity of Bacillus Amylase, XXXIII conference of IBS & international symposium on the new horizons of botany, Shivaji uni., Kolhapur, pp 106. (Date: 10th to 12th November 2010)
138. G. B. Deore, A. S. Limaye, Y. A. Dushing, B. M. Shinde, S. B. Dhoble and **S. L. Laware** (2010), Effect of Novel Liquid Organic Fertilizer on Growth, Yield and Lycopene Content in Tomato, XXIII conference of IBS & international symposium on the new horizons of botany, Shivaji uni., Kolhapur, pp191. (Date: 10th to 12th November 2010)
139. **Laware S. L.**, G. B. Deore, Y. A. Dushing, A. S. Limaye, P.S.Patil, and B. M. Shinde (2010), Effect of Organic Fertilizer on Growth and Productivity of Okra, XXXIII conference of IBS & international symposium on the new horizons of botany, Shivaji uni., Kolhapur, pp 194. (Date: 10th to 12th November 2010)
140. Patil P. S; Dushing Y. A; Shinde B. M; Deore G. B; Limaye A. S. and **S. L. Laware** (2010), Ashokarishta Ameliorates Seed Germination in Mungbean Under PEG Induced Drought Condition, XXXIII conference of IBS & international symposium on the new horizons of botany, Shivaji uni., Kolhapur, pp 197. (Date: 10th to 12th November 2010)
141. B. M. Shinde, G. B. Deore, A. S. Limaye, Y. A. Dushing and **S. L. Laware** (2010), Morpho-Physiological Variations in Groundnut Varieties under Drought Stress, XXXIII conference of IBS & international symposium on the new horizons of botany, Shivaji uni., Kolhapur, pp 203. (Date: 10th to 12th November 2010)
142. Limaye A. S; Deore G. B; Shinde B. M; Dushing Y. A. and **Laware S. L.** (2010) Antioxidant potential of *Adiantum aethiopicum* L. National Conference Of Plant Physiology, held at Banaras Hindu University, Varanasi (Date: 25th to 27th November-2010)
143. B. M. Shinde, A. S. Limaye, G. B. Deore, Y. A. Dushing and **S. L. Laware** (2010) Drought Stress Induced Changes in Groundnut (*Arachis Hypogaea* L.) varieties. National Conference Of Plant Physiology, held at Banaras Hindu University, Varanasi (Date: 25th to 27th November-2010)
144. **Laware S. L.**, Kondekar S. M., Dushing Y. A., Deore G. B., Limaye A.S., and Shinde B. M (2010) Antioxidant Potential of Some Indian Medicinal Plants: An *In-Vitro* Approach National Conference Of Plant Physiology, held at Banaras Hindu University, Varanasi (Date: 25th to 27th November-2010)
145. Morteza Siavoshi and **S.L. Laware** (2010). Effect of Harvesting Time and Crop Residue on Agronomic Characteristics of Ratooning in Rice Varieties (*Oryza sativa* L.). XI International Conference on International Organization of Plant Biosystematics, Aurangabad, India. p76.
146. Morteza Siavoshi, **S.L. Laware** and Morteza Mohseni Delarestaghi (2010). Investigation of Planting Density on Ratooning Characteristics of Rice Different Genotypes (*Oryza sativa* L.). XI International Conference on International Organization of Plant Biosystematics, Aurangabad, India. p76.

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147. Dushing Y.A., Patil P.S., Shinde, B.M., Deore G. B., Limaye A.S. and **S.L. Laware** (2011) Alleviation of the Adverse Effects of Drought Stress By Foliar Application of Ashokarishta on Mungbean. International Conference on Biodiversity and Environmental Crisis: Past, Present and Future, P.R. Ghogarey Sci College, Dhule. pp 44-45.
148. Gopal B. Deore, Limaye A.S., Dushing Y. A., Shinde B. M. and **S. L. Laware** (2011) Production of Novel liquid organic fertilizer. International Conference on Biodiversity and Environmental Crisis: Past, Present and Future, P.R. Ghogarey Sci College, Dhule. pp 37-38
149. Patil P.S., Dushing Y.A., Deore G. B., Limaye A.S., Shinde B.M and **S.L. Laware** (2011) *In-vitro* Antioxidant Activity of different brands of Ashokarishta. International Conference on Biodiversity and Environmental Crisis: Past, Present and Future, P.R. Ghogarey Sci College, Dhule. pp 95.
150. Shinde B.M., Deore G. B., Dushing Y.A., Limaye A.S. and **Laware S. L.** (2011) Screening of Groundnut varieties for drought tolerance through physiological indices. International Conference on Biodiversity and Environmental Crisis: Past, Present and Future, P.R. Ghogare Sci College, Dhule. pp 118.
151. **Laware S. L.**, Y. A. Dushing, G. B. Deore, A. S. Limaye, and B. M. Shinde (2011) Assessment of Antioxidant Potential of Some Medicinal Plants From Ahmednagar. National Conference on Current Innovations in Plant Sciences, K. J. Somaiya College of Arts, Commerce & Science, Kopargaon pp 54
152. B. M. Shinde, G. B. Deore, A. S. Limaye, Y. A. Dushing and **S. L. Laware** (2011) Screening of groundnut (*Arachis hypogaea* L.) Varieties for Stomatal Behavior Under Drought Stress, National Seminar On Plant Biodiversity for Sustainable Development, Department of Botany, University of Pune, pp 45 (Date: 10th to 12th March 2011)

153. Deore G. B., B. M. Shinde, A. S. Limaye, Y. A. Dushing and **S. L. Laware** (2011), Production of Novel Liquid Organic Fertilizer and Effect of Foliar Spray on Growth and Yield in Tomato (*Lycopersicon Esculentum*) National Seminar On Plant Biodiversity for Sustainable Development, Department of Botany, University of Pune, pp 47 (Date: 10th to 12th March 2011)
154. Kushbhu Jalota, Kate S.S. and **S. L. Laware** (2011), Value added cookies for diabetic patients. National Seminar On Plant Biodiversity for Sustainable Development, Department of Botany, University of Pune, pp 64 (Date: 10th to 12th March 2011)
155. **Laware S. L.**, Patil P. S., Deore G. B., B. M. Shinde, A. S. Limaye, and Y. A. Dushing (2011), Antioxidant Potential of Ashokarishta. National Seminar On Plant Biodiversity for Sustainable Development, Department of Botany, University of Pune, pp 65 (Date: 10th to 12th March 2011)
156. **Morteza Siavoshi, S.L.Laware** and Morteza Mohseni Delarestaghi (2011). Investigation of Salt Tolerance in Different Rice (*Oryza sativa* L.) Varieties. The Sixth International Multi Disciplinary Conference Knowledge in New Millennium, Mysore, India, p250-252. Proceedings.
157. Saniya Kirloskar, Ghatpande V., Patil P. S., Deore G. B., and **S. L. Laware** (2011), Effect of TiO₂ nanoparticles on activity of Trypsin. National Seminar On Plant Biodiversity for Sustainable Development, Department of Botany, University of Pune, pp 68 (Date: 10th to 12th March 2011)
158. **Laware S. L.**, A.S. Limaye, Gopal Deore Isolation and Partial Purification of Alpha Amylase Inhibitor from Adiantum Fronds *International Botanical Congress 2011, Melbourne Australia 22-30 July 2011*.
159. **Laware S. L.** and S. S. Bomble (2011) Ex-situ conservation of medicinal ferns. IN proc. International conferences on current trends in medicinal plant research, University of Pune (Jan 2012). pp 81.
160. Morteza Siavoshi and **S.L.Laware** (2011). Effect of organic fertilizers on chlorophyll content in rice (*Oryza sativa* L.). 4th International Congress of Environmental Research December 15-17, Surat (India).

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161. Limaye A.S. Deore G. B., Shinde B. M. Dushing Y A and S. L. Laware (2011) Assessment of Adiantum *aethiopicum* L for amylase inhibitors and antioxidants. In proc. International conferences on current trends in medicinal plant research, University of Pune (Jan 2012).pp 129.
162. Laware S.L. Prachi Parmar and Yogesh Dushing (2012). Detection and validation of phenolic antioxidants by LC-MS from a fermented poly-herbal biomedicine –*ashwagandaristha*, in proc. National Seminar on Current Trends and Recent Advancements on Herbal Formulations. Shirpur dist. Dhule, 22-23 Feb 2012.
163. Laware S.L. Occurrence of deteriorating fungi in intramural environment of B.J. Wadia library, Fergusson College, Pune. National conference on environmental science, Shri Dnyaneshwar Mahavidyalaya, Newasa Dist. Ahmednagar. 23-25 February, 2012
164. S. L. Laware and Shital Bomble (2012) Ex-Situ conservation and eco-physiological study of rare medicinal fern *Christella parasitica* (L) Lev. National conference on environmental science, Shri Dnyaneshwar Mahavidyalaya, Newasa Dist. Ahmednagar. 23-25 February, 2012.
165. Laware S.L. (2012). Production of value added organic fertilizer. Innovation 2012. BJS Arts Science and Commerce College, Wagholi, Pune Date-26&27 March 2012.
166. Raskar Shilpa and S.L.Laware (2012). Effect of TiO₂ on seed germination and early seedling growth in onion. Recent trends in life sciences Bharti Vidyapeet's Y. M. College, Pune 21 and 22 December 2012.

Year: 2013

167. Parul Sharma Usha Ashtekar and S L Laware "Antioxidant and antilipid peroxidation activity of ashokarishta'
168. Raskar Shilpa and **S.L.Laware** (2013).Effect of Zinc oxide nanoparticles on cytology and seed germination in onion.National conference on currant prospects and challenges in life sciences CPCLS-13 - New Arts, Commerce and Science College, Ahmednagar (MS) 26-27, July 2013.
169. Raskar Shilpa and **S.L.Laware** (2013). Phyto-toxicity of Zinc oxide nano particles in onion (2013). National Seminar on New vistas in plant Science and biotechnology - New Arts, Commerce and Science College, Shevgaon, Ahmednagar (MS) 2 , 3 August 2013
170. Parul Sharma and **S.L.Laware** (2013).Antilipid peroxidation effect of Ashokarishta on human erythrocytes. National Seminar on New vistas in plant Science and biotechnology - New Arts, Commerce and Science College, Shevgaon, Ahmednagar (MS) 2 and 3 August 2013.
171. **Laware S.L.** and Shital Bomble (2013). Survey of pteridophytes from Mahabaleshwar. National Seminar on New vistas in plant Science and biotechnology - New Arts, Commerce and Science College, Shevgaon, Ahmednagar (MS) 2 and 3 August 2013.

172. **Laware S.L.** and Y A Dushing (2013). Screening of *kumariasava*: a polyherbal ayurvedic fermented medicine for phytochemicals and antioxidants (2013) National Seminar on New vistas in plant Science and biotechnology. New Arts, Commerce and Science College, Shevgaon, Ahmednagar (MS) 2 and 3 August 2013.
173. **S. L. Laware** and Ila Sharma-Acharya (2013). Antioxidant rich refreshing drink for diabetic patients. State level Seminar on Advances in methodology for life science research, Organized by Department of Botany, Sangamner College, Ahmednagar (MS) 422 605 Date. 20 & 21 September 2013.
174. **S. L. Laware** and Arti Dhangar (2013) Solid state fermentation of leaf litter to produce organic acids. State level Seminar on Advances in methodology for life science research, Organized by Department of Botany, Sangamner College, Ahmednagar (MS) 422 605 Date. 20 & 21 September 2013.
175. Snehalata Patil Vividha Raunekar, and **S.L. Laware** (2013). Alpha-amylase inhibitory potential of some medicinal plants. National Conference on “Organic farming: Need of the time” Organized by Department of Botany Dada Patil College, Karjat, Ahmednagar (MS) 10-12 October 2013.
176. Rohini Jadhav **and S. L. Laware** (2013). Solid state fermentation to produce metal chelators from leaf residue. National Conference on “Organic farming: Need of the time” Organized by Department of Botany Dada Patil College, Karjat, Ahmednagar (MS) 10-12 October 2013.
177. Laware S. L. and Shilpa Raskar (2013). Impact of titanium dioxide nanoparticles on enzymes activities during seed germination in onion. YC, Science College, Karad, Nov. 2013.
178. Vividha Raunekar, Snehalata Patil and **S.L. Laware** (2013). Alpha amylase inhibitory potential of polyherbal tea. YC, Science College, Karad, Nov. 2013. YC, Science College, Karad, Nov. 2013.

Annexure-III

CONFERENCES, WORKSHOPS AND SEMINARS ATTENDED

National level

1. Attended International conference on Ayurveda and Botany organized by Maharashtra Ayurveda Sammelan Pune on 9th to 14th November 1992.
2. Attended the training course cum workshop on “Ethnobotany” organized by Agharkar Research Institute, Pune; Academy of Development Science, Kashele and Society of Ethnobotanists, Lucknow, from 20th to 25th February 1993.
3. Attended the workshop in Applied Botany conducted at Yashwantrao Mohite College, Pune, on 7th and 8th February 1994.
4. Attended and participated in the workshop on “Studies In Botany Under New Prospects and Restructuring of Under Graduate Courses” organized by Abeda Inamdar College, Pune and University of Pune on 18th and 19th December 1995.
5. Attended and participated in the Seminar on “Recent Advances In Botany” Sponsored by Pune University, held at Post Graduate Department of Botany, P. V. P. College Pravaranagar, on 12th and 13th March 1996 and presented papers.
6. Attended and participated in the workshop on “S.Y. and T.Y. B.Sc. Botany Syllabus” Sponsored by University of Pune Held at Department of Botany, Arts, Science and Commerce College, Deolai Camp on 20th 21st December, 1997.
7. Participated and presented a paper ”in 7th All India Conference on Cytology and Genetics and Symposium on Molecular Biology and Biotechnology, organized at Gulbarga University, Karnataka, from 26th to 28th October 1998.
8. Participated in Second Vishwa Vaidya Summelan on Ayurved and Medico Botany; held at Fergusson College Pune-4, from 26th October to 1st November 1998 and presented papers.
9. Participated and presented papers in the Research Student Seminar “Susanvad” held on 4th and 5th December 1998.
10. Participated and presented a paper in National Seminar on New Horizons in Production and Post Harvest Management of Tropical and Subtropical Fruits held at IARI, New Delhi, from 8th to 9th December 1998.
11. Participated and presented a paper in Poster Session of the 4th Agricultural Science Congress held at Jaipur, Rajstan, from 21st to 24th February 1999.
12. Attended and participated in State Level Seminar on ‘Plant Disease Management’ held at Nutan Mahavidyalaya, Sailu, Parbhani (MS) from 25th to 26th August 1999 and presented papers.
13. Attended and Participated in 10th All India Congress of Cytology and Genetics Organized by Department of Zoology, Kalyani University (WB) from 29th to 31st October 1999 and presented papers.

14. Participated and presented papers in the National Seminar on Frontiers of Research and Development in Medicinal Plants, held at CIMAP, Lucknow from 16-18 September 2000.
15. Participated and presented a paper in National Seminar on Plant Physiological Paradigm for Fostering Agro and Biotechnological and Augmenting Environmental Productivity in Millennium 2000. Organized by Indian Society of Plant Physiology, New Delhi, Indian Institute of Sugarcane Research (ICAR) Lucknow, held at Lucknow from 7-9 November 2000.
16. Participated and presented papers in 87th Indian Science Congress held from 3-7 January 2000 at Pune University, Pune-411 007.
17. Participated and presented papers in DAE-BRNS Symposium on the use of Nuclear and Molecular Techniques in Crop Improvement. Organized by Nuclear Agriculture and Biotechnology Division BARC Mumba-400085 and Board of Research in Nuclear Sciences Department of Atomic Energy, Government of India, held at BARC Mumbai from 6-8 December 2000.
18. Completed trainings on breeding methods in pulses, grapes and strawberry and tissue culture applications at Department of Biotechnology, Mahatma Phule Agricultural University, Rahuri (MS) from 27-30 March 2000.
19. Attended one seminar on Role of information technology in biological sciences held at Department of Botany, University of Pune, Pune-411007 on Friday 22nd December 2000.
20. Participated and presented paper in Eighth All India Conference on Cytology and Genetics. Organized by Centre for Applied Genetics, Bangalore University, Bangalore-560056. Held at Bangalore-560056 from 23-25 January 2001.
21. Attended and participated in 1st National Conference on Parada and Gandhaka. Organized by Pune District Education Association's College of Ayurved and research center held on 10th and 11th March 2001 at Pune.
22. Participated and presented papers in National Conference on Plant Biotechnology for Indian Agriculture, Held at Vasant Rao Naik Mahavidyalaya, Aurangabad (MS) on 7th and 8th October 2001.
23. Participated and presented papers in National seminar on role of Plant Physiology for sustaining quality and quantity of food production in relation to environment. Department of crop physiology held at University of Agricultural Sciences, Dharwad (Karnataka) from 5-7 December 2001.
24. Attended International conference on Information technology and biotechnology held at Hotel Le Meridian, Pune (Maharashtra) from 13-15 December 2001.
25. Participated and presented paper in National Seminar on Current Trends in Plant Sciences held at Department of Botany, University of Pune, Pune, 411007 from 26th to 28th March 2002.
26. Participated in national seminar on intellectual property rights (Emphasizing copyright matters in relation Ayurveda) sponsored by HRD ministry, Government of India, held at Tilak Maharashtra Vidyapeeth, Gultekadi, Pune-37 on 31st March and 1st April 2002.
27. Attended one-day workshop on "Botanical Excursions" organised by Department of Botany, Abasaheb Garware College, Pune, 2002.
28. Attended four days "Basic Training in Recombinant DNA technology and PCR" organized by Bangalore Genei Pvt. Ltd. Bangalore, 2002.
29. Participated and worked as resource person in workshop on Restructuring of F.Y. B.Sc. Syllabus in Botany, held at S.P.M College, Baramati on 16-17 February 2002.
30. Attended and participated in one day workshop on Orientation workshop on F.Y. B.Sc. Syllabus held at Agasti and D.R. College, Akole A' Nagar on 26 February 2002
31. Participated and worked as resource person in workshop on Awareness and teaching of new topics in F.Y.B.Sc. Botany Syllabus, held at B.G. College, Sangvi, Pune- 27 on 1st October 2002
32. Participated and presented paper in State level conference in Botany on biotechnology, biodiversity and environmental aspects, Held at P.V.P.College Pravaranagar, Tal. Rahata (Maharashtra) on 26 Feb. 2003
33. Participated and worked as resource person in workshop on Restructuring of S.Y.B.Sc. Botany syllabus" organised by Department of Botany held at Arts, Science and Commerce College, Hadapsar, Pune on 2nd January 2003
34. Participated and worked as resource person in workshop on Orientation workshop on F.Y. B.Sc. Syllabus Agasti, and D.R. College, Akole Ahmednagar on 1st and 2nd February 2003.
35. Attended one day seminar on "Retrospect and prospects of Botany" organized by Department of Botany, Fergusson College Pune, 2004.

36. Attended and presented papers National seminar on Plant physiology held at Department of Botany, University of Pune 27-29th Dec. 2004.
37. Attended seminar on "Discussion of T.Y.B.Sc. Theory and Practical syllabus in Botany" organised by Department of Botany, S.P. College Pune, 2005.
38. Attended and worked as resource person in two days workshop on discussion of T. Y. B. Sc theory and practical syllabus organized by Botany, 8-9th Jan. 2005 S. P. College, Pune.
39. Attended and participated in one day workshop in Biotechnology on 17th Nov. 2005 Modern College, Pune.
40. Attended and participated in one day workshop on Vermicomposting of waste held at Department of Geology, Fergusson College, Pune on 18th Sept 2006
41. Attended and participated in One day seminar on Biophysics" held at Department of Biotechnology, Fergusson College, Pune on 31st Oct. 2006
42. Attended and delivered lead lecture on "Application of computer in systematic Botany" in One day seminar on Advances in Botany held at Shri Shiv Chhatrapati College, Junnar on 4th Feb. 2006.
43. Attended one-day seminar on "Biophysics" organised by Department of Biotechnology, Fergusson College Pune, 2006.
44. Attended and delivered Lead Lecture on "Plant tissue culture for the production of secondary metabolites" in seminar on Recent Trends in Plant Tissue Culture" held at Dada Patil Mahavidyalaya, Karjat on 3rd -4th Feb. 2007.
45. Attended and worked as resource person in State level seminar on "Recent Trends in Plant Sciences and Environment" held at S.S.G.M. College, Kopergaon, Dist. Ahmednagar 19-20th Dec. 2007.
46. Attended and worked as resource person in One day seminar on "Recent advances in medicinal plants and their conservation" held at Swami Muktanand College of Science, Yeola on 12th Jan. 2008.
47. Attended and presented papers in National Conference on Biotechnological approaches in Plant sciences National Conference on Biotechnological approaches in Plant sciences held at B. N. Sarada College, Sagamner on 16-17th Sep. 2008.
48. Attended and participated in One day workshop on Restructuring of Syllabi in Voc. Courses held at K.T.H.M. College, Nashik on 5th Dec. 2008
49. Attended and worked as resource person in State level seminar on "Recent Trends in Taxonomy" held at K.R.T. Arts, B.H. Commerce and A.M. Science College, Nashik on 4-5th Jan. 2008.
50. Attended and worked as resource person in one day University level seminar on Quality improvement programme – Botany held at Department of Botany, Appasaheb Jedhe Arts, commerce and science college Shukrawar peth, Pune 002, on 24th January 2008.
51. Attended and participated in one day seminar on Current trends in life sciences held at Dept. Of Botany, Fergusson College, Pune on 28th Feb. 2008.
52. Attended and presented papers in National Conference on Biodiversity, Sustainable Development And Human Welfare held at S.S.V.P.S Science College, Dhule on 10th -11th Jan 2009.
53. Attended and participated in one day workshop on preparation Of Skeleton Of F. Y. B. Sc. Practical Examination on 31st Jan 2009 organized by Dept. of Botany, Annasaheb Awate College, Manchar, Dist. Pune -31st Jan 2009
54. Attended and participated in one day seminar on "Advanced techniques in Biosciences" held at Department of Botany, Fergusson College, Pune on 17th Feb. 2009.
55. Attended and presented paper in a symposium on "Nano Materials and Their Applications" held at Department of Electronics, Fergusson College, Pune on 5th and 6th March 2009.
56. Participated in Regional Conference for Pune University College Teachers "Innovation 2009-10" held at Vidya Pratishthan's Arts, Science and Commerce College, Baramati. (Date: 19th to 20th December 2010).
57. Participated in one-day workshop on "T. Y. B. Sc. (Botany) Practical (new syllabus) held at SPM's Sir Parshurambhau College, Pune. (Date: 30th July 2010).
58. Participated in Seminar on Recent trends in evolution and biodiversity aspects in plant sciences, held at *New Arts, Commerce and Science College Shevgaon*. (14th and 15th Jan 2011).
59. Participated in National Conference on "Frontiers in Life Sciences", held at Shradabai Pawar Mahila Mahavidyalaya, Baramati (Date: 11th January to 13th January 2011).
60. Participated in National Seminar on Plant Biodiversity for Sustainable Development held from 10th to 12th March 2011 at Department of Botany, University of Pune.

61. One day work shop Current Trends in Medicinal Plants Research- Department of Botany, University of Pune 411007, India 13th January 2012.
62. Participated in National workshop on technology of environmental monitoring Organized by Department of Botany, Y M College, Bharati Vidyapeeth, Pune from 23rd to 27th January 2012.
63. Participated in Two Day's Regional Research Conference in Science (RRCS) (INNOVATION – 2012) Organized by BCUD and Bharatiya Jain Sanghatana's Arts, Science and Commerce College, Wagholi.
64. Participated and worked as resource person in national conference of biodiversity conservation and biotechnology, held at Sonai College, Ahmednagar from 26th 28th July 2012.
65. Participated in Innovation 2012, organized by BJS Arts Science and Commerce College, Wagholi, Pune **Date-26&27 March 2012.**
66. Participated in national conference on Recent trends in life sciences, organized by Department of Botany, Bharti Vidyapeet's Y. M. College, Pune **Date. 21 &22 December 2012.**
67. Participated in National conference on Biodiversity conservation - organized by Department of Botany, Soani College, Ahmednagar **Date: 26-28 July 2012**
68. Participated in National seminar on Advances in plant sciences, organized by Department of Botany, K J Somaiya College of Arts, Science and commerce Kopargaon. Dist. Ahmednagar (MS) **Date. 28 Feb & 1 March 2013.**
69. Participated in National conference on currant prospects and challenges in life sciences CPCLS-13-organized by Department of Botany, New Arts, Commerce and Science College, Ahmednagar (MS) **Date. 26-27, July 2013.**
70. Participated in National Seminar on New vistas in plant Science and biotechnology, Organized by Department of Botany, New Arts, Commerce and Science College, Shevgaon, Ahmednagar (MS) **Date: 2 and 3 August 2013.**
71. Participated in National conference on "Recent emerging trends in plant sciences" Organized by Department of Botany, S I Patil Arts, G B Patel Science and S T S K V S commerce college Shahada 6-7 September 2013
72. Participated in State level Seminar on Advances in methodology for life science research, Organized by Department of Botany, Sangamner College, Ahmednagar (MS) 422 605 **Date. 20 &21 September 2013.**
73. Participated in National Conference on "Organic farming: Need of the time" Organized by Department of Botany Dada Patil College, Karjat, Ahmednagar (MS) 10-12 October 2013.

International level

74. Participated in the international conference on the effect of science on globalization organized by Union of Iranian students' Islamic association (UISIA) and University of Pune, held at Yashwantrao Chavan, Academy of development administration, from 7-8 Feb 2011.
75. Participated in XXXIII conference of IBS and international symposium on the new horizons of botany, held from 10th to 12th November 2010 at Shivaji University, Kolhapur.
76. Participated in International Conference on Biodiversity Conservation held at Modern College, Shivajinagar, Pune-411 005 from 28 to 30 January 2011.
77. Participated in International Botanical congress ICB-2011, held from 24th to 30 July 2011 at Melbourne, Australia. July 2011.
78. Participated in International conference on Current Trends in Medicinal Plants Research- Department of Botany, University of Pune 411007, India. 10-12 January 2012.
79. Participated in International conference on Business Opportunities in Life sciences (ICBOLS-2012) organized by P.E. Society's Modern College, Shivajinagar, Pune-5 from 28th to 30th January 2012.