

**Government Arts college (Autonomous), Coimbatore – 18**  
**Performance - Teacher Appraisal Report**

**i) General Information**

a) Name: Dr. V. C. SARALA BAI

b) Address (Residential): 27, Sabari Gardens II Avenue, Gandhiji Road,  
 Rathinapuri, Coimbatore 641027.  
 Mobile No: 9944676865

c) Designation: Assistant Professor

d) Department: Botany

e) Date of Birth: 13.05.1965

f) Area of Specialization: Plant Biotechnology



**A) Academic Qualifications**

<b>Exam Passed</b>	<b>Subjects</b>	<b>Board/ University</b>	<b>Year</b>	<b>Division/ Grade/ Merit, etc.</b>
High School	Tamil, English, Maths, Science, History & Geography.	Secondary school education	1980	I Class
Higher Secondary or Pre-degree	Physics, Chemistry, Maths & Biology	Higher secondary school education	1982	I Class
Bachelor's Degree (s)	Botany	Madurai Kamaraj University	1985	I Class
Master's Degree (s)	Botany	Madurai Kamaraj University	1987	I Class
Research Degree (s) M. Phil	Botany	Madurai Kamaraj University	1988	Highly Commended
Ph. D	Botany	Bharathidasan University	1993	Highly Commended

PG Diploma in Sericulture	-	-	-	-
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## ii) Research Experience & Training

Research Stage	Title of work / Thesis	University where the work was carried out
M. Phil.	Studies on nodulation, fixation and assimilation of nitrogen in <i>Crotalaria juncea</i> Linn. on ultraviolet-B radiation stress	Madurai Kamaraj University
Ph. D.	Effects on electro static precipitator (ESP) dust on plant growth, root nodule biochemistry and crop productivity in legumes through simulation studies	Bharathidasan University
Post-Doctoral- (RA)	(1993-1996)	Bharathidasan University
Publications (give a list separately)	List enclosed	-
Research Guidance (give names of students guided successfully)	M. Phil candidates 1. Raji sukumar 2. Dincy babu 3. Uma rani 4. Divya 5. Blasson P. George 6. T. Saranya 7. G. Vijayakumar 8. J. PAVITHRA	

Training (please specify)	-	-
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**B) Research Projects carried out**

S. No.	Title of the Project	Name of the Funding Agency	Duration	Remarks
	Nil			

**C) Seminars, Conferences, Symposia Workshops etc. attended** *(If necessary give a separate list)*

Name of the Seminars / Conferences / Symposia / Workshops etc	Name of the Sponsoring Agency	Place and Date
List enclosed		

**iii) Teaching Experience**

Courses Taught	Name of the University / College / Institution	Duration
iv) UG (B.Sc.,)	Maharaja college for women, Perunthurai	1996-2007
	CMS college, Coimbatore	2007-2009
	Government college for women, Salem -8	2009 - 2010
	Government Arts College, Coimbatore-18	2010-Till date
v) PG (M.Sc.,)	Maharaja college for women, Perunthurai	1996-2007

	CMS college, Coimbatore	2007-2009
	Government Arts College, Coimbatore-18	2010-Till date
vi) M. Phil.	-	-
vii) Any other	-	-

**Total Teaching Experience (in years and months):**

a) Under-graduate (Pass) : 23 Years

b) Under-graduate (Hons.) : -

c) Post-graduate : 23 Years

**viii) Innovations/ Contributions in Teaching (If necessary give a separate list)**

a) Design of Curriculum :	Designed syllabus for B.Sc. M.Sc., (Botany) courses.
b) Teaching methods :	Lecturing, educational quiz, group discussions, seminars. Teaching through AV aids, Institutional/ Industrial visits and training.
c) Laboratory experiments :	Experiments prescribed in accordance with the syllabus, conducting Viva-voce and questionnaires, Organizing Quiz programmes in the Department.
d) Evaluation methods :	Tests, seminars, problem solving experiments, Paper presentation, Watch attentiveness of the student periodically, Problem solving exercises, Projects, maintaining Department Library.
e) Preparation of resource material including books, reading materials, laboratory manuals etc.:	Mainly on University specified text books and references. Consultation with senior professors and from the other college professors and software professional.
f) Remedial Teaching / Student Counseling (academic) :	Special coaching classes for slow learners, Identifying students' problems, helping them in Solving problems, parental counseling

g) Any other :	Periodical counseling to students in the Department/college Guidance and Counseling center
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**ix) Extension Work/ Community Service (If necessary give a separate list)**

a) Please give a short account of your contribution to:

i) Community work such as values of National Integration, secularism, democracy, socialism, humanism, peace, scientific temper, flood or drought relief, small family norms etc.

ii) National Literacy Mission

b) Positions held / leadership role played in organizations linked with Extension Work National Service Scheme (NSS), or NCC or any other similar activity

**D. Participation in Corporate Life**

Please give a short account your contribution to:

a) College/ University / Institution	Helping the Principal, HOD in the Departmental activities, Maintaining Discipline in the campus, Motivating the Students to join the entire extra-curricular Activities.
b) Co-curricular Activities	Organizing and coordinating seminars and club activities. Helping the students to actualize their Potentials, directing them to participate in various programs, job fairs conducted by other colleges and companies, industries.
c) Enrichment of Campus Life (Hostels, sports, games, cultural activities)	Helping/assisting /guiding the Principal, HOD, Colleagues and students to enrich the campus life. Encouraging the students to participate in various Botany Quiz and Botany club activities.
d) Students Welfare and Discipline	Periodical counseling to the students, Their Parents and family members in the Guidance and Counseling center, strict discipline is maintained.
e) Membership / Participation in Bodies / Committees on Education and National Development	Member- Board of studies, Syllabus framing, External and Internal examiner in theory and practical.
f) Professional Organization of Teachers	-

**E.**

(a) Membership of Professional Bodies, Societies etc. Nil

(b) Editorship of Journals Nil

**F. Any other information Nil**

**(Signature of the Teacher)**

**LIST OF PUBLICATIONS**

1. **Saralabai, V.C.** Tamizhchelvan, P. and Santhaguru, K. (1989) Influence of ultraviolet – B radiation on fixation and assimilation of nitrogen in *Crotalaria juncea* Linn. Indian Journal of Plant Physiology, XXXII: 65 – 67
2. **Saralabai, V.C.** and Vivekanandan, M. (1992) Positive effects of cement kiln – exhausts on Legume crops under simulation study. Applied Biochemistry and Biotechnology, U.S.A. 36 : 35 – 46.
3. Rajavelu, S., **Saralabai, V.C.** and Vivekanandan, M. (1994) Evaluation of N<sub>2</sub> – fixation by stem and root nodules in *Sesbania rostrata* during rainy and dry months. Applied Biochemistry and Biotechnology, USA. 49(2) : 143 – 151.
4. Vivekanandan, M. and **Saralabai, V.C.** (1994) SOD – An indicator of air pollution tolerance? In: Frontiers of relative oxygen species in Biology and Medicine (Eds) Asada, K. and Yoshikawa, T. Excerpta Medica International Congress Series, 1058, Elsevier science BV, Amsterdam. P. 553 – 554.
5. **Saralabai, V.C.** and Vivekanandan, M. (1995) Does application of cement kiln – exhaust affect root nodule biochemistry and soil N<sub>2</sub> – fixing microbes? Applied Biochemistry and Biotechnology, USA. 50/1: 1 – 10.
6. **Saralabai, V.C.** and Vivekanandan, M. (1995) Effects of application of cement kiln exhaust on selected soil physico chemical and biological properties. Fertilizer Research, 40: 193 – 196.
7. **Saralabai, V.C.** and Vivekanandan, M. (1995) Effects of application of cement kiln exhausts on leaf biochemistry in certain legume crops. Photosynthetica, 31/3: 399 – 409.
8. **Saralabai, V.C.** and Vivekanandan, M. (1995) Ability of endomycorrhizae to withstand to extreme of stress. In : Mycorrhizal Biofertilizers, TERI, Eds. Adholeya and Sujan Singh. P. 522 – 525.
9. Suresh babu, R., **Saralabai, V.C.** and Vivekanandan, M. (1995) Vesicular arbuscular mycorrhizal colonization and biomass production in economically important crop plants grown directly over the sludge. In: Mycorrhizal Biofertilizers, TERI, Eds. Adholeya and Sujan Singh. P 159 – 163.

10. **Saralabai, V.C.** and Vivekanandan, M. (1995) Effects of application of cement exhausts on germination and seedling growth of legumes. *Indian Journal of Plant Physiology*, XXXVIII: 257 – 259.
11. Suresh Babu, R., Muralidharan, K.S., **Saralabai, V.C.** and Vivekanandan, M. (1996) Foliar application of distillery spent wash as a liquid fertilizer for betterment of growth of *Sorghum vulgare* and *Cajanus cajan*. *Applied Biochemistry and Biotechnology*, USA.59 : 1 – 4.
12. **Saralabai, V.C.** and Vivekanandan, M. (1996) Foliar application of electrostatic precipitator dust on growth, stomata and leaf biochemistry in certain legume crops. *R. Bras. Fisiol. Veg.* 8(1): 7 – 14.
13. **Saralabai, V.C.** and Vivekanandan, M. (1997) Effect of electrostatic precipitator (ESP) dust on pollen fertility and crop productivity. *Rev. Bras. Fisiol. Veg.*, Brazil 9(1): 67- 69.
14. Vivekanandan, M. and **Saralabai, V.C.** (1996) Light activation of photosynthetic enzymes. In: *Handbook of Photosynthesis*. (ed.) Pessaraki, M. Marcel Dekker Publisher, USA, pp. 367 – 380.
15. Vivekanandan, M. and **Saralabai, V.C.** (1996) the use of transgenic plants to manipulate photosynthetic processes and crop yield In: *Handbook of Photosynthesis*. (ed.) Pessaraki, M Marcel Dekker Publisher, USA, pp.661 – 669.
16. **Saralabai, V.C.** Vivekanandan, M. and Suresh babu,R. (1997) Plant responses to high CO<sub>2</sub> concentration in the atmosphere. *Photosynthetica* 33 (1): 7 – 37.
17. Vivekanandan, M. Suresh Babu, R. and **Saralabai, V.C.** (1999) Changes in CO<sub>2</sub> levels and their stress effects on photosynthetic carbon fixation. In: *Handbook of Plant & Crop Stress*.(ed.) Pessaraki, M., Marcel Dekker Publishers, USA, pp. 1137 –1161.
18. **Saralabai, V.C.** and Vivekanandan, M. (2002) Current advancements in Learning Biotechnological Applications. *Proceedings in the National Conference on Integrating Technology into Teaching and Learning*. Society for Educational Technology, Research and Development (SETRAD), Tiruchirappalli, pp. 70 – 74.
19. Sakthivel Vellaikkannu, Rajeshwari Duraikannu, Vinoth Mohan, Saralabai Viswanathan Chathlingathe. 2018. Vermicomposting of saw dust mixed with cow dung using *Eudrilus eugeniae*. *International Journal of Biology Research*. 3; 30-32.
20. Sakthivel Vellaikkannu, Saralabai Viswanathan Chathlingathe, Magadevan Subramani. 2017. Genotoxicity of pesticides to onion root tip Meristematic cells. *International Journal of Botany Studies*. 2; 20-23.
21. Sakthivel Vellaikkannu, Jayashri Selvakumar, Vinoth Mohan, Saralabai Viswanathan Chathlingathe. 2018. Vermicomposting of sugarcane bagasse using *Eudrillus eugeniae*. *European Journal of Biotechnology and Bioscience*. 6; 41-42.
22. Sakthivel Vellaikkannu, Malathi Chidhampharam, Jayashri Selvakumar, Saralabai Viswanathan Chathlingathe. 2017. Physico-chemical analysis of vermicompost produced from tea leaves waste mixed with cow dung using *Eudrillus eugeniae*. *European Journal of Biotechnology and Bioscience*. 5; 35-36.

23. Sakthivel Vellaikkannu, Rajeshwari Nallusamy, Vinoth Mohan, Saralabai Viswanathan Chathlingathe. 2018. Effective utilization of corn cob for vermicompost making using *Eudrilus eugeniae*. International Journal of Advanced Scientific Research. 3; 34-36.
24. Sakthivel Vellaikkannu, Vignesh Prasannan, Saralabai Viswanathan Chathlingathe, Dhanalakshmi Subramani. 2017. Phytochemical screening and antioxidant scavenging activity of *Punica granatum* L. fruit peel. International Journal of Pharmaceutical Science and Research. 2; 24-27.
25. Saralabai Viswanathan Chathlingathe, Sakthivel Vellaikkannu, Magadevan Subramani. 2017. Adaptive response of *Oryza sativa* (L.) To salinity stress. International Journal of Botany Studies. 2; 1-3.
26. Saralabai Viswanathan Chathlingathe, Sakthivel Vellaikkannu, Magadevan Subramani. 2017. Stomatal studies in some afforestation tree species. International Journal of Botany Studies. 2; 73-75.

#### **RESEARCH ARTICLES PRESENTED IN FOREIGN AND INDIAN CONFERENCE/ CONGRESS / SYMPOSIA**

1. **Saralabai, V.C.** and Vivekanandan, M. (1989) Tolerance potential of **Vigna radiata** L. to cement exhaust dust. A simulation study. 58<sup>th</sup> Annual General Body Meeting of the Society of Biological Chemists (India), Izatnagar.
2. Arul,A., **Saralabai, V.C.** and Vivekanandan, M. (1990) Poor rhizobial nodulation in crop legume of cement kiln – exhaust dust polluted soil, 5<sup>th</sup> European Congress on Biotechnology, Conpenhagen. July 8 – 13.
3. **Saralabai, V.C.** and Vivekanandan, M. (1990) Positive effects of cement kiln – exhaust on legume crops under simulation study. Thirteenth symposium in Biotechnology for Fuels and Chemicals, Colorado springs, Colorado, USA, May 6 – 10.
4. **Saralabai, V.C.** and Vivekanandan, M. (1992) Application of cement – kiln exhaust on root nodule biochemistry. Fourteenth symposium on Biotechnology, Tennessee, USA, May 11-15.
5. Rajavelu, R., **Saralabai, V.C.** and Vivekanandan, M. (1993) Evaluation of N<sub>2</sub> fixation by stem – and root nodules in **Sesbania rostrata**. Fifteenth symposium on Biotechnology for fuels and chemicals, Colarado, USA, May 10- 14.
6. Muralidharan, K.S., **Saralabai, V.C.** and Vivekanandan, M. (1993) Bioremediation as a useful technology for disposal of distillery wastes. First biomass conference of the Americas, Golden, USA, Aug 20 – Sep 2.
7. Vivekanandan, M. and **Saralabai, V.C.** (1993) SOD – An indicator of air pollution tolerance? VI<sup>th</sup> International conference on superoxide and superoxide dismutase, Kyoto, Japan, October 11 – 15.



8. **Saralabai, V.C.** and Vivekanandan, M. (1993) Resistance of N<sub>2</sub> – fixing to ESP dust. All India symposium on Biofertilizers with reference to nitrogen fixing microorganisms and mycorrhizae. CAS in Botany, University of Madras, March 12- 13.
9. Agastian Simiyon Theoder, P., Arul,A., Dorcus, D., **Saralabai, V.C.** Thiripurasundari, M., Shaik Mohammed Anas, S., Suresh Babu, R., Devatha, M., Mary Anselem Xavier, Ghose Basha, M. and Vivekanandan, M. (1994) Occurrence of VAMF in extreme environments and its exploitation for betterment of crop productivity. Agrotechnology in the Commonwealth: Focus for 21<sup>st</sup> Century, Singapore, May 24 – 26.
10. Suresh Babu,R., **Saralabai, V.C.** and Vivekanandan, M. (1994) Utilization of distillery spent wash as a fluid fertilizer for crop improvement. Second Asia – Pacific conference on Agricultural Biotechnology, Madras, March 6 – 10.
11. Suresh Babu, R., **Saralabai, V.C.** and Vivekanandan, M. (1994) Distillery Spent wash – A liquid fertilizer? National seminar on newer challenges in Agriculture, Horticulture and Industry. The role of Physiologists and Biochemists, Bangalore, Jan 11 – 13.
12. **Saralabai, V.C.** and Vivekanandan, M. (1994) Study of leaf micromorphology of cement exhaust – smeared leaves through scanning electron microscope. XIX conference of Electron microscope society of India, NPL, Pusa Campus, New Delhi, December 14 – 16.
13. **Saralabai, V.C.** and Vivekanandan, M. (1995) Electrostatic precipitator dust (ESP) on crop plant growth and beneficial microbes. First HE – conference, Indian Society of Environmental Health, Department of Geography, Kumbakonam, Tamilnadu.Feb 4-6.
14. Raghavan, P.U.M., Shyamala,K., **Saralabai, V.C.** and Vivekanandan, M. (1995) Oil biodegrading microbes in the aqueous oil effluent. 4<sup>th</sup> Pacific Rim Biotechnology Conference, Melbourne, Australia, Feb 6 –9.
15. **Saralabai, V.C.** and Vivekanandan, M. (1995) *Sesbania rhizobiae* - A misnomer? Seventeenth symposium on Biotechnology for fuels and chemicals. Colorado, USA, May 7 –11.
16. **Saralabai, V.C.** and Vivekanandan, M. (1995) Plasticity of Endomycorrhizae to withstand to extremity of stress. 3<sup>rd</sup> National Conference on Mycorrhizae, TERI, New Delhi, March 13 –15.
17. Suresh Babu,R., **Saralabai, V.C.** and Vivekanandan, M. (1995) VAMF colonization and biomass production in economically important crop plants grown directly over the sludge. 3<sup>rd</sup> National conference on Mycorrhizae, TERI, New Delhi, March 13 – 15.
18. Theodre,P.S., Babu, R.S., Palakal, J.J., **Saralabai, V.C.** and Vivekanandan, M. (1995) Occurrence of VAMF in extreme environments. National conference on Mycorrhizal Technology, CAS in Botany, University of Madras, Madras, March 17 –18.
19. Suresh Babu,R., **Saralabai, V.C.** and Vivekanandan, M. (1995) Enhancement of biomass production and economic yield by distillery spent wash as a fluid fertilizer. X<sup>th</sup> International Photosynthesis Congress, Montpellier, France, August 20 – 25.

20. Suresh Babu,R., **Saralabai, V.C.** and Vivekanandan, M. (1995) Effective utilization of distillery sludge for betterment of growth and crop yield. Second Biomass conference of the Americas, Portland, Oregon, USA, August 20 –24.
21. Vivekanandan, M. and **Saralabai, V.C.** (1995) Possible role of phosphoenol pyruvate carboxylase (PEPC) in developing C<sub>3</sub> leaves. Satellite meeting on cellular environment and regulation of PEP carboxylase, Orsay, France, Aug 18 – 19.
22. Vivekanandan, M. and **Saralabai, V.C.** (1995) DTT – and glutathione – mediated activation of NADP – MDH in C<sub>3</sub> plants. 4<sup>th</sup> International conference on Thioredoxins and related proteins, Witzenhausen, West Germany, Aug 27 – 31.
23. Raghavan, P.U.M., Shyamala,K., **Saralabai, V.C.** and Vivekanandan,M. (1996) Microbial degradation of crude oil. Eighteenth Symposium on Biotechnology for Fuels and Chemicals, Tennessee, USA, May 5 – 9.
24. Vivekanandan, M. and **Saralabai, V.C.** (1995) Light act as an on and off switch mechanism in the regulation of chloroplast and cytosolic enzymes. Photobiology Workshop, Pondicherry University, Pondicherry, November 24 – 25, 1995.
25. Suresh Babu,R., Raghavan, P.U.M., **Saralabai, V.C.** and Vivekanandan, M. (1999) Low cost methods for disposal of industrial wastes with increased biomass production. New Millennium Conference, November 22-23, 1999, New Delhi.
26. **Saralabai, V.C.** and Vivekanandan, M. (1999) Transgenic Plants for production of vaccines and antibodies (Invited Lectures), National Conference on Biotechnology: Hitherto and Henceforth, The American College, Dec 28 --30, 1999, Madurai.
27. **Saralabai, V.C.**, Abdul Hameed, M.J., Suresh Babu,R., Raghavan, P.U.M., Saravanan, A., Hosmani,S.P. and Vivekanandan, M. (2000) Identification of sulfate utilizing algae in Chemical Industrial Effluent. Proceedings of the National Symposium on “Phycology in the new Millennium”, CAS in Botany, University of Madras, March 1 – 3, 2000, Chennai.
28. **Saralabai, V.C.** and Vivekanandan, M. (2000) Cement exhaust dusts affect open – pollinated flowers and not tuberous crops and biofertilizer microbes. National seminar on “Recent trends in Biotechnology and its impact on the Socio – economic improvement of the scheduled castes and Tribes”, Dr. GRD College of science, 6 – 7<sup>th</sup> June, 2000, Coimbatore.
29. **Saralabai, V.C.** and Vivekanandan, M. (2001) “Edible Vaccines”, National Seminar in “Recent Developments in Biology” VOC College, July, 2001, Tutucorin.