Profile and curriculum vitae of Prof. Ranjith Senaratne

Profile

Prof. Ranjith Senaratne, former Senior Professor of Crop Science, Faculty of Agriculture, University of Ruhuna, possesses over 40 years of experience in higher education, including teaching, research and administration and community development. He has held several senior administrative positions with distinction for a period of over 20 years, i.e. the posts of Dean, Faculty of Agriculture and Vice-Chancellor, University of Ruhuna, Chairman of the Committee of Vice-Chancellors and Directors, Chairman of the Ocean University and Vice Chairman, University Grants Commission. Presently, he serves as Chairman of the National Science Foundation and will be the General President of the Sri Lanka Association for the Advancement of Science in 2023.

As Vice Chancellor, University of Ruhuna, he has been strongly committed to promoting academic excellence, high impact research, creative enterprise, strategic partnership with industry, community development and international cooperation. In recognition of his outstanding contribution in education, science, community development and international cooperation, the University of Durham, UK conferred an honorary Doctorate (*honoris causa*) on him in 2007.

Prof. Senaratne has been the recipient of several internationally competitive and prestigious research grants, i.e. from the Board on Science and Technology for International Development (BOSTID) of the National Research Council of the USA and has held several coveted fellowships, including the Andre Mayer Fellowship of the FAO and the Marie Curie Fellowship of the European Community. He is a Fellow of the National Academy of Sciences and has over 100 research communications and papers to his credit. In addition, he has written and edited over 10 books related to agriculture, higher education, science & technology and national development.

Prof. Senaratne has provided strategic, inspirational and operational leadership to higher educational institutions, and he is a visionary leader and an institution builder.

Curriculum vitae

01. NAME : Ranjith Senaratne

02. DATE OF BIRTH : 21.07.1954

03. NATIONALITY : Sri Lankan

04. SEX : Male

05. MARITAL STATUS : Married

06. ADDRESS : Official:

Department of Crop Science Faculty of Agriculture University of Ruhuna Mapalana, Kamburupitiya

Sri Lanka

Tel: (+94) 77-3061033

e-mail: ransen.ru@gmail.com

: Residence: 381/6, Kumaratunga Mawatha,

Pamburana, Matara, Sri Lanka

Tel: (+94) 41-2223364

07. PRESENT POSITION : National Science Foundation

47/5, Maitland Place, Colombo 07

08. EDUCATIONAL QUALIFICATIONS:

(i) Ph.D. in Civil Law (honoris causa), University of Durham, UK (07 Feb 2007)

(ii). Ph.D. in Agriculture, University of Agriculture, Vienna, Austria (1982 October -1986 February) (21 Feb 1986)

Subjects: Agronomy, Plant Breeding & Genetics and Microbiology.

Thesis: Studies on Nitrogen Fixation and Residual Effects of Some Legumes.

(iii). M. Phil in Agriculture at the Post-Graduate Institute of Agriculture, University of Sri Lanka, Peradeniya, Sri Lanka (1978-1980) (05.02.1981)
 Subjects: Plant Physiology, Crop Physiology and Biochemistry.

Thesis: Propagation and Evaluation of *Madhuca longifolia* L. Macbr.)

(iv). B.Sc. in Agriculture, the University of Sri Lanka, Peradeniya, Sri Lanka (1973-1977)(01.08.1977)

Class: Second Class Honours

Subjects: Crop Production, Plant Breeding and Genetics, Plant Physiology and Biochemistry, Soil Science, Agricultural Engineering, Entomology, Pathology, Agricultural Extension and Animal Science.

09. WORK EXPERIENCE:

(a). Academic:

Has about 40 years of experience in teaching and research at university

i. <u>Senior Professor</u> of Crop Science, University of Ruhuna from 01.09.2005 to date

Conducts lectures on principles of crop production, agronomy of agricultural crops, crop physiology, soil fertility, nutrient cycling, biological nitrogen fixation, agroforestry, ecosystem restoration, innovation, entrepreneurship, leadership etc. and supervise postgraduate students in agronomy and allied fields.

ii. Professor of Crop Science, University of Ruhuna from 09.02.1998 to 31.08.2005.

Conducted lectures on principles of crop production, agronomy of agricultural crops, crop physiology, soil fertility, nutrient cycling, biological nitrogen fixation, agroforestry, ecosystem restoration etc. and supervised postgraduate students in agronomy and allied fields.

iii. <u>Associate Professor</u> in Crop Science, from 29.12.1995 to 08.02.1998

Conducted lectures on principles of crop production, agronomy of agricultural crops, crop physiology, soil fertility, nutrient cycling, biological nitrogen fixation, agroforestry, ecosystem restoration etc. and supervised postgraduate students in agronomy and allied fields.

iv <u>Senior Lecturer</u> in Crop Science, University of Ruhuna, Sri Lanka from 25.02. 1986 to 28.12.1995.

Conducted lectures on principles of crop production, agronomy of crops of economic importance, crop physiology, biological nitrogen fixation of legumes etc., and supervised post-graduate students in agronomy, biological nitrogen fixation and nitrogen cycling in legume-based cropping systems.

- v. <u>Graduate Student</u> in Agronomy at the Department of Agronomy and Plant Breeding at the University of Agriculture, Vienna, Austria from 01.10.1982 to 21.02.1986 reading for Ph.D.
- vi. <u>Assistant Lecturer</u> in Agronomy from 31.10.1980 to 30.09.1982 at the University of Ruhuna, Sri Lanka, conducting lectures and practical classes in Crop Production and Plant Physiology.
- vii. <u>Graduate Student</u> in Agricultural Biology at the Post-Graduate Institute of Agriculture, University of Sri Lanka, Peradeniya, from 09.05.1978 to 01.10.1980 reading for M.Phil. (Agric.) degree.

(b). Administrative:

Has over 20 years of experience in administration at senior executive level at higher educational institutions

- (i) Chairman, National Science Foundation from 23 January 2020 to date
- (ii) Vice Chairman University Grants Commission, Sri Lanka from May 2011 – February, 2015
- (iii) Chairman, Ocean University (National Institute of Fisheries and Nautical Engineering) from July 2008 March, 2015
- (iv) Vice Chancellor, University of Ruhuna for two terms, i.e. from 09.03.2001 to 08.03.2004 and 09.03.2004 to 08.03.2007.
- (v) Chairman of the Committee of the Vice-Chancellors and Directors (CVCD) of Sri Lankan Universities in 2006
- (v). Dean of the Faculty of Agriculture, University of Ruhuna from 11.11.1992 until 15.05.1993 (on sabbatical leave w.e.f. 15.05.1993 for 2 years) and from 09.06.1995 to 09.06.1998 and from 17.06.1998 to 08.03.2001.

(vi). Head, Department of Crop Science, University of Ruhuna from 04 .04. 1995 until 09.06.1995.

10. ACADEMIC DISTINCTIONS

(a). Fellowships won

- (i). From the <u>International Atomic Energy Agency of the United Nations</u> from July, 1984 to September, 1985 at the FAO/IAEA Laboratory at Seibersdorf, Austria.
- (ii). From the <u>International Crop Research Institute for the Semi-Arid Tropics</u> on Crop Improvement with special reference to Groundnut from 14 March 1987 to 10 April 1987 at ICRISAT, India.
- (iii). From the Stapledon Memorial Trust in UK to study legume-based pastoral systems in tropical and sub-tropical Australia from 01-28 February 1989.
- (iv). From the <u>Deutscher Akadamischer Austauchdienst (DAAD) in</u> Germany from 06.07.1992 to 03.08.1992 to visit some Universities in Germany which are actively involved in research on nitrogen fixation and allied areas.
- (v). The Andre' Mayer Fellowship from the FAO of the United Nations for 15 months from 15 May 1993 to study "The role of woody pioneer species in improvement of degraded soils and afforestation.
- (vi) <u>Marie Curie Fellowship from the European Community</u> for 06 months from September, 1994 to work on "Inter-specific N transfer in legume + cereal intercropping systems at Wye College, University of London.

(b). Grants received

- (i). From the **Canadian International Development Agency**, Canada (Grant No. CIDA/87/24; Budget US \$ 43,000.00) to study nitrogen fixation of and N-transfer from some legumes to the associated crop as affected by the level of nitrogen and potassium.
- (ii) From the Board on Science and Technology for International Development **(BOSTID) of National Academy of Sciences, USA** (Grant No. BNF-LLK-2-88-82; Budget US \$ 110,000.00) for studies on improved nitrogen fixation of cowpea, mungbean and groundnut intercropped with maize.
- (iii). From the **International Atomic Energy Agency** in Vienna (Grant. No: 5932 DP Budget: US \$ 15,000.00) for improvement of nitrogen fixation of mungbean.
- (iv) From the **GTZ** in West Germany (Grant No. PN 87 2061. 7-32/88, Budget DM 38,000.00) for studies on identification of fast-growing tree species adaptable to different agro-ecological conditions in the Southern Province of Sri Lanka.

(v) From Canadian International Development Agency for a project on "Environmental and Livelihood Restoration and Development in Tsunami-affected Coastal Areas of Sri Lanka" in 2006 at University of Ruhuna jointly with the Universities of Guelph, Manitoba, Waterloo and Queens of Canada with a budget of Can. \$ 2.5 million.

11. FOREIGN UNIVERSITIES AND RESEARCH INSTITUTES VISITED

I have visited over 90 foreign universities and research institutes in about 25 countries and have held discussions with the Presidents/Vice-Chancellors, administrative staff, professors, senior academics, research officers etc. of the institutions visited. Lectures have been delivered at some of these institutions on invitation.

1. Australia

University of Queensland

Commonwealth Scientific and Industrial Research Organization (CSIRO) - stations in Brisbane, Gympie, Rock Hampton and Catherine

Department of Primary Industries, Queensland

2. Austria

International Atomic Energy Agency (IAEA) in Vienna United Nation's Industrial Development Organisation (UNIDO) University of Agriculture in Vienna University of Vienna

3. Bangladesh

University of Dhaka Soil Resources Development Institute, Dhaka

4. Belgium

Katholike Universitat Leuven

5. Canada

University of Guelph University of Waterloo University of Manitoba University of Alberta Agriculture Canada – Manitoba

6. China

Heilongjang Academy of Agricultural Sciences, Harbin Ocean University of China, Quindao

7. Germany

University of Kologne (Koln) Max-Plank Institute, Koln Philipps -University - Marbug Gesamthochshule Kassel George – August University – Gottingen University of Erlangen-Nurenburg, GTZ

8. India

International Crop Research Institute for Semi-Arid Tropics (ICRISAT)
Indian Council for Agricultural Research (ICAR)
Mahatma Gandhi University, Kottayam
University of Madras
South Asian University

9. Indonesia

Biotrop GCTE South East Asian Impact Centre South East Asian Regional Centre for Tropical Biology Global Change Impact Centre for South East Asia University of Agriculture & Forestry - Bogor

10. Italy

Food and Agriculture Organization (FAO), Rome World Food Programme, Rome

11. Japan

Kyoto Botanic Gardens/Institute

12. Kenya

International Crop Research Institute on Agroforestry (ICRAF)

13. Malaysia

Forest Research Institute of Malaysia (FRIM) University of Pertanian, Malaysia (UPM)

14. Nepal

Tribhuvan University

15. The Netherlands

University of Wageningan Alterta/Green World Research, Wageningan Research Station for Nursery Stock, Boskoop.

16. Norway

University of Agder

Bodo University College

University of Bergen

University of Life Sciences

Stromme Foundation, Kristiansand

ARC-aid, Kristiansand

University of Stavanger

University of Science and Technology (NTNU) - Trondheim

International Research Institute of Stavanger (IRIS)

Rogaland Science Park

Bodoe Knowledge Park

17. Pakistan

Nuclear Institute for Agriculture and Biology (NIAB)

18. Philippines

Development Academy of the Philippines

19. Singapore

National University of Singapore

20. South Korea

Korean Institute of Science and Technology (KIST) Songdo Techno Park

21. Sweden

University of Stokholm

Uppsala University

Karlstad University

Linkoping University

Karolinska Institute

Royal Institute of Technology (KTH)

Hogskolan Dalarna

National Agency of Innovation

Norrkoping Science Park

Uppsala Innovation Centre

22. Thailand

University of Khon Kaen

University of Kesetsart

NifTAL Regional Office, Bangkok

University of Ching Mai

Department of Agriculture

Huntra Rice Experimental Station

23. UK

University of Oxford

University of Bangor, Wales

Institute of Terrestrial Ecology, Bangor

Wye College University of London

University of Reading

University of Durham

University of Ashton

University of Birmingham

24. USA

University of Cornell, New York

Boyce-Thompson Institute, New York

University of Minnesota, St. Pauls

Iowa State University, Ames

University of Lincoln, Nebraska

Kansas State University, Manhatton

University of Hawaii -NIFTAL in Maui

University of Tennessee, Tennessee

25. Vietnam

Hanoi Agricultural University (HAU)

Ministry of Agriculture and Fisheries

12. RESEARCH PUBLICATIONS

(a). Books

- 1. Senaratne, R. and G.A. Dayatilake. (Ed) (2000). Revitalization of Cinnamon Industries in Sri Lanka: Constraints and Remedies, Faculty of Agriculture, University of Ruhuna, p 144.
- 2. Senaratne, R. and V.W. Herath. (2009) ශුී ලංකාවේ පශ්චාත් සුනාමි සංවර්ධනය හා එහි ගැටළු. (ISBN: 978-955-97159-2-4)
- 3. Senaratne, R and V.W. Herath. (2011) Socio Economic Analysis of Multi day Fisheries Industry
- 4. Senaratne, R. and S. Sivasegaram. (Ed) (2012). Workshop Proceedings on Recreating and Re-positioning of Sri Lankan Universities to meet Emerging Opportunities and Challenges in a Globalized Environment. University Grants Commission
- 5. Senaratne, R., G.C. Filson and J. Janakiram. (Ed) (2012) Workshop Proceedings on Rebuilding of Tsunami Affected Areas in the Southern and the Eastern Provinces of Sri Lanka, Tharanjee Prints, p 442.
- 6. Senaratne, R. and S. Sivasegaram (Ed) (2013). Workshop Proceedings on Competency Building and Capacity Enhancement of the Emerging Off-shore Gas and Oil Industry in Sri Lanka, University Grants Commission, p166
- 7. Senaratne, R. (2014). Articles and Speeches related to Higher Education and National Development, Tharanjee Prints, p 206
- 8. Senaratne, R. and Pathirana, R. (Ed) (2021). Cinnamon: Botany, Agronomy, Chemistry and Industrial Applications, Springer Nature Switzerland, p 442.
- 9. Senaratne, R. (Ed) (2021): The Future of the Agriculture and The Agriculture of the Future: From Beaten Track to Untrodden Paths, Tharanjee Prints, p 515.
- 10. Senaratne, R., Amaratunga, D., Mendis, S. and Athukorala, P. (Ed) (2021). COVID 19: Impact, Mitigation, Opportunities and Building Resilience: From Adversity to Serendipity, National Science Foundation, Sri Lanka, p 790.
- 11. Senaratne, R. and Sivasubramanium Pathmanathan (Ed) Peace Building and Reconciliation: Role of Higher Education (To be printed)

(b). Articles in Learned Journals

1. Senaratne, R., H.M.W. Herath and S. Balasubramanium. (1981) Preliminary investigations on vegetative propagation of <u>Madhuca longifolia</u> (L). Macbr **Sri** Lanka Forester. 15, (1 & 2), 61-70.

- 2. Senaratne, R., H.M.W. Herath and S. Balasubramaniam. (1982) Investigations on quantitative and qualitative analysis of oils of <u>Madhuca longifolia</u> (L). Macbr. **Nat. Agric. Soc. of Cevlon**, 19, 89-98.
- 3. Senaratne R., H.M.W. Herath and S. Balasubramaniam. (1983) Some cytological studies of <u>Madhuca longifolia</u> (L). Macbr. **Beitrage zur tropischen Landwirtschaft and Veterinarmedizin**, (4) 21, 465-467.
- 4. Senaratne R., and D.A.B.N. Amarasekara. (1984). Effect of seed inoculation on nodulation, growth and yield of groundnut (<u>Arachis hypogeae</u> L.). **Beitrage zur tropischen Landwirtschaft und Veterinarmedizin** 22 (1), 63-68.
- 5. Senaratne R., and P.S.J.W. Seresinhe. (1984). Effect of seed treatment on germination of Ipil-Ipil seeds (*Leucaena leucocephala*) **Beitrage zur tropischen Landwirtschaft und Veterinarmedizin,** 22(1) 69-72.
- 6. Senaratne R., H.M.W. Herath and S. Balasubramanium (1984). Composition of amino acids in free state in seed kernals of <u>Madhuca longifolia</u> (L). **Beitrag zur tropischen Landwirtschaft und Veterianrmedizin,** 22 (4), 397-400
- 7. Senaratne R., C. Amornpimol and G. Hardarson. (1987). Effect of combined nitrogen on nitrogen fixation of soybean (*Glycine max* L. Merill) as affected by cultivar and Rhizobial strains. **Plant and Soil**, 103, 45-50.
- 8. Senaratne, R., and G. Hardarson. (1988). Estimation of residual N effect of feba bean and pea on two succeeding cereals using 15-N methodology. **Plant and Soil.** 110, 81-89.
- 9. Senaratne, R. and D. Ratnasinghe. (1993). Ontogenic variation in nitrogen fixation and accumulation of nitrogen in cowpea, groundnut, mungbean and blackgram. **Biology and Fertility of Soils**. 16, 125-130.
- 10. Senaratne, R. and D. Ratnasinghe (1993). Nitrogen supply by groundnuts to maize in maize + groundnut intercropping system, as affected by the genotype. **Biology and Fertility of Soils.**15, 215-219.
- 11. Senaratne, R., N.D.L. Liyanage and D. Ratnasinghe (1993). Effect of K on nitrogen fixation of intercrop groundnut and maize. **Fertilizer Research**, 34, 9-14.
- 11. Senaratne, R., (1993) Effect of nitrogen application on the A_N value of soil. **Biology** and Fertility of Soils, 16, 299-301.
- 13. Senaratne, R and M.T.K. Gunasekara (1994). Nitrogen Fixation, Growth and Yield of Intercropped Mungbean (*Vigna radiata* L.) and Groundnut (*Arachis hypogaea* L.) as Affected by the Genotype. **J. Agronomy and Crop Science**, 173, 53-60.
- 14. Senaratne, R., N. D. L. Liyanage and R.J. Soper (1995). Nitrogen fixation of and N transfer from cowpea, mungbean and groundnut when intercropped with maize. **Fertilizer Research**, 40, 41-48.
- 15. Senaratne, R., and Ratnasinghe, D.S. (1995) Nitrogen fixation and beneficial effects of some grain legumes and green-manure crops on rice. **Biology and Fertility of Soils**, 19, 49-54.

- 16. Senaratne, R., and S. Subasinghe (2000). Below-Ground Competition in a Maize/Groundnut Intercropping System as Affected by the Rooting Soil Layer, **Plant Prod. Sci.** 3(2): 108-111
- 17. R. Senaratne and Wickramsinghe, S. (2000) Contributions of the National Science Foundation to Agricultural Research in Sri Lanka". **J. Natn. Sci. Foundation Sri Lanka**, 28:1-16
- 18. S. Subasinghe R. Senaratne and M.A. Pemadasa (2000). Use of ¹⁵N to study the N fixation, N transfer and yield of intercropped groundnut (*Arachis hypogea* L.) as affected by genotypes and the root barrier. **Trop. Agric. Research and Ext.** 3(1): 46-49.
- 19. G. A. Dayatilake S. Subasinghe and R. Senaratne (2000) N fixation, N transfer in Maize/Cowpea and Sorghum/Cowpea intercropping systems as determined by ¹⁵N isotop dilution technique. **Trop. Agric. Res. and Ext.** 3 (1) 45-49
- 20. S. Subasinghe and R. Senaratne (2002) Effect of Groundnut genotypes on interactions in Maize- groundnut intercropping system. **Bangladesh J Agric. Res**. 27(1):25-33.
- 21. Subasinghe S., Dayatilake G. A. and Senaratne R. (2003). Studies on the impact of combined N application and inoculation on BNF, growth and yield of cowpea (*Vigna unguiculata* (L.) Walp. **Proceedings of the First Academic Sessions**, University of Ruhuna, 11th July 2003. 9-13
- 22. Subasinghe S., Dayatilake G.A. and Senaratne R (2003) Effect of B, Co and Mo on growth and yield of Cowpea (*Vigna unguiculata*). **Trop. Agric. Res. and Ext**. 6 45-49, 2003 108-112.
- 23. Subasinghe S and Senaratne R (2003). Effect of N, K and Inter-row spacing on the Growth and Yield of Intercropped Maize and Groundnut. **Sabaragamuwa University Journal**, 3(1):75-80.
- 24. Subasinghe S., Senaratne R. and Weerasinghe W.I.L (2003). Development of effective propagation techniques for Elabatu. **Proc. of the First Academic Sessions**, University of Ruhuna, 11th July 2003, 14-18.

(C). Papers/Posters presented in Congresses Conferences, Workshops and Symposia.

- 1. Senaratne, R. and D.A.B.N. Amarasekara (1982) Effect of seed inoculation on nodulation and growth of winged bean (*Psophocarpus tetragonolobus* L. DC) Sessions of Sri Lanka Association for the Advancement of Science.
- 2. Senaratne, R., G. Hardarson and C. Amornpimol. (1986) Effect of combined nitrogen on nitrogen fixation of soybean (*Glycine max* L. Merill) as affected by cultivar and rhizobial strain. Abstracts published in proceedings of Regional Symposium on "Biotechnology of nitrogen fixation in the Tropics" in Malaysia, 25th-29th August, 1986, p. 36.
- 3. Senaratne, R., and S.G. Hardarson. (1987). Estimation of residual effect of faba bean and pea on two succeeding cereals using 15-N methodology. Proc. of workshop on Food Legume. Improvement for Asian Farming Systems" held in Khon Kaen, Thailand, 1st-5th September 1986. P-281.

- 4. Senaratne, R., Hardarson, G and Liyanage N.D.L. (1988). Effect of soybean cultivation on the nitrogen balance in soil. In Nitrogen Fixation: "Hundred Years After" Proc. 7th International Congress on Nitrogen Fixation held 13-20 March 1988, Cologne, West Germany, Gastav Fisher, Stuttgart, p-833
- 5. Senaratne, R., and Gunesekara M.T.K. (1989). Improved nitrogen fixation by cowpea, groundnut and mungbean intercropped with maize. Abstract in Proc. PSTC/BOSTID 29 July 1989, Ames, Iowa, USA.
- 6. Senaratne, R. and Hardarson, G. (1989) Comparison of the accuracy of the Difference method as against Isotopic Methods in determining nitrogen fixation of field-grown faba bean (*Vicia faba L.*) and pea (*Pisum sativum L*) Proc. North American Symbiotic Nitrogen Fixation Conference held 30 July 03 August 1989, in Iowa, USA, p-114.
- 7. Senaratne, R. (1989). Use of Nitrogen-tracer techniques for research on biological nitrogen fixation and allied areas. Paper presented at a seminar on the "Use of Isotopes and Radiation Techniques in Agriculture" held 18-19 Dec. 1989, at Sri Lanka Association for the Advancement of Science, Colombo.
- 8. Senaratne, R. (1990) Augumenting the production of fuelwood through developing fast growing tree species adaptable to different agro-ecological conditions in Sri Lanka. In "Fast growing trees and nitrogen fixing trees" Eds. D. Werner and P. Muller Gustav Fisher Verlag, Stuttgart. p. 361.
- 9. Senaratne, R., and Liyanage, N.D.L. (1990). Selection of mungbean (*Vigna radiata L. Wilczek*) for high nitrogen fixation. Proc. 8th International Congress on Nitrogen Fixation held 20-26 May, 1990, in Knoxville, Tennessee, USA.Eds.P.M. Gresshoff and L.E. Roth Chapman and Hall, New York, p 672.
- 10. Gunesekara, M.T.K. and Senaratne, R., (1990) Effect of K in alleviating competitive depression of mungbean on maize + mungbean intercropping systems. Proc. 14th Int. Congress of Soil Science held on Kyoto, Japan, Aug. 1990, p 501.
- 11. Senaratne, R., and Gunesekara, M. T.K. (1991) Nitrogen fixation of some genotypes of groundnut and mungbean intercropped with maize. Proc. 13th North American Symbiotic Nitrogen Fixation Conference held in Alberta, Canada from 25-30 Aug., 1991, p 94.
- 12. Senaratne, T. Liyanage, N.D.L. and Soper, R.J. (1991) Nitrogen fixation and nitrogen beneficial effects of some legumes in legume + cereal intercropping systems. Proc. 13th North American Symbiotic Nitrogen Fixation Conference held in Alberta, Canada from 25-30 Aug., 1991, p 95.
- 13. Senaratne, R and R.P. Kasturiarachchi (1992). Interspecific N transfer in legume-cereal intercropping system. A paper presented at a Conference on "Improving soil management for intensive cropping in the tropics and sub tropics" 1-3 Dec 1992, Dhaka, Bangladesh.
- 14. Kasturiarachchi, R.P and Senaratne, R. (1992). Some characteristics of salt-affected soils in Hambantota District. Proc. Sri Lanka Association for the advancement of Science, p. 18

- 15. Edirimanna, E.R.S.P. and Senaratne, R. (1992) Identification of high yielding genotypes of mungbean (*Vigna radiata* (L.) Wilzeck) under low nitrogen regime. Proc. Sri Lanka Association for the Advancement of Science. p. 28-29.
- 16. Ratnasinghe, D.S. and Senaratne, R. (1992) Comparative ontogeny of N₂ fixation of some grain legumes. Proc. Sri Lanka Association for the Advancement of Science, p 29-30.
- 17. Edirimanne, E.R.S.P. and Senaratne, R. (1992) Symbiotic performance of two varieties of cowpea (*Vigna unguiculata* (L.) Walp). Proc. Sri Lanka Association for the Advancement of Science, p. 50-51.
- 18. Kasturiarachchi, R.P. and Senaratne, R (1992). Effect of salinity on seed germination of cowpea (*Vigna unguiculata*) (L.) Walp.) as affected by the genotype. Proc. Sri Lanka Association for the Advancement of Science, p. 28-29
- 19. Dayatilake, G. A., Subasinghe, S. and Senaratne, R. (1993). A paper presented at the 4th FAO/IAEA RCM on the Improvement of BNF and yield of grown legumes with the aim of increasing food production and saving N fertilizer in the Tropics and Sub-Tropics of Asia, 30th August to 3rd September, Tamwrowth, Australia. Abstract published in the soils Newsletter, vol.16, No.2, December 1993; 21p.
- 20. Senaratne, R. and Amarasinghe, M.K.T.K. (1996). Decomposition and nutrient dynamics of leaf litter of some agroforestry species. Proceedings Sri Lanka Association for the Advancement of Science.
- 21. Senaratne, R. and Amarasinghe, M.K.T.K. (1996). Relevance of Agroforestry species in ensuring food security in Sri Lanka with special reference to the Southern Province. Proc. seventh regional workshop on multipurpose trees, Kandy, Sri Lanka. 24- 26 October 1996, pp 52-68.
- 22. Senaratne, R. and Amarasinghe, M.K.T.K. (1997). Prospects of augmenting carbon sinks through establishment of early-successional species in degraded ecosystems. Proc. of National Symposium on Climate Change. (In Press)
- 23. Senaratne, R. and Amarasinghe, M.K.T.K. (1997). Food security in Sri Lanka: Prospects, Constraints and Solutions. Paper presented at International Symposium in Sri Lanka Association for the Advancement of Science, 1997. (In press)
- 24. Amarasinghe, M.K.T.K. and Senaratne, R. (1997). Decomposition and nutrient dynamics of leaf litter of some major agroforestry species in the low country wet zone of Sri Lanka. Proc. Sri Lanka Association for the Advancement of Science, 1997. Abstract published in proceedings.
- 25. Amarasinghe, M.K.T.K. and Senaratne, R. (1997). Size and floristic composition of the soil seed banks of some upland and lowland fields at Kamburupitiya. Proc. Sri Lanka Association for the Advancement of Science, 1997.
- 26. Senaratne, R. and Amarasinghe, M.K.T.K. (1997). Effect of agriculture on environment. Paper presented at 3rd Annual Forestry Symposium 12-13 December 1997, Hikkaduwa, Sri Lanka. (In press).

- 27. Ratnayake, C.S.K.A. and Senaratne, R. (1997). Spatial and temporal variability of salinity in some salt-affected soils in Hambantota district. Proc. Sri Lanka Association for the Advancement of Science.
- 28. Kanthi, M.W.A., Ratnayake, C.S.K.A. and Senaratne, R. (1997). Effect of salinity on seed germination of some agroforestry species in Sri Lanka. Proc. Sri Lanka Association for the Advancement of Science.
- 29. Subasinghe, S., Senaratne, R. and Pemadasa, M. A. (1997). Effect of Groundnut Cultivars on the Competitive Balance and Productivity of Maize/ Sorghum-Groundnut Intercropping systems. Proc. Sri Lanka Association for the Advancement of Science, 83p
- 30. Amarasinghe, M.K.T.K. and Senaratne, R. (1998). Effect of mixing of leaf litter of some agroforestry species on the time course of decomposition. Proc. Sri Lanka Association for the Advancement of Science, 1998.
- 31. Amarasinghe, M.K.T.K. and Senaratne, R. (1998). Chemistry of leaf litter of some agroforestry species in Sri Lanka. Paper presented at 4th Annual Forestry Symposium, 3-4 December, 1998, Beruwala Sri Lanka. (In press)
- 32. Senaratne, R., Dayatilaka, G.A. and Subasinghe S. (1998). Studies in Sri Lanka on Cowpea; N₂ fixation, Growth, yield and Effects of cereals. Published in the IAEA TECDOC-1027 of Improving Yield and Nitrogen Fixation of Grain Legumes in the Tropics and Sub-tropics of Asia. Results of a co-ordinated research programme organized by the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture, 117-130.
- 33. Jayasekera, H.K.P.and Senaratne, R. (1999). Time course of growth and biomass accumulation of some early-successional woody species in an uprooted rubber field at Kamburupitiya. Paper presented at the Forestry and Environment Symposium on "Challenges in natural resource conservation in the 21st century" held at Hikkaduwa, Sri Lanka on 10-11-December 1999.
- 34. Amarasinghe, M.K.T.K., Ganewatte. G.K.H and Senaratne, R (1999). Nutrient retranslocation efficiencies in some agroforestry species of Sri Lanka. Paper presented at the Forestry and Environment Symposium on "Challenges in natural resource conservation in the 21st century" held at Hikkaduwa, Sri Lanka on 10-11 December 1999.
- 35. Amarasinghe M.K.T.K. Ganewatta, G.K.H. and Senaratne, R. (1999). Foliar nitrogen retranslocation in some major agroforestry species in Sri Lanka. Proc. Sri Lanka Association for the Advancement of Science, 1999.
- 36. Aruna Kumara, K.K.I.U. and Senaratne, R. (1999). Successional developments in some human-impacted areas at Kamburupitiya following the Nilwala project. A paper presented at the Forestry and Environment Symposium on "Challenges in natural resource conservation in the 21st century" held at Hikkaduwa, Sri Lanka on 10-11-December,1999
- 37. Aruna Kumara, K.K.I.U., Wickramasinghe, U., and Senaratne, R. (2000). A preliminary study on vegetative propagation of four salt-tolerant tree species. A Paper presented at the Forestry and Environment Symposium on "Developments in

- Environmental and Forest Science in Sri Lanka" held at Kandy, Sri Lanka on 29-30-December 2000. 42p.
- 38. Subasinghe S., Senaratne, R and Silva M. P. De (2000). Effect of groundnut genotypes on interactions in maize/groundnut intercropping system A paper presented at the 3rd International Crop Science Congress 2000, 17-22 August 2000. CCH-Congress Centrum, Hamburg, Germany. Abstracted published in the proceedings of the congress, 2000.
- 39. Subasinghe S., Senaratne, R and Silva M.P.De (2000). Effect of different rates of N on growth and yield of intercropped maize and groundnut. A paper presented at the Sri Lanka Association for the Advancement of Science 120 p.
- 40. Aruna Kumara, K.K.I.U. Wickramasinghe, U., and Senaratne, R.(2000). Effect of different salinity levels on seed germination of some salt-tolerant tree species. A Paper presented at the Forestry and Environment Symposium on "Developments in Environmental and Forest Science in Sri Lanka" held at Kandy, Sri Lanka on 29-30-December, 2000. 10p.
- 41. Aruna Kumara, K.K.I.U., Wickramasinghe, U., and Senaratne, R. (2000). of Biomass and nutrients accumulation of an early successional shrub species (*Zizyphus oenoplia*) in an uprooted rubber field at Kamburupitiya A Paper presented at the Forestry and Environment Symposium on "Developments in Environmental and Forest Science in Sri Lanka" held at Kandy, Sri Lanka on 29-30-December, 2000. 4p.
- 42. Aruna Kumara, K.K.I.U., Wickramasinghe, U., Dayatilake, G.A. and Senaratne, R. (2000). Studies on seeds dormancy and germination of *Macaranga peltata* (Kande), an early successional species. A Paper presented at the Forestry and Environment Symposium on "Developments in Environmental and Forest Science in Sri Lanka" held at Kandy, Sri Lanka on 29-30-December, 2000. 6p.
- 43. Aruna Kumara,K.K.I.U. and Senaratne, R.(2000). Soil characteristics in some human-impacted areas at Kamburupitiya following the Nilwala project. A Paper presented at the Forestry and Environment Symposium on "Developments in Environmental and Forest Science in Sri Lanka" held at Kandy, Sri Lanka on 29-30-December, 2000. 11p
- 44. Fernando, K.C.E., Dayatilake, G.A. and Senaratne, R (2000). Studies on the propagation of red sandal wood (*Pterocarpus santalinus* Linn.F), an endangered medicinal tree species. A Paper presented at the Forestry and Environment Symposium on "Developments in Environmental and Forest Science in Sri Lanka" held at Kandy, Sri Lanka on 29-30-December, 2000. 44p.
- 45. S. Subasinghe R. Senaratne and M.A. Pemadasa. Use of ¹⁵N to study the N fixation, N transfer and yield of intercropped groundnut (*Arachis hypogea* L) as affected by genotypes and the root barrier. Trop. Agric. Research and Ext. 3(1): 46-49, 2000.
- 46. G. A. Dayatilake S. Subasinghe and R. Senaratne. N fixation, N transfer in Maize/Cowpea and Sorghum/Cowpea intercropping systems as determined by 15 N isotop dilution technique. Trop. Agric. Res. And Ext. 3 (1) 45-49, 2000.
- 47. Subasinghe S. and Senaratne R. (2001). A study to develop effective seed propagation techniques for Elabatu (*Solanum melongena* var. insanum). A paper presented at Sri

- Lanka Association for the Advancement of Science 2001, Abstract published in Proceedings 2001. 31 p.
- 48. G. A. Dayatilake S. Subasinghe and R. Senaratne (2001) N fixation potential of Cowpea and mungbean lines and its effects on succeeding maize crop. Trop. Agric. Res. And Ext. 4 (1) 6-9.
- 49. Subasinghe S. and Senaratne R. (2001). Comparative root studies in maize, sorghum and two groundnut varieties. A paper presented at the 6th symposium of the International Society of Root Research, 11-15 November 2001, Nagoya, Japan. A paper published in Proceedings of the 6th symposium of the International Society of Root Research.154-155.
- 50. Subasinghe S. and Senaratne R. and Weerasinghe W.I.L (2002). Development of vegetative propagation techniques for *Solanum melongena* var. insanum (Elabatu) A study to develop effective seed A paper presented at Sri Lanka Association for the Advancement of Science 2002, Abstract published in Proceedings 2002. 77 p.
- 51. Amarasinghe M.K.T.K. and Senaratne R. (2002). The seed bank dynamics of two different forest types in southern Sri Lanka. A paper presented at the Forestry and Environment Symposium on "Sustainable Environmental Management Towards a Better Quality of Life." held at Hikkaduwa, Sri Lanka on 12-13-December, 2002.
- 52. Subasinghe S. and R. Senaratne. Effect of Groundnut genotypes on interactions in Maize- groundnut intercropping system. Bangaladesh J Agricl. Res. 27(1):25-33. March 2002
- 53. Subasinghe S., Dayatilake G. A. and Senaratne R. (2003). Studies on the impact of combined N application and innoculation on BNF, growth and yield of cowpea (*Vigna unguiculata* (L.) Walp. Proceedings of the first academic sessions, University of Ruhuna, 11th July 2003. 9-13pp.
- 54. Subasinghe S., Senaratne R. and Weerasinghe W.I.L (2003). Development of effective propagation techniques for Elabatu. Proceedings of the first academic sessions, University of Ruhuna, 11th July 2003. 14-18pp.
- 55. Subasinghe S., Dayatilake G.A. and Senaratne R. Effect of B, Co and Mo on growth and yield of Cowpea (*Vigna unguiculata*). Trop. Agric. Res. and Ext. 6 45-49, 2003 108-112pp.
- 56. Subasinghe S and Senaratne R (2003). Effect of N, K and Inter-row spacing on the Growth and Yield of Intercropped Maize and Groundnut. Sabaragamuwa University Journal Vol. 3 No. 1 pp. 75-80.
- 57. Subasinghe S., Dayatilake G.A. and Senaratne R. Effect of inoculation and N application on growth, yield, nodulation and N fixation of cowpea (*Vigna unguilata*). Trop. Agric. Res. and Ext. 6 45-49, 2003 108-112pp.
- 58. Subasinghe S., Senaratne R. and Dayatilake G.A. (2004). Screening of Mungbeen (*Vigna radiate* (L) Wilczek) and Cowpea (*Vigna ungiculata* (L) Walp) for higher growth and Yield. Proceedings of the Second Academic Session, University of Ruhuna, 16th December 2004. 174-182pp.

- 59. Ranasinghe B.M., M.K.K. De Silva, R.Senaratne and S. Subasinghe (2005). Revitalization of Reed industry- Two case studies in Kalapugama Village, Kalutara and Habakkala and Kaikawala Villages in Bentota. A paper presented at the 10th annual forestry and environment symposium 2005, held in 2-3 December 2005. Abstract published in the proceedings 2005. 14p.
- 60. Walpola, B. A. Somaratne, S. Subasinghe, A.A. Kumara, M. De S Liyanage, R. Senaratne and L.D. Martin (2005). Soil Organic matter and Wet aggregate stability in Tsunami affected soils in Hambantota district, Southern Sri Lanka. A paper presented at the 10th annual forestry and environment symposium 2005, held in 2-3 December 2005. Abstract published in the proceedings 2005. 27p.
- 61. Subasinghe, S., Liyanage, M.D.S, Senaratne, R., Serasinghe, R.T., Kumara, A.A. (2006). Post tsunami recovery programme of the agriculture sector in southern Sri Lanka: an overview. Proceedings of the third academic sessions, University of Ruhuna. 30th January, 2006
- 62. Ranasinghe, B.M., Silva, M.K.K.D, Senaratne, R. Subasinghe, S. (2006). Revitalization of the reed industry: A case study. Proceedings of the third academic sessions, University of Ruhuna. 30th January, 2006
- 63. Devika, H.G.N., Renuka, P.A.P., Senarathne R. (2006). No-pay leave of non-academics of University of Ruhuna; causes and remedies. Proceedings of the fourth academic sessions, University of Ruhuna. 29th January, 2007. 1p.
- 64. Deepika Dias, Rohini vidyaratne, Piyal Renuka, Senaratne, R. (2006). Re-engineering of some key financial translocations and introduction of a clients' charter in the university for improved efficiency and accountability: A case study. Proceedings of the fourth academic sessions, University of Ruhuna. 29th January, 2007. 2p.
- 65. Navaratne, C.M., Weerasinghe, K.D.N., Rathnayake, C. (2006). An improved technique of rainfall analysis: A case study in Mapalana catchment. Proceedings of the fourth academic sessions, University of Ruhuna. 29th January, 2007. 11-12pp.
- 66. Senaratne, R. and Abayakoon, S.B.S. (2012). New breed of institutional leaders for internationalizing Sri Lankan Universities. Workshop Proceedings on Re-creating and Re-positioning of Sri Lankan Universities to meet Emerging Opportunities and Challenges in a Globalized Environment. University Grants Commission. 18th and 19th June 2012. 115-128pp.
- 67. Marapana, R.A.U.J., D.S. Hewamanage, R.T. Seresinhe and R. Senaratne. (2012). Study on behavioral changes of animals prior to a tsunami natural disaster. Workshop Proceedings on Rebuilding of Tsunami Affected Areas in the Southern and the Eastern Provinces of Sri Lanka.
- 68. Abeywickrama, L.M., S. Subasinghe and R. Senaratne. (2012). Sustainability of community based household solid waste management: lessons learned from Ruhuna CIDA restore project. Workshop Proceedings on Rebuilding of Tsunami Affected Areas in the Southern and the Eastern Provinces of Sri Lanka.
- 69. Arunakumara, K.K.I.U., S. Subasinghe and R. Senaratne. (2012). Home gardening as a tool for improving food and nutritional security A case study at Madiha and Gandara in Sri Lanka. Workshop Proceedings on Rebuilding of Tsunami Affected Areas in the Southern and the Eastern Provinces of Sri Lanka.

- 70. Senaratne, R., J. Janakiram and G.C. Filson. (2012). Lessons learned from the restore tsunami project in Sri Lanka. Workshop Proceedings on Rebuilding of Tsunami Affected Areas in the Southern and the Eastern Provinces of Sri Lanka.
- 71. Senaratne, R and Indunil, P (2019). Earthquake and tsunami prediction by changes in animal behavior. A paper presented at International Conference on Capacity Building for Research and Innovation in Disaster Resilience, 15-17, January, Cinnamon Lakeside Hotel, Colombo, Sri Lanka

(d) Section / Chapter of books published

- 1. Senaratne, R. Dayatilaka G.A. and Subasinghe S. (1998). Studies in Sri Lanka on Cowpea; N₂ fixation, Growth, yield and Effects of cereals. Published in the IAEA TECDOC-1027 of Improving Yield and Nitrogen Fixation of Grain Legumes in the Tropics and Sub-tropics of Asia. Results of a co-ordinated research programme organized by the Joint FAO/IAEA Division of Nuclear Techniques in Food and Agriculture. pp. 117-130.
- 2. Subasinghe, S., Walpola, B.C., Somaratne, A.S., Kumara, A.A., Martin, L.D., Liyanage, M. de S. and Senaratne, R. (2006) Chapter 11. Soil quality parameters of Tsunami-affected soils in the Hambantota district In: Relief and Rehabilitation after the Tsunami in Sri Lanka, Manfred Domroes (Ed) pp 170-182, Mosaic Books, New Delhi.

13. ARTICLES FOR DISSEMINATION OF KNOWLEDGE

- 1. Globalization and agriculture in Sri Lanka ("Daily News", Tuesday 30th June 1998)
- 2. Revitalization of Lanka's Cinnamon industry to meet challenges in a global economy ("Daily News", Thursday 30th July 1998)
- 3. Research in Universities: Present Status, Constraints and Remedies ("The Island", Tuesday 1st June 1999, Wednesday 2nd June 1999, Thursday 3rd June 1999)
- 6. Improving Productivity and Output in Public Sector ("Daily News", Friday 05th May 2000)
- 7. Towards "Borderless" Entrepreneurial Universities ("Daily News", Tuesday 28th February 2006)
- 8. Needed: An Entrepreneurial Dimension to universities ("The Island", Tuesday 14th March 2006, Wednesday 15th March 2006)
- 9. A sea change needed in higher education sector ("The Island", Friday the 21st of April 2006, Saturday the 22nd of April 2006, Monday the 24th of April 2006, Wednesday the 26th of April 2006, and Thursday the 27th of April 2006
- 10. Science and Technology Parks for building a creative and innovative nation ("Daily News", Friday the 2nd of June 2006)

- 11. Science and Technology Parks for building a creative and innovative nation ("The Island", Monday the 3rd of July 2006)
- 12. Do our universities respond to needs in a knowledge economy? ("The Island", 12th and 13th June, 2008)
- 13. Making universities wealth creators and agents of growth in a knowledge economy –I, II, III, & IV ("The Island", 8th, 9th, 10th & 11th July 2008)
- 14. Indian Ocean- An untapped resource ("Daily News", 22nd February 2010)
- 15. Let us step out of Ivory towers and address real world issues –I & II ("The Island", 13th &14th October 2010)
- 16. 'Make universities strategic partners in development' ("Daily News", 18th & 20th February 2012)
- 17. New breed of institutional leaders for internationalizing Lankan Universities ("The Island", 30th, 31st May and 1st June 2012)
- 18. Professors: Underutilised treasure in our universities? ("The Island",13th 14th &15th June 2012)
- 19. Lanka's Future Prosperity Lies in the Ocean, Sunday Observer, 09.06.2013
- 20. Building a Rainbow Nation Through Peace Building and Reconciliation: The Role of Universities, The Island, 11.06.2013
- 21. Ocean University: A Strategic Partner for Economic Growth in Sri Lanka, Sunday Observer, 15.12.2013
- 22. Lanka's future Prosperity Lies in the Ocean, Daily News, 30.12.2013
- 23. Agriculture: A Dynamic Force for Prosperity, Wellbeing and Reconciliation in the North. The Island, 27.01.2014
- 24. Governance and Management of Sri Lankan Universities: Role and Responsibilities of councils, The Island, 10.02.2015
- 25. Creating Vibrant Research Culture and Rich Intellectual Ambience in SL Universities, The Island, Part 1-4, 10-13, 03.2015
- 26. Civic Responsibilities and Moral Obligation of Intellectuals and Professionals in National Development, The Island, Part 1 & 2, 21-22.04.2015
- 27. A Clarion Call to Sri Lankan Professionals and Intellectuals, The Island, 09.06.2015
- 28. Plight of the paddy farmer: From quick fixes to lasting solution. The Island, Part 1 & 2. The Island, 17-19.10.2015
- 29. Promoting a knowledge-based bioeconomy in Sri Lanka, The Island, 13.01.2016
- 30. A scarce commodity in Sri Lanka: National consciousness, The Island, 19.07.2017

- 31. Lack of policy direction jeopardizing SL agriculture, The Island, 25.07. 2017
- 32. An environmental disaster and public menace in Sri Lanka Unplanned, uncoordinated and uninhibited growth of grey infrastructure, The Island, 23.11.2017
- 33. Immediate and short-term interventions proposed to mitigate impact of current economic crisis on food and nutritional security, The Island, 23.06.2022
- 34. Overcoming economic crisis and rebuilding economy: A clarion call (Part 1), The Island, 18.07.2022
- 35. Overcoming economic crisis and rebuilding economy: A clarion call (Part 2), The Island, 19.07.2022
- 36. NSF launched National Instrument Database promoting S&T, industrial growth and exports in Sri Lanka, Daily FT, 14.09.2022

I hereby certify that the information furnished above is true and accurate to the best of my knowledge.

Professor Ranjith Senaratne

Chairman, National Science Foundation
General President, Sri Lanka Association for the Advancement of Science - 2023
Professor Emeritus, Department of Crop Science, University of Ruhuna
Former Vice-Chancellor, University of Ruhuna
Former Chairman, Ocean University and
Former Vice-Chairman, University Grants Commission

28.11.2022