## Ms. N. S. WITHANAGE Senior Lecturer (Gr.II) in Agricultural Engineering

Department of Export Agriculture Faculty of Animal Science and Export Agriculture Uva Wellassa University Passara Road, 90000 Badulla, Sri Lanka



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## 1. PROFILE

An academic specialized in Agricultural Engineering having completed BSc in Agriculture (special) and MPhil in Agricultural Engineering (Integrated Water Resources Management) with research interests on Meteorology, Water Management and Climate Change. The objective is to serve the organization by the level best being hardworking, enthusiastic, and self-motivated.

#### 2. EDUCATIONAL QUALIFICATIONS

## Postgraduate Degree (2015.12.31)

Mphil, Postgraduate Institute of Agriculture, University of Peradeniya

Board of Study Agricultural Engineering

(Integrated Water Resources Management)

**FGPA** 3.92 (for course work)

## First Degree (2003.07.09)

BSc in Agriculture (Special), Faculty of Agriculture, University of Ruhuna

Agricultural Engineering Specialization Area

Overall Grade Second Class (Upper Division) Honours

#### G.C.E. Advanced Level (1996)

Dharmasoka College, Ambalangoda in Science stream

Botany - B **Physics** - C Chemistry - C Zoology - B

## G.C.E. Ordinary Level (1993)

Dharmasoka College, Ambalangoda

Mathematics	- D	Buddhism	- D
Science	- D	Agriculture	- D
Sinhala	- D	English	- C
Dancing	- D	Social Studies	- D

#### **Primary School Education**

Southlands College, Galle

St. Theresa Balika Maha Vidyalaya, Elpitiya

St. Theresa Primary School, Elpitiya

## 3. ACADEMIC HONOURS (AWARDS, RECOGNITIONS AND SCHOLARSHIPS)

Best Presenter Award of the Technical Session on Water Resources Management in the 26<sup>th</sup> Annual Congress, Postgraduate Institute of Agriculture, University of Peradeniya, 20-21of November 2014.

#### 4. PUBLICATIONS

### 4.1 Peer Reviewed Journal Articles

- i. Abhiram, G., Jinthushayi, S. and Withanage, N.S. (2018). Optimization of feeding rate and pressure of Orthodox Roller in Black Tea production. AGRIEAST: Journal of Agricultural Sciences, Vol. 12 (1): pp.16–25.
- ii. Withanage, N.S., Dayawansa, N.D.K., Ranjith Premalal De Silva and Rathnayake, R.M.C.W.M. (2016). Morphometric analysis of the Kala Oya River Basin using Geographical Information Systems, International Journal of New Technology and Research (IJNTR), Vol. 02 (12): pp 59–66.
- iii. Wijesinghe, H.G.I.M., Rathnayake U.N., Alakolanga, A.G.A.W. and Withanage, N.S. (2015). Viscoelastic properties of Organo clay filled Fractioned bleached crepe rubber, Journal of Rubber Research Institute of Sri Lanka, Vol. 95: pp 39–57.
- iv. Withanage, N.S., Dayawansa, N.D.K. and De Silva, R.P. (2014). Morphometric analysis of the Gal Oya River Basin using spatial data derived from GIS, Tropical Agricultural Research, Vol. 26 (1): pp 175–188.

## 4.2 Books/Book Chapters

Article on "Water Pollution" in the Book issued at the Inauguration Ceremony of the National Ceremoney of "World's Water Day – 2013 of Uva Province".

## 4.3 Abstracts/Extended Abstracts

- i. D.G.C.B. Abeygunawardana, A.G.M.T.D. Fernando and N.S. Withanage (2019). Development of a protocol to reduce the Total Dissolved Solids in effluent treatment plant water, Proceedings of International Research Conference of Uva Wellassa University (IRCUWU 2019), "Sustainable Business Transition through Technology and Innovation", 7-9 February 2019, p 68.
- ii. P.C.T. Botheju, N.S. Withanage and P. Jayabodhi (2019). Effect of Carboxy Methyl Cellulose on viscosity of NBR, Proceedings of International Research Conference of Uva Wellassa University (IRCUWU 2019), "Sustainable Business Transition through Technology and Innovation", 7-9 February 2019, p 486.
- iii. Nisansala, S. Withanage, Dhammika, K. Dayawansa, Ranjith, P. De Silva and Chithrangani, W.M. Rathnayake (2018). Assessment of morphological characteristics of Maduru Oya River Basin of Sri Lanka using GIS, Proceedings of 39<sup>th</sup> Asian Conference on Remote Sensing (ACRS 2018), "Remote Sensing Enabling Prosperity", Kuala Lampur, Maysia, 15-19 October 2018, Vol.01(55), pp 277-285.

- iv. T.M.A.D.L. Thennakoon, N.S. Withanage, G.bAbhiram and R.C. Munasinghe (2018). Development of new master batch mixing cycle for a track producing extrusion compound with lower rejection rate, Proceedings of 3<sup>rd</sup> International Research Symposium on Pure and Applied Sciences (IRSPAS 2018), "Advancement of Multidisciplinary Scientific Research Towards Sustainable Development", Faculty of Science, University of Kelaniya, 26<sup>th</sup> October 2018, p 97.
- v. Thennakoon, T. M. A. D. L., Withanage, N. S., Abhiram, G. and Munasinghe, R. C. (2018). Development of new master batch mixing cycle for a track producing extrusion compound with lower rejection rate, Proceedings of 3<sup>rd</sup> International Research Symposium on Pure and Applied Sciences (IRSPAS 2018), "Advancements of Multidisciplinary Scientific Research towards Sustainable Development", Faculty of Science, University of Kelaniya, Sri Lanka, 26<sup>th</sup> October 2018, p 97.
- vi. Tharsan, R., Withanage, N.S., Abhiram, G. and Mary, J. (2018). Study on the treating ability of palmyrah seed shell based activated charcoal in newly designed domestic water filter, Proceedings of 2<sup>nd</sup> International Research Symposium of Uva Wellassa University (IRSUWU 2018), "Emerging Technologies for an Innovative Green Economy", February 1 2, 2018, p 248.
- vii. Weerasinghe, N. M., Dharmadasa, R. A. P. I. S., Withanage, N. S. and Senaratne, A. (2018). Identification of perception and adaptation to climatic change by the tea (camellia sinensis) Small-holders in Rathnapura District, Proceedings of 2<sup>nd</sup> International Research Symposium of Uva Wellassa University (IRSUWU 2018), "Emerging Technologies for an Innovative Green Economy", February 1 2, 2018, p 267.
- viii. Bandara, K.M.S., Dharmadasa, R.A.P.I.S., Herath, H.M.S.K. and Withanage, N.S. (2018). Household level impacts of Uma Oya Development Project, Proceedings of 2<sup>nd</sup> International Research Symposium of Uva Wellassa University (IRSUWU 2018), "Emerging Technologies for an Innovative Green Economy", February 1 2, 2018, p 145.
  - ix. Bandara, K.L.A.Y.D., Bandara, S.N., Withanage, N.S. and Jayasinghe, H.L. (2018). Effect of Eco-friendly growth media on soil properties and survival percentage of Tea [Camellia sinensis (L.) O. Kuntze] to mitigate short term drought at nursery level, Proceedings of 2<sup>nd</sup> International Research Symposium of Uva Wellassa University (IRSUWU 2018), "Emerging Technologies for an Innovative Green Economy", February 1 2, 2018, p 54.
  - x. Kanchana, H.L.K., Jayamanne, J.M.D.D.E., Ranawana, S.R.W.M.C.J.K. and Withanage, N.S. (2018). Evaluation of different methods of reducing night temperature in seed potato (Solanum tuberosum L.) production in Simplified Nutrient Film Technique, Proceedings of 2<sup>nd</sup> International Research Symposium of Uva Wellassa University (IRSUWU 2018), "Emerging Technologies for an Innovative Green Economy", February 1 2, 2018, p 24.
  - xi. Thennakoon, T.M.A.D.L., Withanage, N.S., Abhiram, G. and Munasinghe, R.C. (2018). Avoid remixing step in track producing extrusion compound (ATR-6112) by modification of viscosity, Proceedings of 4<sup>th</sup> Jaffna University International Research Conference (JUICe 2018), "Towards a Safer Future", Faculty of Medicine, University of Jaffna, 27-28 September 2018, pp 70-73.

- xii. Manathunga, M.M.K.D., Abhiram, G., Raveendran K. and Withanage, N.S. (2017). Study the performance of High Efficient Motor and Variable Speed Drive in withering and rolling machinery, Proceedings of International Conference on Advances in Science Management and Engineering, (ICASME2017), 29 -30 Dec 2017, Chennai, International Organization of Scientific Research and Development (IOSRD), Vol. 42, pp:1-7.
- xiii. Weerakoon, W.M.T.H., Attanayake, A.P., Gamage, H.V.K., Lokuge, C., Vitharana, L.P. and Withanage, N.S. (2016). Effect of processing conditions on raw rubber properties of natural rubber, Proceedings of the Sixth Symposium on Plantation Crop Research, 2-4 November 2016, BMICH, Colombo, Sri Lanka, Vol.2: pp 43-47.
- xiv. Thilakarathne, H.K.I.J., Withanage, N.S., Rathnayake, R.M.C.W.M. and Kendaragama, K.M.A. (2015). Water Quality Analysis along Mahaweli River in Upper Mahaweli Catchment Area of Sri Lanka, Symposium Proceedings of the Water Professional's Day, October 01, 2015, pp 117-127.
- xv. Natheer, M.M.M., Withanage, N.S., Weerawansha, A.N.R. and Haputhanthri, A.H. (2014). Treatment of online leached wastewater to reuse as boiler feed water in natural rubber glove manufacturing industry, Symposium Proceedings of the Water Professional's Day, October 01, 2014, pp 93-100.
- xvi. Vander Pooten, P.N.M., Rathnayake, R.M.C.W.M., Kadupitiya, H.K. and Withanage, N.S. (2017). Assessment and mapping soil erosion risk hazard zones in Anuradhapura, Polonnaruwa and Vavuniya Districts of Sri Lanka, Proceedings of International Research Symposium of Uva Wellassa University (IRSUWU 2017): Global Trends towards Technopreneurial Development, 19-20 January 2017, p 305.
- xvii. Manathunga, M.M.K.D, Raveendran, K., Withanage, N.S. and Abhiram, G. (2017). Effectiveness of introducing high efficient motors in tea processing Machineries, Proceedings of International Research Symposium of Uva Wellassa University (IRSUWU 2017): Global Trends towards Technopreneurial Development, 19-20 January 2017, p 22.
- xviii. Subankan, K., Withanage, N.S. and Abhiram, G. (2017). Performance analysis of prototype far-infrared tea dryer in black tea manufacturing, Proceedings of International Research Symposium of Uva Wellassa University (IRSUWU 2017): Global Trends towards Technopreneurial Development, 19-20 January 2017, p 169.
  - xix. Jayalath, K.A.T.K., Fonseka, H.H.D., Welegama, H.M.V.T., Alwis, L.M.H.R., Withanage, N.S. and Dissanayake, D.M.B.G.A.I.K. (2017). Evaluation of Morphophysiological variations in wild relatives of eggplant under water stress conditions, Proceedings of International Research Symposium of Uva Wellassa University (IRSUWU 2017): Global Trends towards Technopreneurial Development, 19-20 January 2017, p 294.
  - xx. Karunarathne, R.P.S.T., Withanage, N.S., Rangoda, A. and Jayasinghe, H.A.S.L. (2017). Performance of fine coir dust as a growing medium for Okra (Abelmoschus esculentus), Proceedings of International Research Symposium of Uva Wellassa University (IRSUWU 2017): Global Trends towards Technopreneurial Development, 19-20 January 2017, p 297.

- xxi. Rupasinghe, P.S.V., Munasinghe, E. and Withanage N.S. (2016). Effect of antitranspirant in sustaining rubber leaf physiology under dry climatic conditions, Proceedings of 3<sup>rd</sup> International Conference of Agricultural Sciences (AgInsight 2016), Faculty of Agricultural Sciences, Sabaragamuwa University of Sri Lanka, 8-9 December 2016, pp 116-119.
- xxii. Weerakoon, W.M.T.H., Attanayake, A.P., Withanage, N.S. and Arachchi, M.P.M., (2016). Effect of processing conditions on gel content and storage hardening of natural rubber, Proceedings of Wayamba International Conference -WinC 2016, Wayamba University of Sri Lanka, 19-20 August 2016, p 150.
- xxiii. Padmathilake, M.A.V.N, Withanage, N.S., Dharmadasa, R.A.P.I.S., Wijesuriya, W. and Jeewanthi, W. (2016). Interference of tapping due to rainfall and effectiveness of rain guards under different rainfall scenarios: A case study in the Dartonfield Rubber Estate, Proceedings of Wayamba International Conference -WinC 2016, Wayamba University of Sri Lanka, 19-20 August 2016, p 138.
- xxiv. Rupasinghe, P.S.V., Withanage, N.S. and Munasinghe, E., Rodrigo, V.H.L., Iqbal, S.M.M. and Jayasinghe, H.A.S.L. (2016). Effect of anti-transpirant in sustaining rubber leaf physiology under dry climatic conditions, Proceedings of 6<sup>th</sup> Research Symposium of Uva Wellassa University of Sri Lanka: Towards Emerging Trends in Value Addition, 28-29 January 2016, p 79.
- xxv. Padmathilake, M.A.V.N, Withanage, N.S., Dharmadasa, R.A.P.I.S., Wijesuriya, W. and Jeewanthi, W. (2016). Interference of tapping due to rainfall and effectiveness of rain guards under different rainfall scenarios: A case study in the Dartonfield Rubber Estate, Proceedings of 6<sup>th</sup> Research Symposium of Uva Wellassa University of Sri Lanka: Towards Emerging Trends in Value Addition, 28-29 January 2016, p 95.
- xxvi. Ekanayake, E.A.S.L., Withanage, N.S. and Jayabodhi, P.A.P.N. (2015). Effect of vulcanizing and antioxidant systems on aged tensile properties of MicrOptic Gloves, Proceedings of 5<sup>th</sup> Research Symposium of Uva Wellassa University of Sri Lanka: Value Addition for sustainable development, 29-30 January 2015.
- xxvii. Iddamalgoda, I.D.H.C., Withanage, N.S., Attanayake, A.P., Kumara, P.H.S. and Weerawansa, A.N.R. (2015). Property Variation of Centrifuged latex at different maturity stages in glove manufacturing, Proceedings of 5<sup>th</sup> Research Symposium of Uva Wellassa University of Sri Lanka: Value Addition for sustainable development, 29-30 January 2015.
- xxviii. Karunarathna, G.T., Withanage, N.S. and Edirisinghe, D.G. (2015). Effect of different types of fillers on properties of natural rubber latex foam, Proceedings of 5<sup>th</sup> Research Symposium of Uva Wellassa University of Sri Lanka: Value Addition for sustainable development, 29-30 January 2015.
- xxix. Wijesinghe, H.G.I.M., Ratnayake, U.N., Alakolanga, A. and Withanage, N.S. (2015). Visco-Elastic properties of OMMT filled fractioned bleached Crepe Rubber, Proceedings of 5<sup>th</sup> Research Symposium of Uva Wellassa University of Sri Lanka: Value Addition for sustainable development, 29-30 January 2015.
- xxx. Samarakoon, M.G.l., Withanage, N.S. and Siriwardena, S. (2015). Performance of coconut kernel residue oil as processing oil in carbon black filled natural rubber composites, Proceedings of 5<sup>th</sup> Research Symposium of Uva Wellassa University of Sri Lanka: Value Addition for sustainable development, 29-30 January 2015.

- xxxi. Bulathsinghala, B.A.D.U.P., Samaraweera, U.H.T.P. and Withanage, N.S. (2015). Development of activated carbon included natural rubber latex pillow, Proceedings of 5<sup>th</sup> Research Symposium of Uva Wellassa University of Sri Lanka: Value Addition for sustainable development, 29-30 January 2015.
- xxxii. Ruwanka, W.K.T., Withanage, N.S., Pathmasiri, M.M.R. and Weerawansa, A.N.R. (2015). Factors affecting the level of effectiveness of dryers used in Sri Lanka tea manufacturing, Proceedings of 5<sup>th</sup> Research Symposium of Uva Wellassa University of Sri Lanka: Value Addition for sustainable development, 29-30 January 2015.
- xxxiii. Chathurangi, N.H.K., Withanage, N.S., Pathmasiri, M.M.R. and Weerawansa, A.N.R. (2015). Firewood energy utilization in different dryers used in tea processing, Proceedings of 5<sup>th</sup> Research Symposium of Uva Wellassa University of Sri Lanka: Value Addition for sustainable development, 29-30 January 2015.
- xxxiv. Tharishanan, N., Withanage, N.S. and Liyanage, A.H.L.R.N. (2014). Synthesis and application of depolymerized natural rubber in value added products, Proceedings of Wayamba International Conference -WinC 2014, Wayamba University of Sri Lanka, 29-30 August 2014,p 279.
- xxxv. Jathunarachchi, P.N., Withanage, N.S. and Fernando, J.A.K.M. (2013). Development of a Composite Board by Mixing Cement, Coir Fiber and Calcium Carbonate, Proceedings of 4<sup>th</sup> Research Symposium -2013 of Uva Wellassa University of Sri Lanka: Value Addition through Economic Growth and Prosperity, 12-13 December 2013.
- xxxvi. Jayasingha, D.M.M.D., Withanage, N.S. and Ratnayake, U.N. (2013). Reinforcing Effect of Organically Modified Montmorillonite Clay in Skim Rubber Nanocomposites, Proceedings of 4<sup>th</sup> Research Symposium 2013 of Uva Wellassa University of Sri Lanka: Value Addition through Economic Growth and Prosperity, 12-13 December 2013.
- xxxvii. Jayawardhane, R.M.I.D. and Withanage, N.S. (2013). Use of Refused Tea as a Hydroponics Growing Medium for Lettuce (Lactuca sativa), Proceedings of 4<sup>th</sup> Research Symposium -2013 of Uva Wellassa University of Sri Lanka: Value Addition Through Economic Growth And Prosperity, 12-13 December 2013.
- xxxviii. Karunarathna, A.K.S., Withanage, N.S. and Withanachchi, A.J.M. (2013). Development of Natural Rubber (NR) and Ethylene-Propylene-Diene-Monomer (EPDM) Rubber Blend for Tie Down Strap Compound, Proceedings of 4<sup>th</sup> Research Symposium- 2013 of Uva Wellassa University of Sri Lanka: Value Addition Through Economic Growth And Prosperity, 12-13 December 2013.
- xxxix. Rathnayaka, R. M. V. K., Withanage, N.S. and Dharmadasa, R.A.P.I.S. (2012). Use of Refuse Tea as a Growing Medium for Hydroponically Grown Tomato (Lycopersicon esculentum), Proceedings of 3<sup>rd</sup> Research Symposium 2012 of Uva Wellassa University of Sri Lanka: Meeting Global Challenges through Knowledge and Wisdom, 22-23 November 2012, pp 168-170.
  - xl. Dharmadasa, R.A.P.I.S. and Withanage, N.S. (2012). Migration and Remittances in Tea Estate Sector in Badulla District, Proceedings of 3<sup>rd</sup> Research Symposium 2012 of Uva Wellassa University of Sri Lanka: Meeting Global Challenges through Knowledge and Wisdom, 22-23 November 2012, pp 519-521.

- xli. Withanage, N.S., Dharmadasa, R.A.P.I.S. and Kodikara, K.M.S. (2012). Applicability of Estimating Evapo-transpiration using Different Methods for Badulla Region, Proceedings of 3<sup>rd</sup> Research Symposium 2012 of Uva Wellassa University of Sri Lanka: Meeting Global Challenges through Knowledge and Wisdom, 22-23 November 2012, pp 523-526.
- xlii. Dharmadasa, R.A.P.I.S., Deyshappriya, N.P.R.and Withanage, N.S. (2011). Impact of Labor Out-Migration on Household Income in Tea Estate Sector in Badulla District, Proceedings of 2<sup>nd</sup> Research Symposium 2011 of Uva Wellassa University of Sri Lanka: Towards a Knowledge Economy, 15-16 December 2011, pp 316-317.
- xliii. Hegoda, L.W., Chandrasena, G., Withanage, N.S., Thennakoon, A. and Nadheesha, M.K.F. (2011). Potassium and Magnesium Interaction in Coconut Growing Soils, Proceedings of 2<sup>nd</sup> Research Symposium 2011 of Uva Wellassa University of Sri Lanka: Towards a Knowledge Economy, 15-16 December 2011, pp 208 210.
- xliv. Mihirangi, D.P.A., Weerasooriya, J.D. and Withanage, N.S. (2011). Effects of Moisture Content on Quality of Vermicompost and Specific Earthworm (Perionyx excavatus) Population, Proceedings of 2<sup>nd</sup> Research Symposium 2011 of Uva Wellassa University of Sri Lanka: Towards a Knowledge Economy, 15-16 December 2011, pp 211 213.
- xlv. Pradeep, V.P.P., Subhasinghe, H.M.P.A., Chandrasena, G. and Withanage, N.S. (2011). Study on Changes in Root Systems of Black Pepper (Piper nigrum L) and Support Tree (Gliricidia sepium L) between Two Consecutive Support Tree Prunings, Proceedings of 2<sup>nd</sup> Research Symposium 2011 of Uva Wellassa University of Sri Lanka: Towards a Knowledge Economy, 15-16 December 2011, pp 214 216.
- xlvi. Weerasinghe, S.K.M.M, Kaliyadasa, P.E., Withanage N.S.(2010). Effect of variety, explant and growth regulators in invitro propergation of Gerbera, Proceedings of 1<sup>st</sup> Research Symposium-2010 of Uva Wellassa University of Sri Lanka, 16-17 of September 2010,pp 58.
- xlvii. Withanage N.S, Jinendra B.M.S., Weerasinghe K.D.N, Liyanage. J (2003). Performance Assessment of Newly Formulated Hydroponics Solution Compared to Albert Solution In Two Tomato Varities, Annual Proceedings of Faculty of Agriculture 2003, University of Ruhuna, pp. 46.

### 4.4 Scientific Presentations

"Importance of Rain Water Harvesting for Adaptation and Mitigation to Climate Change", Training Programme organized by Sri Lanka Rainwater Harvesting Forum, Pelawatta, Battaramulla on 'Rain Water Harvesting and Disaster Risk Reduction in Uva Province' for the Administrative Officers and Other Government Officials of Uva Province with the collaboration of District Secretariat and National Water Supply and Drainage Board on 7-8 December 2017 for Badulla and 15-16 March 2018 for Moneragala.

#### 4.5 Theses/Dissertations

<u>MPhil</u>-Assessment of Morphological Characteristics of Selected River Basins in Dry Zone of Sri Lanka

<u>BSc</u>- Performance Assessment of Newly Formulated Hydroponics Solution Compared to Albert Solution In Two Tomato Varities

#### 5. PATENTS

None

#### 6. RECENT RESEARCH PROJECTS INVOLVED

- i. A Simple Alternative Irrigation Technique for Low Grown Tea
- ii. Effect of Curing Temperature and Cooling System on Specific Gravity Behavior of Solid Tyre compounds
- iii. Standardization of Powder content of Surgical Gloves to Overcome Stickiness of Glove Films

### 7. GRANTS RECEIVED

None

## 8. THESIS SUPERVISION

- i. Effect of Carboxy Methyl Cellulose on viscosity of NBR.
- ii. Identification of Changes in Rainfall Pattern on Paddy Yield in Anuradhapura District.
- iii. Development of Cost Effective New Wastewater Treatment Process for Dpl Premier Gloves Ltd.
- iv. Development of a protocol to reduce the Total Dissolved Solids in effluent treatment plant water.
- v. Identifying the causes for CKDu in Mullaitivu District
- vi. Curing characteristics & Film behaviour on various blending ratios of matured and fresh NR & NBR compounds
- vii. Evaluation of cure characteristics, rheological and mechanical properties of skim/natural rubber latex blended ribbed smoke sheets.
- viii. Effect of raw materials and mixing process on rheological properties & viscosity and the correlation between rheological properties & viscosity of extrusion compounds
  - ix. Optimization of pre-leaching process to reduce water consumption in Nitrile-Butadiene rubber based disposable glove production
  - x. Performance analysis of orthodox roller in black tea production
  - xi. Study on the treating ability of palmyrah seed shell based activated charcoal in newly designed domestic water filter
- xii. Evaluation of different methods of reducing night temperature in seed potato (Solanum tuberosum L.) production in Simplified Nutrient Film Technique
- xiii. Effect of Eco-friendly growth media on soil properties and survival percentage of Tea [Camellia sinensis (L.) O. Kuntze] to mitigate short term drought at nursery level
- xiv. Identification of perception and adaptation to climatic change by the tea (*camellia sinensis*) Small-holders in Rathnapura District
- xv. Morphometric analysis of the Kala Oya River Basin using Geographical Information Systems
- xvi. Effectiveness of introducing high efficient motors in tea processing Machineries
- xvii. Performance analysis of prototype far-infrared tea dryer in black tea manufacturing
- xviii. Evaluation of Morpho-physiological variations in wild relatives of eggplant under water stress conditions
  - xix. Performance of fine coir dust as a growing medium for Okra (*Abelmoschus esculentus*)

- xx. Assessment and mapping soil erosion risk hazard zones in Anuradhapura, Polonnaruwa and Vavuniya Districts of Sri Lanka
- xxi. Effect of anti-transpirant in sustaining rubber leaf physiology under dry climatic conditions
- xxii. Effect of processing conditions on gel content and storage hardening of natural rubber
- xxiii. Interference of tapping due to rainfall and effectiveness of rain guards under different rainfall scenarios: A case study in the Dartonfield Rubber Estate
- xxiv. Water quality monitoring study in upper and middle Mahaweli River Basins
- xxv. Effect of anti-transpirant in sustaining rubber leaf physiology under dry conditions
- xxvi. Rain interference on tapping due and effectiveness of raingurds under different rainfall scenarios: a case study in Dartonfield rubber estates, Agalawatta
- xxvii. Impact of rubber plantations grown in Eastern province of Sri Lanka on environmental conditions
- xxviii. Effect of processing conditions on gel content and storage hardening of natural rubber
- xxix. Effect metal ions on physical properties of house hold gloves
- xxx. Effect of china clay and talc filler blend and sulphur on shrinkage of continuous natural latex foam sheet manufacturing process
- xxxi. Comparison of firewood energy utilization of different dryers in tea processing.
- xxxii. Determination of most appropriate viscosity level for tube production.
- xxxiii. Development of an activated carbon included natural rubber latex pillow.
- xxxiv. Effect of different types of fillers on properties of natural rubber latex foam.
- xxxv. Effect of coconut-based mixed cropping systems on micro-climatic condition, leaf area development and female flower production of coconut.
- xxxvi. Evaluating the preservative effect of Preventol on crepe rubber.
- xxxvii. Factors affecting on the effectiveness of dryers in tea manufacturing.
- xxxviii. Performance of coconut kernel residue oil as a processing oil in carbon black filled natural rubber composites.
  - xxxix. Property variation of raw latex with the maturity.
    - xl. Reuse of online leached wastewater as boiler feed water in natural rubber glove manufacturing industry.
    - xli. Visco elastic properties of organoclay filled natural rubber latex nano crepe rubber.
    - xlii. Impact of a Modified Sifting Process Model in Pure Orthodox Black Tea Manufacturing for the Higher Profitability
    - xliii. Use of Refuse Tea as a Growing Medium for Hydroponically Grown Tomato (*Lycopersicon esculentum*)
    - xliv. Applicability of Estimating Evapo-Transpiration Using Different Methods for Badulla Region
    - xlv. Impact of Labor Out-Migration on Household Income in Tea Estate Sector in Badulla District
    - xlvi. Potassium and Magnesium Interaction in Coconut Growing Soils
    - xlvii. Effects of Moisture Content on Quality of Vermicompost and Specific Earthworm (Perionyx excavatus) Population
  - xlviii. Study on Changes in Root Systems of Black Pepper (Piper nigrum L) and Support Tree (Gliricidia sepium L) between Two Consecutive Support Tree Prunings

#### 9. TEACHING CONTRIBUTION

#### Being Taught

- i. EAG 141-2 / ANS 105-0 Agricultural Meteorology & Climatology
- ii. AQT 132-1 Hydrometeorology
- iii. EAG 242-2 Irrigation & Water Management
- iv. PLT 241-2/TEA 242-2 Water Management Technology
- v. EAG 341-1 Advanced Irrigation Technologies
- vi. EAG 451-2 Climate Change and Crop Production
- vii. TEA 451-1 Climate Change and Adaptation

### **Taught**

- viii. EAG 141-1 Agricultural Meteorology
  - ix. EAG 152-0 Agricultural Meteorology & Climatology
  - x. AAS 101-3 General Agriculture
  - xi. AAS 102-3 Fundamentals of Agricultural, Food and Biochemical Engineering
- xii. AAS 202-2 Agricultural Farm Mechanization
- xiii. EAG 141-2 Principles of Agricultural Engineering
- xiv. EAG 141-0 Principles of Agricultural Engineering Technology
- xv. EAG 171-2 Principles of Soil Science
- xvi. EAG 241-1 Land Reclamation Engineering
- xvii. EAG 244-0 Environmental Pollution & Control
- xviii. EAG 245-1 Controlled Environment Agriculture
  - xix. PLT 231-2 Engineering Principles in Palm & Latex Industry
  - xx. TEA 221-2 Fundamentals of Biochemical Engineering
  - xxi. EAG 271-2 Plant Nutrition and Soil Fertility Management
- xxii. EAG 346-2 Food and Biochemical Engineering
- xxiii. EAG 348-0 Hydrology

#### 10. WORK EXPERIENCE

21st June 2016 to Date	Senior Lecturer
	Department of Export Agriculture
	Faculty of Animal Science and Export
	Agriculture,
	Uva Wellassa University of Sri Lanka
21st June 2011 to 20th June 2016	Lecturer
	Department of Export Agriculture
	Faculty of Animal Science and Export
	Agriculture,
	Uva Wellassa University of Sri Lanka
10 <sup>th</sup> January 2011 to 20 <sup>th</sup> June 2011	Temporary Lecturer
	Department of Export Agriculture
	Faculty of Animal Science and Export
	Agriculture
	Uva Wellassa University of Sri Lanka

## 22<sup>nd</sup> June 2009 to 09<sup>th</sup> January 2011 Temporary Demonstrator

Department of Export Agriculture Faculty of Animal Science and Export Agriculture Uva Wellassa University of Sri Lanka

## 24th October 2003 to 23rd March 2006 Temporary Demonstrator

Department of Agricultural Engineering Faculty of Agriculture University of Ruhuna, Sri Lanka

#### 11. OTHER POSITIONS HELD

- Secretary/ Uva Agriculture Development Forum of the Faculty of Animal Science and Export Agriculture, Uva Wellassa University for a period of one year with effect from 5<sup>th</sup> February 2019.
- ii. Team Leader of the Sub Committee on "Student Assessment and Awards" on preparation of Self Evaluation Report (SER) for Program Review (PR) of Export Agriculture Degree Programme- 2019, Faculty of Animal Science and Export Agriculture, Uva Wellassa University.
- iii. Panel Member of Sustainable Crop Production Technical Session of International Research Conference of Uva Wellassa University (IRCUWU 2019).
- iv. Coordinator of the Curriculum Development of BSc in Agricultural Engineering Technology Degree which is going to be offered Uva Wellassa University of Sri Lanka for 2016 intake of A/L students from technology stream.
- v. Faculty Coordinator of Panel Discussion Session Faculty of Animal Science and Export Agriculture of the International Research Conference of Uva Wellassa University (IRCUWU 2019).
- vi. Co-controlling Examiner of G.C.E A/L Examination in Technology Stream Practical Test 2018 of the Center at B/Badulla Central College during 26<sup>th</sup> to 30<sup>th</sup> October 2018.
- vii. Co-controlling Examiner of G.C.E A/L Examination in Technology Stream Practical Test 2017 of the Center at B/Badulla Central College during 19<sup>th</sup> to 24<sup>th</sup> October 2017.
- viii. Co-controlling Examiner of G.C.E A/L Examination in Technology Stream Practical Test 2016 of the Center at B/Badulla Central College during 04<sup>th</sup> to 09<sup>th</sup> November 2016.
  - ix. Convener of the Working Committee on Other Plantation Crops of Uva Agriculture Development Forum of Uva Wellassa University of Sri Lanka.
  - x. Panel Member for the Technical Session of Palm & Latex Technology and Value Addition of the 5<sup>th</sup> Research Symposium of Uva Wellassa University of Sri Lanka, 29<sup>th</sup> and 30<sup>th</sup> January 2014.
  - xi. Panel Member of the 4<sup>th</sup> Session on English Quiz Competition, 27<sup>th</sup> November 2014, Uva Wellassa University of Sri Lanka.

- xii. Panel Member of the Painting and Poster Competition held in parallel to the National Ceremoney of "World's Water Day 2013 of Uva Province" on 25.03.2013 at Mahinda Rajapaksha Conference Hall, Wellawaya.
- xiii. Paper Setter of the Export Agriculture Paper of the Aptitude Test 2013 of Uva Wellassa University of Sri Lanka.
- xiv. Chairman and Member of many Technical Evaluation Committees of Uva Wellassa University
- xv. Member of the sub-committee on "Learning Resources, Student Support and Progression" in preparing Self Evaluation Report for the Institutional Review -2018 of Uva Wellassa University of Sri Lanka.
- xvi. Member of the sub-committee on "Teaching and Learning" in preparing Self Evaluation Report for the Institutional Review of Uva Wellassa University of Sri Lanka.
- xvii. Member of Higher Degree Committee of Faculty of Animal Science and Export Agriculture, Uva Wellassa University of Sri Lanka.
- xviii. Member of Inter- School Quiz Competition Uva Province conducted parallel to the celebration of 10<sup>th</sup> Anniversary of Uva Wellassa University in 2016.
- xix. Member of Ethnic Cohesion sub-committee of University Development Grant Project funded by HETC.
- xx. Quiz Master and Panel Member of several sessions of Inter-Degree Programme Quiz Competition on Ethnic Harmony 2012, Uva Wellassa University of Sri Lanka.
- xxi. Member of Library Committee of Uva Wellassa University of Sri Lanka for more than three years.

## 12. RESOURCE PERSON

- Resource Person for the Awareness Programme on 'Water Resource Management and Development & Conservation of Watersheds' organized by the Ministry of Road Development, Housing, Water Supply, Estate Infrastructure, Cooperative and Tamil Medium Education of Uva Provincial Council on 24<sup>th</sup> March 2019 at Ohiya Training Institute, Ohiya, Badulla.
- ii. Resource Person for the "Practical Sessions of Badulla Region Field Visit 2019 of the Basic Soil Science Module (ET 1006)" offered by the Department of Environmental Technology, Faculty of Technology, University of Colombo during 19 22 January 2019.
- iii. Chief Guest of Prize Giving Ceremony 2018 of Ranasinghe Premadasa National School, Hasalaka on 29<sup>th</sup> November 2018.
- iii. Resource Person for the Training Programme on 'Rain Water Harvesting and Disaster Risk Reduction in Moneragala', 15-16<sup>th</sup> March 2018 at District Secretariat, Moneragala.
- iv. Resource Person for the Training Programme on 'Rain Water Harvesting and Disaster Risk Reduction in Badulla', 7- 8<sup>th</sup> December 2017 at Regional support Centre Uva, National Water Supply and Drainage Board, Mediriya Road, Badulla.

- v. Resource person of 100 hr short course on "Selected Topics of Agriculture and Biosystem Technology" for A/L Agriculture and Biosystem Technology Teachers organized and by Centre for Open and Distant Learning (CODL) with the collaboration of Uva Provincial Department of Education held from 13<sup>th</sup> November to 18<sup>th</sup> December 2016 at Uva Wellassa University of Sri Lanka.
- vi. Resource person of the workshop held for A/L students in Bio-system Technology Stream organized by Uva Agriculture Development Forum, Uva Wellassa University of Sri Lanka held on 20<sup>th</sup> March, 02<sup>nd</sup> and 03<sup>rd</sup> April 2015.
- vii. Resource person of 100 hr short course on "Selected Topics of Agriculture and Biosystem Technology" for A/L Agriculture and Biosystem Technology Teachers organized and by Centre for Open and Distant Learning (CODL) with the collaboration of Uva Provincial Department of Education held from 13<sup>th</sup> November to 18<sup>th</sup> December 2016 at Uva Wellassa University of Sri Lanka.
- viii. Resource person of the workshop held for A/L students in Bio-system Technology Stream organized by Uva Agriculture Development Forum, Uva Wellassa University of Sri Lanka held on 20<sup>th</sup> March, 02<sup>nd</sup> and 03<sup>rd</sup> April 2015.
  - ix. Resource person of the Technological Training Workshop organized by the Vidatha Resources Centre, Divisional Secretariat Hali-Ela on 29.10.2014.
  - x. Contributor of the "Glossary for University Students: Explore Your Own World" published by the Uva Wellassa University of Sri Lanka under HETC Funds in 2014.
  - xi. Resource person of the programmes conducted for capacity development of A/L Agriculture Teachers of Uva province on 1<sup>st</sup> and 2<sup>nd</sup> October 2012; 21<sup>st</sup> and 22<sup>nd</sup> May 2013 and 10<sup>th</sup> and 11<sup>th</sup> October 2013 at the Education Development Centre, Hali-Ela.
- xii. Resource Person of the "Sipsara Udana-2013" Seminar Series conducted at Badulla and Moneragala Districts by the Department of Education, Uva Province.
- xiii. Resource Person of the workshops held on Curriculum Development of Bachelor of Engineering Technology in Agriculture for developing course contents of Agricultural Engineering related subjects on 24<sup>th</sup> July and 09<sup>th</sup> October 2015 at Riverside Hotel, Badulla.
- xiv. Resource Person in Agricultural Engineering Field of Curriculum Revision Committee of Animal Science Degree Programme, Department of Animal Science, Faculty of Animal Science and Export Agriculture, Uva Wellassa University of Sri Lanka.
- xv. Resource Person in Agricultural Engineering Field of Curriculum Revision Process of BSc in Export Agriculture, Department of Export Agriculture, Faculty of Animal Science and Export Agriculture, Uva Wellassa University of Sri Lanka.

## 13. CONSULTANCIES

None

#### 14. TRAININGS AND WORKSHOPS ATTENDED

- Workshop on "Preparation of Sri Lanka's Third National Communication on Climate Change and to Develop Provincial Adaptation Plan - Uva Province" with the collaboration of Climate Change Secretariat of the Ministry of Mahaweli Development & Environment and Office of the Chief Secretary of Uva Provincial Council on 3<sup>rd</sup> August 2019 at Uva Provincial Council Auditorium, Badulla.
- ii. Workshop on 2<sup>nd</sup> Stakeholder Consultation for "Preparation of Adaptation Plan for Uva Province and Establishment of Provincial Climate Change Institutional Setup" organized by the Office of the Chief Secretary of Uva Provincial Council with the collaboration of Climate Change Secretariat of the Ministry of Mahaweli Development & Environment on 7<sup>th</sup> June 2019 at Uva Provincial Council Auditorium, Badulla.
- iii. Climate Change Research Forum of "Sri Lanka NEXT- A Blue Green Era" Programme 2018 on 20<sup>th</sup> October 2018 at the Cinema Lounge, BMICH, Colombo.
- iv. First Workshop on Self Evaluation Report (SER) Writing of Faculty of Animal Science and Export Agriculture on 20<sup>th</sup> June 2018 at E1 Lecture Hall of Uva Wellassa University.
- v. Workshop on Conservation of Badulu Oya organized by District Secretariat, Badulla at the Office Auditorium of Deputy General Manager, National Water Supply and Drainage Board, Mediriya Road, Badulla on 2<sup>nd</sup> November 2017.
- vi. One day Training Programme on 'Design, Operation and Maintenance of Reverse Osmosis Based Drinking Water Treatment' held at Postgraduate Institute of Agriculture, University of Peradeniya on 11<sup>th</sup> August 2017.
- vii. Workshop on Transitional Justice organized by National Peace Council of Sri Lanka on 13<sup>th</sup> July 2017, Grand Regency Hotel, Badulla.
- viii. One day Workshop on 'Sustainable Water- Solutions to the Water Challenges in the 21<sup>st</sup> Century' conducted by Green Building Council of Sri Lanka, 13<sup>th</sup> March 2018, Colombo
  - ix. Workshop held on "Climate Change and Its impacts to Sri Lankan Agriculture" on 10<sup>th</sup> August 2016 at Rice research Institute, Bathalagoda.
  - x. Workshop and Stakeholder Meeting of External Degree Programme in Agriculture organized by the Centre for Open and Distance Learning, Uva Wellassa University of Sri Lanka held on 24<sup>th</sup> November 2015 at Riverside Hotel, Badulla.
- xi. Three day workshop on Outcome Based Curriculum Design and Development of External Degree Programme in Agriculture organized by the Centre for Open and Distance Learning, Uva Wellassa University of Sri Lanka held on 20<sup>th</sup>, 21<sup>st</sup> and 22<sup>nd</sup> June 2015 at Heritage Resorts, Badulla.
- xii. Two day workshop on Water Conflicts Resolution and Desalination organized by Water and Society (WaSo) Project, Department of Civil Engineering, Faculty of Engineering, University of Jaffna on 18<sup>th</sup> and 19<sup>th</sup> April 2015.
- xiii. One day Training Programme on Design, Operation and Maintenance of Reverse Osmosis Based Drinking Water Treatment held at Postgraduate Institute of Agriculture, University of Peradeniya on 11<sup>th</sup> August 2017.
- xiv. Five day Training Programme on "STICS" Crop Model, Faculty of Agriculture, University of Peradeniya in 2014.
- xv. Five day Training Programme on developing research competencies, HETC Project, Ministry of Higher Education in 2013.

- xvi. 160 hours Certificate Course on Teaching in Higher Education, Staff Development Centre, Uva Wellassa University of Sri Lanka in 2012.
- xvii. Proficiency in English Certificate Course (Level I, II, III), University of Ruhuna in 2003.
- xviii. One-week Training Programme in Crop Post Harvest Technology and Food Processing, Institute of Postharvest Technology (IPHT), Anuradhapura in 2003.
- xix. One-week Training Programme on Tea and Rubber Plantation Management and Manufacturing including Tea Milling Technology, Maturata Plantation Pvt.Ltd, Diddenypotha in 2002.
- xx. One year Diploma in Computer Studies, Comtec Lanka (Pvt).Ltd.,Galle in 1999.
- xxi. One year Certificate Course in Professional English, Open University of Sri Lanka in 2001.
- xxii. Geospatial Forum, 10 June 2013, Cinnamon Grand Hotel, Colombo, Sri Lanka.
- xxiii. Symposium of International Network for water and Eco-Systems in Paddy Fields organized by Ministry of Irrigation and Water Resources Management at Jetwing Blue Hotel, Negambo on 3<sup>rd</sup> November 2015.
- xxiv. International Conference on Natural Disaster Management and International Conference on Infrastructure Management (GIT4 NDM and GIT4 IM-2012), 7<sup>th</sup> and 8<sup>th</sup> November 2012, Galadari Hotel, Colombo, Sri Lanka.
- xxv. Water Professional Day Symposium of Water Resources Research in Sri Lanka Organized by Cap-Net Lanka, Postgraduate Institute of Agriculture and Geo-Informatics Society of Sri Lanka held on 01<sup>st</sup> October annually since 2012 to date.

## 15. EDITOR/REVIEWER ASSIGNEMENTS

- i. Reviewer of International Conference on Dry Zone Agriculture (ICDA 2019) organized by the Faculty of Agriculture, University of Jaffna.
- ii. Reviewer of International Research Conference of Uva Wellassa University (IRCUWU 2019) organized by the Faculty of Management, Uva Wellassa University.
- iii. Reviewer of International Conference on Dry Zone Agriculture (ICDA 2018) organized by the Faculty of Agriculture, University of Jaffna.
- iv. Reviewer of Journal of Agriculture and Value Addition (JAVA), Faculty of Animal science and Export Agriculture, Uva Wellassa University of Sri Lanka.
- v. Reviewer of 12<sup>th</sup> Academic Sessions and Vice Chancellor's Awards Ceremony of University of Ruhuna, Sri Lanka, 04 March 2015.
- vi. Reviewer of the Research Symposium 2012, Uva Wellassa University of Sri Lanka.

#### 16. SCIENTIFIC SOCIETIES MEMBERED

Member of the Executive Committee of Water Management Committee held by the Ministry of Road Development, Housing, Water Supply, Consumer Affairs & Co-operative & Food Supply, Uva Provincial Council since 2012 to date.

# 17. PERSONAL INFORMATION

Surname : Withanage

Name : Nisansala Sandamali

Gender : Female
Date of Birth : 1977.05.27
Marital Status : Married
Nationality : Sri Lankan