

Dr. H.A.W.S. Gunathilaka;
Senior Lecturer,
Faculty of Agriculture and Plantation Management,
Wayamba University of Sri Lanka



Name: Dr. H.A.W.S. Gunathilaka

Designation: Senior Lecturer

University: Wayamba University of Sri Lanka

Faculty: Agriculture and Plantation Management

Department: Plantation Management

Current Position: Head, Department of Plantation Management

Qualifications:	B.Sc., MPhil, PhD.
Official Address:	Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka, Makandura, Gonawila.
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Home Address:	140/1/1 Anchor Estate, Ihala Withanamulla, Divulapitiya
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Experience/training in curriculum development, and/or development of teaching and learning methods, assessment strategies and evaluation strategies	
❖ Serving as a member of curriculum revision panel (2016 onwards, National Institute of Education)- Advance Level Technology Stream	

Subjects:

- i. Science for Technology
- ii. Bio System Technology
- iii. Engineering Technology

- ❖ Serving as a member of Editorial Board Advanced Level (Technology Stream)

Subjects:

- i. Science for Technology
- ii. Bio System Technology
- iii. Engineering Technology

- ❖ Serving as a Resource Person on writing panel of supplementary reading books on Mathematics - Advanced Level (2018 New curriculum- Publication Unit, Department of Education)

- ❖ **Module Writer** :- B.Sc. Plantation Management (External) Degree – Wayamba University of Sri Lanka

Module	Number of credits
Farm Power and Machinery Management	03
Irrigation and Watershed Management	02
Energy and Waste Management	02
Agronomy and Processing of Export Agricultural Crops	02
Processing and Manufacturing and value addition of coconut	02

- ❖ Resource person on developing the curriculum of Bachelor of Bio system Engineering, Wayamba university of Sri Lanka.

Subjects :- Waste Management
Farm Machinery

- ❖ Resource person on curriculum development
Higher National Diploma in Agriculture (2015-2016)
Sri Lanka Institute of Advanced Technological Institute of Advanced Technological Education (SLIATE)

- ❖ Program advisory committee member
HNDA- Agriculture – SLIATE (2012-2015) (2016-2018)

- ❖ Serving as the Chief Examiner – Advance Level :- (Department of Examination)

Subjects	Year	code
Science for Technology	2016	AL/67/5/CH/15
Science for Technology	2017	AL/67/5/CH/01

- ❖ Serving as co- controller – Advanced level examination -2016
Subject :- Bio systems Technology

- ❖ Review Board member :- International conference on Advanced in Tea - August,2017 , BMICH

Experience with Research Funds:

Research Grant from Wayamba University of Sri Lanka-SRHDC/RP/2015/02

Number of Undergraduate Students Supervised: 71

Number of Postgraduate Students Supervised: 02

RESEARCH EXPERIENCE**(a) Publications:****(i) Research Papers: In the Proceedings of the Symposiums and Workshops**

1. Dharamawardene M.W.T.M. and Gunathilaka, H.A.W.S. (2018). Effect of Long Term Mulching on Selected Soil Physical Properties of Coconut Cultivations. Proceedings of 17th Agricultural Research Symposium, November 2018, Sri Lanka, vol 1. 6-10.
2. Hettiarachchi S.D. and Gunathilaka, H.A.W.S. (2018). Evaluation of Manufacturing Variability of Drippers Commonly Used in Sri Lanka. Proceedings of 17th Agricultural Research Symposium, November 2018, Sri Lanka, vol 1. 36-40.
3. Jayasinghe V.S.B. and Gunathilaka, H.A.W.S. (2018). Economic Analysis of Drip Irrigation System for Coconut Estates in North Western Province of Sri Lanka. Proceedings of 17th Agricultural Research Symposium, November 2018, Sri Lanka, vol 1. 51-55.
4. Lakmali G.P.N. and Gunathilaka, H.A.W.S. (2018). Forecasting of Coconut Yield Based on Rainfall and Temperature Data Using Vector Auto regression (VAR) Model. Proceedings of 17th Agricultural Research Symposium, November 2018, Sri Lanka, vol 1. 61-65.
5. Mendis B.M.D.T. and Gunathilaka, H.A.W.S. (2018). Effect of Mulching on Root Distribution of Coconut (*Cocos nucifera* L.) Palm. Proceedings of 17th Agricultural Research Symposium, November 2018, Sri Lanka, vol 1. 75-78.
6. Silva K.P.S.A. and Gunathilaka, H.A.W.S. (2018). Evaluation the Performance of Sub Surface Drip Irrigation Systems of Coconut Cultivations. Proceedings of 17th Agricultural Research Symposium, November 2018, Sri Lanka, vol 1. 89-93.
7. Warnakulasooriya W.M.K.D.S. and Gunathilaka, H.A.W.S. (2018). An Investigation on Efficiency of Different Coconut Oil Expelling Methods in Sri Lanka. Proceedings of 17th Agricultural Research Symposium, November 2018, Sri Lanka, vol 1. 94-98.
8. Gamalath R.S.W. and Gunathilaka, H.A.W.S. (2018). A Study on the Current Status of Mechanization of Paddy Cultivation in Sri Lanka: Case of Anuradhapura District. Proceedings of 17th Agricultural Research Symposium, November 2018, Sri Lanka, vol 1. 129-133.
9. Jayalath G.A.I.M and Gunathilaka, H.A.W.S. (2018). Evaluation of Water Distribution Efficiency of Irrigation Schemes for Paddy Cultivation: Case Study at Thalawa Block Division in System H-Kalawewa. Proceedings of 17th Agricultural Research Symposium, November 2018, Sri Lanka, vol 1. 149-152.
10. Rathnayaka N.R.S.S, Amadoru I.J., A.H.M.N., Chamara and Gunathilaka, H.A.W.S. (2018). Performance Evaluation of a Two Wheel Tractor(Sonik Mini Cultivator). Proceedings of 17th Agricultural Research Symposium, November 2018, Sri Lanka, vol 1. 163-167.
11. Athapaththu A.M.S.M. and Gunathilaka, H.A.W.S. (2018). Assessment of Technical Efficiency and Determinants for Abandonment of Micro Irrigation Systems in North Western Province of

- Sri Lanka. Proceedings of 17th Agricultural Research Symposium, November 2018, Sri Lanka, vol 1. 227-231.
12. Rathnayaka R.M.G.T.B., Amadoru I.J., A.H.M.N., Chamara and Gunathilaka, H.A.W.S. (2018). Performance Evaluation of a Two Wheel Tractor (Sonik Mini Cultivator). Proceedings of 17th Agricultural Research Symposium, November 2018, Sri Lanka, vol 1. 168-172.
 13. Kapuwaththa H.B.M.R.J.G., Amadoru I.J., A.H.M.N., Chamara and Gunathilaka, H.A.W.S. (2018). Utilization and Maintenance of Farm Tractors in Kurunegala District of Sri Lanka. Proceedings of 17th Agricultural Research Symposium, November 2018, Sri Lanka, vol 1. 272-276.
 14. Karunanayake W.P.H.S. and Gunathilaka, H.A.W.S. (2018). Assessing Technical Efficiency and Productivity of Two Wheel Tractor Driven Rototillers and Self-propelled Rototillers under Coconut Cultivations in North Western Province. Proceedings of 17th Agricultural Research Symposium, November 2018, Sri Lanka, vol 1. 277-281.
 15. Kolambage M.P. and Gunathilaka, H.A.W.S. (2018). Effect of Different Fertilizers on Flower Initiation and Subsequent Spike Development of Black Pepper (*Piper nigrum* L.). Proceedings of 17th Agricultural Research Symposium, November 2018, Sri Lanka, vol 1. 282-286.

 16. Amadoru I.J., Udadeniya A.G.S.G., Gunathilake H.A.W.S , Abeysinghe D.C. and Dharmadasa R.M. (2016). Impact of Light Intensity on Early Vegetative Growth of *Pogostemon heyneanus* Benth. (Lamiaceae). Proceedings of the 72nd Annual Sessions Part I Abstract, Sri Lanka Association for the Advancement of Science, 5th -9th December 2016, University of Colombo, 90.

 17. Amadoru I.J., Dharmathilaka R.S.M.S.S, Gunathilake H.A.W.S., Abeysinghe D.C. and Dharmadasa R.M. (2016). Crop Water Requirement Studies of Nursery Stage Plants of *Pogostemon heyneanus* Benth. (Lamiaceae) under Different Irrigation Intervals. Proceedings of the 72nd Annual Sessions Part I Abstract, Sri Lanka Association for the Advancement of Science, 5th -9th December 2016, University of Colombo, 92.

 18. Amadoru I.J., Rathnayake R.M.W.S., Abeysinghe D.C. and Dharmadasa R.M. (2015). Vegetative Growth and Crop Water Requirement of *Pogostemon heyneanus* Benth. (Lamiaceae) Grown under Coconut. Proceedings of the 71st Annual Session -2015 Part I Abstract, Sri Lanka Association for the Advancement of Science (SLAAS), 30th November- 4th December 2015, University of Jayawardanapura, 106.

 19. Impact of the Composition of Cocopeat and Husk Chips Combinations on the Initial Vegetative Growth of Tomato (*Lycopersicon esculentum*) and Chilli (*Capsicum annum*)
G.G.C. Madushanka and H.A.W.S. Gunathilaka, Proceedings of 11th Agricultural Research Symposium, October 20,17,

 20. Effect of Inlet Pressure Head on Maximum Lateral Length of a Drip Irrigation System for Coconut
N.M.D.P. Narasinghe and H.A.W.S. Gunathilaka, Proceedings of 11th Agricultural Research Symposium, October, 2017,

 21. Chemical and Physical Characteristics of Different Value Added Cocopeat Based Media Mixtures and Their Effect on Growth and Development of Tomato (*Lycopersicon esculentum*) and Chilli (*Capsicum annum*)
K.B.I. Sandamal and H.A.W.S. Gunathilaka, Proceedings of 11th Agricultural Research Symposium, ,October, 2017,

22. Variation of Micrometeorological Parameters and Different Yield Attributes of Black Pepper (*Piper nigrum* L.) with Growth of Live Support Tree (*Gliricidia sepium* Jacq. Walp) Canopy K.V.A.T.J. Kodithuwakku, H.M.P.A. Subasinghe and H.A.W.S. Gunathilaka, Proceedings of 11th Agricultural Research Symposium, October, 2017,
23. Effect of Different Levels of Inorganic Fertilizers on Growth of Betel (*Piper betle* L.) Grown in Pots R.M.T.H. Rathnayake, D.N. Samaraweera and H.A.W.S. Gunathilaka, Proceedings of 11th Agricultural Research Symposium, October, 2017,
24. Effect of Maturity Stage of Stem Cuttings on High Quality Planting Material Production through Terminal Branches in Black Pepper (*Piper nigrum* L.) W.P.U. Gunasekara, H.M.P.A. Subasinghe and H.A.W.S. Gunathilaka, , Proceedings of 11th Agricultural Research Symposium, October, 2017,
25. Effect of Different Irrigation Levels and Length of Dry Spells on Flower Initiation and Subsequent Spike Development of Black Pepper (*Piper nigrum* L.) A.M.N.P. Abeyasinghe, H.M.P.A. Subasinghe and H.A.W.S. Gunathilaka, , Proceedings of 11th Agricultural Research Symposium, October, 2017,
26. Asara, A.F., Wijebandara, D.M.D.I. and Gunathilaka, H.A.W.S. (2011). Phosphorus Fixation Capacities of Some Coconut Growing Soils of Sri Lanka. Proceedings of 11th Agricultural Research Symposium, September 2001, Sri Lanka, 275-289.
27. Dayarathna, K.G.T.K. and Gunathilaka, H.A.W.S. (2011). Manufacturing Variability of Emitters used for Drip Irrigation in Sri Lanka. Proceedings of 11th Agricultural Research Symposium, September 2001, Sri Lanka, 342-346.
28. Muthumali, S.M.G., Suwadarathna, N.I. and Gunathilaka, H.A.W.S. (2011). Effect of Temperature on Development and Reproduction of Plesispa Beetle (*Plesispa reichei*). Proceedings of 11th Agricultural Research Symposium, September 2001, Sri Lanka, 377-380.
29. Sanjeevani, H.C., Rathnasoma, H.A., Amarakoon, A.M.E.S. and Gunathilaka, H.A.W.S. (2011). Root Promotion of Plagiotropic Branches of Betel (*Piper betle* L) with Rooting Hormones and Different Type of Plotting Mixtures. Proceedings of 11th Agricultural Research Symposium, September 2001, Sri Lanka, 381-385.
30. Bandara, H.M.H.N.K., Ranasinghe, C.S. And Gunathilaka, H.A.W.S. (2011). Effect of Lighting Intensity on Stomatal Characteristics, Chlorophyll Content and Dry Matter Partitioning Pattern of Coconut Seedlings and Their Variation with Variety and Soil Moisture Content. Proceedings of 11th Agricultural Research Symposium, September 2001, Sri Lanka, 391-395.
31. Peris, P.U.S, Ranasinghe, C.S. and Gunathilaka, H.A.W.S. (2011). Response of Physiological and Morphological Parameters of CRIC 60 and CRIC 65 Coconut Seedlings to Different Light Levels and Its Variation with Soil Moisture Availability. . Proceedings of 11th Agricultural Research Symposium, September 2001, Sri Lanka, 396-400.

32. Ariyaprema, R.P.S.H., Gunathilaka, H.A.W.S. and Rathnayaka L. A. (2010). Implimentation of hazard analysis critical control points principles for desiccated coconut industry in Sri Lanka. Proceedings of 10th Agricultural Research Symposium, August 2010, Sri Lanka, 140-144.
33. Herath, S.W.H.M.T.P. and Gunathilaka, H.A.W.S. (2010). Effect of emitter flow rate and inlet pressure head on lateral line design of drip irrigation system for banana. Proceedings of 10th Agricultural Research Symposium, August 2010, Sri Lanka, 185-188.
34. Uyanwaththa, P.U.H.M.S.N., Aratchige, N.S. and Gunathilaka, H.A.W.S. (2010). Effect of temperature on post-embryonic development of *Neoseiulus baraki* Athhias-Henriot (Acari: Phytoseiidae). Proceedings of 10th Agricultural Research Symposium, August 2010, Sri Lanka, 189-192.
35. Kumari, S.A.A.P., Subasinghe, H.M.P.A., and Gunathilaka, H.A.W.S. (2010). Variation of micrometeorological parameters in the canopy of black pepper (*Piper nigrum* L.) between two consecutive support tree (*Gliricidia sepium* L.) pruning. Proceedings of 10th Agricultural Research Symposium, August 2010, Sri Lanka, 203-207.
36. Abeyrathna, H.M.L., Manjula, B.A.S. and Gunathilaka, H.A.W.S. (2010). Effect of maintenance of single and double shoots after pruning of *Cordyline terminalis* and *cordyline fruticosa* intercultivations under coconut. Proceedings of 10th Agricultural Research Symposium, August 2010, Sri Lanka, 223-226.
37. Jayalath, J.A.P.S., Gunathilaka, H.A.W.S. Bambarandage, H. and Vidanapathirana, K.P. (2010). Automation of drip irrigation systems based on soil moisture sensors for water use efficiency. Proceedings of 10th Agricultural Research Symposium, August 2010, Sri Lanka, 227-230.
38. Kabellawita, H.M.M.M. and Gunathilaka, H.A.W.S. (2010). Hydraulic analysis on a gravity-fed drip irrigation system for coconut. Proceedings of 10th Agricultural Research Symposium, August 2010, Sri Lanka, 231-235.
39. Ranasinghe, K.M.R, Ranasinghe, C.S. and Gunathilaka, H.A.W.S. (2010). Effect of heat stress on pollon germination and fruit set of different varieties of coconut (*Cocos nucifera* L.) Proceedings of 10th Agricultural Research Symposium, August 2010, Sri Lanka, 236-240.
40. Safras, M.S.M., Zoyza, A.K.N., Abeyasinghe, D.C., Wijayathunga, W.M.S. and Gunathilaka, H.A.W.S. (2009). Occurence of natural and foliar-fed essential micro nutrients (Cu, Fe, Mn, Zn) in Sri Lanka tea Proceedings of 9th Agricultural Research Symposium, August 2009, Sri Lanka, 122-125.
41. Dhamarathne, H.D.M. and Gunathilaka, H.A.W.S. (2009). Effect of rearing conditions on the survival and development of *Neoseiulus baraki*, a predatory mite of coconut mite. Proceedings of 9th Agricultural Research Symposium, August 2009, Sri Lanka, 197-200.
42. Karunasena , M.A.M.C. and Gunathilaka, H.A.W.S. (2009). Effect of Glyphosate on root growth of coconut seedlings. Proceedings of 9th Agricultural Research Symposium, August 2009, Sri Lanka, 206-209.

43. 18. Harshani, S.D.K., Aratchige, N.S. and Gunathilaka, H.A.W.S. (2009). Distribution pattern of Neoseiulus baraki released on to coconut mite infested palms. Proceedings of 9th Agricultural Research Symposium, August 2009, Sri Lanka, 210-213.
44. Millangoda, U.V.P.U., Gunathilaka, H.A.J., Manjula, B.A.S., and Gunathilaka, H.A.W.S. (2009). Effect of short term forestry on degraded coconut soil. Proceedings of 9th Agricultural Research Symposium, August 2009, Sri Lanka, 214-217.
45. Ranaweera, C.D., Gunathilaka, H.A.W.S. and Widanapathirana, A. (2005). Assessment of benefits of village tanks rehabilitation programme in Walaththewa Grama Niladari division of Kurunegala district. Proceedings of 5th Agricultural Research Symposium, September 2005, Sri Lanka, 116-123.
46. Kadigamuwa, H.M.J.J.K.K., Sumanasena, H.A., and Gunathilaka, H.A.W.S. (2005). Investigation on effect of irrigation methods on betle (Piper betle L.) production. Proceedings of 5th Agricultural Research Symposium, September 2005, Sri Lanka, 70-72.
47. Kumara, H.G.L.A, Kuruppuarachchi, D.S.P. and Gunathilaka, H.A.W.S. (2003). Effect of growing environment and cultivation method on root distribution and moisture extraction of gherkin (Cucumis sativus L.). Proceedings of 3rd Agricultural Research Symposium, June 2003, Sri Lanka, 111-118.
48. Priyanjith, K.J.K., Kuruppuarachchi, D.S.P. and Gunathilaka, H.A.W.S. (2002). Field evaluation of drip irrigation system for small scale banana (Musa) orchards. Proceedings of 2nd Agricultural Research Symposium, June 2002, Sri Lanka, 185-194.
49. Rajapakse, R.L.H., Kuruppuarachchi, D.S.P. and Gunathilaka, H.A.W.S. (2002). Field evaluation of spray jet sprinkler irrigation system for small scale orchards. Proceedings of 2nd Agricultural Research Symposium, June 2002, Sri Lanka, 195-202.
50. Shaminda, K.G.M., Siriwardhane, K.P.D. and Gunathilaka, H.A.W.S. (2002). Effect of fertigation and manual fertilizer application on capsicum (Capsicum annum L.) production under rain shelter. Proceedings of 2nd Agricultural Research Symposium, June 2002, Sri Lanka, 203-208.
51. Pathirana, J.P.D.A.K., Kuruppuarachchi, D.S.P. and Gunathilaka, H.A.W.S. (2001). Field evaluation of low pressure drip irrigation system for vegetables. Proceedings of 1st Agricultural Research Symposium, June 2001, Sri Lanka, 27-38.
52. Faizal deen, H.M., Gunathilaka, H.A.W.S. and Kuruppuarachchi, D.S.P. (2001). Effect of fertigation on growth and yield of vegetable cowpea. Proceedings of 1st Agricultural Research Symposium, June 2001, Sri Lanka, 137-144.
53. Kumara, R.B.J.P., Bandara, M.H.M.A. and Gunathilaka, H.A.W.S. (2001). Modification of vertical type reaper harvester to mini combine harvester. Proceedings of 1st Agricultural Research Symposium, June 2001, Sri Lanka, 277-284.

54. Piyarathna, B.P.U., Gunathilaka, H.A.W.S. and Riligala, N. (1998). Designing a ridge attachment for a two wheel tractor. 54th Annual Session, Sri Lanka Association for the Advanced Science, 127.
55. Rodrigo, B.J.L.S., Gunathilaka, H.A.W.S. and Arampath, P.C. (1998). A wax coating machine for mango. 54th Annual Session, Sri Lanka Association for the Advanced Science, 128.

Research Awards

Best Research presentations:

- (1) Peris, P.U.S, Ranasinghe, C.S. and Gunathilaka, H.A.W.S. (2011). Response of Physiological and Morphological Parameters of CRIC 60 and CRIC 65 Coconut Seedlings to Different Light Levels and Its Variation with Soil Moisture Availability. . Proceedings of 11th Agricultural Research Symposium, September 2001, Sri Lanka, 396-400.
- (2) Kumari, S.A.A.P., Subasinghe, H.M.P.A., and Gunathilaka, H.A.W.S. (2010). Variation of micrometeorological parameters in the canopy of black pepper (*Piper nigrum* L.) between two consecutive support tree (*Gliricidia sepium* L.) pruning. Proceedings of 10th Agricultural Research Symposium, August 2010, Sri Lanka, 203-207.

Experience with relevant industry/community:

- ❖ Teacher trainer on new curriculum of Advanced Level Technology Stream Subjects
 - i. Science for Technology
 - ii. Bio System Technology
 - iii. Engineering Technology
- ❖ Consultant on Micro Irrigation – KD Ebert and Sons Plantations.
- ❖ **Resource Person**

Since 1996, conducting both theory and practical classes of the course modules on:
 Principles Agricultural Engineering and farm Machinery (PM 2119)
 Coconut Agronomy and Processing (PM 3147)
 Land Surveying and Leveling (PM 3148)
 Machinery used in Processing of Major Plantation Crops (Pm3149)
 Export Agricultural Crops (PM 3130)

- ❖ **Resource person in B.Sc. (Plantation Management) External Degree program**

Conducting both theory and Practical Classes of the course modules on:

Farm Power and Machinery Management	03
Irrigation and Watershed Management	02
Energy and Waste Management	02
Agronomy and Processing of Export Agricultural Crops	02

for planters in B.Sc. (Plantation Management) External Degree program since 2009

- ❖ Resource Person: Programme for the Training Course on “Asst. Tea field Officers” conducted by the NIPM, in collaboration with Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka from January – May 2008, NIPM, Athurugiriya.
- ❖ A member of the committee: Preparation of Prospectus and By-Laws for the External B.Sc. degree programme in Plantation Management.
- ❖ Resource Person: “Cashew Module” of the Diploma in Plantation Extension offered by National Institute of Plantation Management (NIPM) from August, 2001 upto date.
- ❖ Resource Person: “Introduction Course for Planter Trainees” offered by National Institute of Plantation Management (NIPM) in September, 2002 upto date.
- ❖ Resource Person: “Agriculture Module” of the Diploma in Plantation Extension offered by National Institute of Plantation Management (NIPM) from 1996 upto date.
- ❖ Programme co-ordinator & Resource Person: The Job Oriented Practical Training Programme in Coconut Estate Management for the diploma holders of the Agriculture in the North Western Province, conducted by the Faculty of Agricultural Sciences, Makandura from June - August, 1997.
- ❖ Resource Person: Practical training programme on Vegetative Propagation Techniques for officers of the North Western Province (NWP) Provincial Council in August, 1996.
- ❖ Resource Person: Practical training programme on Machinery used in Coconut Sector for officers of the Coconut Cultivation Board since August, 1996 to date.

Experience with Administration (Positions held):

- ❖ Head, Department of Plantation Management, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka from 2016 upto date.
- ❖ Course Coordinator, B.Sc. Plantation Management (External) Degree, from 2016 upto date
- ❖ Director, Advanced Technological Institute, Gampaha, SLIATE, Ministry of Higher Education (2012-2016)