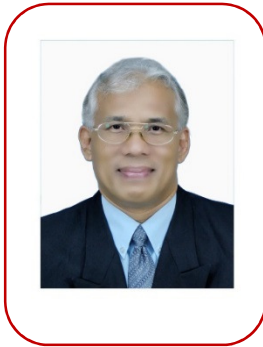


## CURRICULUM VITAE



### **PROFESSOR IR. DR. DESA AHMAD**

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Universiti Putra Malaysia  
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### **Education**

1. PhD. Agricultural Engineering, 1990, Cranfield University. UK
2. M.S. Agricultural Engineering, 1980, Cranfield University, UK
3. B.Sc (Hons.) Agricultural Engineering, 1978, University of Newcastle-Upon-Tyne, UK.

### **Areas of Interest**

1. Agricultural Mechanization
2. Agricultural Machinery Engineering
3. Soil Tillage and Traction
4. Precision Agriculture

### **Professional Qualification/ Membership/ Affiliation**

1. Registered with the Board of Engineers as P.Eng. in Agricultural Engineering, since 1985
2. Corporate member of IEM (MIEM) in Agricultural Engineering, since 1985
3. Member of Malaysian Society of Agricultural Engineers (MSAE) in Agricultural Engineering, since 1984 till 2014
4. Fellow of Malaysian Society of Agricultural Engineers (MSAE) in Agricultural Engineering, 2014
5. Member of The American Society of Agricultural and Biological Engineers (ASABE), since 2006
6. Member of The Malaysian Society of Soil Science (MSSS)

## Appointments

Position	Duration
1. Head, Smart Farming Technology Research Centre.	22 May, 2016 to 22 May, 2018. 1 <sup>st</sup> October 2014 to 30 <sup>th</sup> September, 2016.
2. Promoted to Professor (VK6)	Since 1 st August 2013
3. Acting Head, Department of Biological and Agricultural Engineering.	22nd July to 19th October, 2013
4. Head, Department of Biological and Agricultural Engineering.	1 <sup>st</sup> August 2006 to 31st July, 2011.
5. Director of AGROMAC	1 <sup>st</sup> June 2005 to 31 <sup>st</sup> May 2006
6. Promoted to Professor (VK 7)	1 <sup>st</sup> August 2002
7. Promoted to Associate Professor	1 <sup>st</sup> January 1993
8. Appointed as Lecturer	24 <sup>th</sup> October 1980.
9. Confirmed as Lecturer	1 <sup>st</sup> November 1982
10. Appointed as Tutor	24 <sup>th</sup> August 1978.

## Publications

### Journals (30 recent journals)

1. I.YAVARI, J.B.ENDAN, Y.A. YUSOF, M.N. IBRAHIM AND **D. B. AHMAD** (2014). Study of the Lump System Analysis to Finding Constant Coefficients C and M, of The Equation  $\Theta(T)=Ce-Mt$  to Predicting Malaysia Cockle Center Temperature at Different Heating Conditions. International Journal of Emerging Technology & Advanced Engineering, Volume 4, Issue 7.
2. DIYANA JAMALUDIN, **DESA AHMAD**, REZUWAN KAMARUDDIN AND HAWA Z.E.JAAFAR (2014). Microclimate Inside a Tropical Greenhouse Equipped with Evaporative Cooling Pads. Pertanika Journal of Science and Technology, 22 (1):243-259
3. MD.AKHIR, H. **AHMAD, D.**, RUKUNUDDIN, I.H. SHAMSUDDIN, S. AND A. YAHYA (2014). Design and Development of a Sweet Potato Digging Device. Pertanika Journal of science and technology, 22 (1):43-53
4. AMER N.N.KAKAHY, D.AHMAD, MD.AKHIR (2014). Effects of Mower Speeds on Vine Pulverization. International Journal of Science, Engineering and technology research, Volume 3, Issue 9:2285
5. ABDULLAHI ABUBAKAR SADIQ, SUNUSI ABUBAKAR AMIN, **DESA AHMAD** AND BABA GANA UMARA (2014). Characteristics of Irrigation Tube Wells on Major River Flood Plains in Bauchi State, Nigeria. Rev. Ambient. Agua Vol.9, No.4
6. DAUDA, S.M., **AHMAD, D.**, KHALINA, A. AND JAMAREI, O. (2015). Effect of Cutting Speed on Cutting Torque and Cutting Power of Varying Kenaf-Stem Diameters at Different Moisture Contents. PERTANIKA J. Trop. Agric.Sci. 38 (4) 549-562

7. A.N.N. KAKAHY, **D.AHMAD**, M.AKHIR, S.SULAIMAN AND A.ISHAK(2015). Effects of Cutting Speeds, Moisture Contents and Sweet Potato Varieties on Percentage of Vine Pulverization. *Journal of Advanced Research in Applied Mechanics*, Vol.12, No.1, pages 1-7.
8. B.G.JAHUN, **D.AHMAD**, M.R.MAHDI AND S.SULAIMAN(2015). Design Optimization Parameters for Tractor Mounted Mulcher Blades. *International Journal of Applied Engineering Research*, Vol.10, No. 5, pp3979-3982.
9. W.ALNUAMI, R.B.JANIUS, **D.AHMAD**, MD.AKHIR AND A.BUTHAINAH(2015). Factors Affecting the Mechanical Strengths of Oil Palm Fronds. *Journal of Purity, Utility Reaction and Environment*, Vol4.,No.3, 138-149.
10. MOHAMMAD REZA BAKHTIARI, **DESA AHMAD** (2015). Determining Physical and Aerodynamic Properties of Garlic To Design and Develop a Pneumatic Garlic Clove Metering System. *Agric.Eng.Int:CIGR Journal*, Vol.17, No.1, 59-67.
11. D.JAMALUDIN, S.A.AZIZ, **D.AHMAD**, H.Z.E.JAAFAR (2015). Impedance Analysis of *Labisa pumila* Plant Water Status. *Information Processing in Agriculture* (Accepted).
12. BALAMI, A.A., DAUDA, S.M., MOHAMED, I.S., AGUNSOYE, J.K., ABU, H., ABUBAKAR, I. AND **AHMAD, D** (2016). Design and Fabrication of a Cocoyam (*Colocasia esculenta*) Peeling Machine. *International Food Research Journal*, Volume 23, 2016 Pages S65-S70.
13. BALAMI, A.A., DAUDA, S.M., LAVAL, A. AND **AHMAD, D** (2016). Some Engineering Properties of Palmyra Palm Tree (*Borassus aethiopum*) germinating shoot. *Agricultural Engineering International:CIHR Journal*, Volume 18, Issue 1, March 2016, Pages 58-69.
14. IBRAHIM, M.G., SHEBU, A.A., DAUDA, S.M. AND **AHMAD, D.** (2016). Design, Fabrication and Testing of Sheanut Shelling Machine. *International Food Research Journal*, 23 (Suppl):S71-S79 (December 2016).
15. AHMAD, H.I., **AHMAD, D.**, SULEIMAN, M.L. AND AZIZ, S. (2016). Anthropometric Parameters of Tractor Operators in Kano State, Nigeria. *Journal of Agricultural Engineering and Technology (JAET)*, Vol.23 (No.1).
16. WAN FAZILAH FAZLIL ILAHI AND **DESA AHMAD** (2017). A Study on the Physical and Hydraulic Characteristics of Cocopeat Perlite Mixture as a Growing Media in Containerized Plant Production. *Sains Malaysiana* 46 (6) 2017:975-980
17. REDMOND R. SHAMSHIRI, MUHAMMAD RAZIF MAHADI, KELLY R. THORP, WAN ISHAK WAN ISMAIL, **DESA AHMAD** AND HASFALINA CHE MAN. (2017). Adaptive Management Framework for Evaluating and Adjusting Microclimate Parameters in tropical Greenhouse Crop Production Systems. Chapter 9, *Plant Engineering*, In Tech, November 2017
18. HOSSEINALI SHAMSABADI, MOHAMMAD ABEDI, **DESA AHMAD**, ALIREZA TAHERI-RAD (2017). Comparison of Energy Consumption and Greenhouse Gas Emission footprint caused by Agricultural Products in Greenhouses and Open Field in Iran. *Energy Equipment and Systems*, Vol.5, No.2, June 2017, pp 157-163.
19. WAN FAZILAH FAZLIL ILAHI, **DESA AHMAD** AND MOHAMMUD CHE HUSSAIN (2017). Effects of Root Zone Cooling on Butterhead Lettuce Grown in Tropical Conditions in a Coir-Perlite Mixture. *Horticulture, Environment, Biotechnology* Vol.58 (1) 2017.
20. MOHAMMAD REZA BAKHTIARI AND **DESA AHMAD** (2017). Design of a Vacuum Seed Metering System for Kenaf Planting. *AgricEngInt: CIGR Journal*, Vol 19, No.3, 23-31.
21. HOSSEINALI SHAMSABADI, **DESA AHMAD** AND ALIREZA SABERI (2017). Effect of Plant Density, Nitrogen Fertilization Rate and Furrowing on Foraged Soybean Production. *AgricEngInt:CIGR Journal*, Vol.19, No.3, 32-38.

22. HOSSEINALI, DESA AHMAD, AZMI YAHYA AND W. AIMRUN (2017). Yield Components of Sweet Corn (Zea Mays) and Some Soil Physical Properties Towards Different Tillage Methods and Plant Production. *AgricEngInt:CIGR Journal*, Vol.19, No.3, 56-63.
- 23.
24. R.M.FADHIL, M.K.ROWSHON, D.AHMAD, A. FIKRI AND W. AIMRUN (2017). A Stochastic Rainfall Generator Model for Simulation of Daily Rainfall Events in Kurau Catchment: Model Testing. *ISHS ACTA HORTICULTURAE* 1152, pages 1-10.
- 25.
26. D. JAMALUDIN, S. ABD AZIZ, D. AHMAD AND H.Z.E.JAAFAR (2017). Evaluation of Total Flavoid Content of Labisia Pumila Leaves Based on Impedance Measurement. *ISHS ACTA HORTICULTURAE* 1152, pages 203-210.
- 27.
28. R.SHAMSHIRI, H. CHE MAN, A.J. ZAKARIA, P.V.BEVEREN, W.I. WAN ISMAIL AND D. AHMAD (2017). Membership Function Model for Defining Optimality of Vapor Pressure Deficit in Closed-field Cultivation of Tomato. *ISHS ACTA HORTICULTURAE* 1152. Pages 281-290.
- 29.
30. R.SHAMSHIRI, H. CHE MAN, A.J. ZAKARIA, P.V.BEVEREN, W.I. WAN ISMAIL AND D. AHMAD (2017). Digital Growth Response Maps for Assessment of Cooling Requirement in Greenhouse Production of Tomato. *ISHS ACTA HORTICULTURAE* 1152. Pages 117-124.
- 31.
32. B.G JAHUN, D. AHMAD, M.R. MAHDI AND S. SULAIMAN (2017). Development of an Experimental Rig for Soil and Crop Residues Management. *ISHS ACTA HORTICULTURAE* 1152, pages 87-94
- 33.
34. REDMOND RAMIN SHAMSHIRI, BALA IBRAHIM, DESA AHMAD, SITI KHAIRUNNIZA BEJO, HASFALINA CHE MAN AND ZAHRA MOJGAN SHAD (2018). An Overview of the Systems of Rice Intensification for Paddy Fields of Malaysia. *Indian Journal of Science and Technology*, Vol. 11 (18) pages 1-16.
- 35.
36. REDMOND RAMIN SHAMSHIRI, FATEMEH KALANTARI, K.C. TING, KELLY R. THORP, IBRAHIM A. HAMEED, CORNELIA WELTZIEN, DESA AHMAD AND ZAHRA MOJGAN SHAD. (2018). Advances in Greenhouse Automation and Controlled Environment Agriculture: A Transition to Plant Factories and Urban Farming. *International Journal of Agricultural and Biological Engineering*, Vol.11, No1 pages 1-22.
- 37.
38. REDMOND RAMIN SHAMSHIRI, JAMES W. JONES, KELLY R. THORPES, DESA AHMAD HASFALINA CHE MAN AND SIMA TAHERI (2018). Review of Optimum Temperature, Humidity and Vapour Pressure Deficit for Microclimate Evaluation and Control in Greenhouse Cultivation of Tomato: A Review. *International Agrophysics* 2018, 32, PAGES 287-302

### Conference Proceedings (30 recent Conference Proceedings)

1. **DESA, A.**, KHALINA A., JAMAREI O. AND DAUDA S.M (2014). Development and Testing of a Kenaf Harvesting Machine. Proceedings of the National Conference on Agricultural and Food Mechanization (NCAFM 2014), 20-22 May, 2014, Kota Kinabalu, Sabah.
2. AMER N.N.KAKAHY, **D.AHMAD**, M.D.AKHIR, S.SULAIMAN AND A.ISHAK(2014).Effects of Rotary Mower Blade Cutting Angles on the Pulverization of Sweet Potato Vine.Proceedings of the second international conference on agricultural and Food Engineering, CAFEi2014, Kuala Lumpur Malaysia.
3. RAMIN SHAMSHIRI, WAN ISHAK WAN ISMAIL, **DESA BIN AHMAD** (2014). Determining Peak-Hours of Cooling Requirement for Greenhouse Production of Tomato in Tropical Lowland Condition. Proceedings of the second international conference on agricultural and Food Engineering, CAFEi2014, Kuala Lumpur Malaysia.
4. DAUDA S.M., **DESA. A**, KHALINA, A. AND JAMAREI,O. (2014).Physical and Mechanical Properties of Kenaf Stems at Varying Moisture Contents. Proceedings of the second international conference on agricultural and Food Engineering, CAFEi2014, Kuala Lumpur Malaysia.
5. Z.A.MOHD ASHRAF, **D.AHMAD**, S.S.AHMAD SYAFIK AND M.Y.HAFIZ(2014). Comparison Between Environment Temperature, Relative Humidity and Irrigated Cocopeat Temperature in Tropical Lowland and Upland Areas: A Case Study.Proceedings of the Second International Symposium on Applied Engineering and Sciences (SAES 2014), 20-21 december, Kyutech, Kitakyushu, Japan.
6. **DESA AHMAD** AND EZRIN MOHD HUSIN (2014).Smart Farming Technology Research Centre at UPM.Proceedings of the International Workshop on SMART FARMING XI:Delivering Appropriate Precision Technologies & management Practices in Agriculture, 11 August, UPM.
7. RAMIN SHAMSHIRI, WAN ISHAK WAN ISMAIL AND **DESA AHMAD**(2014). Experimental Evaluation of Air Temperature, Relative Humidity and Vapor Pressure Deficit in Tropical Lowland Plant Production Environments. Proceedings of the 4<sup>th</sup> International Malaysia-Ireland Joint Symposium on Engineering Science and Business, 25-26<sup>th</sup> June, Penang, Malaysia.
8. RAMIN SHAMSHIRI, WAN ISHAK WAN ISMAIL, HASFALINA CHE MAN AND **DESA AHMAD** (2015). Light Condition Based Analysis of Microclimate Parameters for Improvement of Closed-Field Tomato Production in Tropical Lowlands.ASABE Annual International Meeting, 26-29 July, New Orleans, Louisiana.
9. RAMIN SHAMSHIRI, WAN ISHAK WAN ISMAIL, **DESA AHMAD** AND RIMFIEL JANIUS (2015). Adaptibility Factors for Open-Field Tomato Production in East and West Of Malaysia.ASABE Annual International Meeting, 26-29 July, New Orleans, Louisiana.
10. RAMIN SHAMSHIRI, WAN ISHAK WAN ISMAIL AND **DESA AHMAD** (2015). Determining Adaptibility Factors in Modern Controlled Plant Production Systems.ASABE 1<sup>st</sup> Climate Change Symposium:Adaptation and Mitigation, May 3-5, Chicago, Illinois USA.
11. HARIJONO DOJODIHARDJO AND **DESA AHMAD** (2015).Opportunities and Challenges for Climate-Smart Agriculture. Proceedins of the 3<sup>rd</sup> International Conference on Natural Resource Management, September, East Lansing, Michigan, USA.
12. B.G.JAHUN, **D.AHMAD**, S.SULAIMAN AND M.R.MAHDI (2015). Design Optimization Parameters for Tractor Mounted Mulcher Blades. Proceedings of the 4<sup>th</sup> International Conference on Applied Sciences and Engineering, Langkawi Lagoon Resort, Malaysia.

13. B.G.JAHUN, D.AHMAD, M.R.MAHDI AND S.SULAIMAN (2015). Design of an Experimental Rig for Soil and Crop Residues Management. Proceedings of PAWEES-INWEPF Joint International Conference 19-21 August 2015, Kuala Lumpur, Malaysia.
14. SHAMSIRI, R., **AHMAD, D.**, ZAKARIA, A. J.,WAN ISMAIL, W.I., MAN, H.C. AND YAMIN, M (2016). Evaluation of the Reduced State-variable TOMGRO Model Using Boundary Data. Proceedings of 2016 ASABE Annual General Meeting 17-20 July, 2016 Disney's Coronado Springs resort Orlando, USA.
15. SHAMSIRI, R., **AHMAD, D.**,WAN ISMAIL, W.I., MAN, H.C ZAKARIA, A. J., VAN BEVEREN, P. AND YAMIN, M (2016). Comparative Evaluation of Naturally Ventilated Screenhouse and Evaporative Cooled Greenhouse Based on Optimal Vapor Pressure Deficit. Proceedings of 2016 ASABE Annual General Meeting 17-20 July, 2016 Disney's Coronado Springs resort Orlando, USA.
16. M.M.AFIQ, M.R. MAHADI AND **D.AHMAD** (2016). Study on Analysis of Penetration Forces by Drilling and Fungicide-Liquid Flow Behavior by Injecting on Oil Palm Trunk. Proceedings of NanoMITE Annual Symposium 2016 (NMAS 2016).UTM, KL
17. MUHAMMAD RAZIF MAHADI, MUHAMMAD AFIQ MISRI AND **DESA AHMAD** (2016). Conceptual Design of an Applicator for Nano Solution in the Treatment of G. Boninense Infected Oil Palm Tree.Proceedings of NanoMITE Annual Symposium 2016 (NMAS 2016).UTM, KL
18. A.N.N. KAKAHY, **D. AHMAD**, M.D. AKHIR, S.SULAIMAN AND A.ISHAK (2016).Effects of Cutting Speeds, Moisture Contents and Sweetpotato Varieties on Tractor Fuel Consumption. Proceedings of the International Conference on Agricultural and Food Engineering (Cafei2016), 23-25 August 2016.K.Lumpur, Malaysia.
19. B.G.JAHUN.,**DESA AHMAD.**,MR. MAHADI AND S.SULAIMAN (2017).Effects of Tractor PTO and Forward Speeds on the Performance of Tractor Mounted Mulcher for Pulverizing Oil Palm Fronds.Proceedings of the Third Putrajaya International Built Environment, Technology and Engineering Conference (PIBEC3), 9-10 October, Hotel Bangi-Putrajaya, bangi Malaysia.
20. AHMAD SUHAIZI MAT SU AND **DESA AHMAD** (2017). Friction Coefficients of Selected Agricultural Soil and Agro-products: A Review. Proceedings of Mytribos Symposium 2, 8<sup>th</sup> October, UTM, Skudai, Johor (2017) pp. 19-21.
21. RAMIN SHAMSHIRI, MUHAMMAD RAZIF MAHADI, **DESA AHMAD**, SITI KHAIRUNNIZA BEJO, SAMSUZANA ABD AZIZ, WAN ISHAK WAN ISMAIL AND HASFALINA CHE MAN. (2017). Controller Design for an Osprey Drone to Support Precision Agriculture Research in Oil Palm Plantation. Proceedings of 2017 ASABE Annual International Meeting 201700014.
22. KHAMIS, M.N., ISMAIL, N.F., YUNUS, N.A.M AND **AHMAD, D.** (2017). LED lighting with Remote Monitoring and Controlling System for Indoor Greenhouse. Proceedings of 2017 IEEE Asia Pacific Conference on Postgraduate Research in Microelectronics, PrimeAsia 2017, Pullman Hotel, Kuala Lumpur, 31<sup>st</sup> October- 2<sup>nd</sup> November, 2017, pages 81-84
23. HONG, C.K, ISMAIL, N.F., YUNUS, N.A.M AND **AHMAD, D.** (2017). Sensity of Piezoresistive Pressure Sensor with Inner Diaphragm. Proceedings of 2017 IEEE Asia Pacific Conference on Postgraduate Research in Microelectronics, PrimeAsia 2017, Pullman Hotel, Kuala Lumpur, 31<sup>st</sup> October- 2<sup>nd</sup> November, 2017, pages 129-132
24. YUNUS, N.A.M, ISMAIL, N.F., GREEN, N.G AND **AHMAD, D.** (2017). Analysis of Dielectrophoresis AC Electrokinetic in Equilibrium Using Matlab.Proceedings of 2017 IEEE Asia Pacific Conference on Postgraduate Research in Microelectronics, PrimeAsia 2017, Pullman Hotel, Kuala Lumpur, 31<sup>st</sup> October- 2<sup>nd</sup> November, 2017, pages 85-88
25. ISMAIL, N.F., YUNUS, N.A.M.,SULAIMAN, N., MOHTAR, M.N., HALIN, I.A. AND **AHMAD, D.** (2017). Joule Heating Effect on Microdroplet Electrowetting Platform Chip. Proceedings of



26. J.BALA GAMBO, **A.DESA**, M.MUHAMMAD RAZIF, S.SULAIMAN AND S.A.AHMED (2018). Effects of Tractor Mounted Mulcher Blades on the Mulching Depth of Oil Palm Fronds. Proceedings of MSAE Conference, 7-8<sup>th</sup> February, 2018, Serdang, Selangor, Malaysia.
27. A.M. RAFAA, **A. DESA**, M.N. NAZMI AND W.I.WAN ISHAK (2018). Development of an Improved Motorised Cutter for Harvesting Oil Palm Fresh Fruit Bunch. Proceedings of MSAE Conference, 7-8<sup>th</sup> February, 2018, Serdang, Selangor, Malaysia.
28. WAN FAZILAH FAZLIL ILAHI, **DESA AHMAD** AND SITI SALWA ABD GANI (2018). Effect of Root Zone Cooling on Cocopeat-perlite Medium Temperature. Proceedings of MSAE Conference, 7-8<sup>th</sup> February, 2018, Serdang, Selangor, Malaysia.
29. DAUDA SOLOMON MUSA, F. ISMAIL, BALAMI AYUBA AUDU, ALIYU MOHAMMED, MOHAMMED IBRAHIM SHABA AND **DESA AHMAD** (2018). Physical and Mechanical Properties of Raphia Palm Kernel at Different Moisture Contents. Proceedings of the 4<sup>th</sup> International Conference on Agricultural and Food Engineering, 7-9<sup>th</sup> November, UPM, Serdang, Selangor, Malaysia.
30. BALAMI AYUBA AUDU, FAGBEMI SUNDAY ADEDAYO, DAUDA SOLOMON MUSA, MOHAMMED IBRAHIM SHABA, ALIYU MOHAMMED AND **DESA AHMAD** (2018). Development and Performance Evaluation of a Kenaf (*Hibiscus Cannabidis L.*) Stem. Proceedings of the 4<sup>th</sup> International Conference on Agricultural and Food Engineering, 7-9<sup>th</sup> November, UPM, Serdang, Selangor, Malaysia.

### Research Grants

No	Project Title	Amount (RM)	Year	Source of Fund
1.	Design And Development Of An Integrated Rotary Slasher-Digger For Harvesting Sweetpotatoes	185,200	2013-2016	Grant Putra Development and Innovation
2.	The Effectiveness Of Chilled Pipe As Root Zone Cooling Mechanism For Strawberry Cultivation In Lowland Area.	15,000	2014	Putra IPS Grant
3.	Dielectric spectroscopy measurement of <i>Labisia pumila</i> (Kacip Fatimah) water content and phytochemical content	30,500	2014-2015	FRGS & Putra Grant
4.	Application Of The Nanodelivery System And Nanosensor In Smart Farming For Actual Detection And Control Of <i>Ganoderma Boninense</i>	RM1,500,000	2015-2020	LRGS
5.	Integration of Mechanized system for Harvester, Collector and Transporter of Oil Palm FFB.	RM211,000	2015-2017	GS-IPB

### Awards/Recognition

<b>Name of awards</b>	<b>Title</b>	<b>Award Authority</b>	<b>Award Type</b>	<b>Year</b>
<i>Academic Awards</i>	.Recipient of Commonwealth Council of Engineers Award.	Commonwealth Council of Engineers	International	1994
	Internal Quality Audit Certificate	QAI SDN.BHD	National	2000
	21 <sup>st</sup> Century Award of Achievement in Agricultural Engineering.	International Biographical Centre, Cambridge, England	International	2002
	Top 5 Excellent Professors	UPM	UPM	2006
	Bronze medal	PRPI	UPM	2006
	Silver medal	PRPI	UPM	2006
	Gold medal	PRPI	UPM	2006
	Silver medal	MTE	UPM	2007
	Silver medal	Internationale Fachmesse Ideen-Erfindungen-Neuheiten-Nurnberg	International	2007
	Silver medal	ITEX	International	2009
	MALAYSIAN INNOVATIVE PRODUCT AWARD	ITEX	International	2009
	Gold Medal	PRPI2011	UPM	2011
	Silver Medal	BIOMALAYSIA2011	KLCC	2011
	Gold Medal	PRPI2012	National	2012
	Bronze Medal	PECIPTA 2013	INTERNATIONAL	2013
<i>Non-Academic Awards</i>	Inspiration for Management Category	FACULTY	UNIVERSITY	1996



	SETIAPUTRA	UPM	UPM	1999
	Quality Service	UPM	UPM	1999
	Excellence in Teaching	UPM	UPM	1999 - 2012
	Award of Excellence	UPM	UPM	2001 - 2012
	Award of Bakti Putra	UPM	UPM	2011
<i>Awards of Merit</i>	Bintang Kebesaran Darjah Paduka Cura Si Manja Kini (P.C.M)	THE ROYAL HIGHNESS PADUKA SRI SULTAN OF PERAK, SULTAN AZLAN SHAH	National	2008
	Marquis Who's Who in the World	USA	International	2009
	Marquis Who's Who in the World	USA	International	2010
	Marquis Who's Who in the World	USA	International	2011
	Marquis Who's Who in Science and Engineering	USA	International	2016-2017



## Professional Services

Role	Title	Year
1. Reviewer	Acta Horticulturae for International Conference on Agricultural and Food Engineering. August 2016	2015
2. Reviewer	American Journal of Experimental Agriculture, Agricultural Engineering International: CIGR Journal	2014
3. Reviewer	FEIIC-IJET	2016
4. Reviewer	The Philippine Agricultural Scientist	2016
5. Reviewer	Journal of Agricultural Science and Technology	2016
6. Reviewer	International Food research Journal	2016
7. Reviewer	Current Journal of Applied Science and Technology	2017
8. Reviewer	Asian Journal of Agricultural Extension, Economics and Sociology	2017
9. Reviewer	Journal of Scientific research and Reports	2017
10. Reviewer	British Journal of Applied Science and Technology	2017
11. Editorial Board Member	International Journal of Agricultural and Biological Engineering (IJABE)	2013-2015
12. Panel Assessor	MyGrants Research Application	2014-2018
13. Panel Assessor	Malaysian Qualification Agency	2018-2020
14. Panel Assessor	Newton Researcher Links (Workshop Grants)	2016
15. Invited Speaker	International Workshop on Smart Farming XI: Delivering Appropriate Precision Technologies & Management Practices in Agriculture.	2014
16. Panel Jury	Vice Chancellor Fellowship	2015-2017
17. Panel Jury and Secretariat	International Conference on Agricultural and Food Engineering for Life (CAFEi2016)	2016
18. Panel Jury and Secretariat	International Conference on Agricultural and Food Engineering for Life (CAFEi2018)	2017
19. External Examiner	Curriculum Development (UNIMAP)	2014-2015
20. Co-Chairman	2 <sup>nd</sup> International Conference on Agricultural and Food Engineering (CAFEi 2014)	2013-2014
21. External Examiner	Gorgan University of Agricultural Sciences and Natural Resources, IRAN	2014
22. Honorary Editorial Board Member	Pertanika Journal of Scholarly Research Reviews	2015-2017
23.		



24.	Keynote Speaker	7 <sup>th</sup> International Conference on Sustainable Agriculture for Food, Energy and Industry in Regional and Global Context (ICSAFEI 2015)	2015
25.	Lead Speaker	International Agriculture Congress, 4-6 <sup>th</sup> October, 2016	2016
	Academic Promotion Assessor	The University of Jordan and University of Khartoum	2016
26.	Consultant	Prime Minister Office	2016
27.	Panel Academic Advisor	Vocational Diploma Program, MOE	2017
28.	Technical Committee Member	E-Cutter	2018
29.	Invited Speaker	Oil Palm Technology: An exchange of International of Ideas Between CENIPALMA, COLOMBIA and UPM	2017



## Student Supervision

### Main Supervisor (PhD students)

No.	Name	Title	Status
1.	Bala Gambo Jahun	Design, Development and Evaluation of a Howard Mulcher.	Graduated
2.	Habib Imam Ahmad	Prediction of Internal Combustion Engine Life-Span for Remote Controlled Tractor	On-going
3.	Diyana Jamaludin	Dielectric Spectroscopy Measurement of Labisia Pumila ( <i>Kacip Fatimah</i> ) Water Content and Phytochemical Content	Graduated
4.	Abdulkadir Salehu Ahmed	Development of Oil Palm Fresh Fruit Bunch Growth Model to Support Site Specific Harvesting	On-going
5.	Rafea Abdulsattar	Integration of Mechanical Systems for Harvesting, Collection and Transportation of Oil palm FFB.	On-going
6.	Haider Fawzi Mahmood	Harvesting the Vibration Energy of a Disk Plow Using Cloud Technology	On-going





7	Wan Fazilah Fazlil Ilahi	Hysteresis and Root Zone Cooling in Porous Media	Graduated
8	Abdullahi Abubakar Sadiq	Evaluation of Soil Acidity using Satellite Image Data	Graduated
9	Dauda Solomon Musa	Development of a Tractor-Mounted Kenaf Harvesting Machine	Graduated
10	Amer Najat Najmaldeen	Design and Development of a Rotary Slasher (Pulverizer) Blades for Sweet Potato Harvesting Machine	Graduated
11	Abdul Ghafoor	Improving Leaching Efficiency of Saline Soils Using Water Management technique	Graduated
12	Mohammed Shuaibu Abu Bakar	Development of a Dual-Purpose Disc Agrochemical Applicator for Field Crops	Graduated
13	Ali Hashemi	Design, Development and Performance of a Disc Plough Combined with Rotary Blades.	Graduated
14	Mohammad Reza Bakhtiari	Design, Development and Evaluation of a Kenaf Pneumatic Seeding Machine.	Graduated
15	Fatai Bukola Akande	Motion Resistance Analyses of Towed Narrow Wheels.	Graduated
16	Amid Heravi	Development of a robotic weed control system for cucumber grown in a greenhouse.	Graduated
17	Md Akhir Hamid	Design and Development of a Digging Device for Harvesting Sweet Potato	Graduated
18	Omid Ghahraei	Design and Development of Kenaf Harvesting Machine	Graduated
19	Hosseinali Tash Shamsabadi	Effects of Different Tillage Systems and Planting Densities on Soil Physical Properties and Yield Components of Sweet Corn ( <i>ZEAMAYS</i> )	Graduated

#### Main Supervisor (MSc Students)

No.	Name	Title	Status
1.	Hadis Salehi Gahrizsangi	Application of Vetivar Grass for Soil and Water Conservation in Malaysia.	Graduated
2.	Mohd Ashraf Zainol Abidin	Evaluation of Root Zone Cooling System for Strawberry ( <i>Fragaria x ananassa Duchesne</i> ) Cultivation in tropical Lowlands..	Graduated
3.	Mohamad Azhar Che Aziz	Design and Development of a 4-Row Kenaf Stem Harvester	Graduated
4.	Angelina Ho Mei Yi	Heat Transfer Analysis of Cooled Tomato Root Zone Temperature in a Tropical Greenhouse	Graduated
5.	Diyana Jamaludin	Effect of Temperature and Relative Humidity on Crop Yield in Tropical Greenhouse with Evaporative Cooling System.	Graduated

