



## CURRICULUM VITAE



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### Education

1. Ph.D. Agricultural Engineering, 1988, Iowa State University, USA
2. M.S. Agricultural Engineering, 1985, Iowa State University, USA
3. B.Sc (Hons). Agricultural Engineering, 1982, Universiti Pertanian Malaysia.

### Areas of Interest

1. Agricultural Machinery Engineering

### Professional Qualification/Membership/Affiliation

1. Member, American Society of Agricultural and Biological Engineering (ASABE)
2. Fellow, Malaysian Society of Agricultural Engineers (MSAE),
3. Member, Board of Engineers Malaysia (BEM)
4. Member, Institution of Engineers Malaysia (IEM)
5. Member, Malaysian Society for Engineers and Technologists (MySET)
6. Member, Gamma Sigma Delta, Iowa State University of Science and Technology Chapter
7. Member, Asian Association for Agricultural Engineering (AAAE)
8. Member, Incorporated Society of Planters (ISP)
9. Member, International Society of Precision Agriculture (MISPA)
10. Member, Club of Bologna

### Appointments

| Position  | Duration                         |
|---|----------------------------------|
| 1. Dean, Faculty of Engineering, UPM  | March 2014 to date               |
| 2. Dean, Faculty of Engineering, UPM  | October 2004 to October 2007     |
| 3. Deputy Dean (Research), Faculty of Engineering, UPM                                      | September 2002 to September 2004 |
| 4. Head, Department of Biological and Agricultural Engineering, Faculty of Engineering, UPM | August 1996 to August 2001       |

### Publications

#### Journals (30 recent journals)

1. Bande, Y. M., N. M. Adam, J. Othman and **A. Yahya**,. 2014. Examining the Physicochemical Properties and Engine Performance of Biodiesel from whole and kernel of "Egusi" Mellon (*Citrullus colocynthis lanatus*). *Science Asia (Accepted to be published)*.
2. **Yahya, A.**, T. A. Ishola, A. R. M. Shariff, and S. Abd. Aziz. 2014. Instrumentation of a Variable Rate Pneumatic Fertilizer Applicator for Oil Palm Plantation. *Instrumentation Science and Technology (Accepted to be published)*.

3. Putri, R. E., **A. Yahya**, N. M. Adam, and S. Abdul Aziz. 2014. Related Fracture Resistance with Moisture Content in Different Grain Orientation of Paddy Grain. The International Institute for Science, Technology and Education (*Accepted to be published*).
4. Ishola, T.A., **A. Yahya**, A. R. M. Shariff, and S. Abd. Aziz. 2013. An RFID-based Variable Rate Technology Fertilizer Applicator for Tree Crops. *Journal of Applied Sciences* 13(3):409-415.
5. **Yahya, A.**, K. Hamdan, T. A. Ishola and H. Suryanto. 2013. Physical and Mechanical Properties of *Jatropha curcas* L. Fruits from Different Planting Densities. *Journal of Applied Sciences* 13(7):1004-1012.
6. Ishola, T.A., **A. Yahya**, A. R. M. Shariff, and S. Abd. Aziz. 2013. Effects of Operational Variables on Rotary Valve Metering System for a Variable Rate Technology Fertilizer Applicator for Oil Palm. *Journal of Applied Sciences* 13(3):479-484.
7. Pebrian, D.E, and **A. Yahya**. 2013. Mechanised System for in-field Oil Palm Fresh Fruit Bunches Collection-Transportation. *Agricultural Mechanization in Asia, Africa and Latin America* 44(2):7-14.
8. Pebrian, D.E., **A. Yahya**, N. M. Nawi, T. C. Siang, and S.M. Bockari-Gevao. 2013. Monitoring and Auditing Human Energy Input for Oil Palm and Rice Production in Malaysia. *Philipp. Agric. Scientist* 96(3);282-289.
9. Bande, Y. M., N. M. Adam, J. Othman, **A. Yahya**, U. B. Zubairu. 2013. Egusi Melon (*Citrullus colocynthis lanatus*) crop – Malaysian new oil/energy source; production, processing and prospects . *Australian Journal of Crop Science* 7(3):2110-2107.
10. Rahman, A. and A. Yahya. 2013. Performance Investigation of an Advanced Tracked Prime Mover on Low Bearing Soil. *Journal of TERRAMECHANICS* 50(2013): 233- 244
11. **Yahya, A.**, V. H. Su, D. E. Pebrian, and T. A. Ishola. 2013. Performance and Economic Comparisons of Manual and Mechanised Fertiliser Applications for Mature Oil Palm. *The Planter* 89(1046):323-340
12. Pebrian, D. and **A. Yahya**. 2012. New Mechanized System for Circle Spraying of Oil Palms Seedling Emergence. *Sci. Agricola* 69(2):95-102.
13. Bande, Y. M., N.M. Adam, **A. Yahya**, and J. Othman. 2012. Determination of Selected Physical Properties of Egusi Melon (*Citrullus colocynthis lanatus*) Seeds. *Journal of Basic and Applied Sciences* 8:257-265.
14. Bande, Y. M., N. M. Adam, **A. Yahya**, and J. Othman. 2012. Moisture –dependent Physical and Compression Properties of Bitter Mellon (*Citrullus colocynthis lanatus*) Seeds. *International Journal of Agricultural Research* 7(5):243-253.
15. Bande, Y. M., N. M. Adam, **A. Yahya**, and J. Othman. 2012. Physical and Mechanical Properties of “Egusi” Mellon (*Citrullus colocynthis lanatus*) Fruit. *International Journal of Agricultural Research* 7(10):494-499.
16. Rahman, A., A. K Mohiuddin, A. Hossain, A.F. Ismail, and **A. Yahya**. 2011. Integrated Mechanics of Hybrid Electrical Air-cushion Tracked Vehicle for Swamp Peat. *Int. Journal of Heavy Vehicle Systems*. 18(3):227-244.

17. Ishola, T. A., K.C. Oni, **A. Yahya**, and M.S. Abubakar. 2011. Development and Testing of a *Prosopis Africana* Pod Thresher. *Australian Journal of Basic and Applied Sciences* 59(5):759-767.
18. Ghassemi, M.H., **A. Yahya**, and A. Rahman. 2011. A Track Type Oil Palm Fresh Fruit Bunch In-Field Transporter for Low Bearing Capacity Peat Terrain. *Journal of Agricultural Machinery Science* 7(1):7-12.
19. Roodi, S. E., **A. Yahya**, and S. A. Aziz. 2011. Field Performance of a Single Chassis Integrated Machine System in Planting Oil Palm Seedlings. *Journal of Agricultural Machinery Science* 7(2):185-190.
20. Kin, Y. Y., S. S. Jamuar, and **A. Yahya**. 2011. Combine Harvester Instrumentation System for Use in Precision Agriculture. *Instrumentation Science and Technology* 39(2011):374-393.
21. Nawi, N.M., **A. Yahya**, G. Chen, S.M. Bockari-Gevao, and T.N. Maraseni. 2012. Human Energy Expenditure in Lowland Rice Cultivation in Malaysia. *Journal of Agricultural Safety and Health* 18(1):45-56.
22. Ishola, T.A., **A. Yahya**, A. R. M. Shariff, and S. Abd. Aziz. 2011. A New Concept of Variable Rate Technology Fertilizer Applicator for Oil Palm. *International Journal of Agronomy and Plant Production* 2(5):181-186.
23. Pebrian, D.E. and **A. Yahya**. 2010. Comparisons on Engine Power Requirement of 6WD and 4WD Prime Movers for the Oil Palm Plantations. *Journal of Terramechanics* 47(2010)131-142.
24. **Yahya, A.**, C. P. Sye, T. A. Ishola, and H. Suryanto. 2010. Effect of Adding Palm Oil Mill Decanter Cake Slurry with Regular Turning Operation on the Composting Process and Quality of Compost from Oil Palm Empty Fruit Bunches. *Bioresource Technology Journal* 101(2010):8736-8741.
25. Rahman, A., **A. Yahya**, and A. K. Mohiuddin. 2009. Tractive Performance of LGP-30 Wheeled Vehicle During Straight Motion on Sepang Peat Terrain in Malaysia. *The Open Transportation Journal* 2009(3):15-28.
26. **Yahya, A.**, M. Z. Bardaie, A. F. Kheiralla, S. K. Gew., and N. E. Boon. 2009. Mapping System for Tractor-Implement Performance. *Journal of Computer and Electronics in Agriculture* 69(2009):2-11.
27. Suryanto, H., D. Ahmad, **A. Yahya**, F. B. Akande, and K. Syahrita. 2009. Cutting Tests of Oil Palm Empty Fruit Bunches. *Trans. of ASABE* 52(3):723-726.
28. Rahman, A., A. K. Mohiuddin, **A. Yahya**. 2009. Kinematics Model for the Wheeled Vehicle Tractive Performance Determination on Sepang's Peat Terrain in Malaysia. *Int. Journal Heavy Vehicle Systems* 16(1/1):225-242.
29. Aatur, R., A. K. M. Mohiuddin, **A. Yahya**, and Y. Aminda. 2009. Development of a Hybrid Electrical Air-Cushion Tracked Vehicle for Swamp Peat. *Journal of Terramechanics* 47(2010):45-54.

30. **Yahya, A.**, C. P. Sye, T. J. Ishola, and H. Suryanto. 2009. Composting of Oil Palm Empty Fruit Bunch and Decanter Cake Slurry with the Addition of Palm Oil Mill Effluent. *THE PLANTER* 85(1002):497-509

### Conference Proceedings (30 recent Conference Proceedings)

1. Ishola, T. A., **A. Yahya**, A. R. M. Shariff, and S. Abd. Aziz. 2012. An RFID-Based Variable Rate Technology Fertilizer Applicator. Paper presented at the 11th International Conference on Precision Agriculture and other Precision Resources Management, Minneapolis, USA, July 15-18.
2. Ishola, T. A., **A. Yahya**, A. R. M. Shariff, and S. Abd. Aziz. 2012. Hybrid Variable\_rate Fertilizer Application System for Oil Palm Plantation. Paper Presented at 5<sup>th</sup> National Seminar on Oil Palm Mechanisation Seminar, Bangi, Selangor.
3. Ishola, T. A., **A. Yahya**, A. R. M. Shariff, and S. Abd. Aziz. 2012. Variable Rate Technology Fertilizer Applicator for Oil Palm Plantation. Paper Presenter at the International Conference on "Agricultural and Food Engineering for Life", Putrajaya.
4. **A. Yahya**, D. El Pebrian, T. A. Ishola, S. R. Moslehi and H. Hassan. 2012. Oil Palm Plantation Mechanisation in Totality. Paper Presenter at the International Conference on "Agricultural and Food Engineering for Life", Putrajaya.
5. **A. Yahya**, M. M. Isa, and S. Abd. Aziz. 2012. Portable Wireless Yield Monitoring System for Rice Combine. Paper Presenter at the International Conference on "Agricultural and Food Engineering for Life", Putrajaya.
6. Shukery, M. F., H. Suryanto, and **A. Yahya**. 2012. Appropriate Technology for Windrow Composting of Oil Palm Empty Fruit Bunches (EFB). Paper Presenter at the International Conference on "Agricultural and Food Engineering for Life", Putrajaya
7. Ghassemi, M. H. and **A. Yahya**. 2011. A Track Type Oil Palm Fresh Fruit Bunch in-Field Transporter for Low Bearing Capacity Peat Terrain. Paper presented at 11th International Congress on Mechanization and Energy in Agriculture, Turkey, September 21-23.
8. Roodi, S. M., **A. Yahya** and S. Abd Aziz. 2011. Field Performance of a Single Chassis Integrated Machine System in Planting Oil Palm Seedling. Paper presented at 11th International Congress on Mechanization and Energy in Agriculture, Turkey, September 21-23.
9. Pebrian, D. E, **A. Yahya**, n. M. Nawi, T. C. Siang, and S. M. Bockhari-Gevao 2011. Monitoring and Auditing Human Energy Inputs in the Cultivations of Oil Palm and Rice in Malaysia. Paper presented at 11th International Congress on Mechanization and Energy in Agriculture, Turkey, September 21-23.
10. **Yahya, A.** and D.E. Pebrian. 2010. Mechanisation of Oil Palm Plantation in Malaysia: Necessity-Difficulties-Means. Paper presented at the 8<sup>th</sup> ISP National Seminar; Good Plantation Practices (NATSEM 2010), Kuching, 21-23 June.
11. **Yahya, A.** and B. S. Wee. 2008. High Resolution Digital Sensing and Mapping Method for Quantifying Soil Surface Roughness after Tillage Operations. Paper presented at the 1st Global Workshop on High Resolution Digital Soil Sensing & Mapping, Sydney, Australia,

12. El Pebrian, D and **A. Yahya**. 2008. Development of a 4WD Prime Mover with Front Mounted Sprayer Unit for Circle Spraying of Immature Oil Palms. Paper presented at 10th International Congress on Mechanization and Energy in Agriculture, Turkey, October 14-17.
13. Suryanto, H. and **A. Yahya**. 2008. Development of a Turning Machine for a Windrow Composting Process of Oil Palm Empty Fruit Bunch. Paper presented at 10th International Congress on Mechanization and Energy in Agriculture, Turkey, October 14-17.
14. Pebrian, D.E. and **A. Yahya**. 2007. A New Concept of Integrated Mechanisation System for the Oil Palm Plantation Industry in Malaysia. Paper presented at the International Conference on Crop Harvesting & Processing, Louisville, Kentucky, USA, February 11-15.
15. **Yahya, A.**, R. Ruslan, N. Salahuddin and A. Wayayok. 2007. Mapping Harvested Yield and Field Performance from Rice Combine. Paper presented at the International Conference on Crop Harvesting & Processing, Louisville, Kentucky, USA, February 11-15.
16. Wayayok, A., M. A. M. Soom, **A. Yahya** and M. H. Ezrin. 2007. Relationship Between Bulk Soil Electrical Conductivity and Rice Yield. Paper presented in World Engineering Congress, Penang, August 5-9.
17. Amin, M.S.M, W. Aimrun and A. Yahya. 2007. Current Status and Future Directions of Precision Agriculture in Malaysia. Paper presented in 2<sup>nd</sup> Asian Conference on Precision Agriculture (ACPA), Pyeongtaek, Korea, August 2-4.
18. Kin, Y. Y., **A. Yahya**, S.S. Jamura, R. Ruslan, L. Nordin and M. Halid. 2006. Design and Development of a Rice Combine Harvester Instrumentation System for Crop Yield and Field Performance Mapping. Paper presented at the fifth International Conference of the Asian Federation for Information Technology in Agriculture, Bangalore, India, November 9-11.
19. **Yahya, A.** 2005. Concept Paper for the Setting-up of a Center for Mechanisation and Automation Center for Agriculture and Food at Universiti Putra Malaysia.
20. **Yahya, A.**, M. Z. Bardaie, A. F. Kheiralla, G. S. Kiat, and E. B. Ng. 2004. Precision System for Mapping Terrain Trafficability, Tractor-Implement Performance, and Tillage Quality. Paper presented at the 7th International Conference on Precision Agriculture and other Precision Resources Management, Minneapolis, USA, July 25-28.
21. **Yahya, A.** 2004. Principles of Cost Analysis for Farm Machinery. Lecture notes for Intensive Diploma in Oil Palm Management and Technology (IDOPMT), MPOB Head Office, Selangor, September 15.
22. Ataur, R., **A. Yahya**, M. Z. Bardaie, D. Ahmad, W. I. W. Ismail. 2004. Stability of a Segmented Rubber Tracked Vehicle During Turing on Sepang Peat Terrain in Malaysia. Paper in Proceeding of Seventh Asia-Pacific Conference of Japanese Society for Terramechanics of the International Society of Terrain Vehicle System, Changchun, China, September 22-23.
23. Shui, W. B., **A. Yahya**, M. I. Othman, B. S. Sunarjo, A. F. Kheiralla, and N. E. Boon. 3D mapping of Soil Surface Profile with an Automated, Mobile-type, 2-axis Laser Digitizer. Paper in Proceedings of Advanced Technology Congress, Putrajaya, May 20-21, 2003.



24. Hing A. Y. C., J. Harun, K. M. Dahlan, **A. Yahya**. Effect of Lay-up Sequence on the Mechanical Properties of Untreated Kenaf Unsaturated Polyester Composite. Paper in Proceedings of Advanced Technology Congress, Putrajaya, May 20-21, 2003.
25. Boon, N. G., **A. Yahya**, A. F. Kheiralla, W. B. Shui, and G. S. Kiat. Automated Soil Penetrometer-shearometer Unit for Measuring Soil Penetration Resistance and Shear Stress. Paper in Proceedings of Advanced Technology Congress, Putrajaya, May 20-21, 2003
26. Md. Ataur Rahman and **A. Yahya**. 2002. Traction Mechanics of a Tracked Vehicle in Peat Terrain. Paper Presented at the 2<sup>nd</sup> World Engineering Congress (WEC2002), Kuching, July 22-25, 2002.
27. El Pebrian, D. and **A. Yahya**. 2002. Comparisons on the Mechanics of Six-Wheeled Drive and Four Wheeled Drive Prime Mover for Tree Crop Mechanisation. Paper Presented at the 2<sup>nd</sup> World Engineering Congress (WEC2002), Kuching, July 22-25, 2002.
28. Kiat, G. S. **A. Yahya**, M. Z. Bardaie, and A. F. Kheiralla. 2002. Tractor with Built-in DGPS for Mapping Power and Energy Demand of Agricultural Field Operations in Malaysia. Paper Presented at the 2<sup>nd</sup> World Engineering Congress (WEC2002), Kuching, July 22-25, 2002.
29. Shu, W. B., **A. Yahya**, Bambang Sunarjo Suparjo and Isa Othman. 2002. Mobile Automated 3-Axis Laser Soil Surface Profile Digitiser. Paper Presented at the 2<sup>nd</sup> World Engineering Congress (WEC2002), Kuching, July 22-25, 2002.
30. Ismail, W. I. W., A. Yahya and M. Z. Bardaie. 1996. Tractor Performance Instrumentation System. Paper Presented at the International Conference on Agricultural Machinery Engineering (ICAME-96), Seoul, Korea, November 12-15, 1996.

#### Books (If any)

1. Rahman, A., R. Afroz, and **A. Yahya**. 2012. The Peat Swamp : Productivity, Trafficability and Mechanisation. Nova Science Publishers, Inc., New York. ISBN 978-1-61942-670-2 (hard cover), Library of Congress Cataloging TN841.P43 2011.

#### Research Grants

| No | Project Title   | Amount (RM) | Year         | Source of Fund |
|----|---|-------------|--------------|----------------|
| 1  | Development of a Self-propelled Turning-Spraying-Shredding Machine for Windrow Composting of Unchopped Oil Palm EFB mixed with POME | RM130,000   | 2012 to 2014 | RUGS           |
| 2  | Oil Palm Mechanisation In-Totality Field Machinery Package for Undulating and Hill Terrain  | RM200,000   | 2012 to 2014 | PRGS           |
| 3  | Modeling for Energy and Cost Optimization in Wet Paddy Production in Malaysia   | RM11,000    | 2012 to 2013 | RUGS           |



|    |   |               |              |                      |
|----|---|---------------|--------------|----------------------|
| 4  | Total Energy and Economic Analysis of Oil Palm Cultivation in Malaysia  | RM12,000      | 2012 to 2013 | RUGS                 |
| 5  | Development of a Variable Rate Technology Granular Fertilizer Applicator for the Oil Palm Plantation Industry in Malaysia                           | RM106,000     | 2009 to 2010 | RUGS                 |
| 6  | Development of Oil Palm Plantation Field Machinery Systems for Low Bearing Capacity Terrain   | RM248,400     | 2009 to 2010 | e-Science Grant      |
| 7  | Development of a Self Propelled Turning Machine for Composting Oil Palm Empty Fruit Bunch   | RM144,000     | 2008 to 2009 | RUGS                 |
| 8  | Mechanisation in Totality for the Oil Palm Plantations  | RM1.3 Million | 2007 to 2010 | MPOB                 |
| 9  | Mathematical Algorithm for Predicting Tractive Performances and Engine Power Requirements of a Tracked Vehicle on Low Bearing Capacity Peat Terrain | RM100,000     | 2004 to 2005 | UPM Fundamental      |
| 10 | Field Automation-Mechanisation Package for Coastal and Undulating Oil Palm Plantation   | RM186,000     | 2004 to 2007 | RM8 IRPA             |
| 11 | Tractor with Built-in DGPS for Mapping Power and Energy Demand of Agricultural Field Operation in Malaysia  | RM422,000     | 2000 to 2005 | RM7 IRPA             |
| 12 | Design and Development of an All Terrain Crop Upkeep and Fresh Fruit Bunch Collection-Transportation Machine System for Oil Palm Plantation         | RM323,000     | 2000 to 2005 | RM7 IRPA             |
| 13 | Design and Development of an Oil Palm Seedling Bagging Machine  | RM170,000     | 2000 to 2003 | YAYASAN FELDA        |
| 14 | Development and Evaluation of an Oil Palm Transplanting Machine   | RM10,000      | 2000 to 2001 | UPM Short Term Grant |
| 15 | Power and Energy Demand Mapping of Agricultural Operations in Malaysia  | RM295,000     | 1996 to 2000 | RM7 IRPA Grant       |
| 16 | Design and Development of an Infield Collection-Transportation Machine for Oil Palm Fresh Fruit Bunches   | RM255,000     | 1996 to 2000 | RM7 IRPA Grant       |
| 17 | Agricultural Mechanisation : Collection-Transportation of the Oil Palm Fruit Bunches  | RM667,000     | 1991 to 1995 | RM6 IRPA Grant       |
| 18 | Agricultural Power and Machinery Engineering : Development of a Soil Bin Testing Facility for Wheel Traction Study.                                 | RM543,000     | 1991 to 1995 | RM6 IRPA Grant       |

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|----|--|--------|------|----------------------|
| 19 | Design and Development of a Motorised Tapping Knife for Rubber Cultivation | RM5400 | 1989 | UPM Short Term Grant |
|----|--|--------|------|----------------------|

### Awards/Recognition(Current)

| No | Name of awards   | Title   | Award Authority   | Award Type    | Year |
|----|--|---|---|---------------|------|
| 1. | Best Paper Award.  | Variable Rate Technology Fertilizer Applicator for Oil Palm Plantation  | International Conference on "Agricultural and Food Engineering for Life", Putrajaya | International | 2012 |
| 2. | Patent Incentive Award                                       | Automated Soil Penetrometer-Shearometer for Mapping Spatial Variability of Soil Penetration Resistance and Shear Stress | Universiti Putra Malaysia   | National      | 2009 |
| 3. | Gold Medal Award   | New Concept of Integrated Machine System for the Oil Palm Plantation Industry in Malaysia                               | UPM Research, Product and Innovation Exhibition.                                    | National      | 2008 |
| 4. | Gold Medal Award   | Bio-composite Interlocking Block System River Revertment  | EUREKA World Exhibition of Research and New Technology, Brussels                    | International | 2005 |
| 5. | Silver Medal Award   | Tensile Load as an Indicator for the State of Decomposition of Rice Straw and K   | UPM Innovation and Research Exhibition  | National      | 2005 |
| 6. | Appreciation Award for Excellence Scientist                  | Excellence Scientist  | Ministry of Higher Education, Malaysia  | International | 2004 |
| 7  | Gold Medal Award   | Merit for the Tree Crop Transplanter  | Pittsburgh International New Product Exhibition, Pennsylvania, USA                  | International | 2004 |
| 8  | AE50 Outstanding Innovations In Product Or System Technology | FILTRAPS for Testing and Evaluation of Tractor-Implement Performance  | American Society of Agricultural Engineers (ASAE)                                   | International | 2004 |
| 9  | Bronze Medal   | Automated, 2 Axis Laser Soil Surface Profile Digitizer  | UPM Innovation and Research Exhibition  | National      | 2003 |



|    |   |  |   |               |      |
|----|---|--|---|---------------|------|
| 10 | AE50<br>Outstanding<br>Innovations<br>In Product<br>Or System<br>Technology | for the Fresh Fruit Bunch<br>(FFB) Picker MRK-II | American Society of<br>Agricultural<br>Engineers (ASAE) | International | 2003 |
| 11 | AE50<br>Outstanding<br>Innovations<br>In Product<br>Or System<br>Technology | Tree-Crop Seedling<br>Transplanter               | American Society of<br>Agricultural<br>Engineers (ASAE) | International | 2002 |
| 12 | Silver Medal  | Trailed Type Oil Palm<br>Seedling Transplanter   | Geneva International<br>and Exhibitio006E               | International | 2002 |

### Professional Services/Consultation

| No | Year | Title   | Authority  | Amount         |
|----|------|---|--|----------------|
| 1. | 2009 | Complete Machine System for Cutting, Collection and In-field transportation of Fresh Fruit Bunches for the Oil Palm Plantations in Malaysia | AZM AGRI SOLUTIONS SDN. BHD.                     | RM615,825      |
| 2. | 2002 | Yield Mapping for Rice Production at Sawah Sempadan, Selangor with  | MACRES   | RM2.1 Millions |
| 3. | 1995 | Translation of Volvo Bulletins into Bahasa Malaysia   | International Translation Resources, London, UK. | -              |
| 4  | 1988 | Design and Development of a Cutting Depth and Thickness Control Mechanism for Control Mechanism for Motoray                                 | Rubber Research Institute, Malaysia              | RM10,000       |
| 5  | 1987 | 1987 Preliminary Study on Infield Collection and Transportation of FFB  | Pamol Plantation, Johor.                         | RM20,000       |

### Student Supervision

#### PhD (Main Supervisor)

| No. | Name                             | Title   | Status    |
|-----|----------------------------------|---|-----------|
| 1   | Mutasim Eltayyed Ali Abbas       | Design and Development of a Four Wheeled Hydrostatic Drive Oil Palm Fruit Bunch Collection-Transportation Machine | Graduated |
| 3   | Abelmutaleb Fadelmula Kheriralla | Development of a Tractor Data Acquisition System for Power and Energy Demand Mapping                              | Graduated |
| 4   | Md Aatur Rahman                  | Design and Development of a Segmented Rubber-Tracked Vehicle for Sepang Peat Terrain in Malaysia                  | Graduated |
| 5   | Darius El Pebrian                | Design and Development of a Four-wheeled Drive Multipurpose Prime Mover for Oil Palm Mechanization                | Graduated |

## Student Supervision

### PhD (Main Supervisor)

| No. | Name                    | Title   | Status    |
|-----|-------------------------|---|-----------|
| 6   | Tajudeen Abiodun Ishola | Development of a Variable Rate Technology Granular Fertiliser Applicator for the Oil Palm Plantation Industry in Malaysia | Graduated |
| 7   | Aliyu Muaza             | Modeling for Energy Optimization and Cost-benefit Analysis for Rice Production in Malaysia                                | On-going  |
| 8   | Renny Eka Putri         | Mapping Paddy for Quantity and Quality During the Harvesting Operation with a Combine Harvester                           | On-going  |
| 9   | Momtaz Ishaak Hammood   | Design and Development of a Sweet Corn Picking Machine  | On-going  |

### MS with thesis (Main Supervisor)

| No. | Name                           | Title   | Status    |
|-----|--------------------------------|---|-----------|
| 1.  | Elwaleed Awad Khidir           | Motion Resistance Ratio, Net Traction Ratio, and Tractive Efficiency of a Riceland Type Tyre  | Graduated |
| 2.  | Darius El Pebrian              | Design and Development of a Trailed Type Oil Palm Seedling Transplanter   | Graduated |
| 3.  | Wee Beng Shui                  | Design, Development and Calibration of a Tractor Mounted Digital Tilth Meter  | Graduated |
| 4   | Ng Eng Boon                    | Determination of Energy Requirements for Dry Land Tillage Using Spatial Variability Technique   | Graduated |
| 5   | Yap Yoke Kin                   | Development of a Rice Combine Harvester Instrumentation System for Mapping Crop Yield and Field Performance                                     | Graduated |
| 6   | Mohammad Hadi Ghassemi         | Designing a Tracked Prime Mover for In-field Collection and Transportation of Oil Palm Fresh Fruit Bunches on Low Bearing Capacity Peat Terrain | Graduated |
| 7   | Oh Yun Ju                      | Design of a Grain Flow Sensor for Real Time Measurement of Crop Yield on Board a Rice Combine Harvester   | Graduated |
| 8   | Siamak Moslehi Roodi           | Machine System for Precise Planting of Tree Crop Seedlings  | Graduated |
| 9   | Mohamad Firdza Mohamad Shukery | Development of a Self-Propelled Compost Turning Machine for Composting Oil Palm Empty Fruit Bunches   | Graduated |
| 10  | Haslina Hassan                 | Energy and Cost Analysis in Oil Palm Cultivation in Malaysia  | On-going  |



| No. | Name                   | Title   | Status   |
|-----|------------------------|---|----------|
| 11  | Nurul Husna Che Hamzah | Process and Chemical Treatments to Accelerate the Decomposition of Oil Palm Empty Fruit Bunches | On-going |

