

PERSONAL DETAILS

Name : Shaidatul Azdawiyah Abdul Talib
Date of Birth : 14th September 1987
Nationality : Malaysian
Institution : Malaysian Agricultural Research and Development Institute (MARDI)
Employment Period : 19th September 2011 to current
Work E-mail : azdawiyah@mardi.gov.my
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EDUCATION

- (1) Bachelor of Science (Environmental Science) (Hons); Universiti Kebangsaan Malaysia (UKM) – 2009
- (2) Master of Science (Environmental Sciences); Universiti Kebangsaan Malaysia (UKM) – 2014

EXPERTISE

- (1) Crop modelling
- (2) Climate change
- (3) Greenhouse gas inventory
- (4) Vulnerability and adaptation
- (5) Mitigation

PROFESIONAL EXPERIENCE

- (1) Agriculture Sector Lead for Malaysia's Greenhouse Gas (GHG) Inventory Technical Working Group (TWG) for Third National Communication (NC3) and Second Biennial Update Report (BUR2) to the United Nations Framework Convention on Climate Change (UNFCCC)
- (2) Agriculture Sector Lead for Malaysia's Vulnerability and Adaptation Technical Working Group (TWG) for Third National Communication (NC3) Report to the United Nations Framework Convention on Climate Change (UNFCCC)
- (3) Agriculture Sector Lead for Malaysia's Greenhouse Gas (GHG) Inventory Technical Working Group (TWG) for Third Biennial Update Report (BUR3) to the United Nations Framework Convention on Climate Change (UNFCCC)
- (4) Consultant for National Grain Corn Blueprint preparation under Ministry of Agriculture and Agro-Based Industry (MOA)

PROFESSIONAL CERTIFICATIONS

- (1) Proficiency in 501 IPCC: Introduction and Cross Cutting Issues (Greenhouse Gas Management Institute, Washington, USA – 2016)
- (2) Proficiency in 531 IPCC: Agriculture (Greenhouse Gas Management Institute, Washington, USA – 2016)

PROJECTS AND COLLABORATIONS

- (1) Assessing Water Management Options for Rice with DSSAT 4.5 Crop Simulation Models (2011 – 2013) – Project Leader (MARDI Special Fund)
- (2) Suitability of papaya and mango production under different weather conditions (2016) – Sub-project Leader (Development Fund: RMK 11)
- (3) Development of selected fruits production to overcome future climate change (2017 – 2020) – Sub-project Leader (Development Fund: RMK 11)
- (4) Assessing the impact of climate change and determination of adaptation strategy to stabilize rice yield production (2012 – 2014) – Project Collaborator (Development Fund: RMK 10)
- (5) Evaluation of rice management and organic material application impact toward greenhouse (GHG) gas emissions from rice cultivation area in MADA (2012 – 2014) – Project Collaborator (Development Fund: RMK 10)
- (6) Development of selected fruits (papaya and mango) yield projection model and adaptation strategy to stabilized rice yield production (2015) – Project Collaborator (Development Fund: RMK 10)
- (7) Development of selected fruits production system, new rice varieties together with crop and water management to overcome extreme climate (2016 – 2020) – Project Collaborator (Development Fund: RMK 11)
- (8) Development of low carbon system model for agriculture (2016) – Project Collaborator (Development Fund: RMK 11)
- (9) Study on crop, water and soil management as well as rice adaptation and mitigation towards changing climate (2016) – Project Collaborator (Development Fund: RMK 11)
- (10) Development of selected rice variety production system to overcome climate change impact (2017 – 2020) – Project Collaborator (Development Fund: RMK 11)
- (11) Upscaling of rice duck integrated farming system through optimization of soil usage to increase farmers income (2017) – Project Collaborator (Development Fund: RMK 11)

SPECIALIZED TRAININGS

- (1) Training Programme for Review Experts for The Technical Review of Greenhouse Gas Inventories of Parties included in Annex I to the Convention: 18th August 2019 – 10th October 2019, Kuala Lumpur, Malaysia (online course) & Siem Reap, Cambodia (final training session & exam)
- (2) APEC Climate Center (APCC) Young Scientist Support Program 2018: 27th July 2018 – 26th October 2018, APEC Climate Center, Busan, South Korea.

- (3) Quality Assurance/Quality Control for GHG Emissions Inventories from Livestock System in South-East Asia: 13-14 September 2017, Bangkok, Thailand.
- (4) Improving GHG Inventories from Livestock in South and South-East Asia: 11-12 September 2017, Bangkok, Thailand.
- (5) Training Program on the User-oriented Statistical Downscaling of Climate Information in Agriculture and Water Resources: 21-26 August 2017, Busan, Korea Selatan.
- (6) USAID Lead Winter Institute Training on the Intergovernmental Panel on Climate Change (IPCC) Guidelines for Greenhouse Gas Inventories: 29 February – 11 Mac 2016, Bangkok, Thailand.

PUBLICATIONS

- (1) **Shaidatul Azdawiyah A.T.**, Sahibin A.R. & Anizan I. 2014. Preliminary Study on Simulation of Climate Change Impacts on Rice Yield Using DSSAT4.5 at Tanjung Karang, Selangor. *Malays. Appl. Biol.* 43(1): 83-91.
- (2) **Shaidatul Azdawiyah, A.T.**, Mohamad Hariz, A.R., Mohd Fairuz, M.S., Mohamad Zabawi, A.G. 2015. Simulating the effects of changing planting date towards rice production in MADA area, Malaysia. *J. Trop. Agric. and Fd. Sc.* 43(1): 73-82.
- (3) **Shaidatul Azdawiyah, A.T.**, Mohamad Zabawi, A.G., Mohammad Hariz, A.R., Mohd Fairuz, M.S., Fauzi, J., Mohd Syazwan Faisal, M. 2016. Simulating Climate Change Impact on Rice Yield in Malaysia Using DSSAT 4.5: Shifting Planting Date as an Adaptation Strategy. NIAES Series No. 6: The Challenges of Agro-Environmental Research in Monsoon Asia (National Institute for Agro-Environmental Sciences (Tsukuba), ISBN 978-4-931508-15-6: 115-125
- (4) **Shaidatul Azdawiyah, A.T.**, Azizi, A.A., Mardhati, M., Fauzi, J., Mohammad Hariz, A.R., Nurul Ain, A.B., Mohd Fairuz, M.S., Mohamad Zabawi, A.G. Shanmugavelu, S., A'fifah, A.R., Mei Ching, L., Punimin, A., Rozita, O., Mohd Fauzi, M.Y. Vulnerability and Adaptation for Agriculture Sector. Malaysia's first Biennial Update Report (BUR) to the United Nations Framework Convention on Climate Change (UNFCCC), ISBN 978-967-0250-23-6: 88-89
- (5) **Shaidatul Azdawiyah, A.T.** 2018. Study on Potential Productivity of MR 219 Rice Variety under Future Climate Change Scenarios using DSSAT 4.7 in Tanjung Karang, Selangor. Technical Report for APEC Climate Center 2018 Young Scientist Support Program (YSSP), Busan, South Korea.
- (6) **Shaidatul Azdawiyah, A.T.**, Muhamad Hafiz, M.H., Zul Helmeiy, M.S., Muhammad Zamir, A.R., Norziana, Z.Z., Nurul Ain, A.B., Mohd Syazwan Faisal, M., Mohd Aziz, R., Mohd Fairuz, M.S., Fauzi, J., Mohammad Hariz, A.R., Norfarhah A.R., Fazlyzan, A., Norlida, M.H., Mohamad Zabawi, A.G., Mohd Ghazali, R., Syarol Nizam, A.B. 2018. Preliminary Study on the Effects of Daily Temperature and Rainfall Distribution Pattern towards Reproductive Stage of *Magnifera Indica* cv. Harumanis Mangoes. The 15th Symposium Malaysian Society of Applied Biology, 29 Jun - 1 Julai 2018, Melaka, Malaysia.

- (7) **Shaidatul Azdawiyah, A.T.**, Muhamad Hafiz, M.H., Zul Helmezy, M.S., Muhammad Zamir, A.R., Norziana, Z.Z., Nurul Ain, A.B., Mohd Syazwan Faisal, M., Mohd Aziz, R., Mohd Fairuz, M.S., Fauzi, J., Mohammad Hariz, A.R., Norfarhah A.R., Fazlyzan, A., Norlida, M.H., Mohamad Zabawi, A.G., Mohd Ghazali, R., Syarol Nizam, A.B. 2017. Kajian awal pengaruh suhu dan taburan hujan terhadap perkembangan fasa reproduktif mangga Harumanis. Buku Prosiding Bengkel Memperkasa Mangga Harumanis Perlis 2017.
- (8) **Shaidatul Azdawiyah, A.T.**, Nurul Ain, A.B., Norziana, Z.Z., Mohd Fairuz, M.S., Stella, M., Mohamad Zabawi, A.G., Mohd Ghazali, R. 2018. Impact of Selected Organic Amendments on Soil Microbial Population Under Different Water Regime of Paddy Soils. 3rd ASEAN Microbial Biotechnology Conference 2018 (AMBC), 24-26 April 2018, Kuching, Sarawak, Malaysia.
- (9) **Shaidatul Azdawiyah, A.T.**, Mohamad Zabawi, A.G., Mohd Fairuz, M.S., Mohammad Hariz, A.R., Nurul Ain, A.B., Fauzi, J., Azizi, A.A and Mardhati, M. 2018. Greenhouse Gas Emissions: Historical and Projected Methane Emissions from Rice Cultivation in Malaysia (1990-2030). Research in Agriculture Vol. 3(1):19-30 ISSN 2740-4431
- (10) **Shaidatul Azdawiyah A.T.**, Mohammad Zabawi A.G. & Mohd Fairuz M.S. (2013) Kesan tekanan air pada peringkat pertumbuhan yang berbeza ke atas hasil dan pertumbuhan padi. Persidangan Padi Kebangsaan 2013 (PADI 2013), 10-12 Disember 2013, Seberang Jaya, Pulau Pinang: 455
- (11) **Shaidatul Azdawiyah, A.T.**, Mohamad Zabawi, A.G., Mohamad Hariz, A.R., Mohd Fairuz, M.S., Fauzi, J., Mohd Syazwan Faisal, M. 2015. Simulating Climate Change Impact on Rice Yield in Malaysia Using DSSAT 4.5: Shifting Planting Date as an Adaptation Strategy. Monsoon Asia Agro-Environmental Research Consortium (MARCO) Symposium 2015 – Next Challenges of Agro-Environmental Research in Monsoon Asia, 26th-28th August 2016, Tsukuba, Japan: 83-87.
- (12) **Shaidatul Azdawiyah, A.T.**, Azizi, A.A., Mardhati., Mohamad Hariz, A.R., Mohd Fairuz, M.S., Fauzi, J., Nurul Ain, A.B., Aimi Athirah, A. 2015. Malaysia methane (CH₄) emissions from manure management for non-ruminant industries (swine and poultry): Trends of 1990 to 2011. Proc. 2nd ARCAP & 36th MSAP Ann. Conf., 1-3 June 2015, Negeri Sembilan, Malaysia: 201-202.
- (13) **Shaidatul Azdawiyah, A.T.**, Mohd Fairuz, M.S., Nurul Ain A.B, Mohammad Hariz, A.R, Fauzi, J., Azizi A.A, Mardhati M. 2017. Penilaian trend pembebasan gas metana (CH₄) di kawasan tanaman padi (jelapang dan luar jelapang) bagi tahun 1995 hingga 2014. Persidangan Padi Kebangsaan 2017, 25-28 September 2017, Subang: 288-282
- (14) Mohd Fairuz, M.S, **Shaidatul Azdawiyah, A.T.**, Azizi, A.A., Mohammad Hariz, A.R., Mardhati, M., Nurul Ain, A.B., Fauzi, J. Mohamad Zabawi, A.G. Shanmugavelu, S. National Greenhouse Gas Inventory for Agriculture Sector. Malaysia's first Biennial Update Report (BUR) to the United Nations Framework Convention on Climate Change (UNFCCC), ISBN 978-967-0250-23-6: 31-43

- (15) Mohd Aziz, R., **Shaidatul, A.A.T.**, Fauzi, J., Zabawi, M.A.G., Norlida, M.H., Hafiz, M.M.H., Fazlyzan, A., Norfarhah, A.R., Nizam, S.A.B., Subahir, S., Malek, A.K., Ghazali, M.R. and Alif, O.M.M. 2019. Physiological Responses, Nutrient Content and Fruit Quality of Mango (*Mangifera indica* L.) cv. Harumanis at Different Agro-climatic Zones. *Trans. Malaysian Soc. Plant Physiology* (26): 147-151.
- (16) A.R. Mohammad Hariz, S. Soon Chen, A.R. Putri Razreena, A.B. Nurul Ain, S. Mohamad Shahid, Z.Z. Norziana, M.M. Azzani Adam, A. Fazlyzan, J. Fauzi, K. Rahiniza, S. Shamsul Amri and **A.T. Shaidatul Azdawiyah**. 2019. Life cycle assessment in conventional rice farming system: Estimation of greenhouse gas emissions using cradle-to-gate approach. *Journal of Cleaner Production* (212): 1526-1535.
- (17) Azizi, A.A., Mardhati, M., Mohd Fairuz, M.S., **Shaidatul Azdawiyah, A.T.**, Nurul Ain, A.B., Fauzi, J., Mohamad Hariz, A.R. and Reisinger, A. Local emission factors estimates for methane emission from cattle enteric fermentation using IPCC tier-2 methodology. *Mal. J. Anim. Sci.* 20(2): 1-10
- (18) R. Mohd Aziz, A.G. Mohamad Zabawi, **A.T. Shaidatul Azdawiyah** and A. Fazlyzan. Effects of haze on net photosynthetic rate, stomatal conductance and yield of Malaysian rice (*Oryza sativa* L.) varieties. *J. Trop. Agric. and Fd. Sc.* 46(2): 157 – 169.
- (19) Muhamad Hafiz, M.H., Hartinee, A., Nor Dalila N.D., Zul Helmei, M.S., Razali, M., Ab Kahar S., Siti Aisyah, A., Wan Mohd Reza, W.I and **Shaidatul Azdawiyah, A.T.** 2019. Effect of multilocation production on the reproductive growth, yield and quality of harumanis mango. *International Journal of Current Advanced Research* Vol. 8(4): 18175-18180.
- (20) Fauzi, J., Mohamad Zabawi, A.B., **Shaidatul Azdawiyah, A.T.**, Mohd Fairuz, M.S. 2016. Penjadualan Semula Tarikh Menanam: Adaptasi Tanaman Padi Terhadap Perubahan Cuaca Ekstrim. *Agromedia Edisi Khas NAC 2016*: 21.
- (21) Nurul Ain A.B., Mohammad Hariz, A.R, **Shaidatul Azdawiyah, A.T.**, Fauzi, J., Azizi A.A., Mohd Fairuz, M.S., Mardhati M. 2017. Pembebasan gas rumah kaca dari sisa jerami padi di Malaysia: Trend 1990 hingga 2014. *Persidangan Padi Kebangsaan 2017, 25-28 September 2017, Subang*: 283-287.
- (22) Fauzi, J., Mohd Fairuz, M.S., **Shaidatul Azdawiyah, A.T.**, Mohamad Hariz, A.R., Nurul Ain, A.B., Azizi, A.A., Mardhati, M., Mohd Saufi, B. 2017. Jerami gulung: Langkah mitigasi gas rumah hijau dan berpotensi menjadi produk nilai tambah petani. *Persidangan Padi Kebangsaan 2017, 25-28 September 2017, Subang*: 293-297.
- (23) Azizi, A.A., Mardhati., Mohamad Hariz, A.R., Mohd Fairuz, M.S., **Shaidatul Azdawiyah, A.T.**, Fauzi, J., Nurul Ain, A.B., Andy Reisinger. 2016. Local Emission Factors for Methane Emission from Beef Cattle Enteric Fermentation. *37th MSAP Annual Conference, 1-3 Jun 2016, Melaka*: 102-103.
- (24) Azizi, A.A., Mardhati, M., Mohd Fairuz, M.S., **Shaidatul Azdawiyah, A.T.**, Nurul Ain, A.B., Aimi Athirah, A., Mohammad Hariz, A.R., J. Fauzi. 2015. Methane Emission from Ruminant Livestock Enteric Fermentation in Malaysia: Trends of 1990 to 2010. *Proc. 2nd ARCAP & 36th MSAP Ann. Conf., 1 – 3 June 2015*: 75-76

- (25) Mohd Fairuz, M.S, **Shaidatul Azdawiyah, A.T.**, Mohammad Hariz, A.R., Fauzi, J. 2013. Kajian awal potensi pengurangan pembebasan gas rumah hijau kesan aplikasi penambahan bahan organik dan pengurusan air berbeza di kawasan penanaman padi sawah. Persidangan Padi Kebangsaan 2013 (PADI 2013), 10-12 Disember 2013, Seberang Jaya, Pulau Pinang: 555
- (26) Z.Z Norziana, I. Illani Zuraihah, L.K.C. Liza Nuriati, M.S. Mohd Fairuz, A.R. Mohammad Hariz, **A.T. Shaidatul Azdawiyah**, J. Fauzi, and A.G. Mohamad Zabawi. 2015. Effects of different organic amendments on soil organic carbon, nitrogen and rice yield of a paddy field in MADA. Proc. SOILS 2015: Soil Security for Sustainable Food Production, Putrajaya: 191-194

AWARD & RECOGNITIONS

- (1) BRONZE MEDAL – MARDI Science & Technology Exhibition (MSTE 2016), Shifting Rice Planting Date: Climate Smart Approach - Project Leader

- (2) SILVER MEDAL – MARDI Science & Technology Exhibition (MSTE 2017), Hotspots and Potential Solution for Malaysia Greenhouse Gaseous (GHGS) Emission from Agricultural Sector - Project Member

- (3) SILVER MEDAL – MARDI Science & Technology Exhibition (MSTE 2017), Life Cycle Inventory (LCI) in rice and its co-product of near-neutral planting media from “padi hampa”. - Project Member