

NOOR AZRIZAL BIN ABDUL WAHID, PhD



Current Position : Senior Lecturer
Current Affiliation : Department of Biology, Faculty of Science, Universiti Putra Malaysia, 43400 Serdang, Selangor Darul Ehsan, Malaysia.
Home Address : No. 22, Lorong Mahkota Impian 2/24 A, Seksyen 2, Bandar Puncak Alam, 42300 Kuala Selangor, Selangor Darul Ehsan.
H/P : 017 – 9220994
Personal email : azrizal_wahid@yahoo.com
Institutional email : noorazrizal@upm.edu.my

PERSONAL DETAILS

Date of birth : 03 December 1987
Nationality : Malaysian
Hobbies : Adventurous activity, photography, art, craft & design
Marital status : Married, with 3 children
Driving license : D, B2
Working experience : > 10 years
ORCID ID : 0000-0003-2148-1600
Google Scholar Link : <https://scholar.google.com/citations?user=DMbFoFsAAAAJ&hl=en>
Publons Link : <https://publons.com/researcher/4334455/noor-azrizal-abdul-wahid>
ResearchGate Link : <https://www.researchgate.net/profile/Noor-Abdul-Wahid>

PERSONAL BIOGRAPHY

Noor Azrizal bin Abdul Wahid received his bachelor' degree in Ecology and Biodiversity program from Universiti Malaya in 2010. He then pursued his master's degree in Universiti Malaya in the field of entomology and molecular biology, and earned the degree in 2016. In 2021, he graduated with a PhD degree from the same university in the field of entomology, with special focus on the molecular systematics, genetic and population structure, and pathogen interaction in medical-veterinary importance insects. His research expertise has been developed through various research activities and collaboration.

He has strong research knowledge in the field with several publications in ISI-indexed journals in the aspects of entomology, systematics, molecular biology, parasitology and vector biology. Apart from research, he also teaches undergraduate courses related to biology at the Biology Department, Universiti Putra Malaysia. His passion in both research and academic teaching had put himself as a dedicated educator and researcher.

AREA OF EXPERTISE

Entomology (Biodiversity, Systematics, Molecular Biology, Parasitology, Vector Biology)

ACADEMIC QUALIFICATION

Doctor of Philosophy (Ph.D.), Entomology (Molecular & Medico-veterinary) 2021
Universiti Malaya, Kuala Lumpur

Master of Science (M.Sc.), Entomology (Systematics & Molecular Biology) 2016
Universiti Malaya, Kuala Lumpur

Bachelor of Science (B.Sc.) (Hons), Ecology and Biodiversity Universiti Malaya, Kuala Lumpur, CGPA: 3.12	2010
International English Language Testing System (IELTS) British Council-University of Cambridge, Band 6.0	2010
Pre-University, Majoring in Life Sciences Perak Matriculation College, Perak, CGPA: 3.50	2006
Sijil Pelajaran Malaysia (SPM) MARA Junior Science College Kuala Krai, Kelantan, Grade: 6A1, 3A2, 1B3	2004

WORKING EXPERIENCE

Senior Lecturer, Department of Biology, Faculty of Science, UPM <i>Responsible for the academic and research related duties and administrative works such as curriculum and module development</i>	2021 - present
Practical Demonstrator, Biology Division, Centre for Foundation Studies, Universiti Malaya <i>Assist lecturers in teaching the practical classes, evaluate and grade students' reports and assignments</i>	2017 - 2021
Tuition Teacher, Sinar Ilmu Sarjana Tuition Centre, Puncak Alam, Selangor <i>Teach several core subjects for PT3 and SPM levels</i>	2015 - 2021
Research Assistant, Tropical Infectious Diseases Research & Education Centre, UM <i>Manage samples, carry out laboratory works and analyses of data</i>	2018 - 2019
Enumerator, Department of Biology, Universiti Putra Malaysia <i>Assist project leader in conducting the research samplings</i>	2017 - 2019
Tutor, Department of Biology, Universiti Putra Malaysia <i>Teach practical classes & manage fieldwork activities. Responsible for several academic-based administrative works</i>	2011 - 2014
Practical Instructor, Institute of Biological Sciences, Universiti Malaya <i>Assist lecturers in teaching the practical classes, evaluate and grade students' reports and assignments</i>	2014 - 2016

TEACHING EXPERIENCE

Undergraduate, Biology Department, Universiti Putra Malaysia <i>BGY3401 Ecology</i> <i>BGY4402 Wildlife Ecology</i> <i>BGY2001 Concept of Biology</i> <i>BGY3104 Animal Diversity</i> <i>BGY4902 Research Methodology and Field Samplings in Biology</i>	2013 - 2022
Pre-University, Centre for Foundation Studies, Universiti Malaya <i>FAD1001 Biology Practical</i>	2018 - 2021
School level (SPM & PT3), Sinar Ilmu Sarjana Tuition Centre	2015 - 2021

Science
Biology
Mathematics
Additional Mathematics

Undergraduate, Institute of Biological Sciences, Universiti Malaya
SHES1024 Biology Practical

2013 - 2015

RESEARCH EXPERIENCE (Role, Project Title/ Field/ Organization)

- Researcher (Ph.D.)**, Cat Flea Infestation, Evolution and Endosymbionts, and Community Awareness Towards Fleas and Flea-borne Diseases/ Entomology (Molecular and Medico-veterinary)/ Universiti Malaya 2017 - 2020
- Research Assistant**, DNA Barcoding and Species Boundary Delimitation of Insect Vectors and Parasites in Malaysia and Neighbouring Countries/ Parasitology and Vector Biology/ TIDREC, Universiti Malaya. 2019
- Research Assistant**, Understanding The Roles of Vectors In The Transmission of Pathogens In Animals and Humans: Implication for the Prevention and Control of Zoonotic Diseases/ Medical Entomology/ TIDREC, Universiti Malaya. 2018
- Researcher (M.Sc.)**, Morphological and Molecular Studies of Genus *Eurema* (Lepidoptera: Pieridae) in Peninsular Malaysia/ Entomology and Molecular Biology/ Universiti Malaya. 2011 - 2016
- Research Assistant**, Effect of Goat Milk Towards Jaundice Among the Newborn Rat/ Molecular Biology/ Centre for Genetic Studies, Universiti Malaya. 2009 - 2010
- Researcher (B.Sc.)** A Study on Butterfly (Lepidoptera) Population in Berembun Forest Reserve, Negeri Sembilan/ Ecology and Biodiversity/ Universiti Malaya. 2009

PUBLICATION

- Yap, C.K., Tan, W.S., Cheng, W.H., Syazwan, W.M., **Azrizal-Wahid, N.**, Kumar, K., Go, R., Nulit, R., Ibrahim, M.H., Mustafa, M., Omar, H., Chew, W., Edward, F.B., Okamura, H., Al-Mutairi, K.A., Al-Shami, S.A., Sharifinia, M., Keshavarzifard, M., You, C.F., Bakhtiari, A.R., Bintal, A., Zakaly, H.M.H., Arai, T., Naji, A., Saleem, M., Rahman, M.A.B., Ong, G.H., Subramaniam, G. & Wong, L.S. (2022). Ecological-health risk of antimony and arsenic in *Centella asiatica*, topsoils and mangrove sediments: A case study of Peninsular Malaysia. *Frontiers in Environmental Science* (Accepted) (In Press). 2022
- Yap, C.K., Saleem, M., Tan, W.S., Syazwan, W.M., **Azrizal-Wahid, N.**, Nulit, R., Ibrahim, M.H., Mustafa, M., Rahman, M.A.A., Edward, F.B., Arai, T., Cheng, W.H., Okamura, H., Ismail, M.S., Kumar, K., Avtar, R., Al-Mutair, K.A., Al-Shami, S.A., Subramaniam, G. & Wong, L.S. (2022). Ecological-Health Risk Assessments of Copper in the Sediments: A Review and Synthesis. *Pollutants*, 2, 269–288 (ISI-Indexed). 2022
- Yap, C.K., Tan, W.S., Syazwan, W.M., **Azrizal-Wahid, N.**, Nulit, R., Mustafa, M., Abdul Rahman, M.A., Yap, C.W., Edward, F.B., Arai, T. & Cheng, W.H. (2022). A Conceptual Model of Nickel Content in the Bodies of Seafood Mollusks and their Gastrointestinal Absorption. *Journal of Biomedical Research & Environmental Sciences*, 3(4), 323-326. 2022

- Yap, C.K., Syazwan, W.M., **Azrizal-Wahid, N.**, Annavi, G., Tan, W.S., Mustafa, M., Nulit, R., Abdul Rahman, M.A., Yap, C.W., Edward, F.B. & Arai (2022). Human Health Risks of Essential Zinc and Copper in the Topsoils: The Need for Continuous Assessments. *EC Nutrition*, 17(4), 89-92. 2022
- Yap, C.K., Go, R., Bujang, J.S., Syazwan, W.M., **Azrizal-Wahid, N.**, Azmai, M.N.A., Annavi, G., Nulit, R., Ibrahim, M.I., Omar, H., Mustafa, M. & Aziz, N.A.A. (2022). The role of museum of biological collections in environmental research: A short note. *MOJ Ecology & Environmental Sciences*, 7(2), 53–55. 2022
- Azratul-Hizayu, T., Chen, C.D., Lau, K.W., Tan, T.K., **Azrizal-Wahid, N.**, Lim, Y.A.L., Sofian-Azirun, M. & Low, V.L. (2022). Phenotypic profile of *Aedes albopictus* (Skuse) exposed to pyrethroid-based mat vaporizers and underlying resistance mechanisms: A statewide report in Selangor, Malaysia. *Parasitology International*, 86, 102483 (ISI-Indexed) (Q2) (IF: 2.230) 2022
- Azrizal-Wahid, N.**, Sofian-Azirun, M. & Low, V. L. (2021). Flea-borne pathogens in the cat flea *Ctenocephalides felis* and their association with the mtDNA diversity of the flea hosts. *Comparative Immunology, Microbiology and Infectious Diseases*, 75, 101621. (ISI-Indexed) (Q2) (IF: 2.268) 2021
- Azrizal-Wahid, N.**, Rizman-Idid, M. & Sofian-Azirun, M. (2021). Phylogenetic relationships of *Eurema* butterflies from Peninsular Malaysia inferred from COI and 28S gene sequences with emphasis on *Eurema hecabe*. *Raffles Bulletin of Zoology*, 69, 262–271. (ISI-Indexed) (Q3) (IF: 1.267) 2021
- Azrizal-Wahid, N.**, Sofian-Azirun, M., Low, V. L., Chen, C.D. & Shohaimi, S. (2021). Cat owners' perceptions toward flea infestation and flea-borne diseases: Impact for public health and community awareness. *Journal of Applied Animal Welfare Science*, 7, 1–17. (ISI-Indexed) (Q3) (IF: 1.440) 2021
- Azratul-Hizayu, T., Chen, C.D., **Azrizal-Wahid, N.**, Sofian-Azirun, M., Chew, F.P. & Low, V.L. (2021). Knowledge, attitudes and practices on the use of household insecticide products. Is the awareness in place?. *Journal of Integrated Pest Management*, 12(1), 48, 1–13. (ISI-Indexed) (Q1) (IF: 2.937) 2021
- Azratul-Hizayu, T., Chen, C.D., Lau, K.W., **Azrizal-Wahid, N.**, Tan, T.K., Lim, Y.A.L., Sofian-Azirun, M. & Low, V.L. (2021). Bioefficacy of mosquito mat vaporizers and associated metabolic detoxification mechanisms in *Aedes aegypti* (Linnaeus) in Selangor, Malaysia: A statewide assessment. *Tropical Biomedicine*, 38(3), 327–337. (ISI-Indexed) (Q4) (IF: 0.623) 2021
- Saba, A.O., Ismail, A., Zulkifli, S.Z., Ghani, I.F.A., Halim, M.R.A., Ibrahim, M.A., Mukhtar, A., Aziz, A.A., **Wahid, N.A.A** & Amal, M.N.A. (2021). Invasion risk and potential impact of alien freshwater fishes on native counterparts in Klang Valley, Malaysia. *Animals*. (Accepted) (ISI-Indexed) (Q1) (IF: 2.752) 2021
- Azrizal-Wahid, N.**, Sofian-Azirun, M. & Low, V. L. (2020). New insights into the haplotype diversity of the cosmopolitan cat flea *Ctenocephalides felis* (Siphonaptera: Pulicidae). *Veterinary Parasitology*, 281, 109102. (ISI-Indexed) (Q1) (IF: 2.738) 2020

Saba, A.O., Ismail, A., Zulkifli, S.Z., Halim, M.R.A., **Wahid, N.A.A** & Amal, M.N.A. (2020). Species composition and invasion risks of alien ornamental freshwater fishes from pet stores in Klang Valley, Malaysia. *Scientific Reports*, 10, 17205. (ISI-Indexed) (Q1) (IF: 3.998) 2020

Azrizal-Wahid, N., Sofian-Azirun, M. & Low, V. L. (2019). Risk factors associated with flea infestation on cats. *Tropical Biomedicine*, 36(4), 810–821. (ISI-Indexed) (Q4) (IF: 0.623) 2019

Azrizal-Wahid, N., Sofian-Azirun, M. & Rizman-Idid, M. (2016). The significance of wing and body morphometry in discriminating of six *Eurema* butterflies (Lepidoptera: Pieridae) of Peninsular Malaysia. *Sains Malaysiana*, 45(10). (ISI-Indexed) (Q4) (IF: 0.643) 2016

Azrizal-Wahid, N., Sofian-Azirun, M. & Rizman-Idid, M. (2015). A review on morphological characterization, variation and distribution pattern of *Eurema* butterflies of Peninsular Malaysia. *Journal of Biodiversity and Environmental Sciences*, 6(3): 359–372. 2015

CONFERENCE/ SCIENTIFIC SEMINAR

Keynote Speaker, Biology Webinar Series No.3 24th Sep 2021
Title : Butterfly and Dragonfly: Biodiversity, Conservation and Application
Organized by Department of Biology, Faculty of Science, UPM

Participant, FUN International Webinar Series 06 21st May 2021
Title: Insects as an evidence in criminal investigation
Organized by Institute of Medical Molecular Biotechnology, UiTM

Participant, 1st ENTOMA Webinar series 2021 24th Mac 2021
Title : Recent trends on edible insect industry in Korea
Organized by Entomological Society of Malaysia (ENTOMA)

Participant, FUN International Webinar Series 05 24th Mac 2021
Title: To identify the unidentifiable: Puzzling dipteran species colonising dead bodies
Organized by Institute of Medical Molecular Biotechnology, UiTM

Participant, CIS Webinar Series 1/2021 19th Mac 2021
Title: What do we know and still miss about insect extinction?
Organized by Centre for Insect Systematics (CIS), Universiti Kebangsaan Malaysia

Presenter (oral), Graduate Research Symposium 2019 26th Nov 2019
Held in Faculty of Health and Medical Sciences, Taylor's University
Organized by Taylor's University, Subang Jaya

Presenter (poster), Zoological and Ecological Research In Progress 18th Dec 2012
Held in Faculty of Science, Universiti Malaya
Organized by Zoological & Ecological Research Network (ZEN), Universiti Malaya

Presenter (poster), International Symposium on Insect (ISol) 2012 3 – 5th Dec 2012
Held in Mines Wellness Hotel, Seri Kembangan, Selangor
Organized by Entomological Society of Malaysia (ENTOMA)

WORKSHOP/ COURSE/ TRAINING/ SCIENTIFIC EXPEDITION

- Participant,** Kursus Tips dan Panduan Memasuki Perkhidmatan Awam
Held in Auditorium Jabatan Perkhidmatan Awam, Putrajaya
Organized by Suruhanjaya Perkhidmatan Awam Malaysia (SPA) 30th Oct 2014
- Researcher,** North Selangor Peat Swamp Forest Scientific Expedition
Held in Raja Musa Peat Swamp Forest, Kuala Selangor
Organized by Malaysian Nature Society (MNS) 15 – 17th May 2013
- Participant,** Pipetting Academy Training
Held in Microbiology Department, Universiti Malaya
Organized by Sartorius Scientific Malaysia 30th Oct 2012
- Participant,** 'The Skills Employers Look For' workshop
Held in Faculty of Engineering, Universiti Malaya
Organized by Centre for Industrial Training & Relations (CITRA), UM 2009

ACADEMIC COMMUNITY ENGAGEMENT

- Organizing Committee,** Karnival Jom Sains 2019
Held in Faculty of Science, Universiti Putra Malaysia
Organized by Faculty of Science, Universiti Putra Malaysia 13rd Nov 2019
- Module Coordinator,** Biological Education Beyond The Classroom
Held in Biology Department, Faculty of Science, UPM
Organized by Biology Department, Faculty of Science, UPM 7th Nov 2019
- Exhibitor,** Pameran Ekspo Pertanian & Pesta Konvokesyen UPM ke-42
Held in Academic Complex D, Universiti Putra Malaysia
Organized by Universiti Putra Malaysia 25 – 30th Oct 2019
- Facilitator,** Science Exploration Day 2019
Held in Faculty of Science, Universiti Putra Malaysia
Organized by Faculty of Science, Universiti Putra Malaysia 6th Aug 2019
- Facilitator,** Science Outreach Workshop
Held in Dewan Besar, Universiti Putra Malaysia
Organized by Young Scientist Network Malaysia-Academy of Science Malaysia 30th Jul 2018
- Facilitator,** Karnival Jom Sains 2018
Held in Panggung Percubaan, Universiti Putra Malaysia
Organized by Faculty of Science, Universiti Putra Malaysia 24 – 25th Apr 2018
- Facilitator,** UPM-STEM Carnival
Held in Sekolah Menengah Kebangsaan Sri Andalas, Klang, Selangor
Organized by Biology Department, Faculty of Science, UPM 7th Apr 2018
- Facilitator,** Program Jalinan Ilmu Biologi
Held in Biology Department, Faculty of Science, UPM
Organized by Biology Department, Faculty of Science, UPM 19th Mac 2018

CONTRIBUTION/ SERVICE

Professional Expert , Insect and Pest Identification & Diversity Projek Ilham Ladang Cili Fertigasi <i>Agro Pakat Sdn. Bhd. (1326030-U)</i>	2022
Panel Expert , MyBIS (Malaysia Biodiversity Information System) Database <i>Ministry of Energy and Natural Resources (KeTSA)</i>	2022
Reviewer , Article in Journal <i>Parasites & Vectors (ISI-Indexed)</i>	2022
Reviewer , Article in Journal <i>Tropical Biomedicine (ISI-Indexed)</i>	2022
Reviewer , Article in Journal <i>Comparative Immunology, Microbiology and Infectious Diseases (ISI-Indexed)</i>	2021
External Assessor , Staff Performance Management System <i>Biology Division, Centre for Foundation Studies, Universiti Malaya</i>	2021
Examiner , Marking Course for Biology Examination <i>Matriculation Program, Ministry of Higher Education</i>	2012 – 2015
Panel , Question Preparation for Biology Examination <i>Matriculation Program, Ministry of Higher Education</i>	2013
Invited Teacher (Science) , TIMSS Program 2014 <i>Sekolah Menengah Kebangsaan Sri Serdang, Selangor</i>	2014
Head of Bureau , Art Festival Bureau <i>Residential College Committee of Arts and Cultures</i> <i>7th Residential College, Universiti Malaya</i>	2008
Head of Bureau , Management and Protocol Bureau <i>Residential College Committee of Arts and Cultures</i> <i>7th Residential College, Universiti Malaya</i>	2007

PROFESSIONAL MEMBERSHIP

Entomological Society of Malaysia (ENTOMA) (National) <i>Ordinary Member (EOM063)</i>
Malaysian Society of Parasitology and Tropical Medicine (MSPTM) (National) <i>Ordinary Member (716)</i>
Malaysian Nature Society (MNS) (National) <i>Ordinary Member (O/E/35006/B)</i>

SUPERVISION

Undergraduate (Ongoing)

Species checklist and diversity study of butterfly (Lepidoptera) in Universiti Putra Malaysia. *Nur Aliya Adibah binti Hasanuddin* (202189) (Bachelor Science Biology with Honour)

Pattern of butterfly assemblage in different urban landscape of public parks around Putrajaya. *Siti Aishah binti Yahya* (200770) (Bachelor Science Biology with Honour)

Application of landmark-based geometric morphometric of butterfly wings for the genus *Eurema* (Lepidoptera: Pieridae). *Ezlyn Syakila binti Samsuri* (201924) (Bachelor Science Biology with Honour)

Length-based morphometric for discriminating five morphological resemblance species of genus *Graphium* (Lepidoptera: Papilionidae). *Nurinatasya binti Mat Noor* (201895) (Bachelor Science Biology with Honour)

Postgraduate (Ongoing)

Assessment of aquatic insect diversity in three different water bodies around Universiti Putra Malaysia as a potential bioindicator for water quality. *Geetha A/P Mahendran* (GS61891) (Master of Tropical Biology)

Potential microbiota involvement in production of methyl eugenol-derived sex pheromones in male Oriental fruit fly, *Bactrocera dorsalis*. *Illy Husna Ahmad Zainal* (GS63931) (PhD Research)

Effects of safrole upon consumption of methyl eugenol in male Oriental fruit fly, *Bactrocera dorsalis*. *Rishabapriya Rajasegar* (GS63934) (PhD Research)

ADMINISTRATIVE DUTY

Coordinator, Program of Bachelor of Science Biology with Education
Department of Biology, Faculty of Science, UPM

Coordinator, Museum of Zoology
Department of Biology, Faculty of Science, UPM

Committee Member, World Forum for Women in Science
Faculty of Science UPM-Academy of Science Malaysia

Committee Member, Jawatankuasa Penyelidikan dan Data Penyelidikan
Department of Biology, Faculty of Science, UPM

Committee Member, Jawatankuasa Pengurusan Data Akademik
Department of Biology, Faculty of Science, UPM

Committee Member, Program Bio-Career Empowerment
Department of Biology, Faculty of Science, UPM

Chairman, Putra Bio-Explore 2022
Department of Biology, Faculty of Science, UPM

SCHOLARSHIP

Bumiputra Academic Training Scheme (SLAB), Ministry of Higher Education Malaysia, 2011 – 2012
Reference No: KPT(BS) 871203135807

GRANT AWARDED (Grant/ Project Title/ Role/ Amount)

University of Malaya Postgraduate Research Fund (PPP): PV085-2011A/ 2011 – 2016
Morphological and Molecular Studies of Insects/ Co-researcher/ RM86,000

SKILL/ TALENT

Language

Bahasa Melayu (Listening/ Writing/ Speaking/ Comprehension)

English (Listening/ Writing/ Speaking/ Comprehension)

Computer Skills

Microsoft Office Suite (WORD/ EXCEL/ POWERPOINT/ OUTLOOK)

Photo Editor Software (ADOBE PHOTOSHOP/ ILLUSTRATOR/ PHOTOSCAPE)

Statistical Analyses Software (SPSS/ XLSTAT/ PAST/ PRIMER/ STATISTICA)

Reference Manager Software (ENDNOTE/ MENDELEY)

DNA Analyses Software (MEGA/ DNASP/ NETWORK)

Internet Browsing (CHROME/ MOZILLA/ EDGE)

Virtual Meeting Application (ZOOM/ GOOGLE MEET/ MICROSOFT TEAMS)

Research Skills

Scientific research and writing

Insect sampling, collection, identification and preservation

Resin preservation (epoxy)

DNA extraction (tissue samples)

Polymerase Chain Reaction (PCR)

Electrophoresis and gel imaging system

DNA sequencing and phylogenetic analysis

Morphometric analyses

REFERENCES

Prof. Dato' Dr. Hj Mohd Sofian bin Azirun

Honorary Professor

Institute of Biological Sciences, Faculty of Science,

Universiti Malaya, 50603 Kuala Lumpur, Malaysia

Email: sofian@um.edu.my

Tel: 017-6177388

Dr. Low Van Lun

Senior Lecturer

Tropical Infectious Diseases Research & Education Centre (TIDREC)

Universiti Malaya, 50603 Kuala Lumpur, Malaysia.

Email: vanlun_low@um.edu.my

Tel: 016-5605857

Assoc. Prof. Dr. Mohammad Noor Amal bin Azmai

Associate Professor

Department of Biology, Faculty of Science,

Universiti Putra Malaysia
43400 Serdang, Selangor
Email: mnamal@upm.edu.my
Tel: 012-6048305