



JANNA ONG BINTI ABDULLAH, PhD

Associate Professor

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ACADEMIC QUALIFICATION

Qualification Obtained	Name of School / Institution	Year Obtained	Area of Specialization
PhD	Universiti Putra Malaysia	2001	Plant Genetic Engineering
MSc	University of Wyoming, USA	1995	Molecular Biology
BSc (Hons)	University of Wyoming, USA	1992	Microbiology

SCIENTIFIC EXPERIENCE AND SPECIALISATION

Organization	Position	Date	Knowledge / Skill Acquired
University of Wyoming, Laramie, Wyoming, USA	Visiting research scientist	1 Dec 2008 – 31 Aug 2009	Molecular Biology (Expression of Hepatitis B gene for apoptosis study in <i>Saccharomyces cerevisiae</i>)

EMPLOYMENT

Employer	Post	Department	Date
Universiti Putra Malaysia	Lecturer	Biochemistry & Microbiology	Sept 2001 - Jul 2004
Universiti Putra Malaysia	Lecturer	Microbiology	Aug 2004 - Jul 2005
Universiti Putra Malaysia	Senior Lecturer	Microbiology	Aug 2005 - Sept 2008
Universiti Putra Malaysia	Assoc Prof	Microbiology	Oct 2008 - Dec 2014
Universiti Putra Malaysia	Assoc Prof	Cell & Molecular Biology	Jan 2015 – Present

ADMINISTRATIVE POSTS

Year	Position / Affiliation
1 Jan 2015 - 31 Dec 2017	Department Head Department of Cell & Molecular Biology Faculty of Biotechnology & Biomolecular Sciences
26 Sept 2012 – 11 Nov 2012	Acting Department Head Department of Microbiology Faculty of Biotechnology & Biomolecular Sciences
Sept 2001 - Current	Coordinator, Plant Tissue Culture Laboratory (Floral Biotechnology Lab), BioTech2, Faculty of Biotechnology & Biomolecular Sciences, UPM

HONOURS AND AWARDS

Name of awards	Title	Award Type	Year
<i>Non-Academic Awards</i>	• Excellent Service Award, UPM	Certificate & Monetary	2008, 2014
	• Excellent Service, UPM	Certificate	2002-2007, 2009-2024
<i>Awards of Merit</i>	• Project Mentor: Research Acculturation Collaborative Effort (with Universiti Malaysia Pahang)	Grant award & Certificate	2015
	• <i>Putra InnoCreative Carnival in Teaching and Learning</i>	Silver Medal & Certificate	2018, 2019
	• <i>International University Carnival on E-Learning (IUCEL2022: Innovating education for a better tomorrow.</i>	Silver medal	2022
	• <i>International E-Content Development Competition 2025 (eCONDEV 2025)</i>	Silver medal	2025
	• Exhibition of Invention, Research and Innovation	Medals and certificates	2001-2017 International: 1 Gold, 1 Silver, Best poster National: 1 Gold, 1 Silver, Best poster University: 5 Gold, 6 Silver, 7 Bronze, 1 Best Poster

MEMBERSHIP IN LEARNED / PROFESSIONAL SOCIETIES

International

- Phi Kappa Phi Society (USA) since 1992; Life member
- Alumni Association of University of Wyoming, Laramie, Wyoming, USA since 1992; Member
- American Society of Plant Biologists (ASPB), 2008 - 2025; Member

National

- Malaysian Society of Microbiology since 2006; Life member
- Malaysian Society of Plant Physiology, 2003 - 2008

University

- Academician Society of Universiti Putra Malaysia (PPAUPM) since 2003; Life member

UNDERGRADUATE COURSES TAUGHT (CURRENT)

- BSM3104 3(2+1) Principles of Cell & Tissue Culture
- BSM3403 4(3+1) Research Techniques in Cell Biology
- BSM4504 4(3+1) Transgenic Plant Technology

SELECTED PUBLICATIONS

– AUTHOR (S), TITLE, JOURNAL, VOLUME, PAGE AND YEAR PUBLISHED

h-index and citations:

SCOPUS:

[Scopus Author ID:](#)
[13408859000](#)

ORCID:

<https://orcid.org/0000-0002-8280-5923>

(As of September 2025)

Scopus™: 22; Total citations: 1661

Google Scholar: 27; Total citations: 2725

Journals

1. Ayub Nor Hanin, Mat Yunus Abdul Masani, **Ong-Abdullah Janna**, Omar Abdul Rasid, Ghulam Kadir Ahmad Parveez. 2025. *Agrobacterium*-Mediated Genome Modification for Improvement of Oil Palm Planting Materials. *OBM Genetics* 9(2): 1-28. doi:10.21926/obm.genet.2502292 [Q4]
2. Andrew De-Xian Kok, **Janna Ong-Abdullah***, Amanda Shen-Yee Kong, Rogayah Sekeli, Chien-Yeong Wee, Swee-Hua Erin Lim, Wan-Hee Cheng, Jiun-Yan Loh, Kok-Song Lai. 2025. Pluronic F-68 improves root growth of recalcitrant rice cultivar through enhanced auxin biosynthesis. *Tropical Life Sciences Research* [IF:1.56, Q3].
3. Chong Yu Lok Yusuf, Omar Nawawi, Mohd Farhan Azhari, Mohamad Shafek Hilman, Tianqi Bai, Cuixian Zhang, Huaifeng Yi, Zhangguang Ni, Dehong Xie, Meilina Ong Abdullah, Mat Yunus Abdul Masani, Noor Azmi Shaharuddin, Mohd Puad Abdullah & **Janna Ong Abdullah**. 2025. Functional

characterisation of the EgPAL5 promoter from oil palm (*Elaeis guineensis* Jacq.) reveals its potential roles in plant growth and adaptation to drought. *The Journal of Horticultural Science and Biotechnology*, 1-18. <https://doi.org/10.1080/14620316.2025.2519330> [IF:2.37, Q2]

4. Su-Ee Lau, Lucas Wei Tze Lim, Mohd Fadhli Hamdan, Colin Chan, Noor Baity Saidi, **Janna Ong-Abdullah** and Boon Chin Tan. 2025. Enhancing Plant Resilience to Abiotic Stress: The Power of Biostimulants. *Phyton-International Journal of Experimental Botany* 1-31. <https://doi.org/10.32604/phyton.2025.059930> [IF: 1.3, Q3]
5. Chu-Nie Tang, Wan Muhamad Asrul Nizam Wan Abdullah, Chien-Yeong Wee, Zetty Norhana Balia Yusof, Wai Sum Yap, Wan-Hee Cheng, Nadiya Akmal Baharum, **Janna Ong-Abdullah**, Jiun-Yan Loh, Kok-Song Lai. (2023). Promoter cis-element Analyses Reveal the Function of α VPE in Drought Stress Response of *Arabidopsis*. *Biology* 12:430. <https://doi.org/10.3390/biology12030430> [IF:4.729, Q1].
6. Kah Lok Thye, Wan Muhamad Asrul Nizam Wan Abdullah, **Janna Ong-Abdullah**, Dhilia Udie Lamasudin, Chien-Yeong Wee, Mohd Hafis Yuswan Mohd Yusoff, Jiun-Yan Loh, Wan-Hee Cheng, Kok Song Lai. (2023). Calcium lignosulfonate modulates physiological and biochemical responses to enhance shoot multiplication in *Vanilla planifolia* Andrews. *Physiology and Molecular Biology of Plants*. <https://doi.org/10.1007/s12298-023-01293-w> [IF:3.023, Q2]
7. Ku Nur Azwa Ku Aizuddin, Kok-Song,Lai, Nadiya Akmal Baharum, Wilson Thau Lym Yong, Lau Ngi Hoon, Mohd Zahir Abdul Hamid, Wan Hee Cheng, **Janna Ong Abdullah***. (2023). Bamboo for biomass energy production. *BioResources* 18:2386-2407 DOI: 10.15376/biores.18.1.Aizuddin [IF:1.614, Q3].
8. Wan Muhamad Asrul Nizam Wan Abdullah, Noor Baity Saidi, Mohd Termizi Yusof, Chien-Yeong Wee, Hwei-San Loh, **Janna Ong-Abdullah**, Kong-Song Lai. (2022). Vacuolar processing enzymes modulating susceptibility response to *Fusarium oxysporum* f. sp. *cubense* Tropical Race 4 infections in banana. *Frontiers in Plant Science* 12:769855. <https://doi.org/10.3389/fpls.2021.769855> [IF: 5.753, Q1]
9. **Janna Ong Abdullah***, Ab Rahim Mohd-Hairul, Adelene Ai Lian Song, Hooi Ling Foo, Parameswari Namasivayam, Raha Abdul Rahim. (2022) *Vandachostylis* 'Sri-Siam': an intergeneric hybrid with superior qualities as evidenced by its biochemical fragrance and transcriptome profiles. *Journal of Plant Biochemistry and Biotechnology* <https://doi.org/10.1007/s13562-022-00783-4> [IF: 1.175; Q3]
10. Nurul Aishah Shaili, Adelene Ai-Lian Song, Sarah Othman, Lionel Lian Aun In, **Janna Ong-Abdullah** & Raha Abdul Rahim. (2022) Engineering *Lactococcus lactis* as a Cell Factory for the Production of Limonene. *Sains Malaysiana* 51(1):91-100 [IF: 0.643, Q4]
11. Nur Suhanawati Ashaari, Ab. Rahim Mohd-Hairul, Suriana Sabri, Kok Song Lai, Adelene Ai-Lian Song, Raha Abdul Rahim, **Janna Ong Abdullah***. (2021) Kinetic studies and homology modeling of a dual-substrate linalool/nerolidol synthase from *Plectranthus amboinicus* *Scientific Reports* 11: 17094; <https://doi.org/10.1038/s41598-021-96524-z> [IF 4.379; Q1]
12. Kah-Lok Thye, Wan Muhamad Asrul Nizam Wan Abdullah, Zetty Norhana Balia Yusof, Chien-Yeong Wee, **Janna Ong-Abdullah**, Dhilia Udie Lamasudin, Kok-Song Lai. (2022). Λ -carrageenan promotes plant growth in banana via enhancement of cellular metabolism, nutrient uptake a cellular homeostasis. *Scientific Reports* 12:19639. <https://doi.org/10.1038/s41598-022-21909-7> [IF:4996, Q1]
13. Nur Suhanawati Ashaari, Nurul Elyani Mohamad, Amirul Hafizin Afzinizam, Mohd-Hairul Ab. Rahim, Kok Song Lai and **Janna Ong Abdullah***. (2021) Chemical Composition of Hexane-Extracted *Plectranthus amboinicus* Leaf Essential Oil: Maximizing Contents on Harvested Plant Materials. *Applied Sciences*11:10838. <https://doi.org/10.3390/app112210838> [IF 2.679 Q2]

14. Kok, A. D. X., Mohd Yusoff, N. F., Sekeli, R., Wee, C.-Y., **Ong-Abdullah, J.***, & Lai, K.S. (2021) Pluronic F-68 improves callus proliferation of recalcitrant rice cultivar via enhanced carbon and nitrogen metabolism, and nutrients uptake. *Frontiers in Plant Science* 12: 667434. <https://doi.org/10.3389/fpls.2021.667434> [IF 4.402; Q1]
15. Kok, A. D. X., Wan Abdullah, W. M. A. N., Tang, C. N., Low, L. Y., Yuswan, M. H., **Ong- Abdullah, J.**, Tan, N. P. & Lai, K. S. (2021) Sodium lignosulfonate improves shoot growth of *Oryza sativa* via enhancement of photosynthetic activity and reduced accumulation of reactive oxygen species. *Scientific Reports* 11:13226-13238. <https://doi.org/10.1038/s41598-021-92401-x> [IF: 3.998; Q1]
16. W.M. Asrul Nizam Wan Abdullah, N.-P. Tan, L.-Y. Low, J.-Y. Loh, C.-Y. Wee, A.Z. Md. Taib, **J. Ong-Abdullah**, K.-S. Lai. (2021) Calcium Lignosulfonate Improves Proliferation of Recalcitrant Indica Rice Callus via Modulation of Auxin Biosynthesis and Enhancement of Nutrient Absorption. *Plant Physiology and Biochemistry* 161: 131-142. <https://doi.org/10.1016/j.plaphy.2021.01.046>. [IF 3.720; Q1]
17. Hon YK, Yong CSY, **Abdullah JO**, Go R. (2021) Development of species-specific SCAR markers for identification and authentication of three rare Peninsular Malaysian endemic *Coelogyne* (Orchidaceae) orchids. *F1000Research* 9:1-14; <https://doi.org/10.12688/f1000research.26170.2> [Scopus]
18. Chu-Nie Tang, Dhilia Udie Lamasudin, Wan Muhammad Asrul Nizam Wan Abdullah, Chew-Li Moo, Miao-Si Chiew, Qian-Yee Chai, **Janna Ong-Abdullah**, Kok-Song Lai. (2021) Enhanced *in vitro* shoot regeneration and biochemical properties of *Stevia rebaudiana* using chitosan. *Sains Malaysiana* 50(3): 667-676. <http://dx.doi.org/10.17576/jsm-2021-5003-09> [Q4]
19. Nurul Aishah Shaili, Adelene Ai-Lian Song, Siti Sarah Othman, Lionel Lian-Aun In, **Janna Ong Abdullah**, Raha Abdul Rahim. (2021) Engineering *Lactococcus lactis* as a cell factory for the production of limonene. *Sains Malaysiana* 1-26. [IF: 0.643; Q4]
20. Nur Suhanawati Ashaari, Ab. Rahim Mohd-Hairul, Suriana Sabri, Kok Song Lai, Adelene Ai-Lian Song, Raha Abdul Rahim, **Janna Ong Abdullah***. (2020) Functional characterization of new bifunctional terpene synthase from *Plectranthus amboinicus* *PLOS One* 15(7): 1-22. [IF 2.740; Q2]
21. Ab. Rahim Mohd-Hairul, **Janna Ong Abdullah***, Adelene Ai Lian Song, Hooi Ling Foo, Parameswari Namasivayam, Raha Abdul Rahim. (2020) Volatile constituents and floral transcriptome analyses provide new insights into fragrance biosynthesis of *Vanda* Tan Chay Yan. *Plant Biosystems* 1-8. ; <https://doi.org/10.1080/11263504.2020.1829733> [IF 1.750; Q2]
22. Wan Muhamad Asrul Nizam Wan Abdullah, Lee-Yoon Low, Siti Bahijah Mumaiyizah, Qian-Yee Chai, Jiun-Yan Loh, **Janna Ong-Abdullah**, Kok-Song Lai. (2020). Effects of lignosulfonates on *Vanilla planifolia* shoot multiplication, regeneration and metabolism. *Acta Physiologiae Plantarum* 42:107; <https://doi.org/10.1007/s11738-020-03099-9> [IF 1.820, Q2]
23. Andrew De-Xian Kok, Wan Mohamad Asrul Nizam Wan Abdullah, Ngai-Paing Tan, **Janna Ong-Abdullah**, Rogayah Sekeli, Chien-Yoong Wee, Kok-Song Lai. (2020) Growth Promoting Effects of Pluronic F-68 on Callus Proliferation of Recalcitrant Rice Cultivar. *3BIOTECH* 10:116. doi.org/10.1007/s13205-020-2118-5 [IF 2.270; Q2]
24. Wong, W.N., Yong, C.S.Y., Namasivayam, P., Go, R., **Abdullah, J.O.*** (2020) Digitalise herbaria data for assessing extinction risk of the endemic vandaceous orchids from Peninsular Malaysia. *Malayan Nature Journal* 70(1).
25. Miao Si Chiew, Kok Song Lai, Sobri Hussein, **Janna Ong Abdullah***. (2019) Acute gamma irradiated *Stevia rebaudiana* Bertoni enhanced particular types of steviol glycosides. *Asia Pacific Journal of Molecular Biology and Biotechnology* 27(1):56-65.

26. Tan Yoeng Leh, Christina Seok Yien Yong, Rosimah Nulit, **Janna Ong Abdullah**. (2019) Efficient and High-Quality RNA Isolation from Metabolite-Rich Tissues of *Stevia rebaudiana*, an Important Commercial Crop. (2019) *Tropical Life Sciences Research* **30(1)**:149–159.
27. Chew Yee Chern, Wan Mohamad Asrul Nizam Wan Abdullah, Andrew Kok DeXian, **Janna Ong Abdullah**, Maziah Mahmood, Lai Kok Song. (2019) Development of an efficient particle bombardment transformation system for the endemic orchid, *Phalaenopsis bellina*. *Sains Malaysiana* **48(9)**: 1867-1877. [IF 0.65; Q3]
28. Lee-Yoon Low, **Janna Ong Abdullah**, Chien-Yeong Wee, Rogayah Sekeli, Chun-Keat Tan, Kok-Song Lai. (2019) Effect of lignosulfonates as a growth enhancer for callus proliferation and regeneration of recalcitrant Malaysia rice cultivar. *Sains Malaysiana* **48(1)**:7-13. [Impact factor: 0.65; Q3]
29. Rogayah Sekeli, Muhammad Hanam Hamid, Roslinda A. Razak, Chien-Yeong Wee, **Janna Ong Abdullah***. (2018) Malaysian *Carica papaya* L. var. Eksotika: Current Research Strategies Fronting Challenges. *Frontiers in Plant Science* **9(1380)**:1-9. doi:10.3389/fpls.2018.01380 [Q1]
30. Yee-Chern Chew, Muhammad Husni Abd Halim, Wan Mohamad Asrul Nizam Wan Abdullah, **Janna Ong Abdullah**, Kok-Song Lai. (2018) Highly efficient proliferation and regeneration of protocorm-like bodies (PLBs) of the threatened orchid, *Phalaenopsis bellina*. *Sains Malaysiana* **47(6)**:1093-1099. [Q4]
31. Conie Toh, Ab. Rahim Mohd-Hairul, Nooraini Mohd. Ain, Parameswari Namasivayam, Rusea Go, Nur Ashikin Psyquay Abdullah, Meilina Ong Abdullah, **Janna Ong Abdullah***. (2017) Floral micromorphology and transcriptome analyses of a fragrant vandaceous orchid, *Vanda Mimi Palmer*, for its fragrance production sites. *BMC Research Notes* **10**:554; <https://doi.org/10.1186/s13104-017-2872-6>. [Q2]
32. Nor Fadzliana Abu Faizal, Rogayah Sekeli, Noor Azmi Shaharuddin, **Janna Ong Abdullah***. Addition of L-tyrosine to improve betalains production in red pitaya callus. *Journal of Tropical Agricultural Science* **40(4)**: 521-532. [Q4]
33. Siew-Yi Lee, Siti Aqlima Ahmad, Siti Roslina Mustapha, **Janna Ong Abdullah***. (2017) Ability of *Ipomoea aquatica* Forssk. to remediate phenol in water and effects of phenol on the plant's growth. *Journal of Science and Technology* **25(2)**:441-452. [Q3]
34. Muhammad Hanam Hamid, Lina Rozano, Wee Chien-Yeong, **Janna Ong Abdullah***, Noor Baity Saidi. (2017) Analysis of MAP kinase MPK4/MEKK1/MKK genes of *Carica papaya* L. comparative to other plant homologues. *Bioinformation* **13(2)**:31-41.
35. Roslinda A. Razak, Rogayah Sekeli, Noor Azmi Shaharuddin, **Janna Ong Abdullah***. (2015) Using mannose as a positive selection of transformed *Carica papaya* L. var 'Eksotika'. *Jurnal Teknologi* **77(31)**:13-18 [IF 0.096; Q3]
36. Sekeli S., **Janna O.A***, Parameswari N., Pauziah M., Umi Kalsom A.B., Wee C.Y. (2014) A quick protocol to facilitate the selection of putative delayed ripening transgenic papaya lines for field evaluation. *Journal of Tropical Agriculture and Food Science* **43(2)**: 155-164 [IF 0.032]
37. Rogayah Sekeli, **Janna Ong Abdullah***, Parameswari Namasivayam, Pauziah Muda and Umi Kalsom Abu Bakar. (2014) RNA interference of 1-aminocyclopropane-1-carboxylic acid oxidase genes prolonged the shelf life of Eksotika papaya. *Molecules* **19**:8350-8362. [IF 2.416; Q2]

38. Wilson Thau Lym Yong, Joan Li Jett Chang, Vun Yee Thien, Harry Lye Hin Chong, **Janna Ong Abdullah**. (2014) Uptake and Accumulation of Aluminium, Copper and Cobalt in Tissue Cultured *Melastoma malabathricum* Linn. Plantlets. *International Journal of Plant & Soil Science* **3(8)**: 1018-1030.
39. Song, Adelene, **Janna Ong Abdullah**, Mohd Shafee, Norazizah, Othman, Roohaida, Noor, Normah, Rahim, Raha..(2014) Engineering the lactococcal mevalonate pathway for increased sesquiterpene production. *FEMS Microbiology Letters* **355**: 177–184. doi: 10.1111/1574-6968.12469. [Q3]
40. Siti Nurhadis Che Omar, **Janna Ong Abdullah***, Khairul Anuar Khairoji, Sieo Chin Chin, Muhajir Hamid. (2013) Effects of Flower and Fruit Extracts of *Melastoma malabathricum* Linn. on Growth of Pathogenic Bacteria: *Listeria monocytogenes*, *Staphylococcus aureus*, *Escherichia coli* and *Salmonella typhimurium*. *Evidence-Based Complementary and Alternative Medicine* 2013: 1-11; doi:10.1155/2013/459089 [2,720; Q2]
41. Rogayah Sekeli, **Janna Ong Abdullah***, Pauziah Muda, Parameswari Namasivayam, Umi Kalsom Abu Bakar, and Sew Yun Shin. (2013) Aminocyclopropane-1-Carboxylate Oxidase 2 Reduction Effects on Physical and Physiological Responses of Eksotika Papaya. *Journal of Crop Improvement* **27(5)**: 487-506; doi:10.1080/15427528.2013.795205 [Q2]
42. Caroline Manicam, Li Teng Khoo, **Janna Ong Abdullah**, Eusni Rahayu Mohd Tohit, Zainina Seman, Sieo Chin Chin and Muhajir Hamid. (2013) Subacute toxic effects of *Melastoma malabathricum* Linn. aqueous leaf extract on liver and kidney histopathology of rats. *International Journal of Pharmacology* **9**:358-365; doi:10.3923/ijp.2013.358/365. [IF 0.981; Q3]
43. Maryam Moudi, Christina Yong Seok Yien, Mohd Nazre, **Janna Ong Abdullah**, Rusea Go. (2013) Phylogenetic analysis among four sections of genus *Dendrobium* Sw. (Orchidaceae) in Peninsular Malaysia using *rbcl* sequence data. *International Journal of Bioassays* **2**: 392-937.
44. Seow-Ling Teh, **Janna Ong Abdullah***, Parameswari Namasivayam. (2012) Molecular cloning, sequencing and characterization of a putative acetyl-CoA-C-acetyltransferase cDNA from a highly fragrant orchid hybrid *Vanda Mimi* Palmer. *Sequencing* **2012**: 1-8; <http://dx.doi.org/10.1155/2012/509034>
45. Seow-Ling Teh, **Janna Ong Abdullah***, Parameswari Namasivayam, Gwendoline Ee Cheng Lian. (2012) Cloning of 3-hydroxy-3-methylglutaryl-coenzyme A reductase gene from *Vanda Mimi* Palmer and its heterologous expression in *Escherichia coli*. *Journal of Plant Studies* **1(2)**:140-153.
46. Chew Tiong Dar, **Janna Ong Abdullah***, Parameswari Namasivayam, Siti Habsah Rowi. (2012) Sterilization of *Hibiscus rosa-sinensis* Vegetative Explants Sourced from Plants Grown in Open Environment and Influences of Organic Ingredients on Its *In Vitro* Direct Regeneration. *American Journal of Plant Science* **3**:791-798; Online doi:org/10.4236/ajps.2012.36095
47. Adelene Song, **Janna Ong Abdullah**, Puad Abdullah, Norazizah Shafee, Raha Abdul Rahim. (2012) Functional expression of an orchid fragrance gene in *Lactococcus lactis*. *International Journal Molecular Sciences* **13**:1582-1597; Online doi:org/10.3390/ijms13021582. [Q1]
48. Adelene Ai-Lian Song, **Janna Ong Abdullah**, Mohd. Puad Abdullah, Norazizah Shafee, Roohaida Othman, Ee-Fun Tan, Normah Mohd. Noor, and Abdul Rahim Raha. (2012) Overexpressing 3-hydroxy-3-methylglutaryl coenzyme A reductase (HMGR) in the lactococcal mevalonate pathway for heterologous plant sesquiterpene production. *PLoS ONE* **7(12)**: 1-10. [Q1]

49. Rogayah Sekeli, **Janna Ong Abdullah***, Parameswari Namasivayam, Pauziah Muda, Umi Kalsom Abu Bakar. (2012) Better Rooting Procedure to Enhance Survival Rate of Field Grown Malaysian Eksotika Papaya Transformed with 1-Aminocyclopropane-1-Carboxylic Acid Oxidase Gene. *International Scholarly Research Network Biotechnology ISRN Biotechnology* 2013: 1-10; doi:10.5402/BIOTECHNOLOGY
50. Wai-Sun Chan, **Janna Ong Abdullah***, Parameswari Namasivayam. (2011) Isolation, Cloning and Characterisation of New Fragrance-related Floral Transcripts of *Vanda Mimi Palmer*. *Scientia Horticulturae* **127**:388-397. Online doi: 10.1016/j.scienta.2010.09.024 [IF 1.527; Q2]
51. Siti Nurhadis Che Omar, **Janna Ong Abdullah***, Khairul Anuar Khairoji, Sieo Chin Chin, Muhajir Hamid. (2012) Potentials of *Melastoma malabathricum* Linn. flower and fruit crude extracts as antimicrobial infusions. *American Journal of Plant Science* **3**:1127-1134.
52. Khor Hong Eng, **Janna Ong Abdullah**, Tan Soon Guan, Wong Wee Nee, Teoh Shu Woan, Ng Yong Jin, Julaihi Abdullah, Puluni George, Rusea Go. (2012) Rich orchid diversity in limestone habitat of Padawan, Sarawak. *Acta Biologica Malaysiana* **1(2)**:62-70; doi:http://dx.doi.org/10.7593/abm/1.2.62
53. Seow-Ling Teh, Wai-Sun Chan, **Janna Ong Abdullah*** and Parameswari Namasivayam. (2011) Development of expressed sequence tag resources for *Vanda Mimi Palmer* and data mining for EST-SSRs. *Molecular Biology Reports* **38**:3903-3909; Online doi:10.1007/s11033-010-0506-3. [Q2]
54. Mohd-Hairul A.R., Chan W.S., Parameswari N., **Janna O.A.**, Gwendoline E.C.L.. (2011) Screening, Isolation, and Molecular Characterization of Putative Fragrance-related Transcripts from *Vanda Mimi Palmer*. *Acta Physiologiae Plantarum* **33**:1651-1660. Online doi:10.1007/s11738-010-0701-9. [Q2]
55. Yong W.T.L., Henry E.S., **Janna O.A.***. (2010) Enhancers of *Agrobacterium*-mediated transformation of *Tibouchina semidecandra* selected on the basis of GFP expression. *Tropical Life Sciences Research* **21(2)**: 117-132. [Q2]
56. Mohd-Hairul A.R., Chan W.S., Parameswari N., Gwendoline E.C.L., **Janna O.A.**. (2010) Putative phenylacetaldehyde synthase transcript of *Vanda Mimi Palmer*: Sequence and expression analysis. *International Journal of Botany* **6(4)**: 424-432.
57. Mohd-Hairul A.R., Parameswari N., Gwendoline E.C.L., **Janna O.A.**. (2010) Terpenoid, Benzenoid and Phenylpropanoid Compounds in the Floral Scent of *Vanda Mimi Palmer*. *Journal of Plant Biology*. On-line DOI 10.1007/s12374-010-9123-x; **53(5)**: 358-366. [Q3]
58. David D., Gansau J.A., **Abdullah J.O.**. (2010) Effect of NAA and BAP on protocorm proliferation of Borneo scented orchid, *Vanda helvola*. *Asia-Pacific Journal of Molecular Biology and Biotechnology* **18 (1)**: 219-222. [Q4]
59. Eng K.H., Go R., Wen K.P., **Abdullah J.O.**. (2010) A Survey on orchids in selected trails of Gunung Nuang forest reserve. *Pertanika Journal of Tropical Agricultural Science* **33(1)**: 91-95. [Q4]
60. Jawan R., Gansau J.A., **Abdullah J.O.**. (2010) *In vitro* culture of Borneo's endemic orchid, *Vanda dearei*. *Asia-Pacific Journal of Molecular Biology and Biotechnology* **18 (1)**: 203-207. [Q4]
61. Manicam C., **Janna O.A.**, Mohd Tohit E.R., Seman Z., Sieo C.C., and Hamid M.. (2010) *In vitro* anticoagulant activities of *Melastoma malabathricum* Linn. aqueous leaf extract: A preliminary novel finding. *Journal of Medicinal Plants Research* **4(14)**: 1464-1472. [Q3]

62. Wai-Sun Chan, **Janna Ong Abdullah***, Parameswari Namasivayam. (2009) Molecular characterization of a new 1-deoxy-D-xylulose 5-phosphate reductoisomerase (DXR) transcript from *Vanda Mimi Palmer*. *Scientia Horticulturae* **121**:378-382. [Q2]
63. Wilson Y.T.L., **Janna O.A.***, Maziah Mahmood. (2009) *Agrobacterium*-mediated transformation of *Melastoma malabathricum* and *Tibouchina semidecandra* with sense and antisense dihydroflavonol-4-reductase (DFR) genes. *Plant Cell, Tissue, and Organ Culture* **96**:59-67; On-Line Doi:10.1007/s11240-008-9460-3 [Q2]
64. Rusea, G., Lim, M.Y.L., Phoon, S.N., Yong, W.S.Y., Tang, C.H., Khor, H.E., **Abdullah, J.O.**, and Abdullah, J.. (2009) Malaysian limestone orchids status: diversity, threat and conservation. *BLUMEA Journal of Plant Taxonomy and Plant Geography* **54**:109-116; On-Line Doi:10.3767/000651909X474168 [IF 0.271] [Q2]
65. Ng C.Y., **Janna O.A.***, Maziah M., and Nazir B. (2008) Co-transfer of *gfp*, CHS and *hptII* genes into *Oncidium Sharry Baby* PLB using the biolistic gun. *African Journal of Biotechnology* **7(15)**:2605-2617. [Q4]
66. **Janna O.A.***, Wilson Y.T.L. (2007) Melastomataceae: Inherent economical values substantiating potential transgenic studies in the family. *Transgenic Plant Journal* **1(1)**:237-243.
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68. Wilson Y.T.L., **Janna O.A.***, Maziah Mahmood. (2006) Establishment of *Agrobacterium*-mediated transformation system for Melastomataceae spp. using green fluorescent protein (GFP) as a reporter. *Scientia Horticulturae* **109**:78-85. [IF2.769; Q2]
69. **Janna O.A.***, Maziah, M., Ahmad Parveez G.K.A., and Saleh, K.. (2006) Factors affecting delivery and transient expression of β -glucuronidase gene in *Dendrobium Sonia* protocorm-like-body. *African Journal of Biotechnology* **5(2)**: 88-94. [Q4]
70. Yong W., **Janna O.A.***, and Maziah M.. (2006) minimal inhibitory concentrations of kanamycin on *Melastoma malabathricum* and *Tibouchina semidecandra*. *Malaysian Journal of Biochemistry and Molecular Biology* **13**:27-31. [Q4]
71. **Janna O.A.***, Maziah M., and Rohidin R.. (2005) Glasshouse acclimatization of tissue cultured *Melastoma malabathricum* plantlets. *Tropical Science* **45(1)**: 45-49. [Q2]
72. Wendy Y.S.Y., Rusea G., Tang C.H., **Janna O.A.**, and Kassim O.. (2005) Orchids of Perlis: New Records and Distribution. *Pertanika Journal of Tropical Agricultural Science* **28(2)**: 135-146. [Q4]
73. **Janna O.A.***, Marziah M., and Ahmad Parveez G.K.A. (2000). Potential Selective Agents for Orchid Transformation. *Asia Pacific Journal of Molecular Biology and Biotechnology* **8 (1)**: 85-93. [Q4]

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Chapter in book

1. Lee-Yoon Low, Shun-Kai Yang, De-Xian Andrew, **Janna Ong-Abdullah**, Ngai-Paing Tan and Kok-Song Lai (2018) Chapter 3: Transgenic Plants: Gene Constructs, Vector and Transformation Method, *New Visions in Plant Science*, edited by Özge Çelik, IntechOpen, DOI:10.5772/intechopen.79369. Available from: <https://www.intechopen.com/books/new-visions-in-plant-science/transgenic-plants-gene-constructs-vector-and-transformation-method>, ISBN 978-1-78923-703-0, pp 41-61. DOI:10.5772/intechopen.72517
2. Rusea Go, Nur Adilah Auyob, **Janna Ong Abdullah**, Nur Ashikin Psyquay Abdullah, Mohd Akmal Raffi. (2014) Species Richness of Orchid in Gunung Tebu Forest Reserve, Terengganu. In: *Hutan Gunung Besar, Negeri Sembilan:Kepelbagaian Biologi Hutan Siri 22*, edited by Rahman, A.A.R., Nasir, M., Nordin, M.A.H., Nor Hasliza, M.B. and Latiff, A., Forestry Department of Peninsular Malaysia: Kuala Lumpur, pp198-203.
3. Teh Seow-Ling, **Janna Ong Abdullah***, Parameswari Namasivayam, Rusea Go. (2012) Chapter 9: Discovering fragrance biosynthesis genes from *Vanda* Mimi Palmer using the Expressed Sequence Tag (EST) approach. In: *Data Mining Applications in Engineering and Medicine*, edited by Adem Karahoca, InTech Open Access Publisher: Croatia, pp 205-224; ISBN 979-953-51-0720-0, pp 205-224.
4. Rusea Go, H.E. Khor, S.S. Cheah, C.M. Loy, **J. Ong Abdullah**, Muskhazli Mustafa, Ahmad Ainuddin Nuruddin, M.C. Tan. (2012) Chapter 14: Orchids of Penang Hill. In: *The 17th Book Series of Diversity of Forest Biology. Taman Negeri Bukit Panchor dan Pulau Jerejak, Pulau Pinang: Pengurusan Hutan, Persekitaran Fizikal dan Kepelbagaian Biologi*, edited by Abd. Rahman Hj. Abd. Rahim, Mohd Nasir Abu Hassan, Mohd Puat Dahalan, Muhamad Abdullah A. Latiff, Forestry Department of Peninsular Malaysia: Kuala Lumpur; ISBN 978-983-9269-94-9, pp 153 -159.
5. Rusea Go, Khor Hong Eng, M C Tan, Abdul Rahman Abdul Jalil, **Janna Ong Abdullah**. (2012) Chapter 9: Preliminary checklist of orchids in Pangkor Island, Perak. In: *The 19th Book Series of Diversity of Forest Biology. Hutan Pulau Pangkor, Perak: Pengurusan Hutan, Persekitaran Fizikal dan Kepelbagaian Biologi*, edited by Abd. Rahman Hj. Abd. Rahim, Masran Md. Salleh, Mohd Nasir Abu Hassan, Muhamad Abdullah A. Latiff, Forestry Department of Peninsular Malaysia: Kuala Lumpur; ISBN 978-983-9269-93-2, pp102-105.
6. Rusea Go, H.E. Khor, C.H. Tang, M.C. Tan, **J.O. Abdullah**, Muskhazli Mustafa, N.S. Lee. (2011) Chapter 15: Orchids in selected trails of Cameron Highlands. In: *The 14th Book Series of Diversity of Forest Biology. Hutan Pergunungan Cameron Highlands: Pengurusan Hutan, Persekitaran Fizikal dan Kepelbagaian Biologi*, edited by Abd. Rahman Hj. Abd. Rahim, H.L. Koh, Mohd. Paiz Kamaruzaman, Muhamad AbdullahLatiff, Forestry Department of Peninsular Malaysia: Kuala Lumpur; ISBN 978- 983-9269-87-1, pp164-177.
7. **Janna Ong Abdullah***, Khairul Anuar Khairoji, Muhajir Hamid, Maziah Mahmood. (2006) Anthocyanins from *Melastoma malabathricum* and *Tibouchina semidecandra* as Potential Natural Food Colourant. In: *Malaysian Medicinal Plants: Chemistry and Biological Activity*, edited by Fasihuddin A., Zaini A., Laily D., and Ikram M.S., Malien Press Sdn. Bhd, Sarawak, Malaysia, pp35-42.

Proceedings

36 proceedings in international and national conferences attended.

Intellectual Property Rights (selected)

1. Patent filed: PI 2019000052, 14 Jan 2019.
Janna Ong Abdullah*, Raha binti Hj Abdul Rahim, Suriana binti Sabri, Lai Kok Song, Adelene Song Ai Lian, Nur Suhanawati Ashaari, Mohd Hairul Ab. Rahim.
Recombinant terpene synthase.
2. Copyrights: Filing No. 2019042201, 22 April 2019.
Janna Ong Abdullah*, Rusea Go, Parameswari Namasivayam, Christina Yong Seok Yien, Wong Wee Nee.
Database for Vandaceous Orchids of Peninsular Malaysia using BRAHMS
3. Patent granted: MY-154882-A, National, 14 August 2015.
Muhajir H., Janna O.A., Sieo C.C., Caroline M., Eusni R.M.T. and Zainina S.
Bioactive extract having blood anticoagulant activity.

RESEARCH PROJECT (SELECTED)

Grant Scheme	Project Title	Role (Year)	Funding
Exploratory Applied (EA) Grant	Development of transgenic technology using antisense gene construct for flower colour in <i>Melastoma</i> sp.	Principal Investigator (2002 - 2006)	MOSTI
Prioritized Research (PR) Programme	Profiling of gene(s) associated with fragrance in orchids	Principal Investigator (2004 - 2007)	MOSTI
Fundamental Research Grant Scheme (FRGS)	Histological and ultrastructural studies of <i>Vanda</i> Mimi Palmer flowers	Principal Investigator (2006 - 2008)	MOHE
eScience Fund	Antimicrobial activity of <i>Melastoma malabathricum</i> Linn. crude flower and fruit extracts	Principal Investigator (2006 - 2008)	MOSTI
Research University Grant Scheme (RUGS)	Molecular and biochemical approaches to elucidate the fragrance pathway in <i>Vanda</i> Mimi Palmer	Principal Investigator (2008 - 2009)	MOHE
Fundamental Research Grant Scheme (FRGS)	Development of a floral EST resource for <i>Vanda</i> Mimi Palmer	Principal Investigator (2008 - 2010)	MOHE
Malaysia Toray Science Foundation (MTSF): Science & Technology Research Grant 2008	Screening and identification of fragrant-related cDNAs in <i>Vanda</i> Mimi Palmer by differential hybridization	Co-researcher (2008)	MTSF

Fundamental Research Grant Scheme (FRGS)	Functional characterization of selected fragrance- related transcripts of <i>Vanda</i> Mimi Palmer.	Principal Investigator (2011-2013)	MOHE
eScience Fund	Characterization of new genic microsatellite markers in <i>Vanda</i> Mimi Palmer for biodiversity search in Malaysian vandaceous orchids.	Principal Investigator (2012 - 2014)	MOSTI
Fundamental Research Grant Scheme (FRGS)	Development of genetically engineered gamma terpinene synthase of <i>Plectranthus amboinicus</i> (<i>Bangun- bangun</i>) for thymoquinone production	Principal Investigator (2014 - 2016)	MOHE
Putra Grant (IPS)	Phenol remediation by <i>Ipomoea aquatic</i> FORSSK and toxicity study of post- treatment plant extract on Sprague-Dawley rats.	Principal Investigator (2016 - 2018)	MOHE
National River Care Fund (NRCF) Cycle 5 2018	Scheduled monitoring for water quality and aquascape improvement at Sungai Kabul, Beranang, Selangor Darul Ehsan	Principal Investigator (2018 - 2019)	Global Environmental Centre (GEC)
Fundamental Research Grant Scheme (FRGS)	Identification and functional characterization of vacuolar processing enzyme (VPE) responsible for drought in banana	Principal Investigator (2019 - 2023)	MOHE
Putra Grant (IPS)	Indirect somatic embryogenesis and biochemical profiles of the calli induced from <i>Dendrocalamus asper</i> seed	Principal Investigator (2023 - 2025)	PUTRA GRANT [IPS]
Fundamental Research Grant Scheme (FRGS)	Evaluating the role of β -aminobutyric acid in the lignification of <i>Dendrocalamus asper</i> plantlets subjected to sodium chloride - induced salt stress	Principal Investigator (2024 - 2026)	MOHE

GRADUATE STUDENTS SUPERVISION

PhD

As main supervisor: 4 graduated (including 2 graduated with distinction), 1 *on-going*
As co-supervisor: 17 graduated (including 1 graduated with distinction), 3 *on-going*

MS

As main supervisor: 14 graduated, 3 *on-going*
As co-supervisor: 11 graduated, 1 *on-going*

CONSULTANCY / RECOGNITION

1. Panel assessor for research grants at university and national levels [Fundamental Research Grant Scheme, FRGS; eScienceFund; Trans Disciplinary Research Grant Scheme, TRGS; Prototype Research Grant Scheme, PRGS; UPM Matching Grant; RU Grant Scheme]
2. MS and PhD theses examiner for local IPTA and IPTS
3. Panel Interviewer for The DYMM *Yang Di-Pertuan Agong* Scholarship; 2010 - 2012, 2018, 2019, 2021-2023
4. Panel interviewer for scholarships
 - Human Life Advancement Foundation [HLAF] Science & Technology Scholarship 2020
 - Malaysia International Scholarship [MIS], Ministry of Higher Education 2021
5. Research grant proposal assessor for:
 - INTI International University (INTI-IU 2014 Seeding)
 - Perdana University (2015)
 - Taylor's University (2014, 2017)
6. Journal reviewer for local and international journals
7. Editorial Board Member, *Frontiers in Plant Science* (2022-2024)
8. Advisor/mentor to four FORM 4 students from SMS Rembau, Negeri Sembilan for a project entitled *Plant Genetic Engineer as a Choice Career* in a competition "Pertandingan Karnival Pendidikan dan Kerjaya Sekolah Berasrama Penuh Zon Selatan 2014"

RESEARCH ENGAGEMENT WITH INDUSTRY

Industry	Project	Role (Year)
PureCircle Sdn Bhd	Development of new varieties of <i>Stevia rebaudiana</i> Bertoni, PC1, suitable for growing in Malaysia	Project Leader (2015)
Greenworld Bamboo Sdn Bhd	Tissue culture of selected bamboo species	Project Leader (2021 - 2024)