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#### المؤهلات العلمية:

1.	بكالوريوس في العلوم الحياتية التطبيقية، جامعة العلوم والتكنولوجيا الأردنية في عام 1997
2.	ماجستير في علم الاحياء الدقيقة، جامعة ماليزيا الوطنية في عام 2000
3.	دكتوراة في علم الاحياء الدقيقة، جامعة ماليزيا الوطنية في عام 2004

#### الخبرات التدريسية:

#	المسمى الوظيفي	مكان العمل	الفترة الزمنية
.1	باحث	الجمعية الملكية لحماية الطبيعة	1998-1997
.2	باحث	معهد بحوث النخيل/ماليزيا بالتعاون مع مركز بحوث الطاقة المتجددة /اليابان	2004-2003
.3	عضو هيئة تدريس	الجامعة الهاشمية	2005-الآن
.4	عضو هيئة تدريس/إجازة تفرغ علمى	جامعة الزيتونة	2017/2016
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#### الأبحاث المنشورة والمقبولة للنشر:

- **Muhannad I. Massadeh**, Wan Mohtar Wan Yousoff, Jalil Kader & Othman Omar (2001). Synergism of Cellulase enzymes in Mixed culture Solid Substrate Fermentation. *Biotechnology Letters*. 23: 1771-1774.
- Wan Mohtar Wan Yousoff, **Muhannad I. Massadeh**, and Jalil Kader (2000). Solid substrate and Submerged Culture fermentation of sugar cane bagasse for the production of cellulase and reducing

sugars by a local isolate *Aspergillus terreus* SUK-1. *Journal of Microbiology and Biotechnology*. 10: 770-775.

- Wan Mohtar Wan Yousoff, **Muhannad I. Massadeh**, Othman Omar, and Jalil Kader (2000). Sugar cane bagasse degradation by Mixed Culture of *T. reesei* and *A. terreus* in Solid Substrate Fermentation. *Pakistan Journal of Biological Sciences*. 3(10): 1758-1761.
- Wan Mohtar Wan Yousoff, **Muhannad I. Massadeh**, Jalil Kader and Othman Omar (2003). Comparison of cellulolytic enzymes production by single-stage solid substrate fermentation (SSF) and submerged culture fermentation (SCF) and the combination of SSF and SCF fermentation systems. *Journal of Biosciences*. 14 (2): 7 – 17.
- **Muhannad I. Massadeh**, Wan Mohtar Wan Yousoff, and Jalil Kader (1999). Combination of Solid Substrate Fermentation (SSF) with Submerged Culture Fermentation (SCF) for reducing sugar production using sugar cane bagasse. 22<sup>th</sup> Microbiology Symposium. Universiti Kebangsaan Malaysia, Malaysia.
- Wan Mohtar, W. Y., **Massadeh, M. I.**, Jalil, K. & Wan Zahari, M. (2002). Solid substrate fermentation of sugar cane bagasse to animal feed. Proceeding of the workshop “Conersion of biomass into bioenergy”. Serdang: New Energy and Industrial Technology Development Organization (NEDO) and Malaysian Palm Oil Board (MPOB).
- **Muhannad I. Massadeh**, Sahaid, K., Ngan, M. A., Morimoto, M., & Wan Mohtar Wan Yousoff (2003). Strain comparison for the production of Acetone-Butanol-Ethanol using Palm Oil Mill Effluent (POME) as a substrate. Proceeding of the workshop “Products from Biomass Biotransformations”. Serdang: New Energy Development Organization (NEDO) and Malaysian Palm Oil Board (MPOB).
- Wan Mohtar, W. Y., **Massadeh, M. I.** (2003). The Production of Reducing sugar, Cellulase enzyme, and Ruminant feed from Solid Substrate Fermentation (SSF) of sugar cane bagasse. In: *Advances in Materials Processing*. Che Husna Azhari (ed.). Kuala Lumpur: Institute of Materials Malaysia.
- Kamel, A., Qnais, E., Khoury, F., Tahtamouni, L., **Massadeh, MI.**, Al-Matubsi, H., and Abu-Ghalyun, Y. (2006). Reptilian skeletal muscle: physiological and fine structure properties of musculus iliofibularis of the Lizard *Chamaeleo Chamaeleo Recticrista*. Proc. 4<sup>th</sup> Int. Biol. Sci. pp: 201-205.
- **Massadeh MI**, and Modallal, N. (2008). Ethanol production from olive mill wastewater (OMW) pretreated with Pleurotus sajor caju. *Energy and Fuels*. 22: 150-154.
- Saadoun I, Wahiby L, Ababneh Q, Jaradat Z, **Massadeh MI**, and Al-Momani F (2008). Recovery of soil streptomycetes from arid habitats in Jordan and their potential to inhibit multi-drug resistance *Pseudomonas aeruginosa* pathogens. *World Journal of Microbiology and Biotechnology*. 24: 157-162.



- Khalid G. Fandi, Isam Y. Qudsieh, Suleyman A. Muyibi, and **Muhannad I. Massadeh** (2009). Water pollution status assessment of King Talal Dam, Jordan. *Advances in Environmental Biology*. 3: 92-100.
- **Muhannad I. Massadeh**, Abeer Fraij, and Khalid Fandi (2010). Effect of carbon sources on the extracellular lignocellulolytic enzymatic system of *Pleurotus sajor-caju*. *Jordan journal of Biological Sciences*. 3: 51-54.
- **Muhannad I. Massadeh** and Fatima Sabra (2011). Production and characterization of lipase from *Bacillus stearothermophilus*. *African Journal of Biotechnology*. 10(61): 13139-13146.
- **Muhannad I. Massadeh**, Fatima Sabra, Rana Dajani, and Alaa Arafat (2012). Purification of Lipase enzyme produced by *Bacillus stearothermophilus* HU1. Accepted for Oral Presentation in: International Conference on Eco-Systems and Biological Sciences; Penang, Malaysia.
- Khalid Fandi, **Muhannad Massadeh** and Hartmut Laatsch (2012). LC-MS/MS Profiling-based Metabolite Screening of Thermophilic Bacteria from Jordanian Hot Springs. International Conference on Applied Chemistry and Pharmaceutical Sciences; Penang (Malaysia)
- **Muhannad I. Massadeh** and Ameineh N. Radwan (2012). Production of Branched Chain Ketoacid Dehydrogenase Enzyme by Thermophilic Bacteria Isolated from Ma'in Hot springs in Jordan. International Conference on Sciences; Al al-Bayt university in corporation with Universiti kebangsaan Malaysia (Jordan)
- **Muhannad I. Massadeh and Khalid Fandi (2014)**. Acetone-Butanol-Ethanol (ABE) production by anaerobic Microflora growing on Olive Mill Wastewater. *Journal of Biobased Materials and Bioenergy*. 8: 94-98.
- Kayed A. Abu Safieh, Manal M. Al-Oqal, Mikdad T. Ayoub, and **Muhannad I. Massadeh** (2014). Synthesis, Characterization and Antimicrobial Activity of Some 5-Aryl-(2E, 4E)-Pentadienoic Acid Derivatives. *Journal of Chemical, Biological and Physical Sciences*. 4: 1927-1935.
- Abeer Fraij and **Muhannad I. Massadeh** (2015). Use of *Pleurotus sajor-caju* for the Biotreatment of Olive Mill Wastewater. *Romanian Biotechnological Letters*. 20: 10611-10617.
- **Muhannad I. Massadeh** and Rana Dajani (2015). Utilization of lipase enzyme produced by *Bacillus* sp. as a biocatalyst in the production of biodiesel. World Bio Summit & Expo. *Journal of Biotechnology and Biomaterials*; 5:7. November 02-04, 2015 Dubai, UAE. <http://dx.doi.org/10.4172/2155-952X.C1.047>
- Nidal A. Odat, Maen K. Hasan, Maher S. Obeidat, Mohamad A. Shatnawi, Saeid M. Abu-Romman, Issam M. Qrunfleh, and **Muhannad I. Massadeh** (2015). Identifying Selection Signatures Related to Domestication Process in Barley (*Hordeum vulgare L.*) Landraces of Jordan Using Microsatellite Markers. *Jordan Journal of Biological Sciences*. 8: 307-313.
- **Muhannad I. Massadeh** and Mohammad Al-hamed (2017). Utilization of yeast industry wastewater (YIW) as a fermentation medium for the production of bioethanol. *Journal of Biotechnology and*



Biomaterials; 7:5. 19th World Congress on Biotechnology. November 13-14, 2017 Osaka, Japan.  
DOI: 10.4172/2155-952X-C1-083

- **Muhannad I. Massadeh** and Suha Mahmoud (2019). Antibacterial Activities of Soil Bacteria Isolated from Hashemite University Area in Jordan. *Jordan Journal of Biological Sciences*. 12:503-511.
- Anhar Al-Turk, Nidal Odat and **Muhannad I. Massadeh** (2020). Isolation and Molecular Characterization of Antibiotic Producing *Bacillus licheniformis* Strains Isolated from soil. *Journal of Pure and Applied Microbiology*. 14(4): 2363-2370.
- Khalid Ghazi Fandi, Fouad Almomani, **Muhannad Massadeh**, Yousef M. Abu-Zaitoon, and Abdel Rahman Al Tawaha (2020). Pectolytic, cellulytic enzyme activity and RAPD polymorphism detection of Macrophomina phaseolina isolated from infected plants in Jordan. *Research on Crops*. 21(4): 804-812.
- **Muhannad I. Massadeh** and Othman Alsharafat (2021). Butanol production by Clostridium acetobutylicum NCIMB 13357 utilizing Yeast Industry Wastewater as a fermentation medium. The 2nd International Conference on Bioenergy and Environmentally Sustainable Agriculture Technology (Malang, East Java, Indonesia, July 28 – 29).
- Ayu Suci Wulandari<sup>1</sup>, Siwi Indarti<sup>1</sup>, **Muhannad Illayan Massadeh** and Nguyen Van Minh (2021). The Effect of Abiotic Factors and Elevation on the Diversity of Plant Parasitic Nematodes in Garlic on Central Java, Indonesia. *Sarhad Journal of Agriculture*. 37:75.
- Ardi Prasetio, Christina Maria Sri Lestari, Sutaryo Sutaryo, Manar Fayiz Mousa Atoum, Muhammad Zahoor, Asma Nisar and **Muhannad Illayan Massadeh** (2021). Blood Profile of Soybean Meal Substitution with Black Soldier Fly Larvae in New Zealand White Rabbit. *Sarhad Journal of Agriculture*. 37:110.
- Lizda Johar Mawarani<sup>1</sup>, Thomas Andherson Sihombing, Doty Dewi Risanti, **Muhannad Illayan Massadeh**, and Dwi Prananto (2021). Utilization of Chicken Eggshells as Catalyst in Biodiesel Synthesis from Waste Cooking Oil. *Proceedings of the Pakistan Academy of Sciences: Pakistan Academy of Sciences A. Physical and Computational Sciences*: 58(S): 85-95.
- **Massadeh, Muhannad I.**, Khalid Fandi, Hanan Al-Abeid, Othman Alsharafat, and Khaled Abu-Elteen (2022). Production of Citric Acid by *Aspergillus niger* Cultivated in Olive Mill Wastewater Using a Two-Stage Packed Column Bioreactor. *Fermentation*. 8(4): 153. <https://doi.org/10.3390/fermentation8040153>
- **Muhannad I. Massadeh** and Mona Al Masri (2022). Bioactive secondary metabolites production by terrestrial *Bacillus circulans* strains. *Journal of Microbiology, Biotechnology and Food Sciences*, e5666. <https://doi.org/10.55251/jmbfs.5666>
- **Muhannad I. Massadeh**, Mohammad Abu Deyieh, Kawthar Abu-Tahoon, and Abdul Latief A. Al-Ghzawi (2022). Effect of olive mill wastewater (OMW) on growth of tomato and germination of

certain vegetable seeds. Accepted for publication in Bulgarian Journal of Agricultural Sciences. 28(6).

- Emad Hussein, Jacob H. Jacob, Said Al Ghenaimi, Ibrahim H. Bashayreh, Abdul-Salam Juhmani, Bayan AlShakiliya, Hajar AL Marhubi, Najoud Al Badi, Wesam Al Khateeb, Majed M Masadeh, Mazhar Al-Zoubi, Almuthanna K. Alkaraki, **Muhannad Massadeh**, Mohammed A Wedyan, Sumia Alsabi and Mohannad AlSaghir (2022). Can Shopping Carts Act as Potential Source of Drug-Resistant Enteric Bacteria? *Intl J Agric Biol* 28:327–332.
- **Muhannad I. Massadeh**, Mona Al-Masri, Abu-Qqatouseh L F (2022). Antibacterial activity of *Peganum harmala* extracts and their green silver nanoparticles against Acne associated bacteria. *Farmacia*. 70:5.
- **Muhannad I. Massadeh**, Othman Al Sharafart, and Ahmad Saleem (2022). 3RD HYBRID INTERNATIONAL CONFERENCE ON LIFE SCIENCES OCTOBER 29-30, 2022 ICLS22, ISTANBUL, TURKEY.
- Kok, Tjie and Florenika, Natasha and Goeltom, Mangihot Tua and Hardjo, Popy Hartatie and **Massadeh, Muhannad Illayan** (2023) Mini-Review: Extraction of Patchouli Oil from *Pogostemon cablin* Benth. Leaves. In: E3S Web of Conf. Volume 374, The 3rd International Conference on Natural Resources and Life Sciences (NRLS) 2020, 23rd - 24th September 2020, Virtual Conference.
- Ainiyah, R., Riniutami, C., & **Massadeh, M. I.** (2023). Inhibition of *Carica* solid soap to the growth of *Staphylococcus epidermidis* bacteria. Les Ulis: EDP Sciences. doi: <https://doi.org/10.1051/e3sconf/202337400029>
- Sara N. Abdulla, Batol I. Dheeb, Safaa AL-Deen A. S. AL-Qaysi, Mohammed S. S. Farhan, **Muhannad Massadeh**, Abbas Fadel Diab (2023). Isolation and Diagnosis of Biofilms of *Klebsiella pneumoniae* Bacteria and *Candida albicans* Yeast, and Studying the Sensitivity of The Pathogens to Antibiotics and Antifungals. *Egyptian Academic Journal of Biological Sciences, G. Microbiology*. Volume 15, Issue 2, December 2023, Page 73-88.
- Dheeb, Batol Imran and Hussein, Humam Saadi and Asi, Akeel Hussain Ali Al and Alwan, Asmaa Abdulkreem and Abbas, Hayder Mudheher and Hilali, Fatiha El and **Massadeh, Muhannad I.** and Hamid, Abbas Fadel (2023). *Growth Inhibition of Cancer Cell Line Using Fungal Secondary Metabolite*. In: Advanced Research in Biological Science Vol. 3. B P International (a part of SCIENCE DOMAIN International), pp. 177-187.
- Emad Y. Bsoul\*, Sabreen A. Othman, Abdul Latief A. Al-Ghzawi and **Muhannad I. Massadeh**. Effect of Silver Nanoparticles on Growth and Physiological Responses of Spinach (*Spinacia oleracea* L.) under Salt Stress. *Jordan Journal of Biological Sciences*. 16:1-6.
- **Muhannad Illayan Massadeh**, Othman Alsharafat, Ahmad Saleem, Damat Damat, Suherman Suherman and Roy Hendroko Setyobudi (2023). In: E3S Web of Conf. Volume 374, The 3rd International Conference on Natural Resources and Life Sciences (NRLS). E3S Web Conf. Volume 432, 2023.



- Numberi Johni Jonatan, Tiper Uniplaita, Arifia Ekayuliana, Praptiningsih Gamawati Adinurani, **Muhannad Illayan Massadeh** and Afrida Rizka Farzana (2023). Experimental Jet Flame Bioethanol Sago Pulp Fuel as an Energy Source for Isolated Areas in Papua Province, Indonesia. E3S Web Conf. Volume 432, 2023
- Suherman Suherman, Nur Peni Barokah, Nora Atika Islamiaty, Hadiyanto Hadiyanto, Tubagus Rayyan Fitra Sinuhaji, Bambang Waluyo Hadi Eko Prasetyono, Abraham Lomi, Roy Hendroko Setyobudi, **Muhannad Illayan Massadeh** and Erkata Yandri (2023). Assessment on Hybrid Solar Dryer for an Effective Red Chili Drying Process. E3S Web Conf. Volume 432, 2023.
- AlRamadneh, T. N., **Massadeh, M. I.**, Algroom, R., Abu-Harirah, H. A., Amawi, K. F., Daifalla, N. S., ... & Javaraiah, R. (2023). Protective Effects of Secoisolariciresinol Diglucoside on Arsenic-induced Renal Damage and Oxidative Stress in Rats. Jordan Journal of Biological Sciences, 16(4).
- Alananbeh, Kholoud M., Rana Alkfoof, Riyadh Muhamadat, and **Muhannad Massadeh**. 2024. Production of Xylanase by *Trichoderma* Species Growing on Olive Mill Pomace and Barley Bran in a Packed-Bed Bioreactor. Journal of Fungi 10, no. 1: 49. <https://doi.org/10.3390/jof100100499>
- **Massadeh, M. I.**, Alkhataibeh, E. A., Al-Ghzawi, A. L. A., & Aukour, F. (2024). Enhancement of *Medicago sativa* Plant Growth and Yield after Treatment with *Rhizobium* spp. Journal of Ecological Engineering, 25(2), 33-43.
- Al-Momani, Hafez, **Muhannad I. Massadeh**, Muna Almasri, Dua'a Al Balawi, Iman Aolymat, Saja Hamed, Borhan Aldeen Albiss, Lugain Ibrahim, Hadeel Al Balawi, and Sameer Al Haj Mahmoud. (2024). Anti-Bacterial Activity of Green Synthesised Silver and Zinc Oxide Nanoparticles against *Propionibacterium acnes*. Pharmaceuticals 17, no. 2: 255. <https://doi.org/10.3390/ph17020255>
- Al Tharf , M., **Massadeh, M.**, Dheeb , B. I., & Abdulla, S. N. (2024). Extracellular Endoglucanase and Exoglucanase Enzymes Production by *Trichoderma viride* Utilizing Olive Mill Wastewater (OMW) in liquid fermentation. *Journal of Biotechnology Research Center*, 18(1), 133–142. <https://doi.org/10.24126/jobrc.2024.18.1.768>
- Hamami Alfasani Dewanto, Takiyan Abdullah, Anis Shofiyani, Oetami Dwi Hadjoeningtijas, Teguh Pribadi and **Muhannad Illayan Massadeh** (2024). Callus Formation and Its Characteristics of Mountain Papaya *in Vitro* Endosperm Culture. The 3<sup>rd</sup> and 4<sup>th</sup> International Conference on Bioenergy and Environmentally Sustainable Agriculture Technology. <https://doi.org/10.1051/bioconf/202410400016>.

## المعلومات الشخصية:

مكان وتاريخ الميلاد	كتم-اريد 1974
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