

CV of the Experienced Researcher

Name: Maneea Moubarak Abd Elkhalk Moubarak (PhD)
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E-mail: Drmaneea1981@agr.dmu.edu.eg
Birth Date: March 16, 1981
Birth Place: Alexandria city, Egypt
Nationality: Egyptian



20/ 01/2012 – 16/12/2015 **PhD in biotechnology of ornamental and medical plants** at Russian State Agrarian University –Timiryazev Academy at Department of Genetics, Biotechnology and bionanotechnology. Moscow, Russia.
Supervisor : Assoc. Prof. Mikhail Cherednichenko
PhD-thesis title: *In vitro* Culture Study on Pennyroyal (*Mentha Pulegium L.*)
01/07/2009 - 20/01/2012 **PhD course in Biotechnology** at Alexandria University - Damanhour branch
01/01/2004 – 28/04/2009 **M.Sc. in agriculture** at Faculty of Agriculture, Damanhour Branch, University of Alexandria, Egypt.
Major: “**Floriculture**”
Minor: “**Ornamental plants and Landscape Design**”.
Thesis Title: “Effect of Environmental Factors on The Landscape Efficiency of Some Ornamental Plants in The North- western Coast.” With a cumulative grade in Master's Courses: “Excellent”
15/09/1998 – 28/06/ 2002 B.Sc. in agriculture at Faculty of Agriculture, Damanhour Branch, University of Alexandria, Egypt . With cumulative grade “Very Good with honor”

Professional experience Current Position

19.11.2025 - Present **Director of International Relations Office** - Damanhour University, Egypt
10.2025 - Present **Member Board of the Italian Society for Extracellular Vesicles (EVITA)**
20.01.2025 -31.07.2025 **Head of the Department of Environmental and Desert Studies**, Institute of Graduate Studies and Environmental Research, Damanhour University.
29/11/2023 – Present **Assistant professor** at Department of Horticulture, Faculty of Agriculture, University of Damanhour, Egypt;
17/05/2016 – 28/11/2023 **Lecture** at Department of Horticulture, Faculty of Agriculture, University of Damanhour, Egypt.
10/09/2016 – 10/10/2021 Head of Landscape garden design research group
12/12/2016 – Present Head of tissue culture laboratory
01/12/2020 – 30/ 11/2022 **Marie curie Postdoctoral fellowship (IF-MSCA-2019)** under project **greenEV** in the laboratory of Extracellular Vesicles and Mass Spectrometry of the Institute of Biosciences and BioResources (IBBR) of the National Research Council (CNR), Naples, Italy.
10/01/2019 – 20/06/2019 **Postdoctoral visiting researcher** in the laboratory of Extracellular Vesicles and Mass Spectrometry of the Institute of Biosciences and BioResources (IBBR) of the National Research Council (CNR), Naples, Italy. During the short stay basic training in the isolation of extracellular vesicles using ultracentrifugation based

methods. Research interest is focused on the application of EVs in food biotechnology.

22/05/ 2009 –16/05/2016

Teaching Assistant at Department of Horticulture, Faculty of Agriculture, Damanhour Branch, University of Alexandria, Egypt.

31/12/2002 – 21/05/2009

Domenstartor at Department of Horticulture, Faculty of Agriculture, Damanhour Branch, University of Alexandria, Egypt.

Publications:

- 1 H.M.S. Hassan and **M. Moubarak**. Micropropagation of yucca plant by using guar and locust bean seed powder as an alternative cheap gelling agent// Scientific J. Flowers & Ornamental Plants, 7(3):239-246 (2020). doi: 10.21608/sjofop.2020.110364
- 2 E.Sewedan, A. Osman, **M.Moubarak**. Effect of methyl jasmonate and salicylic acid on the production of *Gladiolus grandifloras*, L. // Nature and Science 2018;16(6):40-47].ISSN1545-0740 (print); ISSN 2375-7167 (online). <http://www.sciencepub.net/nature>. 7. doi: 10.7537/marsnsj160618.07.
- 3 **Moubarak M.M.**, Novakovskiy R.O., Baranova E.N., Cherednichenko M.Yu. "Induction of somatic organogenesis from different explant kinds of Pennyroyal (*Mentha pulegium* L.)"// Izvestiya of Timiryazev Agricultural Academy, 2015 ,issue 3- p. 5-15. (In Russian Language)
- 4 M.U. Cherednichenko, **M.M. Moubarak**. Using in vitro technology for the conservation and breeding of Pennyroyal (*Mentha pulegium* L.) as a producer of drugs //trude kobanckova gacodarctvnafe agrarnava univeristy. – 2015. – 4. – p. 278-282. (In Russian Language)
- 5 M.U. Cherednichenko, **M.M. Moubarak**. Evaluation of the cytotoxic action of extracts of medicinal plants in M.HeLa cell line//agro econovy. – 2015. –5. http://agroecoinfo.narod.ru/journal/STATYI/2015/5/st_22.doc . (In Russian Language)
- 6 C. Stanly, **M. Moubarak**, I. Fiume, L. Turiak, ' G. Pocsfalvi, Membrane transporters in citrus clementina fruit juice-derived nanovesicles, Int. J. Mol. Sci. 20 (2019) 6205, <https://doi.org/10.3390/ijms20246205>.
- 7 H.M. El-Naggar.; A.M. Shehata.; **M. Moubarak.**; and A.R. Osman. (2023). Optimization of Morphogenesis and In Vitro Production of Five *Hyacinthus orientalis* Cultivars. *Horticulturae*, 9(2):176. <https://doi.org/10.3390/horticulturae9020176> **Scopus Q1 (Web of science)**
- 8 A.M.Shehata and **M. Moubarak**. (2020). Using nano-fertilization to improve yield, vegetative growth and essential oil contents of Fennel plants. *Future J.Biol*, (3):10-15.
- 9 **M. Moubarak.**; Y. S. Sekhi.; A. Al-furaiji; A. F. Almehemdi and A.A. Almarie. (2021). Potential of hormones combination on callugensis of anise seeds and its antioxidant activity . *Plant cell biotechnology and molecular biology*, 22(31&32): 96-106.
- 10 R. Mammadova.; S. Maggio.; I. Fiume.; R. Bokka.; **M. Moubarak.**; G. Gellén; G. Schlosser.; G. Adamo.; A. Bongiovanni.; F. Trepiccione.; M. Guescini. and G. Pocsfalvi (2023). Protein Biocargo and Anti-Inflammatory Effect of Tomato Fruit-Derived Nanovesicles Separated by Density Gradient Ultracentrifugation and Loaded with Curcumin. *Pharmaceutics*, 15(2):333.
- 11 S.S.Yacoub.; A.A.A. El-Settawy.; E. Sewedan.; **M. Moubarak** and A. R. Osman. (2023). Enhancing growth of *Leucaena leucocephala* seedlings by stimulation of symbiotic relationship between vesicular arbuscular mycorrhizal (VAM) and nitrogen fixing bacteria under phosphate rock fertilization. *Journal of Agricultural and Environmental Sciences.Damanhour University*, 22(1):193-227
- 12 Zeyad M. A.; Mahmood S. A.; **M. Moubarak** and Omar F. A. Rock Gardens Planning and Designing-Theory and Application // Indian Journal of Ecology (2020) 47 Special Issue (12): 85-91

- 13 Osman, A., El-Kadafy, A.I., Sewedan, E., **Moubarak, M.** and Abdel-Rahman, M., (2020). THE EFFECT OF POLYETHYLENE GLYCOL (PEG) ON CALLUSES OF SWEET BASIL (*OCIMUM BASILICUM* L.). Scientific Journal of Flowers and Ornamental Plants, 7(4), pp.447-459.
- 14 Sary H. Brengi, **Maneea Moubarak**, Hany M. El-Naggar and Amira R. Osman (2024). Promoting salt tolerance, growth, and phytochemical responses in coriander (*Coriandrum sativum* L. cv. Balady) via eco-friendly *Bacillus subtilis* and cobalt. **BMC Plant Biology** 24 (1), 848. <https://doi.org/10.1186/s12870-024-05517-3> *Scopus Q1 (Web of science)*
- 15 M ElKammah, E Elkhatab, **M Moubarak (2025)**. Effective elimination of indigo carmine in wastewater using green nanostructured modified biochar: optimization, sorption equilibrium, kinetics, thermodynamics and mechanisms. **Applied Water Science** 15 (8),194. <https://doi.org/10.1007/s13201-025-02556-5>
- 16 **Maneea Moubarak**, Emese Szilágyi-Tolnai, Ani Barbulova, Immacolata Fiume, Ildikó Kovács-Forgács, Judit Homoki, Georgina Pesti-Asbóth, Endre Szilágyi, Ramila Mammadova, Matic Kisovec, Marjetka Podobnik, Dávid Papp, Gitta Schlosser, Judit Remenyik, Gabriella Pocsfalvi (2025). Plant-derived nanovesicles from Ginkgo biloba seeds mitigate LPS-induced endothelial dysfunction and promote vascular homeostasis. **Frontiers in Bioengineering and Biotechnology** 13 , 1715489. <https://doi.org/10.3389/fbioe.2025.1715489>
- 17 **Maneea Moubarak**, Eman A. Swedan, Mohamed A. A. Ahmed, H. B. Gewiada, Tartil M. Emam, Ammar Mohammed AL-Farga*, Dina Abd Al-Aty Soliman Ahmed (2026). Benefits of selenium foliar application on morphological, flowering and biochemical attributes of chrysanthemum upon water-deficit stress. **BMC Plant Biology**, <https://doi.org/10.1186/s12870-026-09373-1>

International Projects Contribution:

Running Now Starting date 01/03/2024 Until 28/02/2028 Principal Investigator (PI)	 Funded by the European Union This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie-SE-2022 grant, agreement No 101131175, acronym "FarmEVs". Principal investigator (PI) in FarmEVs project: Call: SEP-210929913 — HORIZON-MSCA-SE-2021- EU Grants: Application form (Part B1) (HE MSCA SE): V2.5 – 16.12.2022 MARIE SKŁODOWSKA-CURIE ACTIONS - Staff Exchanges (SE)- Call: HORIZON- MSCA- SE-2022 
01/12/2020 – 30/11/2022 Principal Investigator (PI)	 This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant, agreement No 895579, acronym "greenEV" Principal investigator (PI) in greenEVs project: Call: MSCA- IF- 2019 
2025 – Present Erasmus+ KA171	International Credit Mobility, Institutional mobility grants , Institutional Coordinator / International Relations Office Support

Oral and poster presentations at conferences & workshops

- 15/07/2015 **M.M. Moubarak**, M.U. Cherednichenko: Using *in vitro* technique for induction of somatic organogenesis from different explants of pennyroyal (*Mentha pulegium* L.) ***Symposium on Euroasian Biodiversity*** , //Abstract book. Symposium on Euroasian Biodiversity (SEAB-2015). 01-05 June 2015, Baku, Azerbaijan. – P. 38.
- 05/06/2015 ***International scientific-practical conference*** "Ways of increasing the competitiveness of domestic varieties of seeds, planting materials and technologies in the world market" Yalta, Ukraine.
- 20/03/2015 ***International scientific conference*** of young scientists and specialists, dedicated to the 150th anniversary of RGAU-ICCA name KA Timiryazev Moscow, Russia **(Oral)**
- 18/06/2014 **M.M. Moubarak**, M.U. Cherednichenko. Using *in vitro*-methods for propagation and producing secondary metabolites from European pennyroyal plants (*Mentha pulegium* L., ***The 2nd International Symposium*** «Secondary Metabolites: Chemistry, Biology and Biotechnology» Moscow, Russia.) // International Journal of Secondary Metabolite: Vol. 1, Issue 1 (Special Issue - Abstracts), June 2014. – P.50. **(Oral)**
- 20/03/2014 **M.M. Moubarak**: "Biotechnology in crop production, animal husbandry and veterinary medicine", ***The XIV Youth Scientific Conference***, Moscow, Russia . **(Oral)**
- 12/01/2014 **M.M. Moubarak**: ***International scientific conference*** of young scientists and specialists, dedicated to the creation of a united agricultural university in Moscow , Russia **(Oral)**
- 4-5/7/2022 **M.Moubarak**: VISCEA “Plant cell and tissue culture Invitro IV” July 4-5,2022, Vienna,Austria **(Oral)**
- 6-7/7/2022 **M.Moubarak**: VISCEA “Transgenic Plants and Transformation Technologies VI” July 6-7,2022, Vienna,Austria.
- 16/11/2019 **M.Moubarak**: Food Safety Management in Egypt “ current status and future perspectives”. Organized by Egypt- Japan University of Science and Technology.
- 22/3/2019 **M.Moubarak**: Workshop on NanoBiomedicine in Naples: The next future of Theranostics, Italy.

Laboratory skills & Knowledge

Techniques and knowledge related to general plant biology including analysis of physical and chemical properties;

Basic analytical laboratory skills and procedures in the use of spectrophotometers, pH meters, and conductivity meter, microscopes, concentration measurement, etc;

Molecular biology and biotechnology (e.g. Gel electrophoresis, using restriction enzymes);

Extraction of nucleic acids (RNA, DNA and plasmidic DNA), purification of DNA, determination of DNA concentration, PCR:

Tissue culture technique: Mint Plant transformation and development of transgenic plants (e.g. callus induction, transformation mediated by *Agrobacterium* carrying T-DNA, and subsequent regeneration of mint plants from transgenic calli).

Extracellular vesicles Isolations and characterization

Language skills

Arabic	fluent, written and spoken (native tongue).
English	fluent, written and spoken. Successfully completed Local TOEFL ITB received score:(537), October 2007.
Russian	fluent, written and spoken.
Italian	spoken

Computational skills

Good skills in the use of software. - Microsoft Office (Word, Excel, PowerPoint, Access, Outlook). - Statistical analysis programs (SAS, Costat and Minitab).

Additional courses and training in complementary skills

19/4/2024 – 25/4/2024	<i>TOT certificate –Training Of Trainers</i>
23/05/2008 – 25/05/2008	<i>Exams and Students Evaluation System</i> , Faculty of leadership development center (FLDC), Alexandria University, Egypt.
29/03/2008 – 31/03/2008	<i>University Administration Training Course</i> , Faculty of leadership development center (FLDC), Alexandria University, Egypt.
22/03/2008 – 24/03/2008	<i>Conference Organization Training Course</i> , Faculty of leadership development center (FLDC), Alexandria University, Egypt.
15/03/2008 – 17/03/2008	<i>Quality Standards In Training Course</i> , Faculty of leadership development center (FLDC), Alexandria University, Egypt.
19/08/2006 – 22/08/2006	<i>Research Methodology Training Course</i> , Faculty of leadership development center (FLDC), Alexandria University, Egypt.
19/08/2006 – 22/08/2006	<i>Effective Teaching Training Course</i> , Faculty of leadership development center (FLDC), Alexandria University, Egypt.
25/07/2006 – 27/06/2006	<i>Communication Skills Training Course</i> , Faculty of leadership development center (FLDC), Alexandria University, Egypt.

Prizes and Awards

30.4.2025	Damanhour University Award for Excellence in Securing International Research Project Funding
01/01/ 2019 – 30/06/2019	Italian Government grant supported by the Ministry of Foreign Affairs and International Cooperation (MAECI) in the academic year 2018-2019 for 6 monthes as Postdoctoral visiting researcher at the laboratory of Extracellular Vesicles and Mass Spectrometry of the Institute of Biosciences and BioResources (IBBR) of the National Research Council (CNR), Napoli, Italy.
20/01/2012 – 16/12/2015	Full PhD Scholarship from the Russia government at Russian State Agrarian University –Timiryazev Agricultural Academy at Department of Genetics, Biotechnology, Plant Breeding and Seed Science, Moscow, Russia.
01/07/2009 – 01/072014	Registered Full PhD scholarship at Alexandria University, But it was cancelled because I get the new scholarships at Russia Federation.

Teaching experience, supervising and mentoring activities

Since 2003 Actively involved in teaching at Alexandria University and since 2016 at Damanhour University. Keep regular under and postgraduate courses (15h/week) in the following subjects: Landscape and garden design, Ornamental plant Breeding, Advanced Landscape and garden design, Landscape of cities and Advanced Landscape of cities./ undergraduate and postgraduate students; Floriculture, Ornamental Horticulture and landscape design, Aromatic and medical plants, Tissue culture plants as well as summer courses.

10/07/2016 - now	Supervised 1 PhD and 4 Master “Floriculture, ornamental and landscape garden design” students at the University in Damanhour.
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