



Curriculum Vitae

Personal information:

Name: Mohamed Mahmoud Hassib El-Defrawy

Nationality: Egyptian.

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My Google Scholar site: <https://scholar.google.com.eg/citations/user=nFoX8UoAAAAJ&hl=en&oi=ao>



Current Position: Emeritus Professor at the Genetics Department, Faculty of Agriculture, Assiut University, Assiut (71526), Egypt.

Educational qualifications:

1. Ph.D. in Agricultural Sciences (Genetics), Faculty of Agriculture, Assiut University, Assiut (71526), Egypt, (1986).

Thesis title: “Evolutionary relationship between yeasts and Drosophila”.

2. M.Sc. in Agricultural Sciences (Genetics), Faculty of Agriculture, Assiut University, Assiut (71526), Egypt (1979).

Thesis title: “Response to selection for body size of Drosophila on media supplemented with different species of yeast”.

3. B.Sc. in Agricultural Sciences (Genetics), Faculty of Agriculture, Alexandria University, Egypt, (1972). Final graduation grade: Excellent.

Academic record:

-(2010- until now): Emeritus Professor of Quantitative and Population Genetics, Genetics Department, Faculty of Agriculture , Assiut University.

-(2007-2010): Professor of Quantitative and Population Genetics, Genetics Department, Faculty of Agriculture, Assiut University, Egypt.

-(1995-2007): Associate Professor of Quantitative and Population Genetics, Genetics Department, Faculty of Agriculture, Assiut University.

-(1986 - 1995): Lecturer, Genetics Department, Faculty of Agriculture, Assiut University, Egypt.

-(1979 - 1986): Assistant Lecturer, Genetics Department,

Faculty of Agriculture, Assiut University, Assiut (71526), Egypt.

In the year 1978-1979 I did the duty of the military service.

-(1973 - 1979): Demonstrator, Genetics Department, Faculty of Agriculture, Assiut University, Assiut (71526), Egypt.

Research interests:

- 1. Quantitative Genetics, Population structure and biodiversity as well as Molecular Plant Breeding.***
- 2. Selection for abiotic stresses tolerance on wheat, Cotton and faba beans.***

Research experience:

- 1. Experience in the molecular analyses of plants including DNA isolation, agarose and polyacrylamide gel electrophoresis, getting images by gel documentation system, analysis of electrophoretic profiles, genotyping and identifying probable molecular markers.***
- 2. Good understanding principles of Population, Statistical and Quantitative Genetics (conventional and molecular).***
- 3. Experience in comparing breeding strategies and in the methods of genetic prediction and their application to breeding.***
- 4. Design efficient breeding strategies utilizing phenotypic and molecular-based selection methods, focusing on grain crops and cotton.***

5. *Setting up and managing field trials in different environmental conditions, including greenhouses and experimental fields.*
6. *Skills in quantitative genetics, statistical analysis and interpretation of genetic data from plant populations.*
7. *Communicate plans and results with other investigators in molecular breeding programs.*
8. *Ability to work both independently and as a part of a multi-disciplinary research team.*

Skills:

1. *The Mother Tongue: Arabic*

2. *The Foreign Languages: French and English.*

3. *Computer:*

- *Programs for writing, graphics, spreadsheets and data analysis (MSTAT, SPSS, SAS, NTSYS, Microsoft Word, Excel, Power Point).*

- *Front Page and PC maintenance.*

- *Software for genetic analyses.*

Teaching experiences:

1. *Teaching Undergraduate Students of Faculty of Agriculture, Faculty of Science and Faculty of Veterinary Medicine in Assiut*

University (Principles of Genetics)

2. Teaching Under and Postgraduate Students of Faculties of Agriculture, Assiut University the following courses: Population and Quantitative Genetics, Statistical Genetics as well as Advanced Population and Quatitative Genetics. Honey bees Genetics, Immunogenetics, Genetic control of plant and pest resistance and Plant Genetics.

Duties and Responsibilities:

- 1. Training and Supervision of Undergraduate Students in Genetics Department, Faculty of Agriculture.*
- 2. Training and Supervision of Postgraduate Students in Genetics Department, Assiut University during their Master and Doctorate programs.*
- 3. Examination and Assessment Handbook for Undergraduate and Postgraduate Students of Genetics Department, Faculty of Agriculture, Assiut University.*
- 4. Setting and Following up Research Proposals at Genetics Department as well as Carrying out Field Experiments at the Experimental Field of the Genetics department at the Faculty of Agriculture experimental field, Assiut University.*

Publications

- 2020 Chapter 3: G-protein-coupled Receptors in Fungi Mohamed **M.H. El-Defrawy** and Abd El-Latif Hesham 3.1 **M.M.H. El-Defrawy** and Hesham, AE.L.
Springer Nature Switzerland
Fungal Biotechnology and Bioengineering, FungalBiology.
<https://doi.org/10.1007/978-3-030-41870>.
Springer Nature Switzerland AG 2020 A. E.-L Hesham et al. (eds.)
- 2018 Gene action and combining ability of cellular thermotolerance in bread wheat (*Triticum aestivum* L.)
MA El-Rawy, MI Hassan, MF Omran, **M.M. El-Defrawy**
Plant Breeding and Biotechnology 6 (3), 206-220
- 2016 Phenotypic selection and bulked segregant analysis for flag leaf angle under heat stress in bread wheat (*Triticum aestivum* L.)
MI Hassan, MA El-Rawy, AM Ali, **M.M. El-Defrawy**
Assiut J. Agric. Sci 47 (5), 56-71
- 2010 **M.M. El-Defrawy**; Saleh F.M.; Poczai P.; Youssef M.; Hassan M.I
... A Practical Course in Principles of Molecular Biology , Faculty of ,
...Online courses, http://www.aun.edu.eg/faculty_agricultur
- 2006 Genetic variability at the b-Mating type locus in *Ustilago maydis* in Egypt and its molecular identification
F.M. Saleh, **M.M. El-Defrawy**, Abdou, R.F., and A.F. Mohammed
Assiut J. Agric. Sci. 37 (3), 153-171
- 2006 Impact of Selection for Stomata Frequency on Yield Characteristics under Heat and Drought Stresses in Bread Wheat (*Triticum aestivum* L)
M.M. El-Defrawy
Assiut . Agric. Sci 37 (4), 1-23
- 2006 Implications of Selection for Leaf Area Index under Different Moisture stress) Conditions on Yield in Corn (*Zea mays* L
MM El-Defrawy, Tahany H. I. Sherif, SESEMH Ahmad
Assiut . Agric. Sci 37 (No. 2), 247-262
- 2006 Quantitative trait loci analysis for Grain Protein Percentage in Durum Wheat (*Triticum turgidum* L. var. *durum*) durum
MK Omara, MY Hussein, **M.M. El- Defrawy**, MIM Hassan
Assiut Journal of Agricultural Science 37 (4), 25-35
- 2005 Intra- and interrelationships between *Medicago sativa* and *Trifolium alexandrinum* as revealed by molecular markers
EN Elsayed, MM Hashad, **MM El-Defrawy**, AST H.M. El-Aref
Assiut J. Agric. Sci 36 (3), 13-26

- 2005 Molecular analysis of wheat lines selected for stress tolerance
MM Hashad, EN Elsayed, **M.M. El-Defrawy**, ASTHM El-Aref
Assiut. Agric. Sci 36 (1), 125-139
- 2004 Genetic control of preanthesis attributes of wheat plant and their associations
with yield under heat stress
MK Omara, **M.M. El-Defrawy**, AMTAAF Kassem
Assiut J. Agric. Sci 35 (4), 97-115
- 2004 Molecular polymorphism in Egyptian cotton (*Gossypium barbadense L*)
M.M. El-Defrawy, MMHEN Elsayed
Assiut J. Agric. Sci 35 (4), 83-95
- 2004 Selection for earliness in Egyptian cotton *Gossypium barbadense L*
M.M. El-Defrawy and T.M.E. Ameen
Assiut J. Agric. Sci 35 (2), 95-108
- 2002 Sister chromatid exchange as a biomarker for mutagenicity of 17 α
methyltestosterone used for sex reversal induction in Nile Tilapia
NT Hamdoon, **M.M. El-Defrawy**, MYH, M. H. Hashem
The 3rd Scientific Conference of Agricultural Science 1, 497-509
- 2002 Variation in total soluble protein patterns and isozyme activities in Nile Tilapia
following treatment with 17 α -methyltestosterone for male sex reversal
NT Hamdoon, **M.M. El-Defrawy**, MHH and MY Hussein
Proceedings of the 3rd Scientific Conference of Agricultural Sciences 1, 497-
509
- 1995 Genetic analysis of stability and control of variation in Egyptian cotton
(*Gossypium barbadense L.*): II- Fiber fineness and strength
MK Omara, **M.M. El-Defrawy**, TMEA H.Y. Awad
Assiut J. Agric. Sci 26 (1)
- 1995 Genetic analysis of stability and control of variation in Egyptian cotton
(*Gossypium barbadense L.*): I- Yield characters
MK Omara, **M.M. El-Defrawy**, TMEA H.Y. Awad
Assiut J. Agric. Sci 26 (1)
- 1994 Effect of genotype, moisture stress and stability analysis on grain yield and
some quality traits in wheat
M.M. El-Defrawy, Kheiralla, K.A, and R.A. Dawood
Assiut J. of Agric. Sci 25 (1), 341-360
- 1994 Inheritance and selection for early heading in wheat under water stress and
non-stress conditions
M.M. El-Defrawy Kheiralla, K.A
Assiut J. Agric. Sci 25 (5)
- 1994 Stability of faba bean genotypes in Egypt

- M.M. El-Defrawy**, R.A. Dawood, K.A. Kheiralla
Assiut J. Agric. Sci 25 (2), 93-114
- 1994 Effect of genotype, moisture stress and stability analyses on grain yield and some quality traits in wheat
- M.M. El-Defrawy**, R.A. Dawood and K.A. Kheiralla
Assiut J. Agric. Sci 25 (1), 341-360
- 1993 Genetic analysis of grain yield, biomass and harvest index in wheat under drought stress and normal moisture condition
- KA Kheiralla, Tahany H. I. Sherif and **M.M. El-Defrawy**
Assiut J. Agric. Sci 24 (3), 164-184
- 1993 Inheritance of some macro- and microelement concentrations in flag leaves of spring wheat grown in sandy calcareous and clay loam soils
- M.M. El-Defrawy**, K.A. Kheiralla and H.M. Ragheb
XXIII Annual Scientific Meeting of the Egyptian Society of Genetics
- 1993 Inheritance of heading date and some quantitative characters in *Triticum aestivum* grown under sandy calcareous and clay loam soils
- Farash, E, KA Kheiralla, **M.M. El-Defrawy**, and HM Ragheb
XXIII Annual Scientific Meeting of the Egyptian Society
- 1993 Genetic control of heading date and other quantitative character in *Triticum aestivum* L. under favorable and stressed conditions
- HM Ragheb, El-Farash, E.M., K.A. Kheiralla, and **M.M. El-Defrawy**
X X I I I Annual Scientific Meeting of the Egyptian Society of Genetics
- 1987 Effects of two sibling species of *Drosophila* on the outcome of competition between different yeasts
- MM El-Helw, M.R., Abdallah, H.I., Saleh, F., **M.M. El-Defrawy**
Assiut J. Agric. Sci 18, 187-198
- 1987 Effects of *Drosophila melanogaster* and *D. simulans* on migration and dispersal of three different genera of yeast
- MM El-Helw, M.R., Abdallah, H.I., Saleh, F., **M.M. El-Defrawy**
Assiut J. Agric. Sci 18, 175- 186
- 1987 Effect of *Saccharomyces*, *Rhodotorula*, and *Pichia* genera of yeast on migration activity of two sibling species of *Drosophila*
- MM El-Helw, M.R., Abdallah, H.I., Saleh, F. and **M.M. El-Defrawy**
Assiut J. Agric. Sci 18, 165-174
- 1979 Effects of two genera of yeast on the response to selection for body size in *Drosophila melanogaster*
- A.M.M. Kishin, El-Helw, M.R., El-Zawahry, **M.M. El-Defrawy**
Assiut J. Sgric. Sci 10, 73-83
- 1979 Interaction between genotypes of *Drosophila* and genera of yeast

Please refer to google scholar site for the number of citations

Contributions:

-A six months scientific mission (Sabbatical leave) at the Botany departement, University of California at Riverside UCR, USA 1998-1999.

- Outstanding contribution as a Speaker at the International EG-IT Workshop “Mediterranean Cooperation on Plant protection” 6-9 May 2009, Bari University, Bari Italy.

-Initiated the Biotechnology Laboratory in the Genetics department.

-Coordinated two successful Training courses on “The Principles of Molecular Biology” in the Biotechnology Lab. at the Genetics department.

Supervision:

Currently I am the principle supervisor in the supervising committee for the the following M.Sc. post graduate students:

-Ayat Salah Abd Allal Mohamed. M.Sc. Thesis intitled “Genetic analysis of grain yield components in wheat under heat stress condition”.

-Mostafa Abdalrhman Helmy M.Sc. Thesis intitled "Genome-wide association study for wheat yield traits under drought stress condition".

-Youssef Ezz-Elden Eissa M.Sc. Thesis intitled "Identification of candidate genes associated with drought tolerance in Faba beans using genome-wide association mapping".