Rasha Ezzat Mahdy

Prof. of Plant Breeding (Agronomy)
International Reviewer

Education

1- **Professor of Plant Breeding, Assiut University, 2023.**
2- **Associate Prof. of Plant Breeding, Assiut University, 2018.**
3- **Ph.D. in Agricultural Sciences on September 2012, Agronomy (Plant breeding). Worked as an Assistant Professor at Faculty of Agriculture, Assiut University, Assiut, Egypt.**
4- **M.Sc. in Agriculture science on December 2007, Agronomy (Plant breeding). Worked as Assistant Lecturer at Faculty of Agriculture, Assiut University, Assiut, Egypt.**
5- **B.Sc. in Agronomy, 2004, Department of Agronomy, Faculty of Agriculture, Assiut University, Assiut, Egypt B.Sc., with general grade excellent with honor.**

Experience

(2018) Earned a post-doctoral fellow ship to United States of America to practice and learn new Molecular and Biotechnology techniques specially Nobel prize awarded "CRISPR cas-9Technique" at Texas A&M University Agri life- CENTAQ labs.

(2013-2014) Having a post-doctoral scholarship in Yucatan, México at UADY university, studying the fodder Leucaena plants.

Professional Skills:

- **Teaching Agronomy, Breeding courses** in the department as **Statistics** for undergraduate students of faculties of Agriculture, Science and Veterinary.
- **Participating in the Quality Assurance and Accreditation work for under and post graduates.**
- **Supervising** of Master/PhD thesis.
- Conducting **seminars**, discussion groups, to enrich lectures with more life sciences.
- Assisting undergraduate students through summer practical training course.

Contact

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- **Review Editor with** Frontiers in Plant Science Journal **(Q1-6.627 IF), Frontiers**
- **Reviewer with** Cereal Research Communications Journal (**1.2 IF**), **Springer**
- **Mentee within Editorial Team** of CABI Agriculture and Biosciences CABI (A&G) journal, Plant Science & Breeding section **(Q1-3.9 IF)**, **BMC**
- **Invited reviewer** in:
  Agriculture journal **(Q2-3.49 IF), MDPI**
  Sustainability journal **(3.889 IF), MDPI**
  Agronomy journal **(3.949 IF, Q1 Agronomy), MDPI**
  International Journal of Molecular sciences **(6.208 IF), MDPI**
  Applied sciences Journal **(Q2-2.8 IF)**, **MDPI**

Analytical Skills:

- **Experience with CRISPR cas-9 technique.**
- **Performing PCR reactions.**
- **Experience with gene gun.**
- **Experience with Tissue Culture in Rice.**

Research Area and Interests:

Mainly a Wheat Breeder (Master and PhD on Wheat Breeding) beside working with other crops like Cotton, Sesame, Faba beans, Leucaena and Millet.

Worked with Conventional Plant Breeding methods and techniques on Wheat, moreover trained on molecular Biology techniques in AgriLife Labs of Texas A&M university for Six months on the Biggest Wheat Project in United States.

Training:

Passed many training courses **(30)** helping on my branch as a staff Member in Assiut University at FLDP under different titles including:

- **Skills of effective teaching.**
- **Recent trends in education.**
- **Thinking skills.**
- **Legal and financial aspects in university environment.**

Got training courses at **Texas A&M University** entitled:

- **Information Security Awareness**
- **Ethics**

- **Creating a Discrimination Free Work Place**
- **Reporting Fraud, Waste and Abuse**
- **Introduction to NGS RadSeq/GBS course**
- **NGS assembly course**

Languages:

Arabic- Mother tongue.
English- High proficiency and fluency level.
Spanish- Moderate level.

Some Publications:

Comparison of Desired-Genetic-Gain Selection Indices in Late Generations as an Insight on Superior-Family Formation in Bread Wheat (Triticum aestivum L.). Agronomy 2022, 12(8):1738
DOI: 10.3390/agronomy12081738

Direct and Indirect Selection for Grain Yield and Grain Weight in Late Generations of Bread Wheat under Drought Stress and Normal Irrigation Environments. Plants **2022**, 11(12), 1604; **https://doi.org/10.3390/plants11121604**

Improving Sesame (Sesamum indicum L.) Seed Yield through Selection under Infection of Fusarium oxysporum f. sp. sesame. Plants **2022**, 11(12), 1538; **https://doi.org/10.3390/plants11121538**

Changes in Carbon and Nitrogen Metabolites before, at, and after Anthesis for Wheat Cultivars in Response to Reduced Soil Water and Zinc Foliar Application. Plants **2022**, 11(9), 1261; **https://doi.org/10.3390/plants11091261**

Disease severity and correlation study for eight sesame cultivars undergoing Fusarium wilt and charcoal rot resistance screening Article 8, Volume 4, Issue 2, April 2022, Page 84-95
DOI: 10.21608/SVUIJAS.2022.126619.1195

Selection in two segregating populations of sesame under artificial infection of Macrophomina phaseolina (Tassi) Goid. SVU-International Journal of Agricultural Sciences. Article 18, Volume 3, Issue 4, Autumn 2021, Page 214-224.
DOI:10.21608/svuijas.2021.102222.1148

Multiple traits selection in bread wheat under drought stress and normal irrigation. SVU-International Journal of Agricultural Sciences Article 8, Volume 2, Issue 2, Summer and Autumn 2020, Page 104-119
DOI: 10.21608/svuijas.2020.38504.1022

Pedigree Selection to Improve the Seed Yield in Two Segregating Populations of Faba Bean (Vicia faba L.). Assiut J. Agric. Sci., (49) No. (2) 2018(15-37)

Nature of Gene Action in the Inheritance of Earliness, Grain Yield and Related Traits in Diallel Crosses of Bread Wheat under Drought Stress and Normal Irrigation., Egyptian Journal of Plant Breeding 2017,21(3):637-659, DOI: 10.12816/0046355

Efficacy of Selection for Grain Yield in the F2 and F4 Generations in Bread Wheat under Irrigation and Drought Conditions. Egyptian Journal of Plant Breeding 2017,21(4):825-842
DOI: 10.12816/0046462

Genetic analysis of seed cotton yield and its components of egyptian cotton under early and late planting conditions. Egyptian Journal of Plant Breeding. 2017, platform.almanhal.com

Estimation of Genetic Parameters for Lint Yield and Earliness of Egyptian Cotton under Early and Late Plantings. Egyptian Journal of Plant Breeding. 2017, 21(2):363-381 DOI: 10.12816/0046432

Selection for days to heading under normal irrigation and drought stress conditions with monitoring taelf3 gene expression in bread wheat. Egyptian Journal of Plant Breeding,2017, 22(1)

Heterosis and genetic parameters in grain sorghum under irrigation and drought stress environments, Egypt. J. Plant Breed.2016, 20(3):561 – 580

Tannins and mimosine in Leucaena genotypes and their relations to Leucaena resistance against Leucaena Psyllid and Onion thrips February 2016Agroforestry Systems 91(1)
DOI: 10.1007/s10457-016-9907-1