KINGDOM OF SAUDI ARABIA
Ministry of Education
KING ABDULAZIZ UNIVERSITY

CV for Research group member Prof. Magdi A. A. Mousa

Professor
Department of Arid Land Agriculture
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EDUCATION

- B.Sc. 1993, Agriculture Science (Major Horticulture/Vegetables), Assiut
- Univ., Egypt.
- M.Sc. 1998, Vegetable Breeding, Assiut Univ., Egypt.
- Ph.D. 2004, Molecular Genetics, a joint Ph.D. program between Assiut Univ. and the Federal Center for Breeding Research in Cultivated Plants (recently named JKI), Germany

CURRENT PROFESSIONAL POSITION

Professor of Horticulture physiology&biotechnology, College of meteorology, Environment and Arid Land Agriculture, King Abdulaziz University, Saudi Arabia

RESEARCH EXPERIENCE

1. Experimental design and statistical analyses
2. Writing proposals, papers, theses and academic reports
3. Computer skills
4. Agriculture Technology
5. Plant Tissue Culture
6. Molecular Plant genetics

GRANTS AND FUNDING

1. 2006: SAID funded project in title: Agricultural Strategies For Enhancing Upper Egypt Framer Associations (Fas) Exportation Of Green Beans. Grant value 87.000 LE

2. 2012: The Deanship of Scientific Research (DSR), King Abdulaziz University, Jeddah, under grant No. (231 - 155 - 1432). "Double Haploid Homozygous Cabbage (Brassica oleracea var. capitata) Line(s) Derived From Anther Culture."
3. 2012: The Deanship of Scientific Research (DSR), King Abdulaziz University, Jeddah, under grant No. (229 - 155 - 1433). Project title "Towards Mapping Salinity Tolerance QTL(s) for Marker Assistant Selection (MAS) in Tomato "
4. 2012: The Deanship of Scientific Research (DSR), King Abdulaziz University, Jeddah, under grant No (4 –155– D1433). Project title "In Vitro Nodal Segments of four Adapted Saudi genotypes of jojoba (Simmondsia chinensis)"
5. 2013: King Abulaziz City for Science and Technology (KACST), grant no , (0154-11 أك) Project title "Effect of Climatic Change on Genome Stability: Molecular and Physological aspects"
6. 2013: The Deanship of Scientific Research (DSR), King Abdulaziz University, Jeddah, under grant No (5–155– D1433). Project title: "Control of Doubling and Early Bolting Bulbs of Onion Genotypes by Sizes of Sets and Irrigation Systems."

COLLABORATIVE RESEARCH WITH KAUST

1. Superhydrophobic Sand Mulches to Reduce Water Demand and Increase Productivity in Desert Agriculture. Prof. Himanshu Mishra, King Abdullah University of Science and Technology, 2Water Desalination and Reuse Center, 3Division of Biological and Environmental Sciences and Engineering, Thuwal 23955 - 6900 Saudi Arabia.
2. Genetic approaches to discover novel components of salinity tolerance in the wild tomato, Solanum pimpinellifolium. Prof. Mark Tester, Professor, Plant Science, Biological and Environmental Science and Engineering Division, King Abdullah University of Science and Technology, Thuwal 23955 - 6900 Saudi Arabia.
3. Identifying the genetic basis for salinity and heat tolerance in quinoa using drone-based sensing technologies. Prof. Mark Tester, Prof. Professor, Plant Science, Biological and Environmental Science and Engineering Division, King Abdullah University of Science and Technology, Thuwal 23955 - 6900 Saudi Arabia.
4. Prof. Matt MacCabe, King Abdullah University of Science and Technology, 2Water Desalination and Reuse Center, 3Division of Biological and Environmental Sciences and Engineering, Thuwal 23955 - 6900 Saudi Arabia
5. Field Trials of Superhydrophobic Sand Mulching for Crops and Trees Towards Higher Irrigation Efficiencies in the Middle East. Prof. Himanshu Mishra, King Abdullah University of Science and Technology, 2Water Desalination and Reuse Center, 3Division of Biological and Environmental Sciences and Engineering, Thuwal 23955 - 6900 Saudi Arabia.

6. Evaluate the performance of 160 Fonio accessions and for first time under western region climates of Saudi Arabia. Prof Simon G. Krattinger, Plant Science, Biological and Environmental Science and Engineering Division, King Abdullah University of Science and Technology, Thuwal 23955 - 6900 Saudi Arabia

CONTRIBUTION TO THE SCIENTIFIC

1. Editor
   a. Gene Technology
   b. Bioinformatics publication
   c. Journal of Crop Science
2. Reviewer
   a. International Journal of Genetic Engineering, Scientific and Academic Publishing
   b. Australian Crop Science Journal
   c. Pakistan Journal of Science
   d. International Journal of Agriculture Science
   e. African Journal of Microbiology Research
   f. The International Journal of Agricultural Research (IJAPR)

CONTRIBUTION TO SCIENTIFIC ORGANIZATIONS

1. Member of the Egyptian Society of Plant Breeding since April 2004
2. Member of the Assiut Journal of Agricultural Science since May 2004
3. Member of the Egyptian society of Genetic Engineering since 2003 until now
4. Member of the AERI institutional linkage project which is a cooperative project between the Agriculture colleges of Egyptian Universities and the Midwest Universities Consortium for International Activities (MUCIA) and University of Illinois (USA).

PUBLISHED BOOKS AND CHAPTERS

Genome Mapping of Radish (Raphanus Sativus L.) Using PCR-Based Markers: Constructing Radish (Raphanus Sativus L.) Genetic Map Unsing RAPD and AFLP Markers. LAP Lambert Academic Publishing (2012-07-11) pp 76.

SELECTED PUBLICATION

1. Aboul-Naser, M.H. and M.A. Ahmed.2000. in vitro anther culture of cucumber (Cucumis sativus L.). Horti Sci 35 (3): Abst 491. (Q3)
2. Mohamed, F.M., M. H. Dokashi, M.A.A. Mousa and E.F.E Elnobi.2007. Yield of crops in within-row intercropping okra-cowpea or okra-cucumber. Inter. J. Veg. Sci., 13(2): 33-48. (Q3).
3. H. Budahn, H. Peterka, M.A.A. Mousa, Y.H. Ding, S.S. Zhang and J.B. Li.2009. Molecular mapping in oil radish (Raphanus sativus L.) and QTL analysis of resistance against beet cyst nematode (Heterodera schachtii). Theor Appl Genet., 118: 775-782. (Q1)
4. Yaser, A. A. D., M. A. A. Mousa , D. F. Warnock , and D. E. Hahn. 2009. Opportunities for Producing Table Grapes in Egypt for the Export Market: A Decision Case Study. International Food and Agribusiness Management Review,12 (2), 57-71. (Q2)
5. Magdi, A.A. M; H. Abbas and A.G. Haredy.2012. Row configuration on Yield and Economics of Okra Intercropped with Eggplant. Int.J.Veg.Sci. vol18(4): 358-369 (Q3).
6. Magdi A.A. M., Al-Qurashi AA and Bakhashwain A. A. S. 2013. Response of tomato genotypes at early growing stages to irrigation water salinity. JFAE Vol 11. (2) – 132-138. (Q3)
7. Magdi A.A.Mousa, Hassan. Abbas, Ashraf. G. Haredy and Mohammed F. Mohammed. 2013. Improved Androgenesis of Broccoli (Brassica Oleracia var Italica) Anthers Using Sucrose and Growth regulators. Asian Journal of Crop Science, 6(1): 1-9. (Q4)
8. Magdi A.A. M. and Bakhashwain A. A. S.2014. Genotypic and Growth Regulator Combination Effects on in vitro Nodal Segments of Jojoba (Simmondsia chinensis (Link). The life Science Journal, Vol 11(4):37-42 (Q4 .(
9. Saleh M. Ismail and Magdi A.A.Mousa. 2015. Optimizing Tomato Productivity and Water Use Efficiency Using Water Regimes, Plant Density and Row Spacing Under Arid Land Conditions. Irrigation and Darning, 63: 640-650. (Q2).
10. .Magdi A.A.Mousa . 2015.Control of Doubling and Early Bolting Bulbsof Onion Genotypes by Sizes of Sets and Irrigation Systems.2015. The life Science Journal, Vol 1(1) 61-74. (Q4)
11. Sayed Sartaj Sohrab, Muhammad Yasi, Sherif Ali El-Kafrawy, Hassan S.M. Al-Zahrani, Magdi Ali Ahmed Mousa, Ahmed A. Bakhashwain. 2016. Phylogenetic relationships, recombination analysis and genetic variability of Tomato yellow leaf curl virus infecting tomato in Jeddah, Saudi Arabia. Plant Omics Journal, 9(1):90-98 (Q3)..
12. Sayed Sartaj Sohrab, Ayman T. Abbas, Muhammad Yasir, Magdi Ali Ahmed Mousa, Sherif Ali El-Kafrawy, Ahmed A. Bakhashwain. 2016. Association of tomato leaf curl Sudan virus with leaf curl disease of tomato in Jeddah, Saudi Arabia. Virus Diseases, 27(2): 145-153 (Q3).
13. Magdi A.A. Mousa and Adel D. Al Qurashi. 2018. Growth and yield of cowpea (Vigna unguiculata L.) cultivars under water Deficit at different growth stages. Legume Research. DOI: 10.18805/LR-384 (Q2)

14. Kasper Johansen, Mitchell J. Morton, Yoann M. Malbeteau, Bruno Aragon, Samir K. Al-Mashharawi, Matteo G. Ziliani, Yoseline Angel, Gabriele M. Fiene, Sónia S. Negrão, Magdi A. A. Mousa, Mark A. Tester and Matthew F. McCabe. 2019. Unmanned Aerial Vehicle-based Phenotyping using Morphometric and Spectral Analysis can Quantify Responses of Wild Tomato Plants to Salinity Stress . Front. Plant Sci. | doi: 10.3389/fpls.2019.00370 (Q1) .

15. Kasper Johansen, Mitchell J. Morton, Yoann M. Malbeteau, Bruno Aragon, Samir K. Al-Mashharawi, Matteo G. Ziliani, Yoseline Angel, Gabriele M. Fiene, Sónia S. Negrão, Magdi A. A. Mousa, Mark A. Tester and Matthew F. McCabe. 2020. Predicting Biomass And Yield At Harvest Of Salt-Stressed Tomato Plants Using UAV Imagery. ISPRS, 42: 407-411 (Q1).

16. .Kasper Johansen, Mitchell J. Morton, Yoann M. Malbeteau, Bruno Aragon, Samir K. Al-Mashharawi, Matteo G. Ziliani, Yoseline Angel, Gabriele M. Fiene, Sónia S. Negrão, Magdi A. A.Mousa, Mark A. Tester and Matthew F. McCabe.. 2020. Predicting Biomass and Yield in a Tomato Phenotyping Experiment using UAV Imagery and Machine Learning. Front. Artif. Intell. | doi: 10.3389/frai.2020.00028 (Q1) .

17. Adair Gallo Jr., Kennedy Odokonyero, Magdi A. A. Mousa, Joel Reihmer, Samir Al-Mashharawi, Ramona Marasco4, Mitchell J. L. Morton, Daniele Daffonchio, Matthew F. McCabe, Mark Tester, Himanshu Mishra. 2020. Superhydrophobic Sand Mulches Increase Agricultural Productivity in Arid Regions. Science (Q1; submitted)

18. Bahget Talat Hamooh, Farooq Abdulsatar, Gordon Wellman, Magdi Ali Ahmed Mousa (2021) Metabolomic and Biochemical Analysis of Two Potato (Solanum tuberosum L.) Cultivars Exposed to In Vitro Osmotic and Salt Stresses. Plants, 10(1): 1-14. (Q1)

19. Md Sarowar Alam, Magdi Ali Ahmed Mousa and Mark A Tester. (2021) Early growth stage characterization of biochemical responses of salinity tolerance in tomato. Plants (Under submission, Q1) .