

# **CURRICULUM VITAE**

### 1. Basic Information

Name: Hala Abdel Wahab	National ID: 27508168800229	
Date of Birth: 16/8/1975	Place of Birth: Tripoli, Libya	
Affiliation: Plant Pathology Department	ORCID: 0000-0002-3407-3254	
Field of Specialization: Molecular plant pathology	Title: Prof. Dr.	
E-mail: hala_abdelwahab@agr.asu.edu.eg	Mobile Number: (+20) 112-555-1100	
Citations: 154 (ResearchGate) - 196 (Google Scholar)	<i>h</i> index = 7	
Current Position: Professor & Head of Plant Pathology Department / Molecular Diagnostic of Plant Diseases Lab.		

### 2. Education

University / Institut	Degree	Dates (From-to)
Université Paris - Sud (Paris XI), Orsay Ville, France.	Ph.D. "The Transposons of <i>Fusarium oxysporum</i> : New Tools for Functional Genome Analysis"	2001 - 2006
Institut National des Sciences Appliquées de Toulouse (INSAT), France.	Post graduate diploma (D.R.U.) «Genetic Variability of the Tolerance of Sunflower Against <i>Phoma macdonaldii</i> »	2000 - 2001
Plant Pathology Department, Faculty of Agriculture, Ain Shams University, Egypt.	B.Sc. Agricultural Sciences - Plant Pathology	1993 - 1997

## 3. Training

Training attended / Technical skills	Place	Dates
<ul> <li>Molecular Biology Module (MB1): Theoretical courses &amp; Practical training.</li> <li>Microscopy (Optical M, TEM, SEM, Confocal &amp; Fluorescence M).</li> <li>DNA, RNA, and Protein Isolation from different biological sources.</li> <li>Plasmid Isolation and Vector Construction using Restriction Enzymes, Ligation, etc.</li> <li>Fungal and Bacterial Transformation.</li> <li>PCR, IPCR, Nested PCR, QPCR.</li> <li>Southern, Northern, and Western blotting.</li> <li>Gene Isolation &amp; Identification.</li> <li>Fluorescence Differential Display.</li> <li>DNA/Protein Analysis, Blot Hybridization, Gene Cloning / Sequencing &amp; Data Analysis.</li> <li>Plant Disease Biocontrol.</li> <li>Artificial Inoculation of Pathogens, Isolation, Purification and Conservation.</li> <li>Morphological / Cultural / Physiological / Hyperspectral Characterization of Pathogens.</li> <li>Statistical &amp; Bioinformatic Analyses.</li> </ul>	<ul> <li>Institut National des Sciences Appliquées de Toulouse (INSAT), France.</li> <li>Université Paris - Sud (Paris XI), Orsay Ville, France.</li> <li>Molecular Diagnostic of plant Diseases Lab., Ain Shams University, Cairo, Egypt.</li> </ul>	2000 - 2019

# 4. Employment History

Employer	Position	Dates
Plant Pathology Department, Faculty of Agriculture, Ain Shams University, Cairo, Egypt.	Head of Plant Pathology Department	2021 - Current
	Professor	2020 - Current
	Associate professor	2013 - 2020
	Lecturer	2007 - 2013
	Teaching Assistant	1998 - 2000

# 5. Posters, Presentations, Conferences & Workshops

Activity	Place	Date
<ul> <li>European Conference: Molecular Genetics of Fungal Genome.</li> </ul>	Copenhagen, Denmark.	2004
• French Conference: The Transposons of <i>Fusarium oxysporum</i> .	IGM - Institut de génétique et microbiologie, Orsay ville, France.	2004
<ul> <li>Oral presentation: Fungal Transposable Elements.</li> </ul>	Tour, France.	2004
• Conference: Research on Development Strategy for Agricultural Applications.	Ain Shams University, Cairo, Egypt.	2007
<ul> <li>Workshop: Course Specification and Education Quality Performance.</li> </ul>	Faculty of Agriculture, Ain Shams University, Cairo, Egypt.	2008
<ul> <li>Conference: Biocontrol and its Role in the Production of Safety Food.</li> </ul>	National Research Center, Giza, Egypt.	2009
<ul> <li>Workshop: Quality Standards in Teaching Process.</li> </ul>	Faculty of Agriculture, Ain Shams University, Cairo, Egypt.	2009
• Workshop: How to Use the Digital Library.	Supreme Council of Universities, Cairo, Egypt.	2010
• Conference: The First Step of the Effect of the Agronomic Guide.	Faculty of Agriculture, Ain Shams University, Cairo, Egypt.	2010
Conference: Education Systems in Japan.	Faculty of Agriculture, Ain Shams University, Cairo, Egypt.	2011
• The 12 <sup>th</sup> Congress of Phytopathology.	Cairo University, Giza, Egypt.	2012
Conference: European Projects (FP7).	Computers and Information Center, Cairo, Egypt.	2012
<ul> <li>Workshop: Dealing with Change, DAAD.</li> </ul>	Cairo academy, Egypt.	2012

<ul> <li>Workshop: Developing a Personality of Leadership, DAAD.</li> </ul>	Cairo Academy, Egypt.	2013
<ul> <li>Poster: Fungal Spectro-Signature.</li> </ul>	Innovation and Research Applications, Ministry of Scientific Research, Cairo, Egypt.	2013
<ul> <li>Poster: Presidential Meeting - British Society for Plant Pathology "Visions of Plant Disease Management in 2050".</li> </ul>	Aston Business School Conference Centre, University of Aston, Birmingham, UK.	2013
<ul> <li>e-poster: Biotechnology Congress</li> <li>"Biotechnology-Emerging Trends for a Sustainable Future".</li> </ul>	Orlando, Florida, USA.	2015
<ul> <li>Workshop: U.SEgypt S&amp;T Joint Fund Global Lab to Market Forum.</li> </ul>	Ramses Hilton, 1115 Corniche, Cairo.	2016
<ul> <li>Workshop: Remote Sensing Images and Their Applications</li> </ul>	German University in Cairo, GUC, Egypt.	2016
<ul> <li>Workshop: National Scientific, Economic, and Social Studies on Reclaiming and Developing 1,5 Million Feddans.</li> </ul>	Faculty of Agriculture, Ain Shams University, Cairo, Egypt.	2016
<ul> <li>Workshop: Bioinformatics and Functional Genomics.</li> </ul>	Faculty of Agriculture, Ain Shams University, Cairo, Egypt.	2018
• Workshop: Instructions of Course Registration for Under-Graduated Students.	Faculty of Agriculture, Ain Shams University, Cairo, Egypt.	2019
<ul> <li>Workshop: Climatic Changes and Their Relation to Plant Diseases.</li> </ul>	Egyptian Phytopathological Society.	2019
<ul> <li>Conference: Implication of the 4<sup>th</sup> &amp; 5<sup>th</sup> Industrial Revolutions: time to business.</li> </ul>	New Capital, Egypt.	2021
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#### 6. Professional Activities

- Participation in many theoretical and practical activities for graduate and postgraduate subjects such as exam preparation, course specification, course portfolio, exam/annual course reports & Supervision of theses and dissertations.
- Teaching Molecular biology & plant pathology courses for graduate and postgraduate students (Introduction in Biology, Molecular Application in Plant Diseases, Principals of Plant Pathology, General Plant Pathology, Disease Ecology, Epidemiology, Diseases of Field Crops, Diseases of Vegetable and Ornamental Plants, Turf Diseases, Diseases of Medicinal and Aromatic Plants, Diagnosis of Plant Diseases, Molecular Plant Pathology, Rust and Smut Diseases, Methodology of Scientific Writing).
- Responsible of summer training for undergraduate students, such as principals of pathogen detection and molecular diagnostic of plant diseases.

#### 7. Research and Development Projects

- [2011 2014 Principal Investigator (PI), Science and Technology Development Fund (STDF), Cairo, Egypt]
- [2016 2018 Principal Investigator (PI), Academy of Scientific Research and Technology (ASRT), Cairo, Egypt]
- [2020 2022 Principal Investigator (PI), Science and Technology Development Fund (STDF), Cairo, Egypt]

#### 8. Patents

- no. 2012091520 (2016).
- no. 2012091521 (2012).

#### 9. Finance and Infrastructure Establishment

Establishment & Equipement of laboratory "Molecular Diagnostic of Plant Diseases", Plant Pathology Department, Faculty of Agriculture, Ain Shams University, Cairo, Egypt.

#### **10. Field of Interest**

Research Design, Innovation Development, Project Planning & Management, Succession Planning, Scientific Writing & Publication, Laboratory Safety, Bioinformatics, Team Leadership & Supervisory, and Practical Skills:

- Microscopy (Light M, TEM, SEM, Confocal & Fluorescence M).
- Patentability.
- Genomic Analysis.
- Biotechnology.

#### **11. Additional Information**

- Reviewer of many international scientific papers.
- Editorial board member of twelve international journals: Journal of Mycology, Advances in Agricultural Technology & Plant Sciences (AATPS), Journal of Microbiology and Genetics, Acta Scientific Microbiology (ASMI), Journal of Microbiology and Laboratory Science (JMLS), Current Trends in Pharmacology and Clinical Trials (CTPCT), International Research Journal of Biological Sciences, Global Journal of Molecular Biology, International Journal of Genetics and Genomics and Laboratory, Journal of Phytopathology and Pest Management, International Journal of Agriculture and Environmental Research, International Journal of Phytopathology.
- Responsible of course registration for under-graduated students.
- Participation in course specification.
- Bioinformatics applications; alignment of DNA and protein sequences, primer design, gene annotation, DNA, and protein analysis.
- Support financial reporting, budget preparation and ensuring the laboratory is on target to meet performance and operational goals.

#### **12.** Publications

- Abd EL-Ghafar, N. Y. and **Abdel Wahab, H.** (2001). Bacterial spot of tomato in Egypt and its control. *Egyptian Journal of Applied Sci*ence. 16: 13-29.
- Dufresne, M., Hua-Van, A., **Abdel Wahab, H.**, Ben M'Barek, S., Vasnier, C., Teysset, L., Kema, G.H.J. and Daboussi, M.J. (2007). Transposition of a fungal MITE through the action of a Tc1-like transposase. *Genetics*. 175: 441-452.
- Lopez-Berges, M.S., Di Pietro, A., Daboussi, M.J., **Abdel Wahab, H.**, Vasnier, C., Roncero, I.G., Dufresne, M. and Hera, C. (2009). Identification of virulence genes in *Fusarium oxysporum* f. sp. *lycopersici* by large-scale transposon tagging. *Molecular Plant Pathology*. 10: 95-107.
- **Abdel Wahab, H.**, Aly, N.A.H. and Ali, M.K. (2010). Improving detection means for strawberry gray mold caused by *Botrytis cinerea* in Egypt. *Egyptian Journal of Phytopathology*. 38: 107-119.
- Abdel Wahab, H. and Balabel, N. (2011). Detection and molecular characterization of *Ralstonia* solanacearum race 3 biovar2 isolates, using insertion sequence (*IS*) analysis in Egypt.
   *Egyptian Journal of Phytopathology*. 39: 154-168.
- **Abdel Wahab, H.** and Younis, R. (2012). Early detection of gray mold in grape using conventional and molecular methods. *African journal of biotechnology.* 86: 15251-15257.
- Abdel Wahab, H. and Helal, N.A.S. (2013). Evaluation of pre-harvest bioagent applications for both production and biological control of onion and strawberry plants under natural *Botrytis* infections. *African journal of plant science and biotechnology*. 7: 64-69.
- Aboelghar, M. and **Abdel Wahab, H.** (2013). Spectral footprint of *Botrytis cinerea*, a novel way for fungal characterization. *Advances in Bioscience and Biotechnology*. 4: 374-382.
- Abdel Wahab, H. (2015). Characterization of Egyptian *Botrytis cinerea* isolates from different host plants. *Advances in Microbiology*. 5: 177-189.

- **Abdel Wahab, H.**, Aboelghar, M., Ali, A.M. and Yones, M. (2017). Spectral and molecular studies on gray mold in strawberry. *Asian Journal of Plant Pathology*.11: 167-173.
- Aboelghar, M., Moustafa M. S., Ali A.M. and **Abdel Wahab**, **H**. (2019). Hyperspectral analysis of *Botrytis cinerea* infected lettuce. International Journal of Agriculture and Environmental Research. 5: 26-40.
- Wagih, E. E., **Abdel Wahab, H.**, Shehata, M.R.A., Fahmy, M.M. and Gaber, M. (2019). Molecular and pathological variability associated with transposable elements of *Botrytis cinerea* isolates infecting grape and strawberry in Egypt. *International Journal of Phytopathol*ogy. 8: 37-51.
- Gaber, M., Wagih, E.E., Shehata, M.R.A., Fahmy, M.M. and **Abdel Wahab, H.** (2019). Detection and characterization of *Botrytis cinerea* isolates from vegetable crops in Egypt. *International Journal of Phytopathology*. 8: 77-85.
- **Abdel Wahab, H.**, Wagih, E.E., Shehata, M.R.A., Fahmy, M.M. and Gaber, M. (2020). Studies on *Botrytis* spp. infected ornamental plants and emergence of resistant isolates against fenhexamid in Egypt. *Asian Journal of Plant Pathology*. 14: 1-10.
- **Abdel Wahab, H.**, Abdel-Sattar, W., Mawad, R. and Khalil, H.B. (2020). A spectral-based mathematical approach for identification of *Botrytis* and *Sclerotinia* species. *Bioscience Research*. 17: 479-488.
- Abdel Wahab, H., Malek, A., Ghobara, M.M. (2020). Effects of some plant extracts, bioagents, and organic compounds on *Botrytis* and *Sclerotinia* molds. *Acta Agrobotanica*. 73: 1-11.
- Abo-Zaid, A.H., Helmy, K.G., **Abdel Wahab, H.** and El-Samman, M.G. (2020). Purple blotch as seed-borne disease of onion and its control. *Arab Universities Journal of Agricultural Sciences*. 22: 1-9.