

Mohamed H. El-Habbak

Contact Information

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Education

Doctor of Philosophy, Plant Pathology	2013
University of Kentucky, Lexington, Kentucky, USA	
Master of Science, Plant Pathology	2003
Benha University, Moshtohor, Qaluobeya, Egypt	
Bachelor of Science, Plant Pathology	1997
Benha University, Moshtohor, Qaluobeya, Egypt	

Honors, Awards and Scholarships

Graduate Research Assistantship	Aug. 2010 - Mar. 2013
Awarded by <i>Plant Pathology Department, University of Kentucky.</i> In addition to stipend, the assistantship covers tuition costs and health insurance. Eligibility based on student's prior academic performance.	
International Student Tuition Scholarship	Academic 2010 / 2011
Awarded by <i>Office of International Affairs, University of Kentucky.</i> Eligibility for an international student who exhibits quality of character, academic merit and seriousness of purpose.	
Government Mission (GM) Scholarship	Aug. 2006 - July 2010
Awarded by <i>Ministry of State for Scientific Research Affairs, Egypt.</i> A highly competitive program that is focused on Egyptian students of high caliber to pursue their Ph.D. study in the United States in selected fields. GM sponsors the student for his study tuition, health insurance and living expenses for four academic years.	

Professional Career History

I. Research

Visiting Scholar	Sep. 2013 - June 2014
<i>Plant Pathology Department, University of Kentucky.</i>	
Post-Doctoral Scholar (full time)	Apr. 2013 - Aug. 2013
<i>Plant Pathology Department, University of Kentucky.</i>	

Graduate Research Assistant (min. 20h/wk)

Aug. 2010 - Mar. 2013

Plant Pathology Department, University of Kentucky.

II. Teaching

Lecturer (full time)

July 2014 - present

Plant Pathology Department

Faculty of Agriculture, Benha University, Qaluobeya, Egypt.

Invited Instructor

Fall semester 2013

College of Agriculture, University of Kentucky.

Guest instructor for lecture and lab of PPA 400G 'Principles of Plant Pathology'.

Assistant Lecturer of Plant Pathology (off duty)

July 2006 – June 2014

Faculty of Agriculture, Benha University, Qaluobeya, Egypt.

On 'unpaid leave of absence' for traveling abroad based upon my request and approval of the academic department.

Assistant Lecturer of Plant Pathology (full time)

June 2003 – July 2006

Faculty of Agriculture, Benha University, Qaluobeya, Egypt.

Instructor of Plant Pathology (full time)

Jan. 1998 – June 2003

Faculty of Agriculture, Benha University, Qaluobeya, Egypt.

III. Additional Academic and Administrative Positions

Coordinator, English 'Agricultural Biotechnology' 4 years-Bachelor's Program

Sep. 2014 - present

Faculty of Agriculture, Benha University, Qaluobeya, Egypt.

Expertise and Interests

I. Research

Plant genetic resistance; Reverse genetics, Functional genetics, Gene cloning, Gene silencing, Gene overexpression, VIGS, DNA sequencing, real time PCR, Western blotting, Northern blotting.

Biology of fungal pathogens; Isolation of fungal and bacterial plant pathogens, Molecular identification of fungi.

Host-pathogen interaction; Light and fluorescence microscopy, Developing lab, greenhouse and field bioassays for testing plant disease resistance and virulence of plant pathogens.

Mycovirus studies; dsRNA isolation and sequencing.

II. Teaching

Courses taught:

Undergraduate: 'Essential Microbiology - The Fungi', 'Basics of Plant Pathology', 'Taxonomy of Fungi', 'Physiology of Fungi', 'Diseases of Fruit Trees', 'Diseases of Vegetable and Ornamental

Plants', 'Diseases of Field Crops', 'Postharvest Diseases', 'Non-infectious Plant Diseases', 'Plant Disease Diagnostics'.

Graduate: 'Plant Disease Diagnostics', 'Plant Pathology and Biotechnology'.

Capable of teaching other courses related to classic and modern plant pathology, microbiology and molecular biology.

Publications

- Koloniuk I., **El-Habbak M. H.**, Petrzik K., Ghabrial S. A. 2014. Complete genome sequence of a novel hypovirus infecting *Phomopsis longicolla*. *Archives of Virology* (Published Online, DOI 10.1007/s00705-014-1992-8).
- Rao, S.S., **El-Habbak, M.H.**, Havens, W.M., Singh, A., Zheng, D., Vaughn, L., Haudenshield, J.S., Hartman, G.L., Korban, S.S. and Ghabrial, S. A. 2014. Overexpression of *GmCaM4* in soybean enhances resistance to pathogens and tolerance to salt stress. *Molecular Plant Pathology*. 15(2), 145-160. DOI: 10.1111/mpp.12075.
- Singh, A.K., Fu, D.Q., **El-Habbak, M.**, Navarre, D., Ghabrial S. and Kachroo, A. 2011. Silencing genes encoding omega-3 fatty acid desaturase alters seed size and accumulation of bean pod mottle virus in soybean. *Molecular Plant-Microbe Interactions*. 24(4): 506-515.
- El-Habbak, M. H.** 2013. Overexpression/silencing of selected soybean genes alters resistance to pathogens. Ph.D. Dissertation, Theses and Dissertations - *Plant Pathology, University of Kentucky*, pp. 154. http://uknowledge.uky.edu/plantpath_etds/8.
- Eisa, Nawal A., El-Fiki, A.I., Mohamed, F.G. and **El-Habbak, M.H.** 2006. Biochemical changes in squash leaves sprayed with some chemicals for inducing resistance to powdery mildew. The Second Conference of Farm Integrated Pest Management, *Fayoum University, Fayoum, Egypt*. 16-18 Jan. 2006, pp. 211-222.
- El-Habbak, M.H.** 2003. Induction of resistance to powdery mildew disease of squash plants. M.Sc. Thesis, *College of Agriculture, Banha University, Moshtohor, Egypt*.

Posters and Presentations at Professional Meetings

- Rao, S., **El-Habbak, M.** and Ghabrial, S. 2012. Use of virus-based vector for stable protein expression and gene function studies in soybean. The 8th Annual Kentucky Innovation and Entrepreneurship Conference (KIEC), June 1st, Louisville, Kentucky (Poster).
- Rao, S., **El-Habbak, M.**, Haudenshield, J., Hartman, G.L., Korban, S.S. and Ghabrial, S. A. 2011. Over-expression of the calmodulin gene *SCaM4* in soybean enhances resistance to *Phytophthora sojae*. APS Annual Meeting, August 7-11, Charlotte, North Carolina (Poster).
- Ghabrial, S., Rao, S., Singh, A. and **El-Habbak, M.** 2011. Use of virus- based vector for stable protein expression and gene function studies in soybean. The Joint 7th Annual Kentucky Innovation and Entrepreneurship Conference (KIEC) and the 16th Kentucky ESCoR Annual Conference, May 26th, Louisville, Kentucky (Poster).
- El-Habbak, M.H.**, Annamalai, P. and Ghabrial, S.A. 2009. A soybean leucine-rich repeat receptor-like kinase

regulates the response to infection with *Phytophthora sojae*. APS Annual Meeting, August 1-5, Portland, Oregon. *Phytopathology* 99:S32 (Abstract).

Memberships & Affiliations

Member, American Phytopathological Society

Member, Egyptian Phytopathological Society

Member, Gamma Sigma Delta

Social Involvement and Community Service

Member, University of Kentucky Alumni Association

Member, University of Kentucky Postdoctoral Association

Member, Association of Plant Pathology Scholars at University of Kentucky

Judge, Science Fair at Fayette County Public Schools for three consecutive years 2009 – 2011

References

Said Ghabrial, Emeritus Professor, Plant Pathology Department, University of Kentucky, *Phone:* (859) 257-5969, *E-mail address:* saghab00@email.uky.edu

Paul Vincelli, Professor, Plant Pathology Department, University of Kentucky, *Phone:* (859) 218-0722, *E-mail address:* pvincell@uky.edu

Aardra Kachroo, Associate Professor, Plant Pathology Department, University of Kentucky, *Phone:* (859) 218-1292, *E-mail address:* apkach2@uky.edu

John Hartman, Emeritus Professor, Plant Pathology Department, University of Kentucky, *E-mail address:* jhartman@uky.edu
