MOHAMED **MANNAA**

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SUMMARY

Research plant pathologist with over 8 years of laboratory and research experience as a graduate student at prestigious research institutions and member of the teaching staff at Cairo University. I've experienced research in three different countries, Egypt, Italy and South Korea; have accomplished success in several research projects, in different fields of plant pathology, microbiology, biocontrol, plant disease detection and diagnosis.

HIGHLIGHTS

- Experienced in Microbiological techniques
- Experienced in data analysis and experimental design
- Experienced in identification of plant and food associated microbes
- Skilled in data presentation
- Experienced in seeds associated fungi, mycotoxins and bacteria

ACHIEVEMENTS AND AWARDS

- Received the certificate of recognition from Cairo University "Student's Excellence Award" in 2008
- Rewarded CIHEAM scholarship for M.Sc in IAMB, Italy, 2009
- Rewarded as the best student from the Mediterranean Agronomic Institute of Bari, Italy in 2010
- Rewarded the best Master thesis award from the Mediterranean Agronomic Institute of Bari, Italy in 2011.
- Member of the editorial board in the Egyptian Journal of Phytopathology Journal from 2012 – present
- Rewarded the Korean Government scholarship for PhD at Korea University, 2013
- Rewarded best poster presentation, from the Korean society of plant pathology, 2015

EDUCATION & EXPERIENCE

09/2014 -present **PhD candidate**

Korea University - Seoul

Have successfully conducted and published several research articles in the field of plant disease diagnosis and detection and biological control. **Graduation date: 02/2018**

09/2009 to 07/2011 **Master of Science**

Mediterranean Agronomic Institute of Bari -Valenzano, Bari, Italy

Have experienced laboratory work and conducted research and theoretical study in the field of crop protection. Graduated Maxima cum Laude, have been rewarded as best student in 2010 and M.Sc thesis has been rewarded as best thesis for the year 2011

03/2009 **Teaching assistant**

Cairo University - Cairo, Egypt

Have prepared and demonstrated practical lessons of plant pathology classes; supervised biological technicians, and students' activities

2004 - 2008 **Bachelor of Science**: Agriculture
Faculty of Agriculture, Cairo University-Cairo Egypt
First Class Academic Achievement Award as Valedictorian

PUBLICATIONS

No	Title	Year	Journal	Role	Remarks
1	Influence of temperature and water Activity on deleterious fungi and mycotoxin production during grain storage	Accepted Nov. 2017	Mycobiology	First author	SCIE
2	Biocontrol activity of volatile-producing *Bacillus megaterium* and *Pseudomonas protegens* against *Aspergillus flavus* and aflatoxin production on stored rice grains	2017	Mycobiology 45(3): 213-219	First author	SCIE
3	Microbe-mediated control of *Aspergillus flavus* in stored rice grains with a focus on aflatoxin inhibition and biodegradation	2017	Annals of Applied Biology 171(3), 376-392.	First author	SCI
4	Control strategies for deleterious grain fungi and mycotoxin production from preharvest to postharvest stages of cereal crops: A Review	2017	Life Science and Natural Resources Research	First author	-
5	Microbe-mediated control of mycotoxigenic grain fungi in stored rice with focus on aflatoxin biodegradation and biosynthesis inhibition	2016	Mycobiology 2016, 44(2): 67-78	First author	SCIE
6	First report of *Aspergillus awamori* as a fungal pathogen of garlic *(Allium sativum* L.).	2016	Crop Protection 2016, 85:65-70	Co-First author	SCI
7	First Report of Dry Rot of Sweetpotato (*Ipomoea batatas*) Caused by *Diaporthe batatas* in Korea.	2016	Plant Disease 2016, 100(8):1786	Co-author	SCI
8	Draft genome sequence of a biocontrol rhizobacterium, *Chryseobacterium kwangjuense* strain KJ1R5, isolated from Pepper *(Capsicum annuum*).	2016	Genome Announcements 2016, 4(2):e00301-16	Co-author	-
9	Draft genome sequences of *Chryseobacterium artocarpi* UTM-3^T and *Chryseobacterium contaminans* C26^T, isolated from rhizospheres, and *Chryseobacterium arthrosphaerae* CC-VM-7^T, isolated from the feces of a pill millipede.	2016	Genome Announcements 2016, 4(5):e01168-16	Co-author	-
10	Selection and identification of *Bacillus aryabhattai, Microbacterium testaceum* and *Pseudomonas protegens* for biocontrol activity against of *Aspregillus flavus* on unhulled rice	2015	Korean Society of Plant Pathology, 2015, Cheongju, Korea	Best poster award	Poster
11	Biocontrol activity of rice-originated antagonistic bacterial strains against	2015	International Meeting of		Poster

	Aspergillus flavus, Aspergillus candidus and *Aspergillus fumigatus* on stored rice		Korean Microbiological Societies 2015, KINTEX, Korea		
12	Improvement of detection methods and further characterization of *Spiroplasma citri*, the causal agent of citrus stubborn disease in Egypt	2013	American Journal of Plant Science 2013, 4, 245-249	First author	-
13	Citrus stubborn disease in the Mediterranean region: Evaluation of detection methods and genetic study on *Spiroplasma citri* in the Mediterranean region	2012	LAMBERT Academic Publishing	First author	Book
14	Efficiency evaluation of different techniques used for the detection of *Spiroplasma citri*, the causal agent of citrus stubborn disease and the genetic diversity assessment of the *S. citri* Mediterranean isolates	2011	IAM-Bari - M.Sc. Thesis		Best thesis award

TRAINING COURSES

- Distance learning course on "Invasive Fruit Tree Pests Surveillanc in the Mediterranean Region" September 13- December 1, 2013. The Mediterranean Agronomic Institute of Bari- Italy.
- Certificates of attendance of training courses Research ethics, E-learning, International publishing of research, Competitive research projects and Examination techniques & student evaluation. 4-13 February 2012 Faculty and leadrership development center - FLDC, Supervised by International Board of Certified Trainers – IBCT
- Postgraduate Specialist Diploma in Integrated Pest Management November 2009 - June 2010. The Mediterranean Agronomic Institute of Bari- Italy. Grade: Maximum Cum Laude " Best Student for the year 2009-2010"
- Certificate of competence (training of trainers TOT). 22-26 March 2010. The principles and practices of safe use of agro inputs. Crop life "Africa/Middle-East". Grade: Excellent.
- Integrated Pest Management Training Course. 9-13 November 2009. Principle of Integrated Pest Management, Application of Pesticide.Crop life "Africa/ Middle-East" Grade: Excellent.
- Training Course in Tissue Culture Lab: Summer 2007 Plant Biotechnology Research Lab. Cairo University – Faculty of Agriculture Grade: Excellent.

LANGUAGES

- Arabic mother tongue
- Fluent in English. TOEFL iBt score 90 **-** 2013
- Intermediate level Korean Language, TOPIK level 3 - 2014.

SKILLS

A summary of research skills and laboratory experience, as PhD student at Korea University, Seoul, Master degree from the Mediterranean Agronomic Institute of Bari, Italy and teaching assistant at Cairo University Egypt.

- Basic microbiological techniques (media preparation, aseptic culturing, streaking, spread plate, handling of fungi and bacteria, pure culturing of fungi and bacteria, bacterial population adjustment and cell count).
- Isolation of plant associated fungi and bacteria.
- Identification of fungi and bacteria (morphological, biochemical and molecular characterization of bacteria and fungi) including sequencing, phylogenetic relationships starting from DNA extraction until the data analysis using sequence analysis tools.
- Characterization of the biocontrol activity of antagonistic bacteria (including volatile organic compounds assays, testing colonization ability on plant roots or plant leaves, production of antifungal compounds by the antagonistic bacteria *in vitro* dual culture, scanning electron microscopy to the surface of the plant tissue to visualize bacterial colonization, swimming and swarming activities of the antagonistic bacteria, production of extracellular enzymes,..etc).
- Working with storage mycotoxin producing fungi (isolation and characterization of dry condition tolerant fungi such as *Penicillium* spp. and *Aspergillus* spp., artificial inoculation on grains in the storage stage, biocontrol ability of bacteria against such fungi, assessment aflatoxin production by *Aspergillus flavus* and the effect of bacterial treatment on aflatoxin, and aflatoxin detoxification ability.
- Conducting plant and seedling assays for testing biocontrol rhizosphere bacteria against soil borne pathogens (preparation of fungal inoculums for soil borne fungi and inoculate to plants as well as treatment with the bacteria to be tested and assessment of disease severity and disease incidence).
- Detection and diagnosis of graft-transmissible diseases such as stubborn disease of citrus (symptoms, serology, molecular and biological indexing on indicator plants) and studying the genetic diversity between different isolates using molecular tools such as SSCP.
- Good command of SAS, SPSS and Excel for statistical analysis, arrangement of data; Sigmaplot for creation of scientific graphs and charts.

REFERENCES

- *Dr. Khaled Djelouah* PhD, Plant Pathologist, Tutor of the IPM Course IAMB (Istituto Agronomico Mediterraneo di Bari) International Center for Advanced Mediterranean Agronomic Studies, Via Ceglie 09, 70010 Valenzano (Ba) Phone: (+39) 080 46 06 302 Fax: (+39) 080 46 06 275 Email: djelouah@iamb.it

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- *Dr. Ibrahim Al Jboory* Professor of Plant Protection College of Agriculture University of Baghdad. Phone: (+962) 795815543 Email: ijboory@yahoo.com

- *Dr. Chester N. Roistacher* Retired Plant Pathologist- University of California Riverside CA 92521. phone: (951)6840934 Email: chetroist@charter.net