

## Ruba Abuamsha

### Personal Details

Place and Date of birth Ma'an, Jordan in September 23, 1976  
Nationality Jordanian  
Marital status Married, 3 children  
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### Educational Qualifications

2006-2010 PhD Agricultural Sciences (Phytopathology), Christian-Albrechts-University/ Kiel, Institute for Phytopathology, Department of Biotechnology and Biological Control. Thesis title: Seed bio-priming of *Brassica napus* (ssp. *oleifera*) with the bacterial antagonists *Serratia plymuthica* and *Pseudomonas chlororaphis* for control of *Phoma lingam* and *Verticillium longisporum*.  
2003-2005 M.Sc ENVIROFOOD, Environmental protection and agricultural food production, University of Hohenheim, Stuttgart. Thesis title: Potential for integrated biological and chemical control of damping-off disease caused by *Pythium ultimum* in tomato and cucumber.  
1995-1999 BSc Biological Sciences, An-Najah National University, Nablus, West Bank.  
1993-1994 Tawjih, Scientific stream, Russaifa Secondary School, Jordan

### Employment History

2010- Head of the Department of Plant Production and Protection and Research Associate, National Agriculture Research Center (NARC), P. O. Box 209, Qabatya, Jenin, West Bank, Palestine  
Research Visitor at Palestine Technical University-Kadoorie (PTUK); Technical and Applied Research Center (TARC), for conducting scientific research

### Scholarships

10.2006 - 08.2010 DAAD German Academic Exchange Services

### Awards

2012 Women in Science Award presented by United States of America Consulate General Jerusalem

### Languages

Arabic Mother language  
English Conversation, reading and writing  
German Conversation, reading

### Computer Skills

- Using Windows Operating System
- Microsoft Office Package (Word, Excel, Power point)
- Statistical analysis

## Experiences

- **Using of Molecular Markers for Crop Improvement:**
  - Theoretical as well as practical experience in the advanced technologies of molecular markers: Randomly Amplified Polymorphic DNA (RAPD), Amplified Fragment Length Polymorphism (AFLP), Simple Sequence Repeats (SSR), etc.; fingerprinting and their different uses and applications.
  - Using molecular markers in plant breeding and genetic diversity assessment, primer design
- Isolation of Entomopathogenic nematodes from soil samples
- Grafting technique of vegetables
- Plant tissue culture techniques including: callus and cell suspension cultures initiation, maintenance and measurement of growth rate; regeneration; interaction of in vitro cultured cells with pathogens (bacteria)
- Biological control
- Use of Entomopathogenic nematodes against Red Palm Weevil
- Protein purification and isolation using gel electrophoresis
- Conducting experiments in the fields of microbiology and molecular biology and using techniques such as microscopy, chromatography, PCR, electrophoresis and spectroscopy
- In the field of biochemistry, I am able to calculate the concentration of different biochemical compounds present in a sample using spectrophotometer

## Research Interests

Biological control  
Crop protection and pest management  
Integrated pest management  
Plant tissue and cell culture

## Publications

- Mazen Salman, Ruba Abuamsha and Sameer Barghouthi (2013). Interaction of fluorescent pseudomonads with *Pythium ultimum* and *Rhizoctonia solani* in cucumber roots. *American Journal of Experimental Agriculture* 3(1): 240-251.
- Ruba Abuamsha, Mohammed Abueld, Hajaj Hajjeh and Mazen Salman (2013). Evaluation of the Incidence and Severity of Olive Leaf Spot caused by *Spilocaea oleagina* in different olive cultivars in Palestine. Accepted and in Press.
- Omar Hammoudi, Mazen Salman, Ruba Abuamsha and Ralf-Udo Ehlers (2012). Effectiveness of Bacterial and fungal isolates to control *Phoma lingam* on oilseed rape *Brassica napus*. *American Journal of Plant Sciences*. : 773-779. (DOI: 10.4236/ajps.2012.36093).
- Mazen Salman and Ruba Abuamsha (2012). Potential for integrated biological and chemical control of damping-off disease caused by *Pythium ultimum* in tomato. *BioControl*, 57(5): 711-718. (DOI: 10.1007/s10526-012-9444-4).
- Mazen Salman, Abd-Almonem Hawamda, Ahmad Al-Ashqar Amarni, Mahmoud Rahil, Hajaj Hajjeh, Basel Natshah and Ruba Abuamsha (2011). Evaluation of the incidence and severity of olive leaf spot caused by *Spilocaea oleagina* on olive trees in Palestine. *American Journal of Plant Sciences* 2: 457-460.
- Ruba Abuamsha, Mazen Salman and Ralf-Udo Ehler (2011). Improvement of seed bio-priming of oilseed rape (*Brassica napus* ssp. *oleifera*) with *Serratia plymuthica* and *Pseudomonas chlororaphis*. *Biocontrol Science and Technology*. 21 (2): 199-213.
- Ruba Abuamsha, Mazen Salman and Ralf-Udo Ehlers (2011). Effect of seed priming with *Serratia plymuthica* and *Pseudomonas chlororaphis* to control *Phoma lingam* in different oilseed rape cultivars. *European Journal of Plant Pathology* 130:287-295.
- Ruba Abuamsha, Mazen Salman and Ralf-Udo Ehler (2010). Differential resistance of oilseed rape cultivars (*Brassica napus* ssp. *oleifera*) to *Verticillium longisporum* infection is affected by rhizosphere colonisation with antagonistic bacteria, *Serratia plymuthica* and *Pseudomonas chlororaphis*. *BioControl* 56(1): 101-112.

- Mazen Salman and Ruba Abuamsha Integrated control of pre-emergence damping-off caused by *Pythium ultimum* in cucumber using bacteria and chemical fungicides. The 3rd Conference on biotechnology and Applications in Palestine, Al-Quds University, 20 October 2012.
- Iyad Badran and Ruba Abuamsha (2012). Prevalence and Diversity of Gastrointestinal Parasites in small Ruminants under Two Different Rearing Systems in Jenin District of Palestine. An - Najah University Journal Research. (N. Sc.) Vol. 26.

#### Submitted Papers

- Ruba Abuamsha, Ralf-Udo Ehlers. Suppression of Clubroot in different oilseed rape cultivars by seed treatment with antagonistic bacteria.
- Ruba Abuamsha, Wanzhi Ye, Daguang Cai, Ralf-Udo Ehlers. Induction of systemic resistance in *Arabidopsis* against *Phoma lingam* by the biocontrol agent *Serratia plymuthica* HRO-C48.
- Ruba Abuamsha, Mazen Salman, Marlo Hasler and Ralf-Udo Ehlers (2013). Evaluation of different additives on survival of *Serratia plymuthica* HRO-C48 on oilseed rape seeds and control *Phoma lingam*. American Journal of Plant Sciences. Under reviewing.
- Hajaj Hajjeh, Ruba Abuamsha, Mohammed Abueld and Mazen Salman (2013) Determination of latent infection with *Spilocaea oleagina* on olive trees cultivar 'Nabali' in Palestine. Under processing.

#### Conferences

- Mazen Salman and Ruba Abuamsha. Potential for integrated biological and chemical control of damping-off disease caused by *Pythium ultimum* in tomato. Agriculture Development Challenges in Palestine. Al Quds Open University, Qalqilya, Palestine, April 25-26, 2011.
- Ruba Abuamsha, Mazen Salman and Ralf-Udo Ehlers. Seed Treatment with *Serratia plymuthica* and *Pseudomonas chlororaphis* to control *Verticillium dahliae* and *Phoma lingam* in Oilseed Rape Cultivars. German Plant Protection Conference: 22-25 September 2008, Kiel, Germany.
- Ruba Abuamsha, Mazen Salman and Ralf-Udo Ehlers. Effect of pathogen infection on root colonization of oilseed rape by antagonistic bacteria. German Plant Protection Conference: 22-25 September 2008, Kiel, Germany.
- Ruba Abuamsha, Mazen Salman and Ralf-Udo Ehlers. Seed Treatment with *Serratia plymuthica* and *Pseudomonas chlororaphis* to control *Verticillium dahliae* and *Phoma lingam* in Oilseed Rape Cultivars. Crop Protection Symposium May 2008, Gent, Belgium.
- Ruba Abuamsha, Mazen Salman and Ralf-Udo Ehlers. Effect of pathogen infection on root colonization of oilseed rape by antagonistic bacteria. Crop Protection Symposium May 2008, Gent, Belgium.
- Ruba Abuamsha and Ralf-Udo Ehlers. Seed treatment of OSR with *Serratia plymuthica* (Rhizostar): Effect against *Phoma lingam* and *Verticillium longisporum* in relation to cultivars. DPG-AK Biologische Bekämpfung, Berlin March 19-20 / 2009.
- Ruba Abuamsha, Ralf-Udo Ehlers. Suppression of clubroot in different oilseed rape cultivars by seed treatment with antagonistic bacteria. DPG-AK Biologische Bekämpfung, Berlin March 19-20 / 2009.
- Ruba Abuamsha and Ralf-Udo Ehlers. Seed treatment of oil seed rape with *Serratia plymuthica* (Rhizostar): Effect against *Plasmodiphora brassicae*. DPG-AK Biologische Bekämpfung, Berlin March 19-20 / 2009.
- Ruba Abuamsha, Mazen Salman and Ralf-Udo Ehlers. Seed treatment of OSR with *Serratia plymuthica* (Rhizostar): Colonization of rhizosphere in the presence or absence of pathogen infection with *P. lingam* and *V. longisporum*. DPG-AK Biologische Bekämpfung, Berlin March 19-20 / 2009.
- Ruba Abuamsha and Ralf-Udo Ehlers. Seed treatment with antagonistic bacteria *Serratia plymuthica* (Rhizostar) to control fungal pathogens in different Oilseed rape cultivars. DAAD-meeting May 15-17/ 2009, Kiel, Germany.

#### References

- Prof. Dr. Ralf-Udo Ehlers. Institute for Phytopathology, Dept. Biotechnol. And Biol. Control, Hermann-Rodewald-Str. 9, 24118 Kiel, Tel: +49 431 880 4864, E-mail: [ehlers@biotec.uni-kiel.de](mailto:ehlers@biotec.uni-kiel.de)
- Dr. Sameer Barghouthi. Associate Dean. Al Quds University, Faculty of Health Professions. At Bireh, Ramallah, West Bank, Palestine. P.O. Box: 3523. Fax: +972 2 957072, Tel: +972 2 955611, home: +972 2 2958074. E-mail: [bargsam@yahoo.com](mailto:bargsam@yahoo.com)