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EDUCATION

Doctor of Philosophy (Mar. 2010). National School of engineering of Sfax (ENIS, Sfax University), TUNISIA.
***Major*:** Biological Engineering ***Minor*:** Molecular Biology
***Dissertation*:** Exploitation of biotechnological approaches for improving potato: characterization of new genes involved in stress response for the production of new lines more efficient.
***Advisors*:** Dr. Radhia Gargouri Bouzid and Dr. Noureddine Drira

Master of Science (Jul. 2003). National School of engineering of Sfax. (ENIS, Sfax University), TUNISIA.
***Major*:** Biological Engineering ***Minor*:** Plant Physiology and Molecular Biology
***Thesis*:** Molecular characterization of somatic hybrids of potato: Research lines tolerant to salinity.
***Advisors*:** Dr. R. Gargoouri Bouzid and Dr. O. Ellouze

Bachelor of Science (Jun. 2001). College of Sciences of Gabes, South University, TUNISIA.
Major: Natural Sciences

ACADEMIC RESEARCH EXPERIENCE

June 2013-May 2014, Post-Doctoral Researcher floral morphogenesis team
Laboratoire Reproduction et Développement des Plantes de l'Ecole Normale Supérieure de Lyon
***Projet* :** A study of auxin signal transduction and transcriptional regulation of the genes response of auxin on petal morphogenesis

May 2012-Mars 2013, Fulbright Post-Doctoral Scholar (Blueberry Genetics)
Department of Horticulture, Oregon State University and USDA-ARS National Clonal Germplasm Repository, Corvallis, OR, USA.
***Projects*:**
1. Evaluate genetic diversity of low chill germplasm collection from Florida using microsatellite markers
2. Comparison of DNA fingerprints of field and screen house planted Blueberry accessions

Sep. 2011-Apr. 2012, Post-Doctoral Researcher (The nuclear RNPs and RNA processing in *Arabidopsis*)
University of Perpignan via Domitia, UMR CNRS 5096, Perpignan, FRANCE.
***Project*:**
1. Identification and characterization of AtSpagh protein: putative factor for the assembly of snoRNPs in *Arabidopsis thaliana* - Under Averroes Program, funded by the European Commission.

Sep. 2004-Mar. 2010, Graduate Research (PhD)

Laboratory of Plant Biotechnology Applied to Crop Improvement, Department of Biological Engineering, National School of engineering of Sfax, Sfax University, TUNISIA.

***Achievements*:**

1. Identification, cloning and sequence analysis of two genes encoding MIP1 and MIP2 proteins from *Solanum tuberosum* cv Nicola and their subcellular localisation
2. Optimization of a regeneration protocol for transgenic potato plant using hygromycin as selective marker
3. Interspecific potato somatic hybrids between *Solanum berthaultii* and *Solanum tuberosum* showed recombinant plastome and improved tolerance to salinity

Sep. 2001 – Jul. 2003, Graduate Research (MS)

Laboratory of Plant Biotechnology Applied to Crop Improvement, Department of Biological Engineering, National School of engineering of Sfax, Sfax University, TUNISIA.

***Achievements*:**

1. Molecular characterization of intra and interspecific somatic hybrids of potato using I-SSR markers
2. Cytoplasmic DNA analysis of somatic hybrids of potato
3. Evaluation of the microtuberization capacity of potato hybrid lines

INTERNSHIP EXPERIENCE

Jun. 2009: Laboratory of Reproduction and Development of Plants (RDP), ENS Lyon, FRANCE.

Purpose:

1. Identification, clonage and sequence analysis of two genes encoding MIP1 and MIP2 proteins from *Solanum tuberosum* cv Nicola and their subcellular localisation
2. Expression analysis of fragment of genes isolated by cDNA-AFLP

May 2009: Laboratory of Molecular Characterization, Qatar University, Doha, QATAR.

Purpose:

1. Molecular Phylogeny of Qatari Date Palm Genotypes Using Simple Sequence Repeat Markers

Nov. 2008: Laboratory of Reproduction and Development of Plants (RDP), ENS Lyon, FRANCE.

Purpose:

1. Functional analysis of gene involved in the control of petal size in Rose.

RESEARCH SKILLS

Genetic and Molecular analysis

1. DNA, RNA and Protein isolation
2. PCR amplification, restriction digestion and ligation
3. Molecular markers: RAPDs, AFLPs, SSRs, SNPs, SSCP.
4. Real time PCR: High Resolution Melting, Taqman assay, qPCR.
5. Cloning and sequencing (Big dye)
6. Gel and Capillary electrophoresis
7. Southern, Northern and Western blots

Tissue Culture

1. Protoplast culture
2. Shoot tip culture
3. Transgenic plant
4. Transient expression of fluorescent fusion proteins in tobacco

plants and onion epidermal cells

Microbiology

Culture of wild and mutant strains: *E. coli, Agrobacterium tumefaciens*

Cellular Biology

Preparation, mounting tissue, and microscopic observation

Biochemistry

- Production of protein
- Extraction of protein per cell lysis: enzymatic and mechanical tools.
- Protein Purification: Production and over-expression in bacterial strains (Erlen)
- Analysis of protein denaturing conditions

Bioinformatics

1. Data mining tools – NCBI, TAIR, GRAMENE
2. Sequence analysis software: CodonCode Aligner, FastPcr, ClustalW, Primer3 Plus, ApE
3. Phylogenetic software: Powermarker, Phylogenetic win
4. Genetic analyzer : Beckman CEQ 8000 software
5. Imagery: ImageJ

SPECIAL TRAINING SESSIONS ATTENDED

1. Jul. 2012 : Training on Field Clonal Germplasm maintenance
2. Jun. 2012 : Application of High Resolution Melting in crop plants
3. Jun. 2008 : Specialized courses in English at the language school "Omda School of Languages"
4. Feb. 2008 : Participation in English course “English for academic purposes" on the theme " Reading Research Articles " at the National School Engineering of Sfax (ENIS).
5. Aug. 2001: Practical training in Microbiology at the Laboratory for Regional Hospital of Gabes.
6. Ju1. 2001: Participated in workshop "Perfecting in English general and commercial” in the computer laboratory 'horizons formation.
7. Dec. 2000: Participation in practical course on computer application at the institute in management computer.

Awards and Scholarships

1. **Sep. 2011-Avr. 2012:** Merit award scholarship from the European commission in the Averroes Erasmus Munus 3 program.
2. **Mai 2012-Fev. 2013:** Fulbright scholarship awarded by United States in The Fulbright Visiting Scholar Program.
3. **June 2013-May 2014:** Islamic Development Bank scholarship award in the Merit Scholarship Program for High Technology.

TEACHING EXPERIENCE

Contractual Assistant at the College of Sciences of Gabes

1. Jan. 2009 - May 2009: Contribution to education practical work of Molecular genetics for students: 3rd year of Engineering in Biological Engineering (GB3).
2. Jan. 2008 - May 2008: Contribution to education practical work of Cell and Molecular biology for students: Second year License of Life Sciences and Earth (SVT2) and Life Sciences (SV2)
3. Jan. 2007 - May 2007: Contribution to education practical work of Molecular Biology and Cell and Molecular biology for students: First year License of Life Sciences and Earth (SVT1)
4. Jan. 2006 - May 2006: Contribution to education practical work of Molecular Biology and Cell and Molecular biology for students: First year License of Life Sciences and Earth (SVT1) and Second year License of Life Sciences and Earth (SVT2) and Life Sciences (SV2)

5. Jan. 2005 - May 2005: Contribution to education tutorial of Molecular Biology, practical work for Genetic Engineering and Molecular Technology for students: 4th year License of Life Sciences and Earth (SVT4); 4th year License of Life Sciences (SV4) and 3rd year License of Life Sciences (SV3)

PEER REFEREED PUBLICATIONS

1. Donia Bouaziz, Malika Ayadi, **Amira Bidani**, Souad Rouis, Oumèma Nouri-Ellouz, Raïda Jellouli, Noureddine Drira and Radhia Gargouri-Bouzid, (2009). A stable cytosolic expression of VH antibody fragment directed against PVY NIa protein in transgenic potato plant confers partial protection against the virus, *Plant Sciences* 176 489-496.
2. **Amira Bidani**, Oumèma Nouri-Ellouz, Lilia Lakhoua, Darasinh Sihachakr, Catherine Cheniclet, Ali Mahjoub, Noureddine Drira and Radhia Gargouri-Bouzid, (2007). Interspecific potato somatic hybrids between *Solanum berthaultii* and *Solanum tuberosum* L. showed recombinant plastome and improved tolerance to salinity, *Plant Cell, Tissue and Organ Culture* 91:179-189.
3. Aïda Hmida-Sayari, Radhia Gargouri-Bouzid, **Amira Bidani**, Leïla Jaoua, Arnould Savouré, Samir Jaoua, (2005). Overexpression of δ-1-pyrroline-5-carboxylate synthetase increases proline production and confers salt tolerance in transgenic potato plants, *Plant Sciences* 169 746-752.

PATENTS:

1. Construction de plantes de pomme de terre transgéniques exprimant le gène δ-1-pyrroline-5-carboxylate synthétase conférant la tolerance à la salinité. Inventors: Aïda Hmida-Sayari, **Amira Bidani**, Leïla Jaoua, Radhouane Ellouz, Samir Jaoua & Radhia Gargouri-Bouzid. Ref : INNORPI SN05093 du 25 Mars 2005.

WORKSHOPS

1. Dec. 2006 : Participation in Meeting of AFRA / IAEA under the theme "Regional consultancy meeting to develop new strategies for date palm improvement using advanced in vitro techniques" at the College of Sciences of Sfax (TUNISIA).
2. Nov. 2003 : Participation in the workshop AFRA/IAEA under the theme "Regional training course on cost effective scale up production plant in vitro and longterm storage of mutant plant material C7-RAF 5.049-003/04" at the College of Sciences of Sfax (TUNISIA).

SCIENTIFIC PRESENTATIONS/POSTERS

1. Juil. 2013: Communication of the theme: 'An economical molecular tool for genetic identity confirmation in blueberry' at the 2013 ASHS (American society horticultural science) annual conference', 22-25/07/2013 in California-USA.
2. Jan. 2013 Communication of the theme 'Genetic diversity assessment of wild southeastern american *Vaccinium* using microsatellite markers' at International Plant and Animal Genome XXI, 12-16 2013 in San Diego, California, USA.
3. Dec. 2009 - Communication of the theme "Identification, clonage et localisation intracellulaire de deux protéines MIP1 et MIP2 de pomme de terre variété Nicola" at the 8th Scientific Days of the Tunisian Association of Biotechnology, from 20 to 23 December 2003 in Sousse,Tunisia.
4. May 2008 - Communication of the theme: "Interspecific somatic hybrids between potato *Solanum berthaultii* and *Solanum tuberosum* L. showed recombinant plastome and improved tolerance to salinity" in the context of: 'An International Symposium on Biotechnology, 04 - 08 May 2008 Sfax, Tunisia.
5. Dec. 2006 - Communication of the theme: "The use of somatic hybridization for the production of new lines of potatoes tolerant to *Pythium aphanidermatum*" in the context of : Meeting international

"Resource management and biotechnology applications in dryland and crops oasis : Prospects for recovery potential Sahara' ; from 25 to 28 December 2006, Jerba, Tunisia.

6. Dec. 2003 - Communication of the theme "Performance evaluation of somatic hybrids of potato cultivated in the absence and presence of a salt stress" at the Third Scientific Days of the Tunisian Association of Biotechnology, from 20 to 23 December 2003 in Mahdia, Tunisia.
7. Dec. 2002 - Communication of the theme: "Molecular characterization of somatic hybrid intra and interspecific potato" during the First Days Maghrebine Biotechnology and second Scientific days of the Tunisian Association of Biotechnology, from 15 to 18 December 2002 in Hammamet, Tunisia.
8. Sep. 2002 - regional Symposium on Plant Biotechnology of the Tunisian Association of Biological Sciences (ATSB) from 13 to 15 September 2002 in Hammamet, Tunisia.

COURSE PRACTICAL MANUAL

1. 2001-2002: Technology Molecular 3rd grade level Life Sciences SV3. (College of Sciences of Gabes). Genetic Engineering 4th year level of life Sciences and earth sciences and life; SVT4 and SV4. (College of Sciences Gabes).
2. Apr. 2002: Participation in educational seminar entitled "information technology and teaching methods" at the National School Engineering of Sfax (ENIS).
3. Apr. 2003: Participation in the seminar entitled "The university's spring teaching" at the National School Engineering of Sfax (ENIS).
4. May 2003: Cycle teacher training at the National School Engineering of Sfax (ENIS).
5. Jul. 2008 : Supervision scientific of graduation project of the Qatar University as part of a collaboration between the Center of Biotechnology of Sfax (CBS) and the University of Qatar.

STUDENT ADVISING

1. One Master student in f Molecular and Cellular Biology Research at College of Sciences of Sfax
2. One Project Graduation Senior Technician (Bac + 3) of the Higher Institute of Technology Sfax (food section)
3. One Project Graduation Engineer (Bac + 5) of the National School of Engineers of Sfax (Biological Engineering, Biotechnology option) and the Qatar University (Biomedical Stream)