

Curriculum Vitae



Name : Soumaya ARRAOUADI

Date of birth: 03 11 1980

Civil status: married

Position

Since 2012: Assistant Professor of Agricultural Higher Education, Department of field crop

Education

2005 – 2011: Ph.D. in Biological and Biotechnological Sciences (University Elmanar of Tunis, Faculty of Sciences of Tunis)

Subject: « Genetic Analysis of salt stress tolerance of *Medicago truncatula* lines».

2004 – 2005: Post-Graduate Diploma in Cellular physiology and Plant Biotechnology (University Elmanar of Tunis, Faculty of Sciences of Tunis)

Subject: « Genetic analysis and response to osmotic stress of natural populations of *Medicago truncatula* resulting from Tunisian south »

2003: Bachelor's degree in Natural Sciences. University Elmanar of Tunis, Faculty of Sciences

1999: Baccalaureate in Applied sciences. Secondary school of Ez-zahra, Tunisia.

Languages

	Reading	Writing	Speaking
Arabic	***	***	***
French	***	***	***
English	***	***	**

Farming

- 1- Supervision of the module: «genetic diversity of natural populations of *Medicago truncatula* » 3rd national course “**Genetic and genomic heading of the model *Medicago truncatula***” organized during the period from the 21 to 26 Novembre 2005 by Legumes Laboratory and Laboratory of Genetics Molecular, Immunology and Biotechnology (LGMIB) in collaboration with the Laboratory Vegetable Biotechnology, “E.N.S.Agronomique” of Toulouse, France.
- 2- Supervision of a Final Project Study Technician of two students from Higher Institute of Biological and Applied Sciences of Tunis (ISSBAT) for 2006-2007 academic years.

This project is entitled "Analysis of salt stress effect in natural Tunisian populations of *Medicago truncatula*".

- 3- Co-framing of Final Project Study Technician of two students from Higher Institute of Biological and Applied Sciences of Tunis (ISSBAT) for 2007-2008 academic years. This project is entitled "Identification of QTLs related to salt stress in *Medicago truncatula*".
- 4- Supervision of a Final Project Study Technician of two students from Higher Institute of Technological Studies of Sidi Bouzid for 2013-2014 academic years. This project entitled "Analysis of genetic diversity of barley lines *Hordenuim vulgare*".
- 5- Supervision of a Final Project Study of student from Private polytechnic school of Sousse for 2015-2016 academic years. This project entitled " Effect of water stress on germination and growth of different safflower lines (*Carthamus tinctorius*.L).

Teaching

- ♦ **2010-2011:** Teaching of Integrated Course of Biology and Plant Physiology in Higher Institute of Technological Studies of Sidi Bouzid.
- ♦ **2010-2011:** Teaching of Workshop Microbiology in Higher Institute of Technological Studies of Sidi Bouzid.
- ♦ **2011-2012:** Teaching of Integrated Plant Biology in Higher Institute of Technological Studies course of Sidi Bouzid .
- ♦ **2012-2013:** Teaching of Plant and Cell Biology for continuing education studies in Higher Institute of Technological Studies of Sidi Bouzid.
- ♦ **2013-2014:** Teaching tutorials and practice of Genetics in Faculty of Science and Technology of Sidi Bouzid.

Organizer of seminars

2007. Member of the Steering Committee of Model Legumes Congress (MLC2007)

Scientific Publications

1. **Soumaya Arraouadi**, Mounawer Badri, Adel Zitoun, Thierry Huguet and Mohamed Elarbi Aouani (2011) "Analysis of NaCl stress responses in Tunisian and references lines of *Medicago truncatula*." Russian Journal of plant physiology **58: 316-323**
2. **Soumaya Arraouadi**, Mounawer Badri, Thierry Huguet, Mohamed Elarbi Aouani (2011) "QTL analysis of plant salt response in recombinant inbred line of *Medicago truncatula* under two salt treatments". *Acta Physiologiae Plantarum* **33(3): 917-929**
3. **Soumaya Arraouadi**, Mounawer Badri, Chedly Abdelly, Thierry Huguet, Mohamed Elarbi Aouani (2012) "QTL mapping of physiological traits associated with salt tolerance in *Medicago truncatula* Recombinant Inbred Lines." *Genomics* **99: 118-125**
4. **Arraouadi S** Badri M, Abdul Jaleel C, Djéballi N, Ilahi H, Huguet T, analyse d'Aouani ME (2009) "Analysis of Genetic Variation in Natural Populations of *Medicago truncatula* of Southern Tunisian Ecological Areas, Using Morphological Traits and SSR Markers." *Tropical Plant Biology* **2:122-132**
5. **Soumaya Arraouadi**, Mounawer Badri, Wael Taamalli, Adel Zitoun, Thierry Huguet, Mohamed Elarbi Aouani (2011) "Variability salt stress response analysis of Tunisian natural populations of *Medicago truncatula* (Fabaceae) using salt response index (SRI)." *African Journal of Biotechnology* **10(52): 10636-10647**
6. **Soumaya Arraouadi**, Ramadhane Nasrawi, Walid Gharbi et Mohamed Houssen Eddine Sellami (2015) " Genetic variation of Response to irrigation system of three

durum wheat varieties cultivated in Sidi Bouzid (Tunisia)” *Journal of New sciences* 20:7

7. Mounawer Badri, **Soumaya Arraouadi**, Thierry Huguet, Mohamed Elarbi Aouani (2010) “Comparative effects of water deficit on *Medicago laciniata* and *Medicago truncatula* lines sampled from sympatric populations.” *Journal of Plant Breeding and Crop Science* 2(8): 259-266
8. Mounawer Badri, Imen Bouhaouel, **Soumaya Arraouadi**, Wael Taamalli, Thierry Huguet and Mohamed Elarbi Aouani (2015) “Variation in tolerance to drought among Tunisian populations of *Medicago truncatula*.” *Plant Genetic Resources: Characterization and Utilization* 1-9
9. Naceur Djébal, Souha Aribi, Wael Taamalli, **Soumaya Arraouadi**, Mohamed Elarbi Aouani, Mounawer Badri (2013) “Natural variation of *Medicago truncatula* resistance to *Aphanomyces euteiches*” *European Journal of Plant Pathology* 135:831-843
10. Maren L Friesen, Eric JB von Wettberg, Mounawer Badri, Ken S Moriuchi, Fathi Barhoumi, Peter L Chang, Sonia Cuellar-Ortiz, Matilde A Cordeiro, Wendy T Vu, **Soumaya Arraouadi**, Naceur Djébal, Kais Zribi, Yazid Badri, Stephanie S Porter, Mohammed Elarbi Aouani, Douglas R Cook, Sharon Y Strauss and Sergey V Nuzhdin (2014) “The ecological genomic basis of salinity adaptation in Tunisian *Medicago truncatula*” *BMC Genomics*, 15:1160
11. **Arraouadi Soumaya**, Badri Mounawer, Huguet Thierry et Aouani Mohamed El Arbi (2006) « Caractérisation phénotypique des populations naturelles de la légumineuse modèle *Medicago truncatula* (Fabaceae) issues du sud Tunisien » dans « Diversité des Fabacées fourragères et de leurs symbiotes : applications biotechnologiques, agronomiques et environnementales » Alger, Algérie, p99.
12. **Soumaya Arraouadi**, Mounawer Badri, Chedly Abdely, Thierry Huguet and Mohamed Elarbi Aouani (2009) « QTLs for Na⁺ and K⁺ uptake of the shoots, stems and roots controlling salt tolerance in *Medicago truncatula* » Dans « gestion et valorisation des ressources et applications biotechnologiques dans les agro systèmes arides et sahariens » Djerba, Tunisie
13. Mounawer BADRI, **Soumaya ARRAOUADI**, Thierry HUGUET, and Mohamed Elarbi AOUANI (2005). “Genetic variation of the model legume *Medicago truncatula* (Fabaceae) lines under drought and salt stress”. Proceedings of the 6th Tunisian-Japanese Seminar on Culture, Science & Technology 2005, Sousse, Tunisie.
14. Aouani M.E., Badri M., Zribi K., Badri Y., Lazrek F., **Arraouadi S.**, Laouar M., Huguet T., Abdelguerfi A. (2006). Polymorphism and specificities in medic-sinorhizobia symbioses from Tunisian areas: a preliminary assessment of the statement. International workshop on « Diversité des fabacées fourragères et leurs symbiotes: Applications biotechnologiques, agronomiques et environnementales », February 19th-22nd, 2006, Alger, p38.

National and International Conferences and Seminars

- ✓ **March 2005** Participation in 16th Biological Days organized by Tunisian Association of Biological Sciences (ATSB) in March 20th-23th, 2005. Title: Analysis of molecular variability of natural populations of *Medicago truncatula* resulting from Tunisian south.

- ✓ **February 2006** Participation in the international workshop on " Diversity of Fabacea fodder and their symbiosis: biotechnological, agronomic and environmental applications " Algeria, in February 19th-22th 2006. Title: Phenotypical characterization of natural populations of *Medicago truncatula* (Fabaceae) resulting from the Tunisian south.
- ✓ **March 2006** Participation in the first mediterranean congress of Biotechnology "MBC1" organized in Yesmine (Hammamet-Tunisia in March 25th-29th, 2006. Title: Morphological and molecular variability of natural populations of *Medicago truncatula* grown in Tunisian south areas.
- ✓ **November 2006** Participation in «International conference on biosaline agriculture & high salinity tolerance» organized by Laboratory of Plantes Adaptation of Abiotic stresses (LAPSA) in Sousse in November 3th-8th, 2006. Title: Response analysis to NaCl stress of *Medicago truncatula* lines.
- ✓ **March 2007** Participation in «International Satellite Workshop of Abiotic Stress on Legumes (WAS) and the Model Legumes Congress (MLC2007) » organized by Laboratory of Legumes in Tunis in March 22th-28th, 2007. Title: Analysis of growth performance of *Medicago truncatula* (Fabaceae) lines under NaCl stress: research of the most discriminative traits under a moderate concentration.
- ✓ **October 2007** Participation in 8th Tunisian–Japanese Symposium on Science Society and Technology (TJASSST 2007) in Sousse, Tunisia, in Octobre 29th-31th, 2007 Title: Effect of NaCl stress on *Medicago truncatula* lines coming from two Tunisian populations of different eco-geographical origin.
- ✓ **November 2007** Participation in «Integrating legume biology for sustainable agriculture, the GLIP Dissemination event held as the 6th European Conference on Grain Legumes» in Portugale, Novembre 12th-16th, 2007. Title: Response of natural populations of *Medicago truncatula* to NaCl stress.
- ✓ **December 2008** Participation in the 7th Biotechnology Days organized by the Tunisian Association of Biotechnology in Hammamet in December 15th-18th, 2008. Title: K⁺ and Na⁺ ions concentration in leaves, stems and roots of parental lines of RILs of *Medicago truncatula* in NaCl stress .
- ✓ **April 2009** Participation in 3rd International SMBBM Congress of Biochemistry and Molecular Biology, IUBMB Special Meeting on Plant Stresses 6th FASBMB Congress" in Marrakesh, Morocco in April 20th-24th, 2009. Title: Quantitative Trait Loci analysis of NaCl stress tolerance in *Medicago truncatula* “.
- ✓ **December 2009** Participation in 3rd international meeting on the resources management and biotechnology applications in agriculture of the arid and Saharan regions in Djerba in December 15th-17th, 2009. Title: QTLs for Na⁺ and K⁺ uptake of the shoots, stems and roots controlling salt tolerance in *Medicago truncatula*.
- ✓ **Juillet 2009:** Participation in Model Legume Congress, organized in July 12th-16th, 2009, Asilomar, California, USA.

Authors : Badri M., Arraouadi S., Lazrek F., Ilahi H., Chardon F., Huguet T., Aouani M.E.

Title: Genetic analysis of drought and salt stress tolerance in *Medicago truncatula* using QTLs approach p22.

- ✓ **Novembre 2007:** Participation in the 6th European Conference on grain legumes, organized in November 12th-16th, 2007 in Lisbon, Portugal.
Authors: Badri M., Zitoun A., Arraouadi S., Huguet T., Aouani M.E.
Title: Effects of water deficit on natural populations of *Medicago truncatula* p171.
- ✓ **March 2012:** Participation in 23th ATSB congress organized in Yasmine Hammamet in March 21th – 24th, 2012.
Authors : Mounawer Badri, Soumaya Arraouadi, Fatma Lazrek, Maren L. Friesen, Eric J.B. von Wettberg, Ken S. Moriuchi, Fathi Barhoum et al.
Title: QTLs and candidate genes for salt tolerance in the model legume *Medicago truncatula*,
- ✓ **Mars 2013:** Participation in 24th ATSB congress organized in Sousse in Mars 25th – 28th, 2013. Communication details are:
Authors: Soumaya Arraouadi, Chedly Abdelly and Mohamed Elarbi Aouani.
Title: QTL analysis and Comparison between morphological and physiological traits related to salt response of *Medicago truncatula*.
- ✓ **Decembre 2013:** Participation in international meeting on management of resources and biotechnological application and dry land Saharan culture: prospects for sustainable development for arid zones, in Djerba, Tunisia in Decembre 17th-19th, 2013.
Authors : Mounawer Badri, Soumaya Arraouadi, Yousra El Manai, Peter L. Chang, Maren L. Friesen, Eric J.B. von Wettberg, Ken S. Moriuchi, Fathi Barhoumi, Sonia Cuellar-Ortiz, Matilde A. Cordeiro, Wendy T. Vu, Naceur Djéballi, Kais Zribi, Yazid Badri, Stephanie S. Porter, Cécile Ben, Laurent Gentzbittel, Chedly Abdelly, Thierry Huguet, Douglas R. Cook, Sharon Y. Strauss, Sergey V. Nuzhdin, Mohamed Elarbi Aouani.
Title : Genome-wide association studies identify candidate gene for salt and drought tolerance in the annual legume *Medicago truncatula*.
- ✓ **Mai 2015:** Participation in ILDAC 2015 in Djerba in Mai 11th – 14th, 2015. Communication details are:
Authors: Soumaya Arraouadi, Ramdhan Nasrawi, Walid Ghrabi, Mohamed Houssemeddin Sallami.
Title: Genetic variation of Response to irrigation system of three durum wheat varieties cultivated in Sidi Bouzid (Tunisia)

Training

- ✓ Training of study (June 2002) in National Institute of Agronomic research of Tunisia (INRAT). Titled: Initiation with various techniques of evaluation of water stress wheat tolerance.
- ✓ Training in flow cytometry in Faculty of Pharmacy of Monastir in the framework of the First National Days of Flow Cytometry (JNCF 2007), October 26th-27th, 2007.

- ✓ Training in over protection and plant finding exploitation, one day organized by the Ministry for Higher education of Scientific Research and Technology in collaboration with the Ministry for Agriculture and Hydraulic Resources. June 2007.
- ✓ Graduation English Certificate of 4th level Bourguiba Institute of Modern Languages With honors (June 2012).
- ✓ Participation in training sessions as part of Capacity Building Associative organized by GIZ and the EU under the themes (July 2011 - December 2012):
 - Associative management and project cycle
 - Development files grant applications
 - Communication for Development NGOs
- ✓ Participation in conferences of Bioinformatics organized by Tunisian Society of Microbiology, Laboratory of Transmissible Diseases and Biologically Active Substances and Doctoral School of Biological Sciences and Biotechnology Health in December 2013.
- ✓ Training in data analysis with SAS TBC Partners organized the 6th to 7th November 2013 in Tunis.