

MOULAY ISMAIL UNIVERSITY

BIOLOGY DEPARTMENT

CURRICULUM VITAE

OF

MOHAMMED DIOURI

JUNE 2020

## CV ABSTRACT

Full name: Mohammed Diouri

Date of birth: 28 April 1961

Current occupation: Professor (of Biology) at Moulay Ismail University, Meknes, Morocco

Education: K-12 in Morocco, MS from Belgium (animal husbandry), PhD from USA (animal science-Nutrition)

Interests and skills: dietary fibers, eating behavior, diet analysis, research methodology, higher education systems, science and society

Spoken languages: Arabic, English and French

Main courses taught: Animal nutrition, plant anatomy and chemistry, research methodology

Scientific publications: 2 theses, 16 conference papers, 27 articles

Other publications: 1 article, 12 presentations, 4 reports

Supervision: 7 doctorate dissertations, 5 MS theses, 13 BS reports

Evaluation: 14 theses, 9 applications, 3 article manuscripts

Extension: 18 lectures, 6 trainings

Honors: Fulbright grant (once), USAID grant (twice)

Responsibilities: Organizing member of several courses, curricula and meetings, department chairperson (twice), member of the university council, of the college council and of the scientific committee. Member of the Higher Council for Education, Training and Scientific Research. Editor of JFAE.

Profile main trait: diversity (in places, languages, topics, activities and responsibilities)

## 1. IDENTITY

First Name: Mohammed

Last Name: Diouri

Date of birth: 28 April 1961

Place of birth: Meknes, Morocco

Country of citizenship: Morocco

Marital status: widower, 3 daughters (born in 95, 97 and 98).

Occupation: Professor at Moulay Ismail University (MIU), College of Science, Meknes, Morocco

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Home: address: 68, Ismailia 1, VN, 50010, Meknes, Morocco

Phone: (+212) 6 65 99 98 22 (Cell)

E-mail : mo.diouri@gmail.com



## 2. EDUCATION

### 2.1. UNIVERSITY CURRICULUM

- 9/89-3/93: doctoral studies. Utah State University, Logan, Utah (USA).  
Obtained diploma (17 March 1993): Ph.D. in Animal science (ruminant nutrition).
- 10/81-10/84: agriculture studies. State college of agriculture at Gembloux, Belgium (currently: Gembloux Agro Bio Tec).  
Obtained diploma (28 September 1984): “Ingénieur Agronome” (MS), in: Animal husbandry.
- 10/79-7/81: pre-agriculture studies. State college of agriculture at Gembloux, Belgium (currently: Gembloux Agro Bio Tec).  
Obtained diploma (July 1981): “Candidat Ingénieur Agronome”.

### 2.2. OTHER TRAININGS

- March 2018: Design of a MOOC. MIU, Meknes. (3 days)
- April 2014: R software in statistical data analysis. MIU, Meknes. (3 days)
- May 2013: R software in statistical data analysis. MIU, Meknes. (4 days)
- May 2012: Turkish higher education and scientific research system. Ankara and Istanbul, Turkey. (5 days)
- June 2011: Data mining with R. CEPE-INSEE, Paris, France. (2 days)
- Febr. 2000: Networks and operating systems. MIU, Meknes. (3 days)
- 9/87-12/87: Plant-animal interactions. Utah State University, Logan, Utah (USA). (3 months)

### 2.3. FLUENTLY SPOKEN LANGUAGES

- 1). Arabic (mother tongue, several oral presentations and written articles)
- 2). French (a five-year residence and an MS obtained in French speaking Belgium)
- 3). English (TOEFL score of 560 obtained in 1987, and a PhD obtained in USA).

### 2.4. OTHER SKILLS

- Different lab techniques: forage anatomy and chemistry (fibers in particular), digestion parameters and feed value determination, etc.
- ration formulation and evaluation (especially for ruminants) using computer programs
- Design of experiments

## CURRICULUM VITAE

- Statistical data analysis using SAS and R.
- Use of different computer programs and operating systems (Windows, Linux, Office, LibreOffice, etc.)

### 3. PRODUCTION

#### 3.1. TEACHING

9/85 to date: Instructor in biology department (MIU).

Main courses taught:

- Ruminant nutrition
- Plant anatomy
- Forage chemical composition
- Cell biology
- Scientific English
- Research methodology

1990 and 92: Teaching assistant in applied animal nutrition. USU, Logan, Utah (USA).

#### 3.2. RESEARCH

##### 3.2.1. Scientific Publications

###### 3.2.1.1. Theses

Diouri M. 1993. «Treatment of low quality forages by hydrogen peroxide and (or) anhydrous ammonia and their utilization in ruminant nutrition». PhD dissertation. USU, Logan, Utah (USA).

Diouri M. 1984. [Condition analysis of modern poultry industry in Meknes province (Morocco)] in French. MS thesis. State college of agriculture at Gembloux, Belgium (currently: Gembloux Agro Bio Tec).

###### 3.2.1.2. Conference papers

Benaddou M, Diouri M, Hajjaj H (2019) Improving forage value of lignocellulosic biomass by fungal and enzymatic treatments. First International Congress on Human Health and Oasis Natural Resources. Errachidia, Morocco. 16-18 October 2019. Page 88.

Oulad El Majdoub Y, Diouri M, Arena P, Arigò A, Cacciola F, Dugo P, Mondello L (2018) HPLC-PDA/ESI-MS analysis of available polyphenols of *Hibiscus sabdariffa* and *Zingiber officinale* within the rat colon lumen. 42nd International Symposium on Capillary Chromatography and 15th GCxGC Symposium. Riva del Garda, Italy. 13-18 May 2018. Chromaleont S.r.L. Messina, Italy. ISBN: 978-88-941816-1-6. Poster P32, page 488.

Ismaili B., Diouri M. 2016. Use of feces micro-histological analysis to study Atlas deer diet. The Third International American Moroccan Agricultural Sciences Conference (AMAS III). Ouarzazate, Morocco, 13-16 December 2016. Poster 024, page 70.

Bouiamrine E., Diouri M., Nassiri L., Ibijbjen J., El Halimi R., Bouchelta Y., Bachiri, L. 2015. [Selection at the cell level for improving water-stress in durum wheat (*Triticum durum* Desf.):

plant selection and regeneration methods] in French. Bioses 2015. Fez, Morocco, 22-24 October 2015.

Darai S, Diouri M, Elguilli M, Amiri S, Chourfi A, 2012. Location of the outbreaks of *Verticillium dahliae* the causal agent of verticillium wilts of olives in the olive-growing regions of Morocco. The second edition of the International congress- Microbial biotechnology for Development (MICROBIOD 2). 02- 04 October 2012 Marrakesh, Morocco.

Bouiamrine E., Diouri M., 2012. [Acclimatization of plantlets and characterization of somaclonal variants derived from immature embryo culture of durum wheat (*Triticum durum* Desf.)] in French. First Biotechnology and Environment national meeting. Abstracts p: 19.  
Poster presentation at Oujda, Morocco.

Bouiamrine E., Amssa M., Diouri M., El Halimi R., 2012. [Effect of water stress induced by PEG (PolyEthylene Glycol) on calluses growth and their regeneration power in durum wheat (*Triticum durum* Desf.)] in French. First Biotechnology and Environment national meeting. Abstracts p: 20.  
Poster presentation at Oujda, Morocco.

Bouiamrine E., Amssa M., Diouri M., Ibjibijen J., 2011. [Somatic embryogenesis from durum wheat (*Triticum durum* Desf.) immature embryos: effect of genotype and growth regulators] in French. Third agriculture production improvement international meeting. Abstracts p: 178.  
Poster presentation at Settat, Morocco.

Bouiamrine E., Amssa M., Diouri M., Ibjibijen J., 2011. [Cellular level selection for improving water stress tolerance in durum wheat (*Triticum durum* Desf.): effect of PEG on embryogenesis capacity and regeneration power] in French. Third agriculture production improvement international meeting. Abstracts p: 179.  
Poster presentation at Settat, Morocco.

Darai S., Diouri M., Amiri S., 2011. [Detection of outbreaks of *Verticillium dahliae*, the causal agent of olive verticilliose in areas of Meknes / Fez / Taounate] in French. Third agriculture production improvement international meeting. Abstracts p: 248.  
Poster presentation at Settat, Morocco.

Bouderrah M., Es-sgaouri A., Elyousfi S.M., Diouri M., 2007. [micropropagation utilization in a Eucalyptus genetic improvement program in Morocco] in French.  
Poster presentation at Meknes, Morocco (second International Agriculture Fair in Morocco).

Wiedmeier R. D., Diouri M., Tanner B. H., Shenton H. T. 1998. Performance of beef cows exposed to long-term use of wintering diets composed of ammoniated cereal straw. Proc., meeting of the American Society of Animal Science (Western Section): 49.

Diouri M., Wiedmeier R.D., 1992. Nutritional metabolism of hydrogen peroxide/anhydrous ammonia treated barley straw. J. Anim. Sci. 70(Supplement 1): 192  
Oral presentation at Pittsburgh, Pennsylvania (USA).

Diouri M., Wiedmeier R.D., Tanner B.H., Bair J.R., 1991. Effect of ammonia treatment of sedge (*Carex* sp.) on intake, nutrient digestibility, and ruminal fermentation characteristics. *J. Anim. Sci.* 69(Supplement 1): 259

Poster presentation at Laramie, Wyoming (USA).

- Wiedmeier R.D., Tanner B.H., Diouri M., Bair J.R., 1991. Effect of anhydrous ammonia treatment of mature range grasses on utilization by ruminants. *J. Anim. Sci.* 69(supplement 1):258

Poster presentation at Laramie, Wyoming (USA).

### 3.2.1.3. Articles

- Amari A, Belloute R, Diouri M (2020) Portable E-nose based on MQ Gaz Sensors and its Application for Pizza Toppings Identification. *Journal of Food Measurement and Characterization*. Submitted.

- Oulad El Majdoub Y, Diouri M, Arena P, Arigò A, Cacciola F, Rigano F, Dugo P, Mondello L (2019) Evaluation of availability of delphinidin and cyaniding-3-O-sambubioside from *Hibiscus sabdariffa* and 6-gingerol from *Zingiber officinale* in colon using liquid chromatography and mass spectrometry detection. *Eur Food Res Technol.* <https://doi.org/10.1007/s00217-019-03358-1>

- Ismaili B, Diouri M, Oujja A (2018) Getting the dietary knowledge to restore a missing species: Seasonal diet of Atlas deer (*Cervus elaphus barbarus*) in Tazekka National Park, Morocco. *Wildlife Biology* N° 00387. DOI: 10.2981/wlb.00387. URL: <http://www.bioone.org/doi/full/10.2981/wlb.00387>

Saidi A, Diouri M (2017) Food self-sufficiency under the Green-Morocco Plan. *Journal of Experimental Biology and Agricultural Sciences* 5(Spl-1- SAFSAW): 33-40.

DOI: [http://dx.doi.org/10.18006/2017.5\(Spl-1-SAFSAW\).S33.S40](http://dx.doi.org/10.18006/2017.5(Spl-1-SAFSAW).S33.S40)

Belloute R, Diouri M (2016) Perception and preference of umami-taste-containing foods based on olfaction and (or) gustation. *Recent Research in Science and Technology* 8: 24-29. DOI: 10.19071/rrst.2016.v8.3028

Belloute R, Diouri M (2015) Consumption habits in Morocco and their influencing factors. *International Journal of Scientific Research* 4(12): 52-56.

Belloute R, Diouri M (2015) Préférences et aversions au Maroc et les facteurs qui les influencent [Preferences and aversions in Morocco and influencing factors] in French. *International Journal of Innovation and Scientific Research* 13(2): 463-473.

El Kahkahi R, Zouhair R, Diouri M, Ait Chitt M, Errakhi R (2015) Morphological and biochemical characterization of Morocco carob tree (*Ceratonia siliqua* L.). *Int. J. Biol. Med. Res.* 6(2): 4946-4952.

Belloute R, Diouri M (2014) Comportement et critères d'achat des produits alimentaires au Maroc et les facteurs qui les influencent [Food products purchasing criteria and behavior in



Morocco and their influencing factors] in French. ScienceLib Editions Mersenne 6 (141116). Available at: [http://scielib.fr/IMG/pdf/Article\\_belloute.pdf](http://scielib.fr/IMG/pdf/Article_belloute.pdf)

Cherrate M, Diouri M (2014) Préférence et comportement alimentaires et thérapeutiques envers la nature au Maroc [Eating and therapeutic preference and behavior towards nature in Morocco] in French. ScienceLib Editions Mersenne 6 (140501). Available at: [http://www.sciencelib.fr/IMG/pdf/ARTICLE\\_CHERRATE-2-1.pdf](http://www.sciencelib.fr/IMG/pdf/ARTICLE_CHERRATE-2-1.pdf)

Darai S, Chourfi A, Amiri S, Diouri M (2014) Assessment of the Tolerance Level of Three Olive Intercroppings (Tomato, Eggplant and Pepper) vis-à-vis *Verticillium dahliae* Klebahn, at Seed and Cutting Stage. J Plant Pathol Microb 5: 218. doi:10.4172/2157-7471.1000219

Darai S, Chourfi A, Diouri M, Amiri S (2014) Morphological and molecular characterization of *Verticillium dahliae* population occurring in different olive-growing regions of Morocco. South Asian J Exp Biol 4 (6): 300-307.

Mekdad S, Naciri Bennani M, Diouri M (2014) Effect of the Mg/Al ratio and of the rate of reinforcement on the synthesis of a nanocomposite Cellulose/Hydroxycalcite. Journal of Advances in Chemistry 10(4): 2625-2633.

Yakoubi S, Cherrat A, Diouri M, EL Hilali F, Zair T (2014) Chemical composition and antibacterial activity of *Thymus zygis* subsp. *gracilis* (Boiss.) R. Morales essential oils from Morocco. Mediterranean Journal of Chemistry 3(1): 746-758.

Bouiamrine EH, Diouri M, El Halimi R, Chillasse L (2013) Callus growth and plant regeneration in durum wheat (*Triticum durum* Desf.) immature embryos under abscisic acid (ABA) treatment. Int. J. Biosci. 3(2): 87-98.

Bouiamrine EH, Diouri M (2012) Response of durum wheat (*Triticum durum* Desf.) callus culture to osmosis-induced drought stress caused by polyethylene glycol (PEG). Annals of Biological Research 3(9): 4555-4563.

Bouiamrine EH, Diouri M, El Halimi R (2012) Assessment of somaclonal variation in regenerated plants from immature embryos culture of durum wheat. Int. J. of Agric. and Biol. 14(6): 941-946.

Bouiamrine EH, Diouri M, El Halimi R (2012) Somatic embryogenesis and plant regeneration capacity from mature and immature durum wheat embryos. Int. J. Biosci. 2(9): 29-39.

Diouri M, Wiedmeier RD (2003) Internal markers and water balance in sheep fed straw-based diets. Actes de l'Institut Agronomique et Vétérinaire Hassan II (Maroc) 23(2-4): 87-93.

Bakkali M, Barbero M, Qarro M, Zine El Abidine A, Oujja A, Ezzahiri M, Belghazi B, Diouri M (2002) Biomasse aérienne du cytise de battandier (*Argyrocytisus battandieri* Maire) dans les parcours du Moyen Atlas tabulaire marocain: Prédiction et effet de la pression pastorale [Above-ground biomass of *Argyrocytisus battandieri* Maire in the range lands of the Moroccan tabular Middle Atlas. Prediction and effect of the grazing pressure] in French. Ecologia Mediterranea 28(1): 19-30.

Bakkali M, Zine El Abidine A, Qarro M, Diouri M, Ouijja A (2002) Fertilité des sols sous couvert d'Argyrocytisus battandieri (Maire) Raynaud dans le Moyen Atlas tabulaire [Soil fertility under *Argyrocytisus battandieri* (Maire) Raynaud canopy in the Moroccan tabular Middle Atlas] in French. *Ann. Rech. For. Maroc* T(35): 43-57.

Defontaine A, Zouhair R, Cimon B, Carrère J, Bailly E, Symoens F, Diouri M, Hallet J-N, Bouchara J-P (2002) Genotyping study of *Scedosporium apiospermum* isolates from patients with cystic fibrosis. *J. Clin. Microbiol.* 40(6): 2108-2114. DOI: 10.1128/JCM.40.6.2108-2114.2002

Diouri M, Wiedmeier RD (2002) Effect of treating wheat straw at different pH levels with hydrogen peroxide and(or) anhydrous ammonia on in situ dry matter disappearance in Holstein cows. *Rev. Biol. Biotech.* 2(2): 38-41.

Bakkali M, Ouijja A, Diouri M, Zine El Abidine A, Qarro M, Ezzahiri M, Belghazi B (2001) Phytomasse aérienne du cytise de Battandier (*Argyrocytisus battandieri* Maire) dans le Moyen Atlas tabulaire marocain: exemple des forêts d'Azrou et de Sidi M'guild [Above-ground biomass of *Argyrocytisus battandieri* Maire in the tabular Middle Atlas of Morocco: examples of Azrou and Sidi M'guild forests] in French. *Sécheresse* 12 (4): 239-44.

Bakkali M, Zine El Abidine A, Qarro M, Diouri M, Ouijja A (2001) Evaluation de la productivité aérienne du cytise de Battandier (*Argyrocytisus battandieri* M.) dans le Moyen Atlas du Maroc [*Argyrocytisus battandieri* M. epigeal biomass yield assessment in Moroccan Middle Atlas] in French. *Ann. Rech. For. Maroc* T(34): 17-25.

Bakkali M, Qarro M, Diouri M, Barbero M, Bourbouze A (2000) Phytomasse aérienne du cytise de battandier (*Argyrocytisus battandieri*) dans le Moyen Atlas marocain [Above-ground biomass of *Argyrocytisus battandieri* Maire in the Middle Atlas of Morocco] in French. *Fourrages* 162: 169-179.

Diouri M, Wiedmeier RD (2000) Nutritional metabolism of hydrogen peroxide/anhydrous ammonia treated barley straw in ewe lambs. *Ann. Zootech.* 49(4): 329-333. DOI: 10.1051/animres:2000123

Jennane A, Thiry M, Diouri M, Goessens G (2000) Fate of the nucleolar vacuole during resumption of cell cycle in pea cotyledonary buds. *Protoplasma* 210: 172-178.

#### 3.2.1.4. Books and book chapters

- Saidi A, Diouri M (2020) Food security and sustainable development in Africa: what is the appropriate agricultural model? In: *Food security and safety: African perspectives*. Springer. Accepted.

- Diouri M, El Halimi R (2019) [Practicing experimental research: research pathway and statistical processing of data with R] in French. *Presses Académiques Francophones*. Riga, Latvia. ISBN: 978-8381-4158-9. 472p.

#### 3.2.2. Various publications

3.2.2.1. Articles and presentations

- Diouri M. [Current situation of Arabic in exact sciences] in Arabic. Presentaion at the college of education (MIU) when celebrating the World Arabic Language Day. 17 December 2015.
- Diouri M. [Food habits change] in Arabic. Presentation in the first international conference on « change management », organized by Higher Institute of Nursing Professions and Health techniques (Meknes, Morocco). 28-29 May 2015.
- Diouri M. [Continuing education: current situation and prospects] in Arabic. Presentation in the University-Industry meeting (Tempus euMILL project). Chamber of Commerce, Industry and Services, Tangier (Morocco), 8 May 2015.
- Diouri M. [A design proposal for the complementary compulsory education] in Arabic. Presentation in the «complementary compulsory education» seminar, MIU, 6 June 2012.
- Diouri M. [Plant fiber analysis using Van Soest method] in French. Presentation in the « Physico-chemical analyses techniques » meeting, MIU, 6 June 2011.
- Diouri M. [University education system and curricula management: the fundamental questions] in Arabic. Presentation in the ninth university pedagogy meeting at Tetouan, Morocco (May 2011).
- Diouri M. [continuing education to the benefit of society] in Arabic. Presentation in the « continuing education » seminar, MIU, 28 March 2011.
- Diouri M. [House rules proposal for creating and managing graduate courses] in Arabic. Presentation in the seventh university pedagogy meeting. Ibn Tofail university, Kenitra, Morocco (November 2009).
- Diouri M. [Knowledge complementarity application in the university: study of an experience] in Arabic. Presentation in the sixth university pedagogy meeting. SMBA university, Fez, Morocco (May 2008).
- Diouri M. [The current pedagogic reform: problem of bridges between curricula] in Arabic. Presentation in the fifth university pedagogy meeting. MIU, Meknes, Morocco (May 2007).
- Diouri M. [Thoughts about quality moral criteria] in French. Presentation in the sixth quality meeting. Commerce, industry and services chamber of Meknes (October 2002).
- Diouri M. [Student situation in the expected reform] in Arabic. Presentation in the university pedagogy meeting at Tetouan, Morocco (May 2002).
- Diouri M. [A call for standardizing university] in Arabic. Dafatir Siasiah 28 (1-15 January 2002): 16-17.

3.2.2.2. Reports

- Diouri M. [Draft rules for creating Master's programs] in French. Report presented to the college of sciences' council. MIU, Meknes, April 2009.
- Diouri M. Workshop on biotechnology and its application in agriculture, organized by the Moroccan Egyptian commission for cooperation in the field of scientific research. Report on the last two sessions. MIU, Meknes, 24-25 March 2009.
- Bouchikhi B., Diouri M. [report of the last two workshops of the regional seminar on: «capitalization: valuing of research and technological innovation] in French. SMBA University, Fez. 8 June 2007.
- Diouri M. [Research at the biology department: current situation and future prospects] in French. A report submitted to the dean of the college of sciences and to the president of MIU. December 2003.

### 3.2.2.3. Application

- Meziane O., Benhlima S., Diouri M. 2013. Design of Wajbah, a trilingual ration formulation computer program.

### 3.2.3. Sponsored research projects

- «impact of drought on steppe vegetation and the management of small ruminants on rangelands». A development research project sponsored by the Moroccan department of agriculture, under the supervision of Pr Mohamed Mounsi (Meknes National School of agriculture). 2017.
- «Curative action of dietary polyphenols, against digestive and systemic symptoms of carbohydrate intolerance, and their preventive one toward the resulting diseases». A project sponsored by MIU to promote research at the university. 2016.
- «Approximate Equations to Predict the Nutritive Value of Different Forages». A project conducted in USA and sponsored by the Fulbright foundation. 2006.
- [introduction of a sylvo-pastoral legume (*Cytisus triflorus* l'Herit.) as forage shrub, effect of salt and drought stresses on yield] in French. A project sponsored by the Moroccan department of research (PROTARS III, D51/12, 2003); led by M. Bakkali (Abdelmalek Essaadi University, Tangier).
- «Treatment of low-quality forages». A project conducted in USA and sponsored by USAID. 1989.
- «Plant-animal interactions». A project conducted in USA and sponsored by USAID. 1987.

## 3.3. ADVISING

### 3.3.1. Theses and reports Supervision

## CURRICULUM VITAE

### Doctorate dissertations

- [Feeding behavior in Morocco: Perception and choice of foods] in French.  
PhD thesis defended by Rachida Belloute at MIU in 18 December 2015.
- [Pathogenicity and structure of Moroccan populations of *Verticillium dahliae* Kleb, the agent of olive (*Olea europaea*) verticilliose] in French.  
PhD thesis defended by Soumia Darai at MIU in 9 May 2015.
- [Somaclonal variation and cell-level selection for improving water stress tolerance in durum wheat (*Triticum durum* Desf.)] in French.  
PhD thesis defended by El Houssine Bouiamrine at MIU in 23 October 2012.
- [Micropropagation in cork oak and Eucalyptus] in French.  
PhD thesis defended by Mohamed Bouderrah at MIU in 1 July 2006.
- [supra- and infra-specific characterization of some cryptogams: taxonomic and epidemiologic approaches] in French.  
PhD thesis defended by Rachid Zouhair at MIU in 16 February 2002.
- [Above-ground biomass of battandieri laburnum (*Argyrocytisus battandieri* Maire), a tabular middle Atlas forage shrub: case of Azrou and Sidi M'guild forests] in French.  
PhD thesis defended by Mohammed Bakkali at MIU in 5 July 2001.
- [Hydric state and cytophysiology of nucleolus and of nuclear bodies in pea cotyledonary bud meristem during cell cycle] in French.  
PhD thesis defended by Abdelilah Jennane at MIU in 29 January 2000.

### Master theses

- [Parameters that influence cream cheese viscosity and pasteurized milk creaming index] in French. Master thesis defended by Aziz Bouymajane at MIU in 2 October 2014.
- [WAJBAH application: Ration formulation and evaluation] in French. Master thesis defended by Othmane Ameziane at MIU in 25 December 2013.
- [Use of plant fibers in sustainable-development building] in French. Master thesis defended by Sanae Benani at MIU in 6 December 2013.
- [The current situation of food and therapeutic preference toward nature and change ability as influenced by knowledge] in French. Master thesis defended by Mustapha Cherrate at MIU in 25 November 2013.
- [Contribution to the use of olive slurry as crop fertilizer: cases of *Trigonellafœnum-graecum* and *Coriandrum sativum* crops] in French.  
Master thesis defended by Keltoum Oubella at MIU in 13 October 2012.

### BS reports

- [Digestibility in ruminants] in French.

Memoir defended by Rajae Loukili and Fatiha Maaidi at MIU in June 2017.

- [Feeding behavior toward plant fibers] in French.

Memoir defended by Sihame Maazouz at MIU in July 2016.

- [Conditioned taste aversion] in French.

Memoir defended by Chaker Zakaria and Said Zitouni at MIU in July 2015.

- [Dietary fibers in human feeding] in French.

Memoir defended by Ismail Elkandoussi and Hassan Outahninit at MIU in June 2014.

- [Plant fibers in feeding and industry] in French.

Memoir defended by Amina El Bennani and Nada Znagui at MIU in July 2013.

- [Kidney lithiasis in humans] in French.

Memoir defended by Souad El Maguri at MIU in July 2012.

- [Milk urea: physiology, variation and analysis] in French.

Memoir defended by Rachid Akki and Naima Berraho at MIU in July 2011.

- [Organic agriculture and farming] in French.

Memoir defended by Mohamed Ait Bella and Abdesslam Ouzainata at MIU in July 2010.

- [Dairy herd feeding improvement in two farms of Midelt region] in French.

Memoir defended by Karim Laaguig and Souad Maadouch at MIU in July 2009.

- [Treatment of lignocellulosic substrates for their use in feeding and industry] in French.

Memoir defended by Abdelilah Houssaini and Naoual Razzouk at MIU in July 2008.

- [feeding and cancer] in French.

Memoir defended by Hayate Bouharb and Fouzia Lachhab at MIU in July 2007.

- [study of *Thymus ciliatus* and *Lavandula stoechas* essential oils' antifungal activity against *Penicillium digitatum*] in French.

Memoir defended by Meryem Marhfour and Hafsa Shisseh at MIU in 14 July 2006.

- [milk pasteurization] in French.

Memoir defended by Hannou Bahouat and Abdelmonaim Elmimouni at MIU in July, 2006.

### **3.3.2. Theses and research evaluation**

- [Milk urea as an indicator of the efficiency of the nitrogen metabolism of dairy cows Holstein and its use to improve feed programs in Marrakech-Safi region] in French. PhD thesis defended by Napoléon Munyaneza at Cadi Ayyad University (Marrakesh, Morocco) on 11 July 2019.

- [Sylvo-pastoral study and use of *Cytisus villosus* Pourret. in the Moroccan Rif rangelands: Aerial biomass and food and medicinal values] in French. PhD thesis defended by Chaimae M'rabet at Abdel Malek Essaadi University (Tangier, Morocco) on 25 March 2017.

## CURRICULUM VITAE

- [Occupational exposure impact on the medical profile of craft potters: a toxicological and epidemiological approach] in French. PhD thesis defended by Aicha Fassi Fihri at Sidi Mohamed Ben Abdellah University (Fez, Morocco) in 27 December 2016.
- In vitro and in vivo evaluation of anti-diabetic and anti-inflammatory activity of *Asparagus aphyllus* L., *Crataegus azarolus* L. and *Ephedra alata* Decne.: from traditional uses to cellular action mechanisms. PhD thesis defended by Abdalsalam Omer Mohammed Kmail at Sidi Mohamed Ben Abdellah University (Fez, Morocco) in 6 September 2016.
- Molecular microbiology. Different scientific works conducted and defended, at MIU in 30 July 2016, by ten students from College of Staten Island, the City University of New York, USA.
- Functional domains and regulation study of the promoter of the gene coding for the synthesis of ovine *LH-beta* subunit. PhD thesis defended by Redouane Aherrahrou at MIU in 16 June 2015.
- [Effect of condensed tannins on the production and the nutritional quality of goat products, and opportunities for improvement] in French. PhD thesis defended by Mohamed Ayadi at Abdel Malek Essaadi University (Tangier, Morocco) in 15 November 2014.
- [Diagnosis of fluctuation in the viscosity of milk desserts and their compliance] in French. MS thesis defended by Yassine Oulad El Majdoub at MIU in 26 September 2014.
- [Evaluation of vitamin A status by the HPLC method and study of the influence of age, gender and scabies infestation in camels (*Camelus dromedarius*) raised in the Guelmim region (Morocco) ] in French. PhD thesis defended by Moulay Youssef Lyaktini at Ibn Zohr University (Agadir, Morocco) in 21 June 2014.
- [Monitoring the incidence of tomato yellow leaf curl (TYLCV) by the ELISA serological technique on some weeds] in French.  
MS thesis defended by Hayate Bouharb at MIU in 2 July 2009.
- [study of *Botrytis fabae* (Sard), the responsible agent of the chocolate spot in *Vicia faba* L.: importance, characteristics and integrated control approaches] in French.  
PhD thesis defended by Lahbib Mabsoute at MIU in 15 May 2004.
- [study of *Silene vulgaris* (Moench) Garcke's saponins and of the production of two prosaponin glucuronides in three species of Caryophyllaceae family] in French.  
PhD thesis defended by Mohamed Rochd at MIU in 24 April 2004.
- [improvement of tolerance to salinity in cellular cultures and entire plants of hard (*Triticum durum* Desf.) and soft (*Triticum aestivum* L.) wheats: characterization of salinity-tolerant variants] in French.  
PhD thesis defended by Fatiha Oudija at MIU in 5 April 2003.
- [artificial reproduction: its scientific methods and religious obligations] in Arabic.  
PhD thesis defended by Abderrafi Alj at MIU in 7 February 2002.
- [impact of the energetic feeding factor on endocrine pancreas seasonal function in an insulin-resistant species: *Psammomys obesus*] in French.  
PhD thesis defended by Mohammed Laraki at MIU in 27 October 2001.

- [evaluation and improvement of embryogenesis and regeneration capacities in durum wheat (*Triticum durum* Desf.) embryos] in French.

MS thesis defended by El houssine Bouiamrine at MIU in 30 May 1998.

### **3.3.3. Articles review**

- Wildlife Biology (2019),
- Journal of microbiology, biotechnology and food sciences (2018),
- Journal of Experimental Biology and Agricultural Sciences (special issue, 2017),
- J. Mater. Environ. Sci. (7(Y), 2016),

### **3.3.4. Applications evaluation**

- Member of the promotion committee, selecting habilitated professors in life sciences to become full professors. Sidi Mohamed Ben Abdellah University, Fez, Morocco (sessions of October-December 2015-2018).

- President of the hiring committee in charge of choosing one assistant professor in biological and environmental analyses for Khenifra community college (January 2016).

- Member of the Ibn Zohr university president selection committee (February 2015).

- Elected member of the Moulay Ismail university president selection committee (November 2014).

- Member of the Mohamed 5 university president selection committee (September 2014).

- Reporter on an application file, submitted by Abdelhafid Keli in order to get the "University habilitation" diploma (November 2013).

- President of the hiring committee in charge of choosing one assistant professor in biotechnology for Errachidia college of science and technology (June 2005).

- Reporter on an application file, submitted by Ghizlane Echchgadda in order to get the "University habilitation" diploma (April 2005).

- Member of the community college dean selection committee, MIU (April 2003).

## **3.4. EXTENSION**

### **3.4.1. Lectures**

- [Methodology of the scientific information search and presentation] in Arabic. Lecture presented at the college of arts and human sciences. Hassan 2 University, Mohammedia, 27 February 2020.



## CURRICULUM VITAE

- [Feeding behavior and taste development] in Arabic. Lecture presented to the teachers of Talaia al Ghad School, Meknes, 11 May 2016.
- [Nutritional education] in Arabic. Lecture presented to the pupils of Label Excellence School, Meknes, 1 May 2016.
- [Scientific thinking characteristics] in Arabic. Lecture presented to « Alomrane » association (Meknes), 5 January 2013.
- [Taste preference and aversion from diversity to addiction] in Arabic. Lecture presented in the « science » festival, college of engineering, MIU, 24 May 2012
- [Children nutrition education] in Arabic. Lecture presented to the teachers and the pupil parents of Wislane School, Wislane, 22 May 2010.
- [role of free-access colleges between theoretical and practical education and research] in Arabic. Lecture presented at the college of sciences. MIU, Meknes, 13 January 2009.
- [taste choice, from diversity to addiction] in Arabic. Lecture presented at the national school of agriculture. Meknes, 14 November 2008.
- [going back to the origin] in Arabic. Lecture presented the teachers of Talaia al Ghad School, Meknes, 21 December 2005.
- [Why do we prefer a food to another?] in Arabic. Lecture presented in the National Week of Science, MIU, 25 March 2004.
- [Higher education reform] in Arabic. Lecture presented at the biology department, MIU, June 2002.
- [scientific thinking] in Arabic. Lecture presented at the lawyers club, Fez, 9 March 2002
- [Crazy cow disease] in Arabic. Lecture presented at the education delegation headquarters of Fès jdid – Dar dbiber, 25 April 2001.
- [feeding behavior, from biology to civilization] in Arabic. Lecture presented to the association « Manar Al'irfane », Meknes, 25 March 2001.
- [How to choose the baby sex: an American natural and scientific method] in French. Lecture presented at the biology department, MIU, November 2000.
- [How does the animal choose its feed?] in Arabic. Lecture presented at Alqods youth house, Fez, 10 January 1998.
- [baby sex choosing methods] in Arabic. Lecture presented at the lawyers club, Fez, 23 November 1997.
- [plant quality improvement] in Arabic. Lecture presented at Alqods youth house, Fez, 21 March 1997.

### 3.4.2. Trainings

- [Scientific reporting and communication] in French. Training for the PhD candidates of the college of science, MIU, 30 December 2015.
- [Scientific reasoning] in Arabic. Workshop held for Alomrane association, Meknes, 29 Novembre, 2015.
- [Scientific thinking characteristics] in Arabic. Workshop held for the teachers of Talaia al Ghad School, Meknes, March 2013.
- [Writing a scientific document] in French. Workshop for the PhD candidates of the college of science, MIU, 15 February 2012.
- [the 01-00 law] in Arabic. Training to the benefit of the college of science's staff. Meknes, MIU, June-July 2010.
- Scientific English. Training to the benefit of the college of science's faculty. Meknes, MIU, October-December 2008.

### 3.4.3. Other

- Invitation by Assadissa TV channel, show « with the taste of achievement » (youth and science), 25 April 2019.
- Invitation by hespress electronic journal, May 2018 (<https://m.hespress.com/societe/393480.html>).
- Expertise for hespress electronic journal, March 2018 (<https://m.hespress.com/economie/383667.html>).
- Invitation by MedinaFM radio channel in connection with the Environment Week, Meknes, 20 September 2010.

### 3.5. HONORS AND AWARDS

- 5-6 Feb./ 18: hosted scientist by the Global Forum for Innovations in Agriculture (GFIA). Abu Dhabi, Arab Emirates
- 9/06-12/06: Fulbright foundation grant and a visiting research scholar status at the ADVS department, USU Logan UT (USA).
- 9/89-3/93: USAID scholarship to prepare a PhD (42 months) at the ADVS department, USU Logan UT (USA).
- 9/87-12/87: USAID scholarship for a visit to the range science department, USU Logan UT (USA).

### **3.6. RESPONSIBILITIES AND TRUSTS**

#### **3.6.1. In teaching**

10/07– present: Organizing member of different master programs at MIU.

9/03 – 6/05: president of the life sciences curriculum at MIU.

10/97– 7/03: organizing member of «Milk and its derivatives' industry» vocational bachelor at MIU.

Several times: responsible of different undergraduate and graduate courses at MIU.

#### **3.6.2. In research**

March 2018-present: editorial advisory board member of the « Applied Biological Research » journal.

October 2017-present: editor of the « Journal of Food, Agriculture and Environment ».

11 March 2015: organizing member of the meeting on «Science as a topic of thinking» at MIU.

4 June 2012: organizing member of the meeting on «Marine biodiversity and green economy» at MIU.

11-13 May 2007: organizing member of the fifth university pedagogy meeting at MIU.

January 2006 - present: member of the research laboratory «Plant Biotechnologies and Molecular Biology» accredited by MIU.

6/03 – 6/06: member of «Agro-ecology and plant protection» education and research unit, College of science and technology, Tangier.

June 2005 – June 2009: Head of the research team «biotechnologies and valorization of plant Resources» accredited by MIU.

19 May 2005: organizing member of «research projects' sponsoring: criteria, execution and evaluation» meeting, MIU.

22 April 2004: organizing member of «scientific research at the Moroccan university in the light of the new changes» meeting, MIU.

6/97 – 6/02: member of «plant Biotechnologies at the development service» education and research unit, MIU.

5-6 June 1987: organizing member of the «environment protection» meeting, MIU.

### **3.6.3. In administration**

1/2018- 7/2019: member of the Higher Council for Education, Training and Scientific Research.

3/97-1/03and 1/09-12/11: member of the college of sciences' council, MIU.

2/06-12/08: member of the college of sciences' scientific committee, MIU.

1/03 – 1/06: member of the university council, MIU.

1/99-1/01and 6/03 – 6/05: chairperson of the biology department, MIU.

11/97-1/99: member of the biology department executive committee, MIU.

1/95-1/98: member of the faculty union committee

### **3.6.4. Different contributions**

- Member in different commissions:

- study of master program and research teams projects (2006 - 2009),
- monitoring of higher education reform (2003 - 2004),
- discussion of the faculty evaluation and promotion criteria (2002),

- Different services and favors to the colleagues: article translation, design of experiments, statistical data analysis, etc.

## 4. PROSPECTS

### 4.1. DIFFERENT SUBJECTS OF INTEREST

- Taste perception, preference, aversion and addiction
- Diet analysis in different animal species
- Use of plant fibers in feeding and industry
- Higher education systems
- Science and society

### 4.2. ONGOING WORK

- Writing a book on “the Moroccan university dream” (in Arabic)
- Supervising a doctorate research project on « study of the bioavailability and methylglyoxal trapping effect of Hibiscus sabdariffa polyphenols and assessment of their effect on the rat large intestine microbiota ».
- Supervising a doctorate research project on « analysis of the diet of the Atlas deer (*Cervus elaphus barbarus*) in Tazekka National parc (Taza province, Morocco).
- Supervising a doctorate research project on « Improving forage value of lignocellulosic biomass by fungal and enzymatic treatments ».