

# Curriculum Vitae

## Sofiane BOUDALIA (Ph.D.)

### Researcher in Sustainable Food and Agriculture (*Food Security and Climate Change*)

Professional address: Faculty of Natural Sciences, Life Sciences, Earth, and the Universe

Department of Ecology and Environmental Engineering

8 Mai 1945 University, Guelma-Algeria

Affiliate Laboratory: Biology, Water, and Environment: <http://lbee.univ-guelma.dz/>

Team leader: “[\*Production and quality of agricultural products.\*](#)”

Email: [sofiane.boudalia@hotmail.com](mailto:sofiane.boudalia@hotmail.com); [boudalia.sofiane@univ-guelma.dz](mailto:boudalia.sofiane@univ-guelma.dz)

Phone: (00213) 6 71 88 67 04,  [Profil Research Gate](#)

Languages: English (B2), French, and Arabic

## **EDUCATION**

- University qualification (lecturer), Section 65 (2021 campaign, France).
- PhD in Food Science (Food Quality and Security), Burgundy University, Dijon-France (2009-2013).
- Master degree in Food Science, AgroSup Dijon, Dijon-France (2008-2009).
- Bachelor in Cell Biology and Physiology, Burgundy University, Dijon-France (2007-2008).

### *Short-term training:*

- Transversal Accelerator on-site Training Program (TAP). Department of Methods and Models for Economics; Territory and Finance (MEMOTEF). Sapienza University, Rome, Italy (2019: two weeks).
- Training "*Business skills approach*". Environmental Competence Center (Forem) Mons, Belgium. <https://www.formation-environnement.be/> (2016: two weeks).

## **PROFESSIONAL EXPERIENCE**

- Université 8 Mai 1945 Guelma-Algeria.

Department of Ecology and Environmental Engineering

[\*\*Associate Professor in Sustainable Food and Agriculture\*\*](#), 01-05-2017– present.

- Université 8 Mai 1945 Guelma-Algeria.

Department of Ecology and Environmental Engineering

[\*\*Assistant Professor in Sustainable Food and Agriculture\*\*](#), 01-10-2014 – 30-04-2017.

- University Hospital Center (CHU), Amiens-France.

ONCOPIC (Regional network of oncology in Picardy)

[\*\*Researcher \(Oncology & Nutrition\)\*\*](#), 2014.

- Burgundy University, Dijon-France.

The French National Institute for Agricultural Research (INRA)/ The Centre for Taste and Feeding Behavior (CSGA).

[\*\*PhD candidate, Food Science: Food Safety and Toxicology \(Dietary endocrine disruptors\)\*\*](#), 2009-2013.

## **TECHNICAL SKILLS**

- Areas of expertise: Sustainable food and nutrition, Agriculture sustainability (climate change impacts), Dietary and environment risk assessment (heavy metals, endocrine disruptors ...), Food security, Climate Smart Agriculture, sustainable livestock (cattle, camel and goat).
- Regulatory Affairs: follow regulatory developments at local and international levels.
- Statistical data analysis, data visualization and analytical tools (R and Cortex Manager...).

- Analytical techniques: Molecular biology; ELISA techniques; Histology; Good knowledge of bioinformatics; Cell culture; Atomic Absorption Spectroscopy; Animal experimentation.
- Project management (monitoring and reporting: FP7, Erasmus Capacity Building).
- Oral results presentations and communication skills.
- Proposals submission, funding acquisition, project Administration, conceptualization, supervision, data curation and formal analysis, methodology design, writing scientific publications and technical reports.

## **PUBLICATIONS (PEER-REVIEWED JOURNALS)**

- 1- « *Camel livestock in the Algerian Sahara under the context of climate change: Milk properties and livestock production practices* ». *Journal of Agriculture and Food Research*, (2023): 11, 100528. Boudalia S, Gueroui Y, Zebsa R, Arbia T, Chiheb AE, Benada Mh, Hadri Z, Youcef A, Bousbia A. <https://doi.org/10.1016/j.jafr.2023.100528>
- 2- « *Evaluation of trace metallic element levels in coffee by icp-ms: a comparative study among different origins, forms, and packaging types and consumer risk assessment* ». *Biological trace element research*, (2023). Zergui A, Boudalia S, Ababou A, Joseph M-L <https://doi.org/10.1007/s12011-023-03582-7>
- 3- « *Climate-Smart Agriculture in African Countries: A Review of Strategies and Impacts on Smallholder Farmers* ». *Sustainability* 14, no. 18: 11370. (2022). <https://doi.org/10.3390/su141811370>. Ariom, Thaddaeus Obaji, Elodie Dimon, Eva Nambeye, Ndèye Seynabou Diouf, Oludotun Olusegun Adelusi, and Sofiane Boudalia.
- 4- « *Effect of salinity levels on antifungal activity of essential oil from Thymus against Fusarium oxysporum* ». *Rev. Fac. Agron. (LUZ)*. 39(3): e223941 (2022). [https://doi.org/10.47280/RevFacAgron\(LUZ\).v39.n3.07](https://doi.org/10.47280/RevFacAgron(LUZ).v39.n3.07). Boualem Boumaaza, M'hamed Benada, Sofiane Boudalia, Ibrahim E. Benzohra, Abdelhamid Gacemi, Omar Khaladi, Mohamed Benkhelifa.
- 5- « *Prevalence of obesity and effect of sport activity on university students in Algeria* ». *Scientific African*. 17:e01319 (2022). <https://doi.org/10.1016/j.sciaf.2022.e01319>. HADRI Zouheyr, BENADA M'hamed, DJELLOULI Mustapha, BOUDALIA Sofiane, RAHALI Abdellah, ARAF Ali.
- 6- « *Pesticide residues levels in raw cow's milk and health risk assessment across the globe: a systematic review* ». *Environmental Advances*. 100266 (2022). <https://doi.org/10.1016/j.envadv.2022.100266>. Ali BOUDEBBOUZ, Sofiane BOUDALIA, Meriem Imen BOUSSADIA, Yassine GUEROUI, Safia HABILA, Aissam BOUSBIA, George K. SYMEON.
- 7- « *The exploration and exploitation of shale gas in Algeria: Surveying key developments in the context of climate uncertainty* ». *The Extractive Industries and Society*, 101115 (2022). <https://doi.org/10.1016/j.exis.2022.101115>. Sofiane BOUDALIA, Sheila A. OKOTH, Rabah ZEBSA.
- 8- « *Determination of Heavy Metal Levels and Health Risk Assessment of Raw Cow Milk in Guelma Region, Algeria* ». *Biological Trace Element Research*, 101115 (2022). <https://doi.org/10.1007/s12011-022-03308-1>. Boudebouz, A., Boudalia, S., Bousbia, A., Gueroui, Y., Boussadia, M. I., Chelaghmia, M. L., Zebsa, R., Affoune, A. M., and Symeon, G. K.
- 9- « *Demographics of indigenous bovine cattle farms in Greece, Tunisia and Algeria* ». *Options Méditerranéennes A - Addressing the challenges of agro-pastoral farming systems to strengthen their resilience. Zaragoza : CIHEAM*. no. 129, 2022 <http://om.ciheam.org/om/pdf/a129/a129.pdf>. D. Tsiokos, A. Bousbia, S. Ben Said, Y. Gueroui, S. Boudalia, A. Mohamed-Brahmi, S. Smeti, M. Anastasiadou, G. Symeon.
- 10- « *Challenges and Opportunities of the Mediterranean Indigenous Bovine Populations: Analysis of the Different Production Systems in Algeria, Greece, and Tunisia* ». *Sustainability* 14, 3356 (2022). <https://doi.org/10.3390/su14063356>. Aziza Mohamed-Brahmi, Dimitrios Tsiokos, Samia Ben Saïd, Sofiane Boudalia, Samir Smeti, Aissam Bousbia, Yassine Gueroui, Ali Boudebouz, Maria Anastasiadou and George K. Symeon.
- 11- « *Relationship between endocrine disruptors and obesity with a focus on bisphenol A: a narrative review* ». *BioImpacts* 11(4): 289-300 (2021). <https://doi.org/10.34172/bi.2021.33>. Sofiane BOUDALIA, Aissam BOUSBIA, Boualem BOUMAAZA, Malha OUDIR, Marie Chantal CANIVENC LAVIER.
- 12- « *Use of multivariate analysis as a tool in the morphological characterization of the main indigenous bovine ecotypes in northeastern Algeria* ». *PlosOne* 16(7): e0255153 (2021). <https://doi.org/10.1371/journal.pone.0255153>.

Aissam BOUSBIA, Sofiane BOUDALIA, Yassine GUERoui, Kamel HADDED, Abdelkader BOUZAQUI, Dounia KIBOUB, George SYMEON.

13- « *Isolation and efficacy of two bacterial strains antagonists of Erwinia amylovora and Pectobacterium carotovorum* ». *Egypt J Biol Pest Control* 31, 105 (2021). <https://doi.org/10.1186/s41938-021-00443-0>. M'hamed BENADA, Boualem BOUMAAZA, Sofiane BOUDALIA, Omar KHALADI.

14- *Effect of high temperature, short time (HTST) pasteurization on milk quality intended for consumption*. *Asian Journal of Dairy and Food Research*, 2021, DR-210. <https://doi.org/10.18805/ajdfr.DR-210>. Aissam Bousbia, Yacine Gueroui, Sofiane Boudalia, Mhamed Benada, Mabrouk Chemmam.

15- « *BOVISOL Project: Breeding and Management Practices of Indigenous Bovine Breeds: Solutions Towards a Sustainable Future* ». *Sustainability*, 2020, 12(23), 9891. <https://doi.org/10.3390/su12239891>. Sofiane Boudalia, Samia Ben Said, Dimitrios Tsikos, Aissam Bousbia, Yassine Gueroui, Aziza Mohamed-Brahmi, Samir Smeti, Maria Anastasiadou and George Symeon.

16- « *Evaluation of physicochemical properties and sensory qualities of pasta enriched with freeze-dried sweet whey* ». *Scientia Agriculturae Bohemica (SAB)*, 2020. 51(3): 75–85. <https://doi.org/10.2478/sab-2020-0010>. Sofiane BOUDALIA, Yassine GUERoui, Boualem BOUMAZA, Aissam BOUSBIA, Mhamed BENADA, Choubaila LEKSIR, El Yamine MEZROUA, Khadija Ryma ZEMMOUCHI, Afaf SAOUD and Mabrouk CHEMMAM.

17- « *The Effect of Mixing Milk of Different Species on Chemical, Physicochemical, and Sensory Features of Cheeses: A Review* ». *Foods*. 2020. 9, 1309. <https://doi.org/10.3390/foods9091309>. Oumayma BOUKRIA, El Mestafa EL HADRAMI, Sofiane BOUDALIA, Jasur SAFAROV, Françoise LERICHE, Abderrahmane AIT KADDOUR.

18- « *Heavy metals levels in raw cow milk and health risk assessment across the globe: A systematic review* ». *Science of The Total Environment*. 2020, 141830. <https://doi.org/10.1016/j.scitotenv.2020.141830>. Ali Boudebouz, Sofiane Boudalia, Aissam Bousbia, Safia Habila, Meriem Imen Boussadia, Yassine Gueroui.

19- « *Milk heat treatment affects microbial characteristics of cows' and goats' "Jben" traditional fresh cheeses* ». *Food Sci. Technol.* 41(1): 136-143, July-Sep. 2021. Epub July 06, 2020. ISSN 0101-2061. <https://dx.doi.org/10.1590/fst.00620>. Dahmane TADJINE, Sofiane BOUDALIA, Aissam BOUSBIA, Yassine GUERoui, George SYMEON, Lamia MEBIROUK BOUDECHICHE, Aicha TADJINE, Mabrouk CHEMMAM.

20- « *Characterization of traditional Algerian cheese "Bouhezza" prepared with raw cow, goat and sheep milks* ». *Food Sci. Technol.* 40(suppl.2): 528-537. 2020. Epub July 17, 2020. ISSN 1678-457X. <https://doi.org/10.1590/fst.35919>. Sofiane BOUDALIA, Ali BOUDEBBOUZ, Yassine GUERoui, Aissam BOUSBIA, Mhamed BENADA, Choubaila LEKSIR, Zeki BOUKAABENE, Aya SAIHI, Hadjer TOUAIMIA, Abderrahmane AÏT-KADDOUR, Mabrouk CHEMMAM.

21- « *Pasteurization effects on yield and physicochemical parameters of cheese in cow and goat milk* ». *Food Sci. Technol*, 40(3): 580-587, July-Sep. 2020. Epub Dec 13, 2019. ISSN 0101-2061. <http://dx.doi.org/10.1590/fst.13119>. TADJINE Dahmane, BOUDALIA Sofiane, BOUSBIA Aissam, KHELIFA Rassim, MEBIROUK BOUDECHICHE Lamia, TADJINE Aicha, CHEMMAM Mabrouk.

22- « *Traditional dairy products in Algeria: case of Klila cheese* ». *Journal of Ethnic Foods*, 6(1), 7: 2019. <https://doi.org/10.1186/s42779-019-0008-4>. Choubaila LEKSIR, Sofiane BOUDALIA, Nizar MOUJAHED and Mabrouk CHEMMAM.

23- « *Heavy metals concentrations in raw cow milk produced in the different livestock farming types in Guelma province (Algeria): contamination and risk assessment of consumption* ». *The Journal of Animal and Plant Sciences*. 29(2): 2019, Page: 386-395. Aissam Bousbia, Sofiane Boudalia, Yacine Gueroui, Ghebache Rahim, Amrouchi Marwa, Belaize Bochra, Soumia Meguelati, Boussad Belkheir, Mohamed Benidir and Mohamed Lyamine Chelaghmia.

24- « *Variability of virulence and aggressiveness of Erwinia carotovora subsp. carotovorum causing the soft rot on potato tubers in the western of Algeria* ». *International Journal of Plant Biology*. 9(1), 2018. <https://doi.org/10.4081/pb.2018.7568>. M'hamed BENADA, Boualem BOUMAAZA, Sofiane BOUDALIA, Omar KHALADI, Bettache GUESSAS.

- 25- « Effects of different levels of saline water on infection of tomato by *Botrytis cinerea*, the causal agent of gray mold ». *Indian J. Agric. Res.*, 52(5) 2018: 530-535. <https://doi.org/10.18805/IJARe.A-327>. Boumaaza Boualem, Boudalia Sofiane, Gacemi Abdelhamid, Benzohra.I. E, Benada M'hamed, Benkhelifa Mohamed and Khaladi Omar.
- 26- « Nutritional and hygienic quality of raw milk intended for consumption in the region of Guelma, Algeria ». *Asian J. Dairy & Food Res*, 37(3) 2018: 192-196. <https://doi.org/10.18805/ajdfr.DR-123>. A. Bousbia, S. Boudalia, Y. Gueroui, B. Belaize, S. Meguelati, M. Amrouchi, R. Ghebache, B. Belkheir and M. Benidir.
- 27- « Male rat exposure to low dose of di(2-ethylhexyl) phthalate during pre-pubertal, pubertal and post-pubertal periods: impact on sperm count, gonad histology and testosterone secretion ». *Reproductive Toxicology*, Vol. 75, pp 33–39, January 2018. <https://doi.org/10.1016/j.reprotox.2017.11.004>. Malha OUDIR, Henni CHADER, Bachir BOUZID, Kheira BENDISARI, Batoul LATRECHE, Sofiane BOUDALIA, Mokrane IGUER-OUADA.
- 28- « Endocrine disruptors: history and difficulties in predicting effects ». *Insights Nutr Metabol*. 2017;1(2):1-2. Sofiane BOUDALIA.
- 29- « Aroma characterization of ripe date fruits (*Phoenix dactylifera L.*) from Algeria ». *African Journal of Biotechnology*, Vol. 16(42), pp. 2054-2061, 18 October, 2017. <https://doi.org/10.5897/AJB2017.16222>. El Yamine MEZROUA, AbdelNacer AGLI, Guido FLAMINI, Sofiane BOUDALIA and Hayet OULAMARA.
- 30- « Analysis of Factors Affecting Consumer Behavior of Dairy Products in Algeria: A Case Study from the Region of Guelma ». *International Journal of Agricultural Research*, Volume 12, Number 2, 93-101, 2017. <https://doi.org/10.3923/ijar.2017.93.101>. Aissam BOUSBIA, Sofiane BOUDALIA, Sarra CHELIA, Karima OUDAIFIA, Hanane AMARI, Mohamed BENIDIR, Boussad BELKHEIR and Sofiane HAMZAoui.
- 31- « Early Endocrine Disruptors Exposure Acts On 3T3-L1 Differentiation And Endocrine Activity ». *Bioimpacts*. 2017;7(2):83-89. <https://doi.org/10.15171/bi.2017.11>. Sofiane BOUDALIA, Christine BELLOIR, Marie-Louise MILLER, Marie-Chantal CANIVEC-LAVIER.
- 32- « Evaluation of the Stability of the Physico-chemical Properties and Sensory Qualities of Farfalle Pasta from the Region of Guelma, Algeria ». *Mal J Nutr*, 2016 Dec. 22(3): 443-453. Sofiane BOUDALIA, El Yamine MEZROUA, Aissam BOUSBIA, Manel KHALDI, Warda MERABTI & Hacéne NAMOUNE.
- 33- « Bisphenol-A: Legislation in Industrials Countries and in Algeria ». *Research Journal of Environmental Toxicology. Res. J. Environ. Toxicol.*, 2016 April 15. 10:189-192. <https://doi.org/10.3923/rjet.2016.189.192>. Sofiane BOUDALIA and Malha OUDIR.
- 34- « Physico-chemical properties and hygienic quality of raw and reconstituted milk in the region of Guelma-Algeria ». *International Journal of Agricultural Research. Int. J. Agric. Res.*, 2015 March 15. 11: 77-83. <https://doi.org/10.3923/ijar.2016.77.83>. Sofiane BOUDALIA, Dalal BENATI, Radja BOUKHAROUBA, Besma CHEMAKH and Mabrouk CHEMMAM.
- 35- « Enamel hypomineralization due to endocrine disruptors ». *Connect Tissue Res*. 2014 Aug;55 Suppl 1:43-7. <https://doi.org/10.3109/03008207.2014.923857>. Katia Jedeon, Clémence Marciano, Sophia Loiodice, Sofiane Boudalia, Marie-Chantal Canivenc Lavier, Ariane Berdal, and Sylvie Babajko.
- 36- « A Two-generation Study on Low-dose BPA Exposure in Wistar Rats: Effects on Maternal Behavior, Flavor intake and Development ». *Neurotoxicology and teratology*, 2013 Nov 20. pii: S0892-0362(13)00217-1. <https://doi.org/10.1016/j.ntt.2013.11.002>. Boudalia Sofiane, Berges Raymond, Folia Mireille, Chabanet Claire, Decocq Laurence, Pasquis Bruno, Abdennebi-Najar Latifa and Canivenc-Lavier Marie-Chantal.
- 37- « Oral homeostasis disruption by medical plasticizer component Bisphenol A in adult male rats ». *The Laryngoscope*, 2013 Jun; 123(6):1405-10. <https://doi.org/10.1002/lary.23791>. Folia Mireille, Boudalia Sofiane, Ménétrier Franck, Decocq Laurence, Pasquis Bruno, Schneider Charles, Bergès Raymond, Artur Yves and Canivenc-Lavier Marie-Chantal.
- 38- « Enamel defects reflect perinatal exposure to bisphenol A ». *The American Journal of Pathology*, 2013 Jun 4. pii: S0002-9440(13)00279-4. <https://doi.org/10.1016/j.japath.2013.04.004>. Katia Jedeon, Muriel De la Dure-Molla1, Steven Brookes, Jennifer Kirkham, Marie-Chantal Canivenc-Lavier, Raymond Bergès, Sofiane Boudalia, Clémence Marciano, Sophia Loiodice, Hidemitsu Harada, Ariane Berdal1, Sylvie Babajko.

39- « *Sub-NOAEL amounts of vinclozolin and xenoestrogens target rat chondrogenesis in vivo* ». *Biochimie*, 2013 Dec 12. pii: S0300-9084(13)00438-0. <https://doi.org/10.1016/j.biuchi.2013.12.001>. Thuy-Anh Auxietre, Marie-France Dumontier, Irene Balguy, Yves Frapart, Marie-Chantal Canivenc-Lavier, Raymond Berges, Sofiane Boudalia, Jacques Auger, Marie-Therese Corvol, Jean-François Savouret.

40- « *Perturbateurs Endocriniens Altérations Comportementales et Sensorielles* ». *ARET-Actualités*, parution octobre 2013. Marie-Chantal Canivenc-Lavier, Sofiane Boudalia, Mireille Folia et Wided Kouidhi.

41- « *Effects of oral Bisphenol A exposure on sweet preference and on submandibular salivary gland structure in male adult rat* ». *La Revue de Geriatrie*, Tome 37, N°9 Nov 2012. Folia Mireille, Boudalia Sofiane, Ménétrier Franck, Decocq Laurence, Pasquis Bruno, Schneider Charles, Bergès Raymond, Artur Yves and Canivenc-Lavier Marie-Chantal.

## **RESEARCH GRANTS**

Type of Grant	Role	Title of Project	Awarding Body	Duration	Grant Amount
Research grants	Principal Investigator (Algeria)	From tradition to functionality: Bio-active compounds in Mediterranean dairy products (ACTIVEDAIRY)	PRIMA-foundation and European Union(H2020)	3 years	Submitted (150000 Euros)
Research grants	Principal Investigator (Algeria)	Breeding and management practices of indigenous bovine breeds: Solutions towards a sustainable future (BOVISOL)	European Commission under the ERA-NET Scheme of the 7 <sup>th</sup> Framework Programme	09/2018 to 3/2022	20 000 Euros
Erasmus+ Capacity Building	Project manager at the Faculty level (Guelma University)	Co-construction of a training Professional offer with high employability (COFFEE)	European Commission	09/2015 to 09/2018	18 600 Euros
Erasmus+ Capacity Building	Member (Guelma University)	Initiation of the Validation Process of Acquired Experience through higher education in Algeria – (InPROVE)	European Commission	09/2018 to 09/2022	15 000 Euros
Research grants	Member (Guelma University)	Sustainable Dairy production: Optimization of production techniques, valorization and quality control	DIRECTORATE GENERAL FOR SCIENTIFIC RESEARCH AND TECHNOLOGICAL DEVELOPMENT (DGRSDT)	09/2017 to 09/2021	15 000 Euros
Research grants	Member INRA Dijon (France)	Continuous exposure to mixtures of Dietary Endocrine Disruptors at environmental doses: Impact on Reproduction, Development and Food Behavior	French National Research Agency	9/2009-03/2013	289 422 Euros

## **VISITS UNIVERSITIES/LABORATORIES**

1- March 11-15, 2019: *Erasmus teaching mobility*. Faculty of Engineering; Department of Food Engineering, Ondokuz Mayıs University, Samsun, Turkey.

- 2- December 9-21, 2018: Visit to the laboratory of Environment and Microbiology Team (EEM), UMR CNRS 5142, Université de Pau et des Pays de l'Adour, Mont-de-Marsan. Pau, France. <https://iprem.univ-pau.fr/fr/index.html>
- 3- December 11-15, 2017: Visit to VetAgro Sup Campus Agronomique, Clermont-Ferrand, France.
- 4- December 01-11, 2017: Visit to the Centre for Taste and Feeding Behavior (CSGA), French National Institute of Agronomic Research (INRA), Dijon, France.
- 5- May 15-18 2017: Training "Internships and internship management". Université de Perpignan Via Domitia (UPVD). Perpignan, France.
- 6- December 01-21, 2016: Visit to the Centre for Taste and Feeding Behavior (CSGA), French National Institute of Agronomic Research (INRA), Dijon, France.
- 7- 21-24 March 2016: Training "Business skills approach". Environmental Competence Center (Forem) Mons, Belgium. <https://www.formation-environnement.be/>

## **REVIEWER**

- [Sustainability](#)
- [Nutrients](#)
- [Science of The Total Environment](#)
- [Human and Experimental Toxicology](#)
- [Scientific African](#)

## **FUNDING AND AWARDS**

- [One Planet Fellowship](#). (Agriculture sustainability and climate change).
- Fellowship from the French National Institute for Agricultural Research (INRA), Division: Nutrition, Chemical Food Safety and Consumer Behavior. France.
- Fellowship from the Burgundy Council (Région Bourgogne), Dijon-France.
- Congress bursary from the French Society of Toxicology.