

# Curriculum Vitae

## **Personal information:**

Full Name: Mohamed .M . M .Bumadian

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## **Educational background and Training:**

### **2014- Present, Academic**

Head of the Department of Botany,  
Faculty of Science,  
Benghazi University

### **2012-Present, Academic**

Affiliated University of Benghazi  
Affiliated University of Omar Al Mukhtar, Al Beida  
Libya

### **2007-2011, Molecular Identification and physiological Characterization of Extreme Halotolerant Bacteria, Ph.D.**

Department of Molecular Biology and Biotechnology  
University of Sheffield  
Sheffield, UK.

### **2006-2007, Academic English**

University of Sheffield  
Sheffield, UK.

### **2002-2006, Lecturer Assistant**

University of Omar Al Mukhtar, Al Beida  
Department of Botany  
Libya

### **2000 - 2002, Environment General Authority**

Head of Natural Resources Dept.  
Libya

### **1996-2000, Technical Center for Environmental Protection**

Team of study and Monitoring Water Quality  
Libya

### **1996-1999, M.Sc. Research in Ground water pollution**

Department of Botany  
University of Benghazi  
Libya

### **1989-1993, B.Sc.**

Department of Botany  
University of Benghazi

## **Publications**

### **Papers Published:**

**Mohamed Bumadian**, Michael P. Williamson and D. James Gilmour .(2014). The *de novo* synthesis and uptake of compatible solutes in *Klebsiella pneumoniae* ATCC 342. 4<sup>th</sup> Annual International Conference on Advances in Biotechnology (BioTech 2014) Copyright © GSTF 2014. ISSN 2251-2489. doi: 10.5176/2251-2489\_BioTech 14.59. <http://dl4.globalstf.org/?wpsc-product=the-de-novo-synthesis-and-uptake-of-compatible-solutes-in-klebsiella-pneumoniae-atcc-342>.

**Mohamed M Bumadian**, Hwida H Almansury, Ismaeel H Bozakouk, Youssef F Lawgali and Farag A Bleiblo. (2013). Detection and Enumeration of Coliform Bacteria in Drinking Water at Hospital of Benghazi/Libya. Journal of Experimental Biology and Agricultural Sciences, 1(6):436-440.

### **Proceeding Conference Abstracts:**

**Mohamed Bumadian**, Michael P. Williamson and D. James Gilmour .(2013). Role of ectoine in the osmoadaptation of *Aeromonas hydrophila*.4<sup>th</sup> World Congress on Biotechnology. J Biotechnol Biomater, September 2013, 3:3, USA. <http://dx.doi.org/10.4172/2155-952X.S1.025>

**Mohamed M Bumadian** and Ali M El-Bakkosh.(2012). Drinking water quality in some region at South East Libya. The First International Conference on Water Resources in Al-Jabal Al-Akhdhar (June, 2012) Faculty of Natural Resources and Environmental Science El-Bayada-Libya. (Oral Presentation).

**Mohamed Bumadian**, Michael P. Williamson and D. James Gilmour .(2010). 8<sup>th</sup> international Congress on Extremophiles 2010 Ponta Delgada, Azores, Portugal. Molecular Identification and Physiological Characterisation of Halotolerant Bacteria Isolation from the River Wye, Derbyshire, UK. (Poster).

**Mohamed Bumadian**. (2009). Physiological characterisation of bacteria isolation from fresh water. The 2<sup>nd</sup> Academic Symposium of Libyan Students- Universities of UK/2009 Bradford UK. (Oral Presentation).

**Mohamed Bumadian** and , Faraj M Budajaja. (2002). Study of Drinking Water Quality at Kufra Region The First National Conference on Environment .2002. Tripoli. Libya. (Oral Presentation).

**Mohamed Bumadian** and Mohamed Hamouda. (2000). Level Nitrate on Several Wells around Benghazi City Natural Resources Conference 2000 Sirt / Libya. (Oral Presentation).

## **Books**

Farag Bleiblo, Youssef Ogali, **Mohamed Bumadian**, Ismaeel Buzakok, and Ali Bleiblo., Signal Transduction Pathways of Cardiovascular Pathophysiology: Focus on Immunostimulatory RNA. 2013, LAP LAMBERT Academic Publishing. ISBN: 978-3-659-35269-0.

## **Recommended and Skills**

TO WHOM IT MAY CONCERN

### **Mohamed Bumadian**

Mohamed Bumadian undertook PhD studies in my laboratory from October 2007 until May 2011. He submitted his thesis entitled “Molecular Identification and Physiological Characterization of Extremely Halotolerant Bacteria Isolated from a Freshwater Environment” and he successfully passed his oral examination with only minor corrections required. The degree of PhD was conferred on Mohamed on 14<sup>th</sup> October 2011.

A major part of Mohamed’s research was to use molecular methods to identify the bacteria that he isolated from the river samples. This work involved extracting genomic DNA from pure cultures of the isolates, using the polymerase chain reaction (PCR) to amplify the 16S rDNA. Gel electrophoresis is used to check that the genomic DNA has been successfully extracted and that the correct size band is present to indicate that the correct gene (16S rRNA) has been amplified. The 16S rDNA is then cleaned up then cloning of PCR products and transformation of *E.coli*. QIAGEN Mini-Prep kit. and plasmid sent for sequencing. Mohamed then used the software available at the BLAST website to identify his isolates and draw phylogenetic trees. Mohamed is trained in these techniques and can use them to identify unknown bacteria from other samples in the future.

In addition to his molecular work, Mohamed has all the microbiology laboratory skills to grow pure cultures of microorganisms and to measure their growth quantitatively. He has also measured the respiration rate of bacteria using an oxygen electrode and is familiar with the spectrophotometric measurement of enzyme activities. Finally, he has used NMR analysis to identify the compatible solutes found in bacteria that grow at high salt concentrations.

It has been a pleasure to have Mohamed in my laboratory for the last few years and **I unreservedly recommend him to you as an excellent research scientist.**

I am happy to provide any further details that you may require.

Yours sincerely

Dr D J Gilmour

## **Currently works**

Usra Al-Sabahe, **Mohamed Bumadian** and Fozea Al-garaboly. *In vitro* antibacterial activity of crude extracts of *Posidonia oceanica* from western coast of Benghazi-Libya. Cosupervisor of MSc. student at Benghazi University.

Nagah Abu-Bakr and **Mohamed Bumadian**. Investigation of coliforms, fecal coliforms and other waterborne bacteria in some wells of water at El-Bayada city in Libya. Cosupervisor of MSc. student at Omar Al Mukhtar, Al Beida, Libya.

Kiled kalial, **Mohamed Bumadian**. Antibacterial Activity of crud extract of *Drimia maritima* on resistant antibiotics strains of bacteria isolated from children hospital. Special project, Botany Department, Benghazi University.

Ismaeel H. Bozakouk, **Mohamed Bumadian**. Community Associated *Staphylococcus aureus* Infections Among Children at Hospital of Benghazi/Libya.

Abosaf Almagaraby, **Mohamed Bumadian**, Mareia Almhadoe. A study of Phytochemical, Antioxidant Screen and Antimicrobial Activity of the Various Extracts of *Cyclamen graecum* Link Tubers and Leaves from East Libya.

## **REFERENCES**

### **Dr. D J Gilmour**

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### **Prof. Mohamed . S . Hamouda**

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### **Prof. Mohamed El Drawi**

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