Curriculum Vitae

Personal information:

Full Name: Mohamed .M . M .Bumadian Tel: 00218 92 6739517 E-mail: <u>mbumedian@yahoo.com</u>

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

<u>Publications</u> <u>Papers Published:</u>

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

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*.4th 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). 8th international Congress on Extremophiles 2010 Ponta Delgada, Azores, Portugal. Molecular Identification and Physiological Characterision of Halotolerant Bacteria Isolation from the River Wye, Derbyshire, UK. (Poster).

Mohamed Bumadian. (2009). Physiological characterision of bacteria isolation from fresh water. The 2nd 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 Bumedian**, 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 14th 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

Academic Staff Department of Molecular Biology and Biotechnology Sheffield UK. Tel.0044114 222 4412 E-mail: <u>D.J.Gilmour@sheffield.ac.uk</u>

Prof. Mohamed . S . Hamouda

Botany Department University of Benghazi Benghazi Libya P.O.box : 17390 Benghazi / Libya Tel: 00218 913759344 E-mail : <u>mshamouda@yahoo.com</u>

Prof. Mohamed El Drawi

Academic Staff Botany Department University of Benghazi Benghazi Libya Tel:00 218 91 3805947