Inhibition of Pseudomonas aeruginosa Quorum Sensing by a

Methyl Gallate Compound from Mangifera indica

Nourhan G. Naga¹, Ahmed A. Zaki ², Dalia E. El-Badan¹, Heba S.

Rateb³, Khalid M. Ghanem¹, Mona I. Shaaban⁴

¹Botany and Microbiology Department, Faculty of Science, Alexandria University, Egypt,

²Pharmacognosy Department, Faculty of Pharmacy, Mansoura University, Egypt.

³Department of Pharmaceutical and Medicinal Chemistry, Faculty of Pharmacy, Misr University

for Science and Technology, Cairo, Egypt

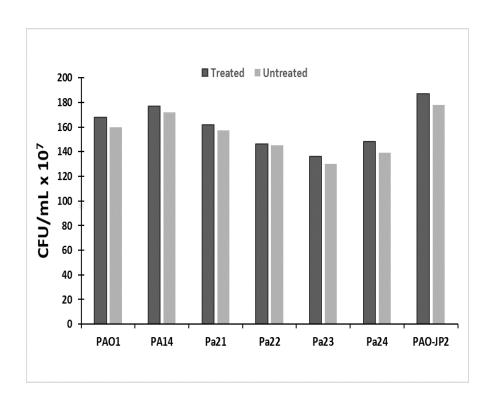
⁴Microbiology and Immunology Department, Faculty of Pharmacy, Mansoura University, El

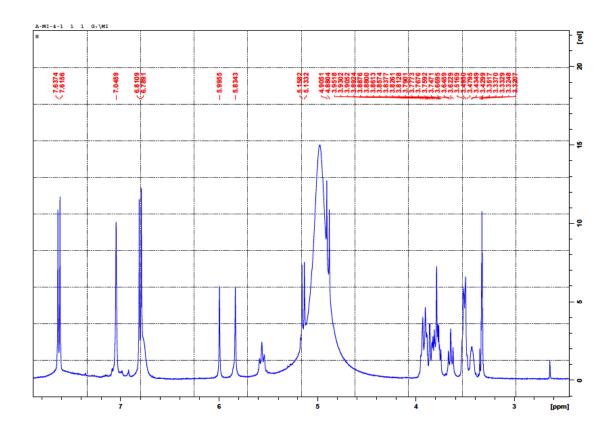
Mansoura, Egypt

Corresponding author: Mona I. Shaaban

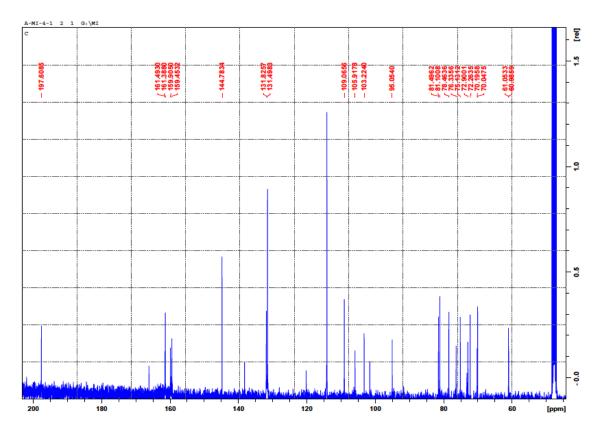
Phone: +201092535893; fax: (+2) 050-2246253

E-mail: mona ibrahem@mans.edu.eg, sarafawzy2002@yahoo.com

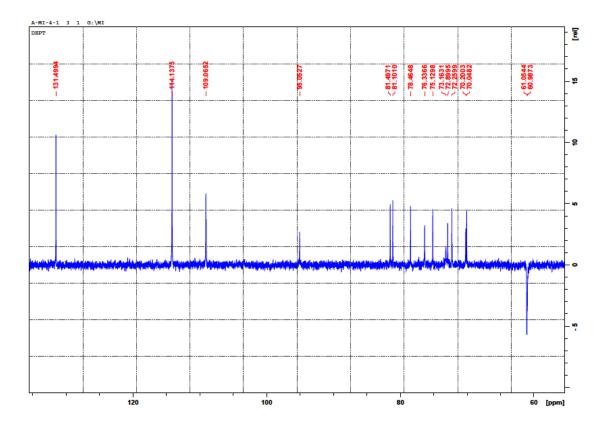




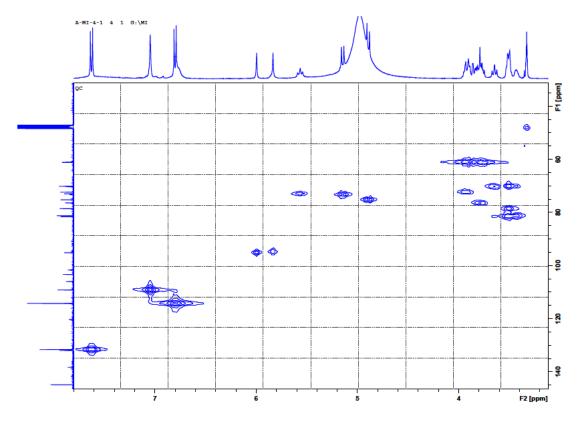
Supplementary figure S1: ¹H-NMR Spectrum of Compound 4-1 (400 MHz, CD3OD)



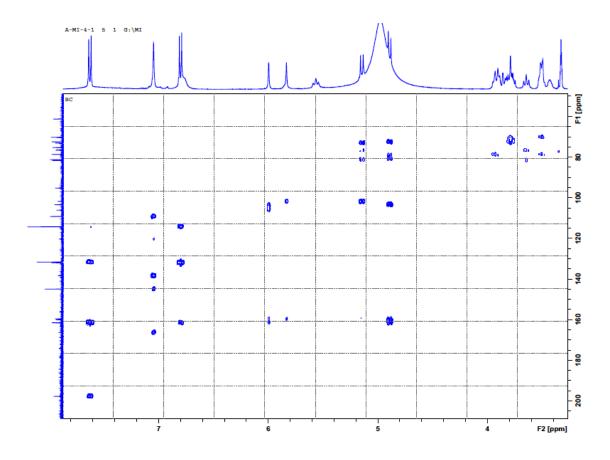
Supplementary figure S2: ¹³C-NMR Spectrum of Compound 4-1 (100 MHz, CD3OD)



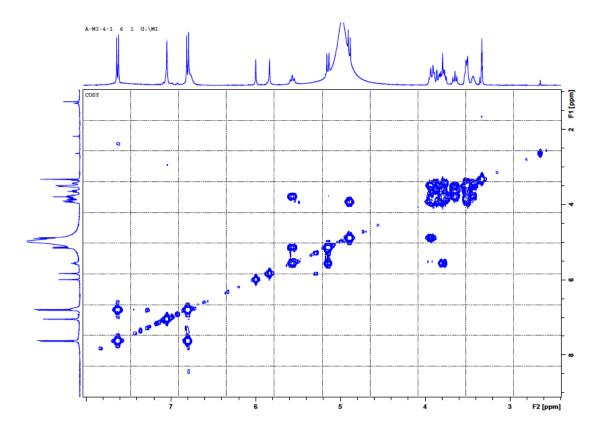
Supplementary figure S3: DEPT Spectrum of Compound 4-1 in CD3OD



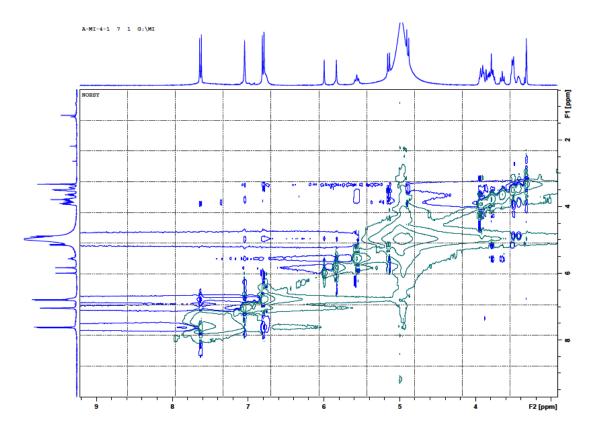
Supplementary figure S4: HMQC Spectrum of Compound 4-1 (400 MHz, CD3OD)



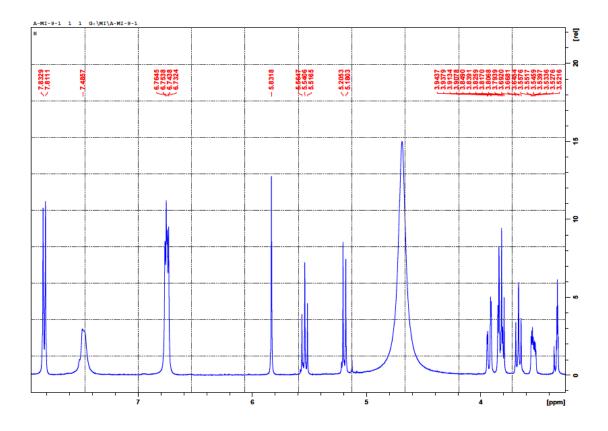
Supplementary figure S5: HMBC Spectrum of Compound 4-1 (400 MHz, CD3OD)



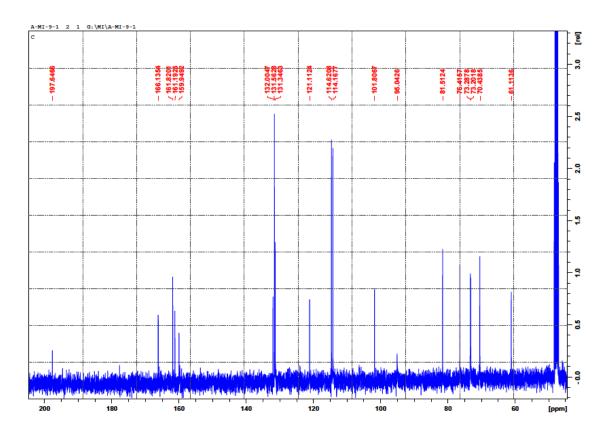
Supplementary figure S6: COSY Spectrum of Compound **4-1** (400 MHz, CD3OD)



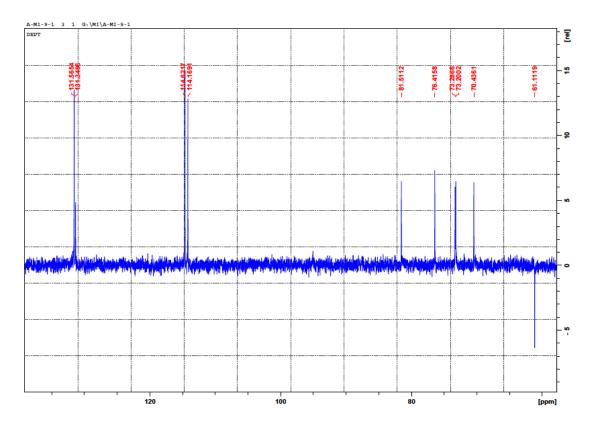
Supplementary figure S7: NOESY Spectrum of Compound 4-1 (400 MHz, CD3OD)



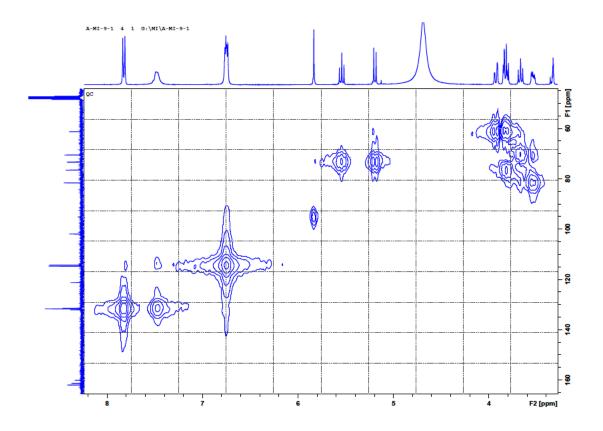
Supplementary figure S8: ¹H-NMR Spectrum of Compound 9-1 (400 MHz, CD3OD)



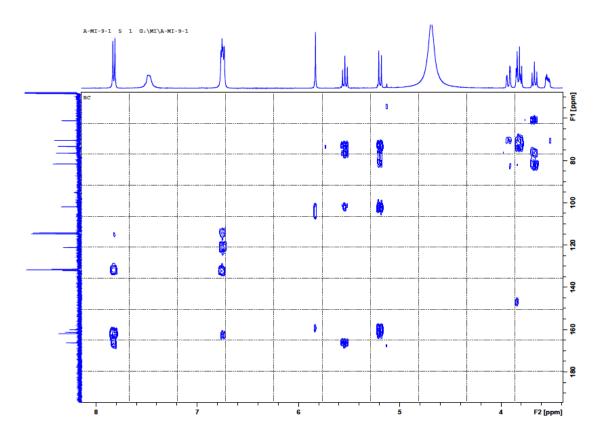
Supplementary figure S 9^{: 13}C-NMR Spectrum of Compound 9-1 (100 MHz, CD3OD)



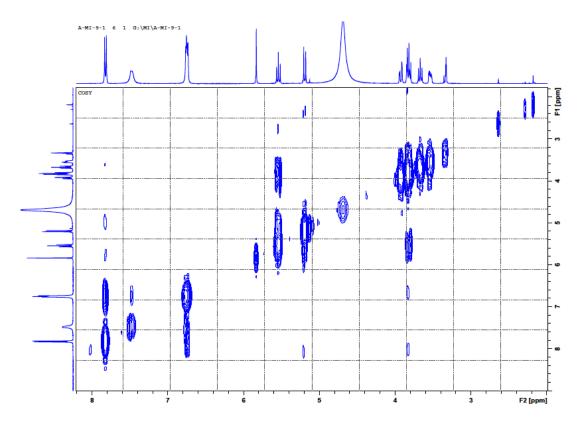
Supplementary figure S10: DEPT Spectrum of Compound 9-1 in CD3OD



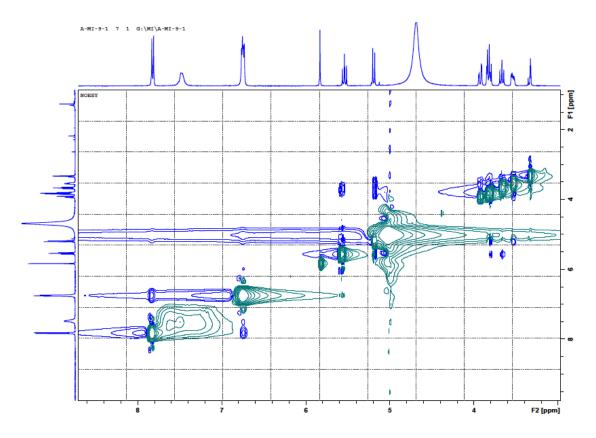
Supplementary figure S11: HMQC Spectrum of Compound 9-1 (400 MHz, CD3OD)



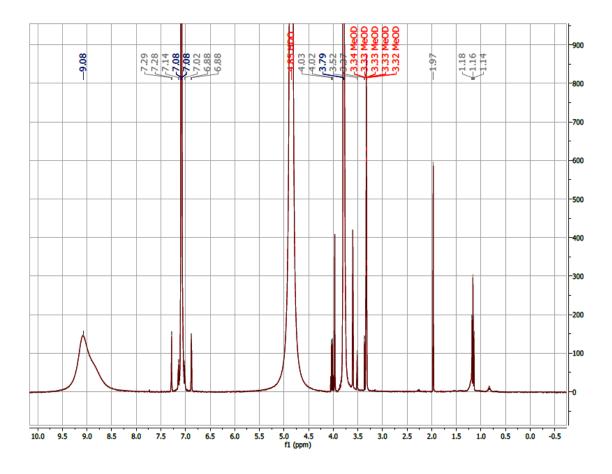
Supplementary figure S12: HMBC Spectrum of Compound **9-1** (400 MHz, CD3OD)



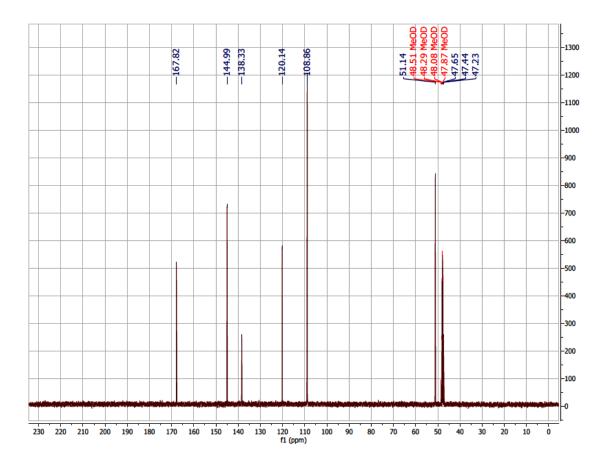
Supplementary figure S13: COSY Spectrum of Compound 9-1 (400 MHz, CD3OD)



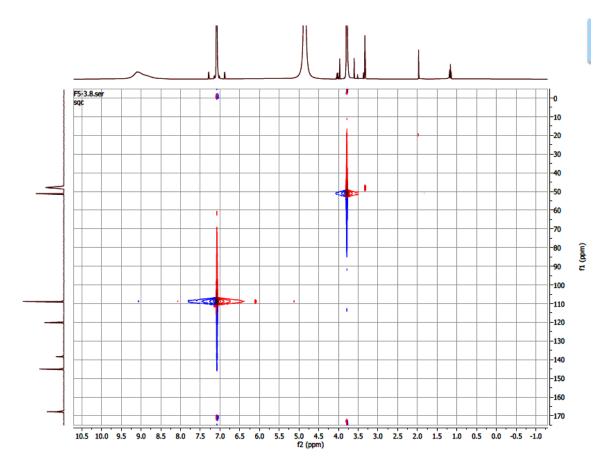
Supplementary figure S14: NOESY Spectrum of Compound 9-1 (400 MHz, CD3OD)



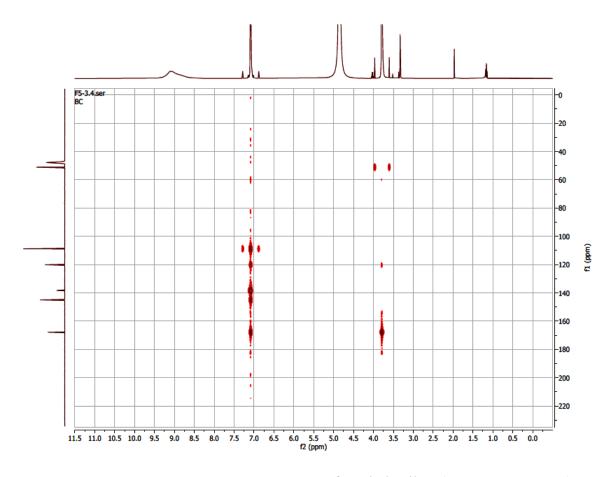
Supplementary figure S15: ¹H-NMR Spectrum of Methyl gallate (400 MHz, CD3OD)



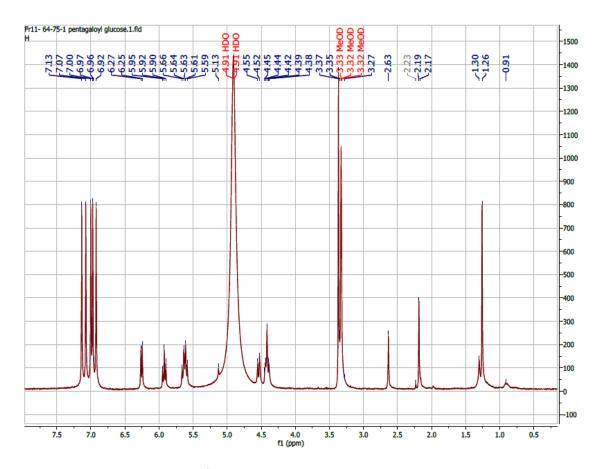
Supplementary figure S16: ¹³C-NMR Spectrum of Methyl gallate (100 MHz, CD3OD)



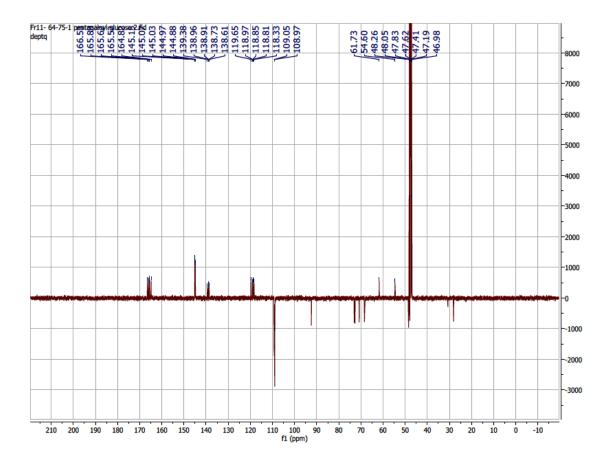
Supplementary figure S17: HMQC Spectrum of Methyl gallate (400 MHz, CD3OD)



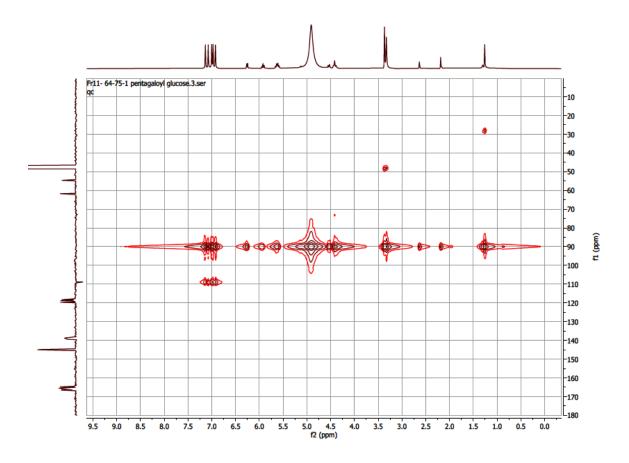
Supplementary figure S18: HMBC Spectrum of Methyl gallate (400 MHz, CD3OD)



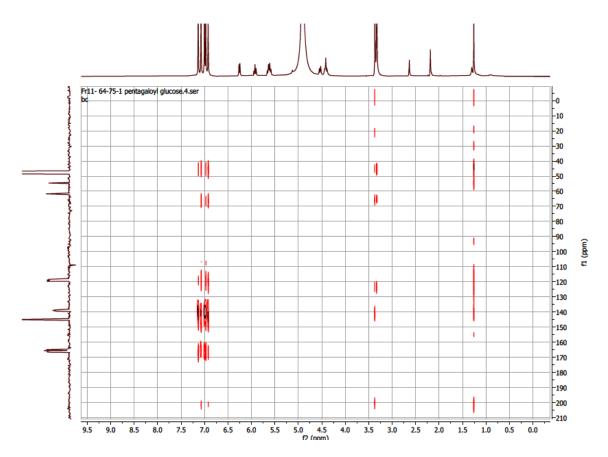
Supplementary figure S19: ¹H-NMR Spectrum of pentagalloyl glucoside (400 MHz, CD3OD)



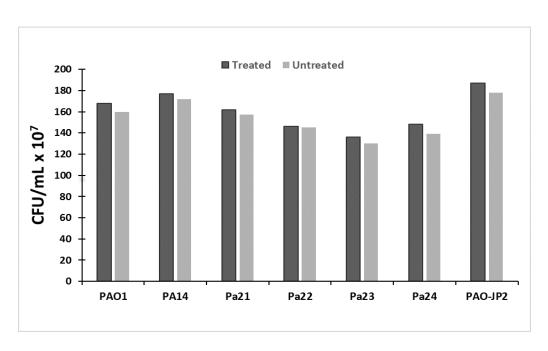
Supplementary figure S20: ¹³C-NMR Spectrum of pentagalloyl glucoside (100 MHz, CD3OD)



Supplementary figure S21: HMQC Spectrum of pentagalloyl glucoside (400 MHz, CD3OD)



Supplementary figure S22:HMBC Spectrum of pentagalloyl glucoside (400 MHz, CD3OD)



Supplementary figure S23: Bacterial count of *P. aeruginosa* with and without 1/2 MIC of methyl gallate.