

Erratum to: Radio-protective and antioxidative activities of astaxanthin from newly isolated radio-resistant bacterium *Deinococcus* sp. strain WMA-LM9

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Erratum to: Ann Microbiol
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The original article contained errors, correct data is given below. The original article was corrected.

The name of Manzoor Ahmad is also corrected in this article.

This sentence,

For this purpose, the DNA was extracted using a DNA extraction kit (QIAGEN, Hilden, Germany), and the 16S rRNA gene sequence was amplified using 27F' (5'-AGAGTTTGATCCTG GCTCAG-3') and 1494R' (5'-CTACGGCTACCTTGTTACGA -3') bacterial primers.

Should be:

For this purpose, the DNA was extracted using a DNA extraction kit (QIAGEN, Hilden, Germany), and the 16S rRNA gene sequence was amplified using 27F' (5'-AGAGTTTGATCCTG GCTCAG-3') and 1492R' (5'-CTACGGCTACCTTGTTACGA -3') bacterial primers.

The online version of the original article can be found at <http://dx.doi.org/10.1007/s13213-017-1269-z>

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This sentence,

The carotenoid extracts from *Deinococcus* sp. WMA-LM9 were analysed in an liquid chromatography–tandem mass spectrometry (LC–MS/MS; Varian 1200 Triple-Quadrupole-LC-MS system; Varian, Palo Alto, CA).

Should be:

The carotenoid extracts from *Deinococcus* sp. WMA-LM9 were analysed in an liquid chromatography–tandem mass spectrometry (ABX3200 Q-TRAP mass spectrometer equipped with a TurbolonSpray ESI source, and connected to a Shimadzu HPLC system with dual LC-20 pumps, a SPD-M20A UV/Vis photodiode array (PDA) detector and auto sampler).

This sentence,

A nuclear magnetic resonance (NMR) spectrum provides prime evidence on the structure of a compound. NMR spectroscopic data were recorded at room temperature on a Bruker AMX 400 MHz and AMX 600 MHz NMR spectrometer (Bruker Corp., Billerica, MA) in dCDCl₃ (CDCl₃), with tetramethylsilane as an internal standard.

Should be:

A nuclear magnetic resonance (NMR) spectrum provides prime evidence on the structure of a compound. NMR spectroscopic data were recorded at room temperature on a Bruker Avance 400 MHz NMR spectrometer (Bruker Corp., Billerica, MA) in dCDCl₃ (CDCl₃) referenced to

residual protonated solvent (δ 7.24 ppm, δ 77.0 ppm), with tetramethylsilane as an internal standard.

This sentence,

In the present study surface soil collected from the desert of District Lucky Marwat was screened for the isolation of radio-

resistant bacteria.

Should be:

In the present study surface soil collected from the desert of District Lakki Marwat was screened for the isolation of radio-resistant bacteria.