Assessment of γ-radiation levels and associated dose rates from surface soils in the eastern part of Botswana

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Abstract

This paper reports the γ-radiation levels of the naturally occurring ^{40}K, ^{210}Pb, ^{232}Th and ^{226}Ra and the anthropogenic ^{137}Cs in the eastern part of Botswana so as to assess their possible dose impact to the members of the public in the area. The radium equivalent activity was (175±24) Bq/kg, and thus below the allowed maximum value of 370 Bq/kg. The total absorbed rate ranged from 24.12 nGy/h to 215.44 nGy/h with

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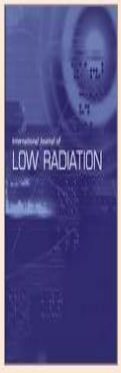

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