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Comparison of soil and plant models inside and outside the Tuwaitha nuclear site

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An environmental study based on comparing the results of measurements of soil and plant samples taken from inside destructive nuclear sites such as the Russian reactor, July 14, and the Italian fuel site and comparing them with models taken from the areas around the Tuwaitha nuclear site using the gamma spectrum system (high purity germanium gamma spectroscopy) to determine the real effects of the destroyed nuclear sites on the surrounding areas.

Most of the samples taken from the site were contaminated with isotopes of Cs-137, Co-60, and K-40, where the highest concentration of Cs-137 activity was (1847 ± 40.6) Bq/Kg and K-40 was (758 ± 40) Bq/Kg. The off-site radioactivity of the samples Cs-137 was (0.891 ± 0.01) Bq/Kg and K-40 was (587.420 ± 10.6) Bq/Kg.

Topics

[Environmental studies](#), [Gamma ray spectroscopy](#),
[Radioactive decay](#), [Gamma spectra](#)

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