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BOOK OF ABSTRACTS



DETERMINATION OF GAMMA-EMITTING RADIONUCLIDES IN PISTACHIO SAMPLES FROM SOUTHEASTERN ANATOLIA REGION, TURKEY

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As an important component of earth, natural radionuclides such as uranium and thorium series radioisotopes and natural ⁴⁰K should be determined due to their existence in water, soil, sediment, plants and air. Hence several health effects such as chronic diseases occur through inhalation and ingestion of radionuclides in a long term exposure. However, the radioactivity levels of pistachio in Turkey, one of the most prominent appetizers in Southeastern Anatolia region, were not studied previously in spite of its contribution to the external doses absorbed by the population. In the present study, pistachio samples collected from seven districts in Gaziantep city of Southeastern Anatolia, Turkey has been analyzed for ²²⁶Ra, ²³²Th and ⁴⁰K by using gamma ray spectroscopy to obtain natural radioactivity levels as a part of environmental monitoring. The measured activity concentrations showed that the mean values are comparable with the reported International average (UNSCEAR, 2000).

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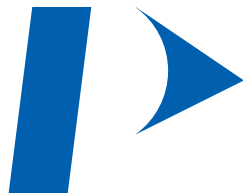
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