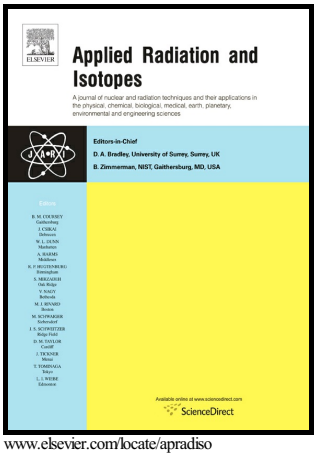

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Abstract

This study evaluated the antibacterial activity of crude and fractionated leaf extracts of *Anacardium occidentale*, after receiving 10 kGy from ^{60}Co, against multiresistant strains of *Staphylococcus aureus* in vitro. Minimum Inhibitory Concentrations-MIC and Minimum Bacteriostatic Concentrations-MBC were respectively assessed by serial microdilution technique in multiwall plates and Petri dishes, against standard strains and clinical isolates of multiresistant *S. aureus*. The results pointed out a significantly increase of the antibacterial activity of the such extracts after irradiation, emphasizing the role of gamma radiation on leaf extracts of *A. occidentale* to improve bioactive substances, offering new raw material for antibacterial drugs.

Key words: gamma irradiation; antibacterial activity; Anacardium occidentale L.; antibacterial agents; Staphylococcus aureus.