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Initial Investigation on Protein Extracts of Gamma-Irradiated Robusta, Excelsa and Liberica Civet Coffee Beans: Bradford Assay and SDS-PAGE

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Abstract: The three known civet coffee varieties are Robusta, Excelsa and Liberica. Proteins from the coffee beans were extracted via maceration and were subjected to two different analyses namely Bradford Assay and SDS-PAGE. Protein concentrations were obtained from Bradford Assay and R_f values from SDS-PAGE. A significant decrease in protein concentration was observed after irradiation. Concentrations of the resolving gels were varied to 12%, 15% and 17.5% to fully optimize gel runs. The concentration that resulted to more resolved bands was 17.5%. All proteins had low R_f values thus having high molecular weights.

Key Words: SDS-PAGE; Gamma-irradiation; Civet Coffee; Bradford assay