

1331 Fractionation of Genomic DNA from Cotton, *Gossypium Hirsutum* L. Using EcoRI and HindIII

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A plant DNA isolation protocol was successfully optimized and used to prepare DNA from two cotton varieties, Tamcot CAMD-E (Multiadversity Resistant) and Samcot 10, a commercial cotton variety cultivated in the southern cotton growing zone of Nigeria. DNA extracts were obtained from seedlings and defatted cottonseeds of both varieties. The percentage purity obtained were higher with values ranging from 83 – 90% but the yield were lower with values ranging from 0.45 – 0.75 ug/ml. The percentage purity was lower with values ranging from 69 – 80% but the yield was higher with values ranging from 2.5 – 4.5 ug/ml. The two DNA extracts were digested with each of EcoRI and HindIII restriction enzymes and subjected to agarose gel electrophoresis with the undigested genomic DNA. Distinct fluorescent bands were obtained along the lanes of the digested DNA but no bands were visualized in the wells containing the intact genomic DNA, an indication that no significant DNA fragments were present and hence the protocol was adequate for the extraction of genomic DNA from these cotton varieties.