

Abstract

The random amplified polymorphic DNA (RAPD) assay was used to characterize and estimate genetic relatedness in tea. 27 random nucleotide primers were screened individually within a test array composed of 36 commercial tea clones representing a range of variety types. Over 150 (62%) polymorphic (variable) bands were generated from 21 informative primers. Each individual of the test array exhibited a unique molecular "fingerprint" and could be uniquely identified and characterised. Composites for variety types were identified and a band specific to the cambod tea was identified. Analysis of similarity based on the proportion of shared bands reflected known genetic and pedigree relationships among the selected entries with clones selected from the same population of Jats and parents and their progeny exhibiting greater similarity. The results demonstrated that RAPD makers can be of great value in tea gene bank management for the purpose of identification and measurement of variation