

Analysis of genetic variation of *Cinnamomum* species by Randomly Amplified Polymorphic DNA (RAPD)

K.C.Samanthika¹, P.D. Abeysinghe¹ and K.G.G. Wijesinghe²

¹Department of Botany, Faculty of Science, University of Ruhuna, Matara, Sri Lanka

²Cinnamon Research Station, Department of Export Agriculture, Palolpitiya, Thihagoda, Matara, Sri Lanka

The potential use of the Randomly Amplified Polymorphic DNA (RAPD) technique was investigated for *Cinnamomum* spp. found in Sri Lanka. Immature leaf samples of six wild *Cinnamomum* spp. (*C. dubium*, *C. litseaefolium*, *C. citriodorum*, *C. capparucoronde*, *C. sinharajaense* and *C. rivulorum*) and ten *C. verum* accessions (CRS 351, CRS 357, CRS 156, CRS 23, CRS 278, CRS 26, CRS 317, CRS 184, CRS 318, CRS 40) were obtained from the Cinnamon Research Station in Palolpitiya, Matara. DNA was extracted according to a previously described protocol with some modifications. Ten primers, which showed polymorphism were selected out of 16 primers screened. Out of above ten primers, four primers gave reproducible results. Sizes of the small fragments which have been generated by above primers were approximately 450 bp, 350 bp, 500 bp and 300 bp, respectively. Amplification products of four RAPD primers are not sufficient to get a clear picture of genetic relatedness of *Cinnamomum* species. Therefore, further studies have to be conducted.

Key words: *Cinnamomum* spp., Leaf samples, RADP