B3 TISSUE CULTURE OF TEA - DEVELOPMENT OF A CULTURE METHOD FOR SHOOT MULTIPLICATION

P.V. Arulpragasam, R. Latiff and P. Seneviratne
Tea Research Institute, Talawakele

Only a few attempts have been made in the propagation of tea plants using tissue culture techniques. Work on the micropropagation of tea was initiated at TRI in early 1985. *In vitro* proliferation of shoots of tea by axillary brnaching was achieved using shoot tips and nodal segments as explants. Shoot multiplication was successful in two media, both consisting of Murashige and Skoog salts supplemented with (a) 0.4 mg thiamine-HCl, 100 mg m-inositol, 0.01 mg IBA, 1.0 mg BA and 0.1 mg GA_3 (b) 1.0 mg thiamine-HCl, 100 mg m-inositol, 1.0 mg pyridoxine-HCl 0,01mg biotine, 2.0 mg ascorbic acid, 1.0 mg nicotinic acid, 1.0 mg calcium pantothenate, 20.0 mg adenine sulphate, 0.1 mg IAA and 1.0 mg BA. Better shoot proliferation occurred when the BA was increased to 2.0 mg/1. Micro-cuttings of shoots produced in culture have been cultured again for further shoot proliferation and in this manner three generations of nicro-cuttings have been obtained and are being cultured for further proliferation.

Results obtained so far clearly indicate that propagation of tea by tissue culture is a distinct possibility in the near future.