List of Tables

Table 1.1. Structural diversity and number of secondary metabolites
Table 1.2. High yield of secondary product
Table 1.3. Root cultures of medicinal plants
Table 1.4. Useful secondary products produced by hairy root cultures
Table 1.5. Shoot cultures of medicinal plants
Table 1.6. Immobilized plant cell systems used for production of secondary metabolites
Table 4.1. Effect of plant growth regulators (NAA and BA) on callus formation from leaf segments of *O. eriantha* after 8 weeks of cultures
Table 4.2. Effect of growth-regulators on shoot differentiation from leaf derived callus of *O. eriantha* after 8 weeks of cultures.
Table 4.3. Influence of different concentrations of Kinetin on multiple shoot production of *O.eriantha* after 8 week culture
Table 4.4. Influence of different auxins on rooting of *in vitro* formed shoots of *O.eriantha* after 8 weeks culture
Table 4.5. Influence of various concentrations of sucrose on multiple shoot production of *O.eriantha*
Table 5.1. Effect of plant growth regulators (NAA and BA) on CPT and 10-HCPT production in callus cultures of *O.eriantha*.
Table 5.2. Effect of growth-regulators on CPT and 10-HCPT production in multiple shoot cultures of *O.eriantha*
Table 5.3. Influence of different concentrations of sucrose on CPT and 10-HCPT production in *O.eriantha* multiple shoots
Table 5.4. Effect of different salt concentration of MS on CPT and 10-HCPT production in *O.eriantha* shoot cultures.
Table 5.5. Effect of NAA on adventitious root induction in *O.eriantha* from leaf derived callus.
Table 5.6. CPT and 10-HCPT content in 8 week old adventitious roots developed from leaf derived calli with respect to media containing different concentrations of NAA.
Table 5.7. Content of CPT and 10-HCPT in adventitious roots developed in suspension cultures supplemented with different auxins.

Table 9.1 Effect of radiation on antioxidant enzymes