

ABSTRACT

The present study was determined the effect of Auxins, Cytokinins and Auxins Cytokinins interaction on callus induction in *Coccinia grandis*. Different explants were used (Cotyledons, Plumule and Radicle) for Callus formation. In cotyledons best result was recorded at 0.04 mg/L, 2, 4-D, callus index was 580. For Plumule best results were achieved at 0.05 mg/L of 2, 4-D with callus index of 520. For Radicle best results were recorded at 0.03 mg/L of 2, 4-D with a callus index of 480. Best results for the combinations were achieved was CI 480, by both 2,4-D+BAP and BAP +NAA. Whereas Plumule and Radicle showed similar CI *i.e.* 560 at media strength supplemented with BAP + 2,4-D. 2,4-D was found to be most potent hormone for the callus formation in *Coccinia grandis*.

Maximum protein contents were recorded in the roots of field grown plant (920 µg/mL). Whereas plumule callus gave best protein contents (550µg/mL).