

ABSTRACT

Althaea. rosea is beautiful ornamental garden plant. The present work is carried out to study the effect of plant growth regulators (PGRs) on callogenesis and organogenesis potential of three explants cotyledon, plumule and radicle of *A. rosea*.

Among auxins maximum callus index CI (560) was obtained by cotyledon and plumule in MS medium supplemented with 0.03mg/L and 0.02mg/L 2,4-D, initiated callus after 10 and 6 days after inoculation respectively. Auxins NAA and 2,4 -D gave good CI (480) in 4mg/L and 0.003mg/L concentration respectively.

10mg/L BAP exhibited CI (480) in MS medium and proved to be best cytokinin for callogenesis from cotyledon and radicle then kinetin.

Combination of BAP +2, 4-D was better than IBA + NAA and BAP + NAA. Best CI (560) obtained from plumule and radicle in MS medium supplemented with 4:0.01 and 4:0.02 mg/L BAP + 2,4 - D combinations respectively.