ABSTRACT

A procedure for *in vitro* growth of *Sprekelia* (*Sprekelia Formosissima* CV. Aztec lily) was being established by using bulb as explant. Twin or multiple scales produced from donor explants were inoculated in MS media containing varying levels of auxin and cytokinin. Surface sterilization was optimized with ethanol (70%) for 2 minutes and NaClO (30%) with single or two drops of teen-20 for 3 minutes 30 seconds. Parameters being observed were shoot induction, root induction and bulblet growth. Different PGRs like NAA, 2, 4-D, BAP, Kin, TDZ, IBA and IAA were used alone and in combination at different strength to observe growth. Maximum root induction was seen when using NAA alone at 0.5mg/I NAA, while maximum shoot induction was seen at 0.5mg/l BAP. Maximum root growth were observed when PGRs employed in combination at 0.5NAA+1.0BAP mg/I. BAP in combination with 2,4-D showed maximum shoot growth at concentration 1.0 BAP+0.1 2,4-D mg/l. When IAA was applied alone, no growth was seen, but when combined with BAP, it caused minimal shoot induction. Combining 0.5 g/I NAA and 1.0 mg/l BAP led to a surveillance of 85% bulblets. Other cultures also showed bulbets development, but not at control cultures.