

Micropagation of African violet

S.A. Ghaem maghami and R.Zarghami

Agricultural Institute, Iranian Research Organization for Science and Thechnology, Tehran.

African violet (*Saintpaulia ionatha*) is a day - natured indoor plant that has the ability to flower throughout the year. It is traditionally propagated from leaf cutting. The purpose of this study is to demonstrate the high regenerative capacity of African violet petiole and leaf in subculture and also to illustrate its potential for micropropagation technology.

The MS medium was supplied with IAA (2.0 mg/liter) and BA (0.08 mg/liter) according to the method of Cooke (Cooke, R.C., 1977). The leaves and petioles formed in the glass jars were weighted and divided to 3*3 factorial arrangement design. The treatments were 1) IAA with 1.0 , 2.0 and 3.0 mg/liter, 2) BA with 0.04 , 0.08 and 0.12 mg/liter and 3) Thiamine - Hcl with 0.1 , 0.5 and 1.0 mg/liter. Seventy days later the plantlets were weighted again.

The results of this study indicated the plantlets in the IAA and BA treatments (3.0 and 1.12 mg/litre respectively) and significantly ($P < 0.01$) higher fresh weight in compared with controls. The results also indicated that plantlets with thiamine - Hcl (0.1 mg/litre) had also significantly ($P < 0.05$) higher fresh weight than control.