

M.J. Hutchinson, S. KrishnaRaj and P.K. Saxena. 1997. Inhibitory effect of GA<sub>3</sub> on the development of thidiazuron-induced somatic embryogenesis in geranium (*Pelargonium x hortorum* Bailey) hypocotyls cultures. Plant Cell Reports 16: 435-438.

### **ABSTRACT:**

Somatic embryogenesis in geranium (*Pelargonium x hortorum* Bailey cv. 'Scarlet Orbit Improved') can be achieved by incubating hypocotyls explants on MS medium supplemented with thidiazuron (TDZ; 10  $\mu$ M) for 3 days followed by subculture on medium devoid of any plant growth regulators. The presence of gibberellins (GAs) during both induction and expression phases of embryogenesis was significantly detrimental to somatic embryo formation on the hypocotyl explants. The addition of the GA-synthesis inhibitors paclobutrazol, uniconazole or ancymidol during the period of growth and differentiation of somatic embryos increased the number of somatic embryos formed on each explant. However, paclobutrazol added during the period of induction had no significant influence on somatic embryo formation. Results suggest that both exogenously supplied as well as endogenous GAs play a role, albeit a negative one, on somatic embryogenesis of geranium.