EFFECT OF LIGHT ON AVOCADO SOMATIC EMBRYOGENESIS

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Application of biotechnological techniques such as genetic transformation or somaclonal variation requires the availability of an efficient *in vitro* regeneration protocol. Somatic embryogenesis constitutes the regeneration method currently used in woody species such as the avocado. Although this process has been widely studied in this species, the final performance remains low, which reveals the necessity of further optimization. Environment during *in vitro* culture is a critical issue. Different aspects related to light conditions such as wavelength, irradiance and photoperiod, have been revealed as important factors due to their profound morphogenetic effects. However, little attention has been paid to its role on somatic embryogenesis. In the present investigation, the effect of light irradiance has been tested on different phases of avocado somatic embryogenesis such as proliferation of embryogenic cultures, development of somatic embryos at advanced developmental stages and somatic embryo germination. The results obtained reveal an important influence of light conditions on the different phases studied and, consequently, on the final yield of this regeneration method.