DEHYDRATION AND CRYOPROTECTIVE SOLUTIONS FOR AXILLARY BUDS OF CREOLE AVOCADO (*Persea americana* Mill. VAR. DRYMIFOLIA) PRODUCED *IN VITRO*

I. Vidales-Fernández [1], J. Rodríguez-Jiménez [2], R. Salgado-Garciglia [3], R. López-Gómez [3], E. Angel-Palomares [2] and H. Guillén-Andrade[2]

[1] Campo Experimental Uruapan. INIFAP. Av. Latinoamericana No. 1101. Col. Revolución. CP 60150. Uruapan, Michoacán, México. Correo electrónico: vidales.ignacio@inifap.gob.mx
[2] Fac. de Agrobiología "Pdte. Juárez". Universidad Michoacana de San Nicolás de Hidalgo. Paseo Lázaro Cárdenas S/N. CP. 60150. Uruapan, Michoacán, México.
[3] Instituto de Investigaciones Químico-Biológicas. UMSNH. Edificio B-3. Ciudad Universitaria. CP. 58030. Morelia, Michoacán, México.

Cryopreservation is an alternative to reduce the frequency of *in vitro* reculture, risk of contamination and cost. However, to obtain an efficient protocol, defining the most suitable techniques is required, such as tissue dehydration and the use of cryoprotectant substances. With that purpose in mind, 6 terms of dehydration of axillary buds of creole avocado (*Persea americana* Mill. var. *drymifolia*) maintained *in vitro* were evaluated, using the method of drying with sterile air in laminar flow cabinet (30, 60, 90, 120, 150 and 180 minutes). Also, the effect of immersion of axillary buds in two cryoprotectant solutions (PVS2 and PVS4) was proven. After culture of treated buds in the shoot regeneration medium, shoots with 100% of survival were obtained at 30, 45 and 60 day-terms; plantlets with an optimal development were obtained, producing shoots with leaves of dark green colour. The optimal treatment was obtained with 60 minutes of dehydration and maintaining the axillary buds in PVS4 solution at 0°C for 30 minutes.