



Plant regeneration from somatic embryos in two developmental stages of a grapevine seedless cultivar in different basal media

Regina Beatriz Bernd¹; Valéria Aquino Canterle²; Renata Dal Magro³

¹Researcher of Embrapa Coastal Tablelands, P.O. Box 44, CEP 49025-040, Aracaju, Sergipe, phone 55 (79) 4009-1332, email: regina@cpatc.embrapa.br; ²B.Sc. in Viticulture and Enology, email: valeriacanterle@hotmail.com; ³Engineer of Bioprocesses and Biotechnology, email: renatadalm@yahoo.com.br.

Somatic embryos are commonly used as target for genetic transformation of grapevine (*Vitis vinifera*). Therefore, the success of the transformation depends on the efficiency of germination, development and rooting of the somatic embryos. Somatic embryos in two developmental stages, globular (immature) and torpedo (mature), of the cultivar BRS Clara were individualized and submitted to different culture media, ½ MS complete, ½ MS salts and B5 vitamins, Galzy and WPM. To every media it was added 30 g L⁻¹ sucrose and 6 g L⁻¹ agar, and the pH was adjusted to 5.7 prior to sterilization. The somatic embryos were incubated at temperature of 26 ± 2°C, 16h light, and subcultured at 30 days to the same medium. After 60 days in culture, it was evaluated the number of regenerated plants, the number of leaves and rooting from immature and mature somatic embryos in each medium. The largest relative frequency of reactivity to the culture media was observed in mature somatic embryos, in WPM for plant regeneration (33%) and formation of leaves (62%). Immature and mature somatic embryos showed the largest rooting average in the ½ MS salts and B5 vitamins; however, it was observed in most cases that the embryos that rooted before shoot elongation ended up not regenerating the whole plant. Following, we will study the supplement of growth regulators to the WPM to improve the regeneration efficiency.

Key-words: 'BRS Clara'; *Vitis*; embryogenesis.