



STUDIES ON SUSPENSION CULTURE OF VIRGINIA MALLOW

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Virginia mallow (*Sida hermaphrodita* (L.) Rusby) belongs to the Malvaceae family. It is a very important industrial and energetic crop (KASPRZYK *et al.* 2013). In our studies, we used plant cell suspension cultures due to the fact that it is a useful tool to investigate biochemical, molecular and physiological aspects of many cellular functions (DONG *et al.* 2010).

Virginia mallow seeds, obtained from Prof. Borkowska (University of Life Sciences in Lublin, Poland), were used in this investigation to obtain plants which were grown in sterile conditions in the Department of Plant Anatomy and Cytology, Maria Curie-Skłodowska University in Lublin, Poland. The seeds were surface sterilized and washed three times in sterile, distilled water. After 3 weeks of *in vitro* culture, young seedlings were used as a source of explants (to callus induction). Two types of explants were used to form callus culture: leaf

and petiole. Callus tissues were then aseptically transferred to an Erlenmeyer flask with liquid medium and placed on an orbital shaker moving at 120 rpm. The observations of this suspense culture were conducted under light and confocal LSM microscopes. The authors observed that depending on the type of explants and composition of medium, callus tissue has varied in color and character of growth.

References

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