P 101

Plant Regeneration in Immature Zygotic Embryo-derived Embryogenic Cell Suspension Cultures of *Catharanthus* roseus

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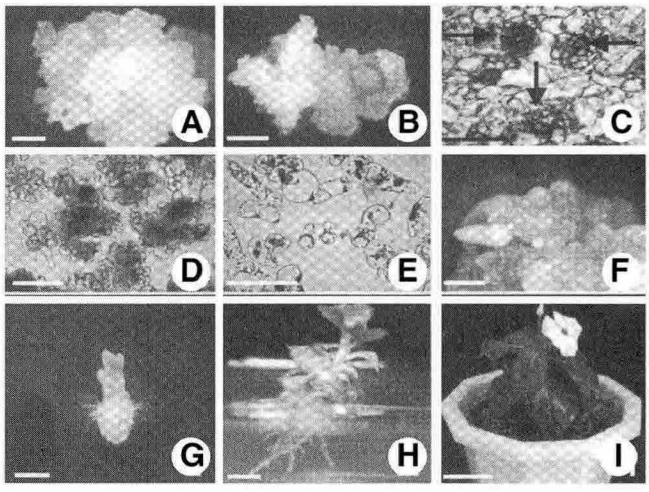
Objectives

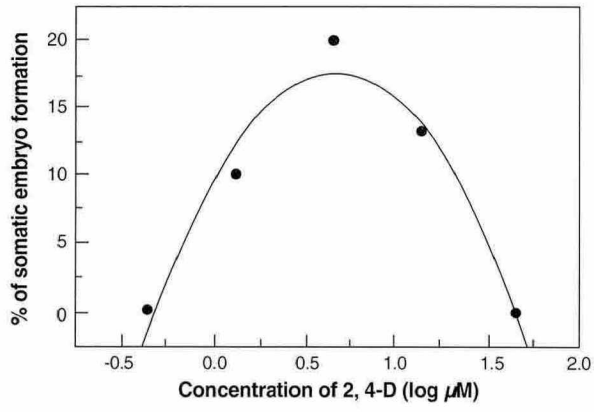
This study describes an efficient plant regeneration system in immature zygotic embryo-derived embryogenic cell suspension cultures of *C. roseus*.

Materials and Methods

1. Materials: Immature zygotic embryos of *Catharanthus roseus* (L.) G. Don 'Little Bright Eye'
2. Methods: To establish cell suspension cultures, yellowish, friable calluses (approximately 1 g) and off-white, friable calluses (approximately 1 g) were separately collected from initial calluses and were carefully disintegrated with forceps and transferred to each of 250 ml of Erlenmeyer flasks containing 20 ml of liquid MS medium supplemented with 4.52 μM 2,4-D (MS1D). The flasks were placed on a gyratory shaker at 100 rpm. After two weeks of culture, 20 ml of liquid MS1D was added to each of the flasks. After two to three weeks culture, 5 ml of suspension cultures was dispensed into each 250 ml of Erlenmeyer flask containing 50 ml of liquid MS1D medium. Embryogenic and non-mbryogenic cell suspension cultures were subcultured at two-week intervals.

Results and Discussion





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