

**Title** A research on obtain virus free plant by means of meristem culture in Lena and Scania carnation (*Dianthus caryophyllus* L.) cultivars

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#### **Abstract**

This study was carried out to obtain viruses (Mottle, Vein mottle, Ring spot) free plants to carnation cultivars (Lena, Scania) by means of meristem culture. In the result of experiment carried out *in vitro* conditions, the MS basal medium added 1.0 mg/l of BAP was found to be appropriate for meristem development and shoot formation when 0.2-0.4 mm long meristem tips were cultured. For rooting of shoots, the best results were obtained with MS basal medium containing 1.0 mg/l IBA. It was determine tahat the plants obtained from *in vitro* conditions established and developed in a mixture of two parts chestnut soil+one part sand+one part sheep manure. Plants were inspected by ELISA to identify whether they were infected by viruses. The viruses were completly eliminated testing plants from meristem culture.