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**Common myrtle *in vitro* propagation: establishment and multiplication stages**

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The use of medicinal plants for the extraction of active pharmacological agents and precursors for chemio-pharmaceutical hemisynthesis has recently increased. A medicinal use of common myrtle (*Myrtus communis* L.) extracts has been reported as antimicrobial and bactericide. Micropropagation is a suitable method to obtain genetically homogeneous and healthy plants useful for biotechnological purposes. In this work we aimed at studying the *in vitro* propagation of common myrtle. In the establishment phase, the most suitable disinfection method was found by using increasing concentrations of sodium hypochlorite (10%, 15% and 20%). It was found that the sodium hypochlorite of 15% allowed better results in the shoots' survival rate (87%). The methods used to establish the explants from adult plant material (180 explants) did not allow, however that all of them survived, possibly due to the high release of phenolic substances, and also to a certain toxicity of the disinfectant used, especially at the highest concentration. Therefore, less than half of the explants

were transferred to the next phase (83 explants). During the multiplication phase the explants remained about one month at room culture. At this stage, it was intended to assess the influence of the light factor, through the bottle caps color, on the shoots growth rate parameters, but we observed that it had no influence on the average of longest shoot, on the average of the smaller shoot, and, also, on the parameters related to the multiplication rate, the number of shoots and the number of shoot segments, in order to pursue to the multiplication phase.