

MINICUTTING OF *LIQUIDAMBAR STYRACIFLUA* L.: SUBSTRATUM EFFECT AND TYPES OF PREPARATION

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Minicutting is a clonal alternative for vegetative propagation of individuals with superior genetic characteristics. Minicutting technique is widespread for *Eucalyptus* species, but its application is not common seen to other wood species. The objectives of this work were to evaluate the effect of different substratum compositions and the types of preparation of the minicutting in the survival, rooting and vegetative vigor of sweetgum minicuttings. Sprouts of ministumps produced by cuttings were collected. The ministumps were cultivated in semi-hydroponics system. The minicuttings (5 cm in length) had one pair of leaf with 50% of the foliar area. Then, minicuttings were submitted to four different types of preparation: P1 = paraffin, P2 = paraffin + 8 g L⁻¹ of IBA, P3 = 8 g L⁻¹ of IBA and P4 = control. The application of the IBA was realized with the immersion of the basal region of minicuttings in a solution for a period of 10 seconds and the paraffin application was done in the basal and apical portion of minicutting. The minicuttings were planted in conic recipient (55 cm³) with three different substratum combinations (v/v): S1 = rice rind + commercial substratum Plantmax® (1:1), S2 = carbonized rice rind + commercial substratum Plantmax® (1:1) and S3 = rice rind + commercial substratum Plantmax® + vermiculite (2:1:1). The minicuttings were kept under controlled conditions of humidity and temperature in greenhouse; after 91 days of rooting promotion they were transferred to shadow house for acclimatization during 15 days. Finally, the survival minicuttings were placed in an open garden for up to 35 days. The survivals of minicuttings were evaluated in the end of each step (greenhouse, shadow house and open garden). After 141 days of culture the shoots length, number of leaf, biggest root length and the length of the root system were measured, as well as the visual aspects of the plant and root formation were evaluated. The types of preparation of the minicutting no presented statistical difference. However, there was a strong influence of the substratum in the aerial and root formation. S2 substratum provided the biggest percentage of rooting (69%), with no necrosis, presented statistical difference of S3 (45%) and S1 (12%). In resume, the rooting of minicuttings of *L. styraciflua* is technically viable without the application of IBA and paraffin, with substratum combination of carbonized rice rind + commercial substratum Plantmax® (1:1).