



AXILLARY SHOOT INDUCTION OF MAHOGANY (*Swietenia macrophylla* KING)*

FERNANDA PINTO¹, JULIANA DEGENHARDT-GOLDBACH², MARGUERITE G. G. QUOIRIN³

¹UNIVERSIDADE FEDERAL DA GRANDE DOURADOS. E-mail:fertixa@hotmail.com, ²EMBRAPA FLORESTAS, ³UNIVERSIDADE FEDERAL DO PARANÁ

Mahogany (*Swietenia macrophylla* King) belongs to the family *Meliaceae*, is a species of great economic importance because of its wood, which is durable and highly appreciated for manufacturing furniture and luxury items decoration. The aim of this work was to establish methods for induction of axillary shoots, nodal segments from *in vitro*. Cultivated plants were inoculated in MS medium with 2.5 M BAP combined with the following concentrations of KIN: 0.25, 0.50, 1.0, 1.5 and 2.0 M. In another experiment, MS and SH media were used with 2.5 M BAP and 2.2 M 2-iP with modification of CaCl₂ concentrations: 0, 0.5x, 1x and 2x that of normal medium concentrations. In the first experiment with several concentrations of KIN in combination with BAP there was an intense oxidation in 90% of the explants. Only 10% of them produced weak shoots which did not permit any subculture. In the experiment with MS and SH media, when CaCl₂ was twice the normal concentration, there was a higher number of shoots (6.8 in SH and 7.8 in MS) and higher weight of shoots (1.27g in SH and 1.63g in MS) than in the other concentrations. When shoots were subcultured in the same media they suffered intense oxidation that did not allow their subculture. Leaf chlorosis symptoms were observed in high concentrations of CaCl₂. Despite the great number of axillary shoots obtained in CaCl₂ treatments, when they were subcultured in the same medium they suffered intense oxidation that did not allow their subculture. Thus it was impossible to establish an efficient method of axillary shoot multiplication.

Palavras-chave: CaCl₂, chlorosis,

* Apoio Financeiro: Capes