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Abstract

Plantlets of the mulberry (*Morus alba* L. vars. Chinese White, and Kokuso-27) were produced from callus cultures. For callus induction, leaf, internodal segments, and petiole explants of Chinese White, Kokuso-27 and Ichinose varieties were grown on MS basal medium fortified with 2,4-D and 6-benzylaminopurine (BA). Callogenesis was dependent on the nature of explant used, the genotype and growth regulators supplemented in the medium. Leaves were the best explant type used for callus induction. Best callogenesis was obtained on MS medium containing a combination of 1 mg l^{-1} 2,4-D and 0.5 mg l^{-1} BA (95-100%). Calluses formed shoots on MS medium supplemented with 1 mg l^{-1} BA. Supplementation with 0.1 mg l^{-1} 2,3,5-triiodobenzoic acid (TIBA) in this medium enhanced shooting response. Presence of TIBA in the medium also improved the long-term organogenic potential of the callus. Regenerated shoots produced roots on Murashige & Skoog (MS) medium containing either 0.5 mg l^{-1} indole-3-butyric acid (IBA) or α-naphthaleneacetic acid (NAA). Seventy percent of the rooted plants were established in the field where they are performing well.

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