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IN VITRO PROPAGATION OF JATROPHA CURCAS L.

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ABSTRACT

The present experiment was consummated with the aim to establish a well defined protocol for micropropagation of *Jatropha curcas* L. adequate enough to its continuous demand on a large scale. Seeds were surface sterilized using Clorox and HgCl₂ solution at 40 % Clorox and 0.7 g/l HgCl₂ with a 100% of survival percentage and free contamination in all seed tested. MS medium supplemented with 3.0 g/l activated charcoal and 3.0 mg/l IBA produced the highest number of leaves and shoot length at the establishment stage. The best medium for shoot length and number of leaves was that which contained IBA only at 2.00 mg/l. Nevertheless, a medium supplemented with 3.0 mg/l BA and 1.00 mg/l IBA was the best used on number of shoots at the multiplication stage. For rooting stage, a medium supplemented with 3.00 mg/l IBA and 2.00 mg/l NAA was the best in producing the highest number of roots while, the longest root was achieved as a result of a medium supplemented with 3.0 mg/l IBA and 3.0 mg/l NAA. A medium of peat moss and sand at 2:1 was the best for acclimatization stage.

Key words: BA, *Jatropha curcas* L., IBA, *In Vitro* culture, Micropropagation , NAA, regeneration,