



## Research Paper

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# Cheaper water sources for micropropagation of banana (*Musa acuminata*) cv. 'GRANDE NAINÉ'

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**ABSTRACT :** Water source in plant tissue culture production laboratories is from distillation units. The costs of these units are a high and regular maintenance is also economically taxing. Hence, to reduce the cost of production of tissue cultured banana, *in vitro* multiplication and rooting was carried out on a medium prepared with different sources of water *viz.*, millipore filter water, aquaguard filter water, double distilled water, single distilled water and autoclaved potable tap water. Cultures grown on MS medium prepared with aquaguard filter water recorded maximum mean number of shoots/culture (12.50), highest mean shoot length (2.77 cm) and maximum mean number of adventitious buds/culture (8.25) followed by millipore filter water and autoclaved potable tap water. Microshoots cultured on MS medium prepared with aquaguard filter water recorded highest rooting percentage (100 %), maximum number of primary roots/shoots (9.50) and highest root length (7.00 cm) followed by millipore filter water. Cheaper source of water such as aquaguard filter or even autoclaved potable tap water can be used as low cost alternative water source for successful micropropagation of banana 'Grande Naine'.

**KEY WORDS :** Aquaguard filter water, Grande Naine, Micropropagation, Millipore filter water, Potable tap water

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