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■ e ISSN-0976-5670

RESEARCH PAPER

Cheaper carbon sources for micropropagation of banana cv. 'GRANDE NAINE'

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Abstract : Micropropagation of banana has become a routine procedure but high production cost is limiting the commercial use of tissue culture technology. Analytical grade sucrose is the most commonly used carbon source for the micropropagation banana, however, the cost is too high to justify the use at commercial scale. Therefore, inexpensive and readily available sources of carbon such as laboratory grade sucrose, common grade sugar, cube sugar, rock sugar, candy sugar, glucose, jaggery and sugarcane juice were evaluated for *in vitro* propagation of banana cv. 'GRANDE NAINE'. Best response in terms of shoot multiplication and rooting were achieved with rock sugar and common grade sugar, respectively which could be compared well with that of analytical grade sucrose. The results showed the possibility of successful use of cheaper carbon sources for micropropagation of banana cv. 'GRANDE NAINE'.

Key Words: Analytical grade sucrose, Common grade sugar, Grande Naine, Micropropagation, Rock sugar

View Point Article: Prabhuling, G. and Sathyanarayana, B.N. (2017). Cheaper carbon sources for micropropagation of banana cv. 'GRANDE NAINE'. *Internat. J. agric. Sci.*, **13** (1): 124-131, **DOI:10.15740/HAS/IJAS/13.1/124-131.**

Article History: Received: 15.10.2016; Revised: 27.11.2016; Accepted: 23.12.2016