In vitro Culture of Stem Node Segments of Maerua crassifolia

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Abstract : The stem node segments were cultured on Murashige and Skoog (MS) medium. In the case of using MS+ Zeatin (1 mg/l), small shoot buds were formed directly in 70% of explants after 15 days, their length range between 0.1 to 0.3 cm after two weeks and reached 0.3 cm in length and three shoots in numbers after 4 weeks. When those small shoots were sub cultured on the same medium, they increased in length, number and reached 0.4 cm with 4 shoots, 0.4 cm with 5 shoots after six, eight and ten weeks respectively. In the case of using MS free hormones, MS+IAA (0.2mg/l) +BA (0.5mg/l), MS + kin(0.5mg/l) and MS +NAA (3mg/l) +BA (1mg/l), no sign of responses were noticed and only change in color in some cases. Different types of parenchyma cells and many layers of thick wall sclerenchyma cells were observed on MS+BA (1mg/l).

Keywords: Maerua, stem node, shoots, buds, In vitro

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