

OPTIMUM PROTOCOL FOR SHOOT FORMATION IN SORGHUM (SORGHUM BICOLOR (L) MOENCH) THROUGH ORGANOGENESIS

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ABSTRACT

A protocol for shoot formation in Sorghum bicolor (L) Moench was developed using immature embryo. Murashige and Skoog (MS) basal medium supplemented with varying concentration of 6- benzyl aminopurin (0, 1, 2 and 3mg/l) was used for shoot initiation. After one week of inoculation the primary leaves of the shoot obtained were removed and meristems were cultured for shoot multiplication using MS medium fortified with 3mg/l BAP (6-benzylaminopurine) alone or in combination with 1mg/l NAA (Naphthalene Acetic Acid). For shoot initiation the media fortified with 2mg/l BAP recorded the highest percentage shoot formation (86.67%), the least was obtained from hormone free media (46.67%). The average shoot number per plant was more in the media fortified with 3mg/l BAP + I mg/l NAA (2.4) but this is not significantly different from what was obtained from the media fortified with 3mg/l BAP alone

KEYWORDS: A Protocol, Phytochemicals, Sorghum bicolor, (L) Moench