

**RESEARCH ARTICLE :**

## Somatic embryogenesis and plantlet regeneration from plumule explants of Finger millet [*Eleusine coracana* (L.) Gaertn.]

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**SUMMARY :** Plumule explants of finger millet varieties CO 9, CO 14 and TRY 1 showed better response to callus induction and plantlet regeneration compared to seed explants. High frequency of embryogenic, white, friable callus was induced from plumule explants, when cultured in MS + 2.0 mg/l 2,4-D and MS + 0.5 mg/l 2,4-D + 0.25 mg/l Kn. A concentration of 2,4-D at 0.5 mg/l with the lowest level of kinetin (0.1 mg/l) was found to be optimum for subculture and subsequent plant regeneration. Histological study of the embryogenic calli at different ages of subculture revealed the presence of somatic embryogenic pathway in plantlet regeneration and the initiation of somatic embryogenesis taking place in callus induction medium itself.

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