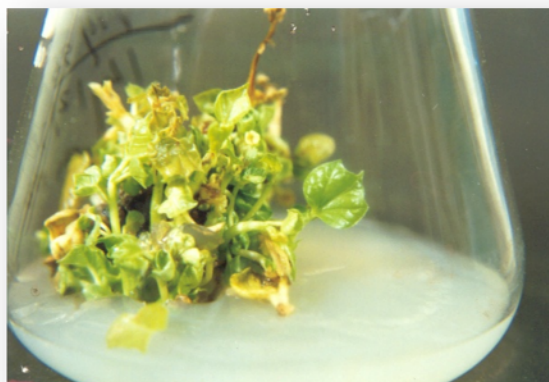


Propagation of Diploid cotton *G.arboreum* by Shoot induction

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Description: The regeneration protocol by multiple shoot induction was developed using shoot tip culture technique. The shoot tip explants isolated from the *in-vitro* germinating seedling were cultured on multiple shoot induction medium. The explants undergo morphogenic changes and produced multiple shoot buds within 30-40 days. The shoot bud mass on transfer to shoot differentiation medium with at least two passages of MS medium, developed into large number of shoots within 20-30 days of culture. Individual shoot was rooted after their separation from the mass of multiple shoot developed from the shoot tip explants. At least 15-20 shoots/explants can be harvested in 2-3 successive cycle. Rooted plantlet were first hardened in MS liquid medium with filter paper support and allow to grow under high light intensity for first 15 days. Thereafter they were transferred in earthen pot for further hardening. The mature plants were fertile and true to the type .



Features: Regenerated plants are true to the types and low somaclonal variation

Uses: The protocol can be used in micro propagation of rare material and development of transgenic plants.

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