

B-45 : IN VITRO PROPAGATION OF KOMARIKA

(*Aloe vera* (L.) Burm.F.)

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Komarika (*Aloe vera* (L.) Burm.f.) is a medicinal plant of great commercial value and a potential export crop. In Sri Lanka it is used internally and externally to treat several diseases such as constipation, dyspepsia and cough and also burn injuries. In European countries it is used for the production of a vast array of highly expensive body lotions used in beauty therapy. Large-scale cultivation of this plant is limited by lack of planting material. The plant does not produce seeds and is propagated by vegetative means. The present practice of propagation which is based on suckers is

inadequate to provide the required planting material. This paper describes the methodology perfected for large-scale production of komarika propagules.

Shoot meristems of komarika were cultured in Murashige and Skoog (1962) medium supplemented with cytokinin (BAP or KN, 0.1 - 0.5 mg/l) and auxin (IBA or NAA, 0.01 - 0.05 mg/l). Shoot meristems 2-3 weeks old, taken from the medium containing IBA (0.02 mg/l), and BAP (0.2 mg/l), were transferred to the same medium supplemented with higher levels of cytokinin (BAP or KN, 5 - 10 mg/l) and within 6 - 8 weeks about 70 well-formed shoots 0.5 cm - 2 cm long were produced from a single shoot meristem. Shoots were individualized and transferred to a hormone-free medium (MS) for root induction. Finally the plants were successfully established in soil.