

## IN VITRO ROOT INDUCTION IN WHITE CLOVER (*Trifolium repens* L.)

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### ABSTRACT

An efficient protocol for *in vitro* root formation of *Trifolium repens* was developed in this study. The adventitious shoots of *Trifolium repens* were cultured in the different strength (1/1, 3/4, 1/2, 1/4, 1/6, and 1/8) of basal Murashige and Skoog's (MS) medium. It was found that there was a considerable improvement in rooting up to 47.5% at 1/2 strength MS medium within 44-48 days. Then, shoots were cultured in 1/2 strength MS medium alone or in combination with different concentrations of indole-3-butyric acid (IBA), indole-3-acetic acid (IAA) and  $\alpha$ -naphthaleneacetic acid (NAA). Root formation frequency was increased up to 95 % in 1/2 strength MS medium supplemented with 1  $\mu$ M IBA.

*Key words:* *Trifolium repens*, *in vitro*, tissue culture, rooting