

**REGENERATION POTENTIAL OF RIGHT AND LEFT COTYLEDONS IN WINGED BEAN
(*PSOPHOCARPUS TETRAGONOLOBUS* (L.) DC.)**

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ABSTRACT

Psophocarpus tetragonolobus (L.) DC. (Winged bean), the wonder crop of the new millennium, is highly rich in proteins and essential amino acids and can be a boon to the developing nations to overcome the problem of malnutrition. It is a hot crop for tissue culturists, as it is recalcitrant to tissue culture techniques. The present study was conducted to evaluate the regeneration potential of right and left cotyledons separately as explants for in vitro propagation of the plant. The proximal and distal halves of both right and left cotyledons were also studied individually for assessing their regeneration potential. The right cotyledon gave maximum response of 17 shoots in MS media containing IAA (0.2 mg/l) along with BAP (2 mg/l) while the left cotyledon gave only 7 shoots in the same media composition. When the proximal half of the right and left cotyledon were used as explants, a similar response was observed. But when the distal halves were used, only callusing was obtained in both the cases.

KEYWORDS: Clonal Propagation, Cotyledon Culture, *Psophocarpus tetragonolobus*, Winged Bean