

***IN VITRO* REGENERATION OF *LUPINUS ALBUS* CV. CEDARA
AND *LUPINUS ANGUSTIFOLIUS* CV. TANGIL**

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Executive Summary

In 1998, CSIR Foodtek and ARC Roodeplaat undertook a project funded by the Protein Research Trust entitled "Genetic Engineering Lupins (*Lupinus* sp.) for Resistance to Anthracnose". As a prerequisite to lupin transformation, experiments were undertaken to determine regeneration potential and a method for optimum regeneration of *L. albus* cultivars Esta and Hanti, and *L. angustifolius* cultivars Eureka and Helderberg. In this proposal, we plan to assess the *in vitro* regeneration potential of two economically important lupin cultivars viz. *L. albus* cv. Cedara and *L. angustifolius* cv. Tangil. This will be undertaken adopting methods optimised in previous regeneration experiments, and using shoot apical meristems and cotyledonary nodes as explants. The regeneration potential of Cedara and Tangil will be compared with that of Esta and Hanti, and Eureka and Helderberg respectively, and one *L. albus* cultivar, and one *L. angustifolius* cultivar will be used in future transformation studies.