

IN VITRO PROPAGATION AND PRODUCTION OF QUALITATIVE TRAITS OF CULTIVATED VARIETY OF *WITHANIA SOMNIFERA* L. FROM CALLUS OF EMBRYONIC COTYLEDON EXPLANTS IN B5 MEDIUM

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ABSTRACT

Withania somnifera is a member of family Solanaceae is one of the most important and effective Ayurvedic and medicinal herb in different region of India. It is widely and preferly used in the curing of many diseases and disorders like inflammatory conditions, rheumatism, different types of tumor which also responsible to cause cancer, tuberculosis or in reproductive system to become young again or to decrease the sterility, cure nervous system related diseases and it is very important and beneficial to improve the vitality. The world wide interest in Ashwagandha and the large demand for its dry roots give a great opportunity to propagate this plant on commercial scale. Now present price for its roots is very attractive, Ashwagandha crop provides most economically returns in compare to other traditional crop plants. In India Ashwagandha is commercially propagated as rain fed crop plant in Rajasthan mainly in Kota district and Bhanpura, Manasa, Neemuch, Jawad tehsils of Mandsaur district of Madhya Pradesh and Kur-nool, Prakasam, Anantapur, Mahabubnagar and Warangal districts of Andhra Pradesh. Cultivation has been occurred at few areas in Karnataka.

KEYWORDS: *Withania Somnifera*, Solanaceae, Curing, Diseases, Improve, Vitality, Roots, Rain Fed Crop Etc