

VALIDATION OF HARVESTING PERIOD FOR OBTAINING OPTIMUM CONCENTRATIONS OF WITHANOLIDES FROM *WITHANIA SOMNIFERA* (L.) DUNAL AT DIFFERENT PHENOLOGICAL STAGES OF PLANT LIFE

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ABSTRACT: *Withania somnifera* (Ashwagandha) is one of the widely used medicinal plants in Ayurveda and other systems of medicine, which is being harvested without knowing the quality and quantity of the active principles for which the plant is being used. In the present investigation, we have evaluated the optimum time period for the harvesting of the plant with reference to maximum concentration of the active principles, i.e. Withanolide-A and Withaferin-A in its roots. It was found that these secondary metabolites were maximum in the roots of plants at the age of 10-12 months during which the Withanolide-A and Withaferin-A contents were recorded 0.0407% and 0.0401%, respectively. This study would be helpful for farmers, collectors of herbal raw material, researchers and herbal drug manufacturers in obtaining best quality plant material when the active principles remain at their maximum concentration.

Keywords: *Withania somnifera* roots phenological stages, Withanolide-A, Withaferin-A Contents