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VEGETATIVE AND REPRODUCTIVE PHENOPHASE ANALYSIS OF *WITHANIA SOMINIFERA* L. WITH PARTICULAR REFERENCE TO KYMORE PLATEAU REGION

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ABSTRACT : Present paper deals with the study of vegetative and reproductive phenophase parameters i.e. plant height, root length, root diameter, number of branches, flowering, fruit initiation, and maturity of Ashwagandha (*Withania somnifera* L.) a medicinally important species. Rewa constitutes one of the significant geographical areas of the Kymore plateau region. The sampling from three sampling plots identified for the study was done after 45, 60 75, 90 and 105 days of sowing. *Withania somnifera* L. is an important species growing wildly in Kymore Plateau region but due to deforestation, this species has been listed as endangered in the list of forest department of Rewa Division. Cultivation of this species helps to conserve this medicinally important species in this region. The vegetative and reproductive phenophase parameters studied during the present investigation reveals that the growth performance and reproductive performance of the species proves the suitability of the species for large scale cultivation in Kymore plateau region. The cultivation of this medicinally important species will not only lead to propagation of this important medicinal material but will also improve the biodiversity of the region.

Key Words: *Ashwagandha, Reproductive Phenophase, Root dry weight, Vegetative Phenophase*