

Abstract

Gibberellins (GA for Gibberellic acid) are the plant hormones known to have various roles like seed germination, floral induction, stem elongation, pollen maturation, expansion of leaves, development of trichome and pollen maturation. DELLA proteins act as negative regulators in GA signal transduction and there are five DELLA proteins in Arabidopsis. The role of GA signalling and hence the DELLAs in the Shoot Apical Meristem (SAM) maintenance has not yet been established. SAM maintenance is done via WUSCHEL-CLAVATA feedback loop and the phenotypes of mutants of *clv* and the quintuple mutant of DELLAs – *global della* are similar in that they both have enlarged SAM. In this study, I tried to find out and validate if there are any interactions at the level of protein-protein interaction between DELLAs and WUSCHEL. This project would be the very first step to elucidate role of DELLAs and hence GA signalling in the maintenance of SAM in Arabidopsis.