



## RESEARCH PAPER

# Studies on preventing *in-situ* germinating in groundnut (*Arachis hypogaea* L.) VRI 8

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**Abstract :** Groundnut (*Arachis hypogaea* L.) is one of the most commercially important oilseed crops and it is also designated as a “Wonder Legume”. Dormancy play a major role in deciding crop yield in groundnut. Generally, the bunch type groundnut varieties are non-dormant while, spreading and semi spreading types are having a varied period of dormancy. The receipt of rain at the time of harvest in non dormant varieties adversely affects the considerable yield loss due to *in situ* germination (sprouting). The groundnut VRI 8 is a non dormant bunch variety and popular among the farmer in Northern districts of Tamil Nadu. In order to over come *in situ* germination in VRI 8 groundnut variety, foliar application of ABA at various concentrations viz., 250 and 500 ppm were tried at 70 and 80 days after sowing. The results revealed that foliar spray of Absciscic acid (ABA) 500 ppm at 70 days after sowing (DAS) in non-dormant groundnut cv. VRI 8 could induced dormancy and minimized the *in situ* germination even irrigation given at 90 DAS. The practical utility of the study is foliar application of ABA 500 ppm at 70 DAS can minimize yield loss by preventing *in situ* germination even receipt of rain at 90 DAS. For immediate sowing, kernel seed dormancy could easily broken by soaking the seeds with Ethrel 100 ppm for 6 hours which helps the farmer for taking immediate sowing without missing the cropping season.

**Key Words :** Groundnut, *Insitu* germination, Absciscic acid, Dormancy, Ethrel

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