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In-vitro florigenesis: an efficient regeneration system escaping time consuming vegetative phase in Indian soybean cv., JS-335

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The optimum conditions for *in-vitro* florigenesis has been established using cotyledonary node with axillary bud explant of soybean genotype cv., JS-335. Flower buds were directly induced from proximal end of the explant on Murashige-Skoog (MS) medium augmented with thidiazuron (TDZ) and naphthalenacetic acid (NAA). TDZ proves the potential growth regulator for *in-vitro* florigenesis. As results of self-fertilization, pods developed from generated flowers and matured within 40-45 days on hormone-free medium. Pods and seed set under *in-vitro* conditions resemble pods and seeds produced under *in-vivo* conditions. This pathway of *in-vitro* florigenesis showed great potential for successful induction of *in-vitro* flowering, which in turn can be explored in producing transgenic soybean seeds in popular Indian soybean genotype without escaping transgene.