

IMPROVEMENT IN SEED GERMINATION IN SENNA (*CASSIA ANGUSTIFOLIA*) THROUGH PRETREATMENTS

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Abstract: *Cassia angustifolia* popularly known as Senna is a valuable plant drug in Ayurvedic and modern system of medicine. Leaves and pods are used as natural laxative. Leaves of this plant contain sennosides A, B, C and D and are in demand internationally and preferred as ingredient of herbal tea in Europe. The drug is used as the most reliable and least harmful laxative agent. Pods and leaves are also used in the form of decoction, powder and many other herbal preparations. Senna is a sun-loving crop and requires bright sunshine for its successful growth. The crop is raised from seed and has a hard and tough seed coat. Poor germination of seeds affects nursery production for its mass propagation. Therefore pre-treatment of seeds is necessary to induce quick germination. The improvement in seed germination through chemical pre-treatments was reported in the present study that was conducted under completely randomized block design under polyhouse at Experimental farm, College of Horticulture and Forestry Neri- Hamirpur, Himachal Pradesh. The statistical analysis revealed significant effect on seed germination due to different pre-treatments. Pre-treatment T₄ i.e. GA₃ 10ppm for 24 hrs soaking resulted in maximum germination (68.00 per cent) which was followed by GA₃ 5ppm (60.00 per cent) and minimum germination (28.00 per cent) was recorded in control. There was 142 per cent increase in germination percentage in treatment T₄ over control.

Keywords: Senna, Pre-treatments, Germination, Laxative, Sennosides

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