



RESEARCH PAPER

Response of linseed (*Linum usitatissimum* L.) to different plant growth regulators

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Abstract : The commercial importance of linseed (*Linum usitatissimum* L.) has attracted Agronomist to increase its seed yield using various agronomical and breeding approaches. Plant growth regulators (PGRs) have a significant role in enhancing yield and its related traits in linseed. Hence, to find out effect of different growth regulators on growth, yield attributes, yield and economics of linseed, the present experiment was conducted under AICRP on Linseed, College of Agriculture, Nagpur. Growth regulator shows significant effect on growth, yield attributes and yield of linseed. Plant height and number of capsules per plant was observed highest and significantly superior after application of 400 ppm Gibberellic acid (GA) and application of 0.1 % Tebuconazole which was at par with T₇ i.e. 1.0 ppm Auxin + 200 ppm GA and T₅ i.e. 75 ppm salicylic acid. Number of branches and number of capsules per plant were also observed at par in the treatment T₃ i.e. 200 ppm GA. The seed yield of linseed was recorded significantly higher in T₄ i.e. 400 ppm GA which was at par with T₇ i.e. 1.0 ppm Auxin + 200 ppm GA and treatment T₃ i.e. 200 ppm GA and treatment T₅ i.e. 75 ppm salicylic acid. The gross monetary return was found maximum in the treatment T₄ i.e. 400 ppm GA, this might be due the maximum seed yield after application of 400 ppm GA, but net monetary return and B:C ratio resulted minimum due to the high market cost of GA (Rs. 9000/- for 400 ppm). Net monetary return and B:C ratio was found maximum in treatment T₅ i.e. 75 ppm salicylic acid, this might be due to the low cost of Salicylic acid.

Key Words : Linseed, Growth regulator, Gibberellic acid, Salicylic acid, Tebuconazole, Growth, Seed yield

View Point Article : Katore, J.R., Nair, Beena, Damdar, Rupali, Rananaware, Shilpa and Kavalkar, G.R. (2021). Response of linseed (*Linum usitatissimum* L.) to different plant growth regulators. *Internat. J. agric. Sci.*, 17 (2) : 276-279, DOI:10.15740/HAS/IJAS/17.2/276-279. Copyright@2021: Hind Agri-Horticultural Society.

Article History : Received : 22.02.2021; Revised : 26.02.2021; Accepted : 14.03.2021