

EFFECT OF HYDROGEL AND FOLIAR SPRAY OF SALICYLIC ACID ON PRODUCTIVITY AND PROFITABILITY OF TARAMIRA

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Abstract: A field experiment was conducted at Agronomy Farm, S.K.N. College of Agriculture, Jobner during *rabi* season of 2019-20 to evaluate the effect of hydrogel and salicylic acid on productivity and profitability of taramira under semi-arid conditions of Rajasthan. The experiment consisting of 9 treatment combinations, viz. T₁:control, T₂:hydrogel 2.5 kg/ha, T₃: hydrogel 5.0 kg/ha, T₄: salicylic acid (SA) 75 ppm at flowering (fl.) and siliqua formation (sf.), T₅:SA 100 ppm at fl and sf, T₆:hydrogel 2.5 kg/ha + SA 75 ppm at fl. and sf., T₇:hydrogel 2.5 kg/ha + SA 100 ppm at fl. and sf., T₈:hydrogel 5.0 kg/ha + SA 75 ppm at fl. and sf., T₉: hydrogel 5.0 kg/ha + SA 100 ppm at fl. and sf. were laid out in randomized block design with three replications. Results revealed that application of hydrogel 5.0 kg/ha with two spray of salicylic acid 100 ppm at flowering and siliqua formation stages recorded maximum plant height (113.10 cm), primary (7.63) and secondary (12.80) branches, siliqua/plant (133.20), seeds/siliqua (19.47), test weight (3.97g), seed yield (12.39 q/ha), gross return (₹ 47082/ha) and net return (₹ 29202 /ha) among all the treatments. However, this treatment was found statistically at par with hydrogel 5.0 kg/ha + salicylic acid 75 ppm at flowering & siliqua formation stages. Further, treatment T₂, T₃, T₄, T₅, T₆ and T₇ also recorded significantly higher growth and yield parameters over control. Thus, application of hydrogel 5.0 kg/ha with two spray of salicylic acid either 100 ppm or 75 ppm at flowering and siliqua formation stages was found beneficial for obtaining higher seed yield as well as net returns of taramira.

Keywords: Hydrogel, Productivity, Salicylic acid, Siliqua, Taramira

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