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Effect of Spermidine and Methyl Jasmonate on Vegetative and Reproductive Growth of Snake Melon (*Cucumis melo* var. *flexuosus*)

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In order to study the effects of spermidine (0.5 and 0.75 mM) and methyl jasmonate (0.25 and 0.5 mM) on the vegetative and reproductive growth of snake melon, an experiment was conducted using a randomized complete block design with 3 replications in College of Agriculture, Isfahan University of Technology. Each replication consists of 8 plants. Each plant (5-7 leaf stage) was sprayed with 100 ml of related solution and distilled water was used as a control. Characteristics including the date of flowering, the number of male and female flowers, yield, fruit characteristics were measured during and at the end of the experiment. Results showed that the plants treated with 0.5 mM spermidine, had the highest number of female flowers and the highest ratio of female to male flowers and they had the highest number of fruits in the plant. Also, the plant related to this treatment produced male flowers sooner than other plants. Overall, srpermidine increased vegetative growth and the photosynthetic surface of plants.

Key Words: Spermidin, Sex, Snake melon, Methyl jasmonate.

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