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THE EFFECTS OF DIMETHYLESULPHATEON DIVERSITY CREATION AND GROWTH CHARACTERISTICS IN PURSLANE (*PORTULACA OLERACEA* L.)

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Purslane (*Portulaca oleracea* L.) is a valuable medicinal plant, containing a different kind of active ingredients. Induced mutation can efficiently be used to induce new variations as a basis for plant breeding. This study was conducted to evaluate the effect of dimethylesulphate (0,0.03, 0.05, 0.1, 0.2, 0.3, and 0.4 %) in a completely randomized designon rootlet length, shootlet length, plant height and germination rate and also to determine the suitable concentration of dimethylesulphatefor mutation induction. On the basis of multiple variance analysis, significant differences were observed among different dimethylesulphate concentration for evaluated traits (rootlet length, shootlet length, plantlet height andgermination rate)($P<0.01$). The least germination rate (0%) was obtained in concentrations 0.6, 0.8, and 1 percentage of dimethylesulphate. The maximum germination rate (91%) was observed in control, although the difference of this treatment was not significant with aconcentration of 0.03 (89%).